EUI ROBERT SCHUMAN CENTRE

RECONFIGURING EUROPE IN A FRACTURED GLOBAL ECONOMY

edited by
Marco Buti
Giancarlo Corsetti
Anna Peychev

THE 2026 EMU LAB FLORENCE REPORT

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The Robert Schuman Centre for Advanced Studies

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EMU Lab

The Economic and Monetary Union Laboratory (EMU Lab) at the Robert Schuman Centre for Advanced Studies of the European University Institute is a collaborative project under the guidance of Marco Buti and Giancarlo Corsetti. The Lab is designed as a platform for multi- and cross-disciplinary synergies among scholars, policymakers, and other stakeholders to reconsider the EMU in response to the political, institutional, and geo-strategic developments at home and abroad. Our aim is to identify avenues for research and policy innovation that advance Europe's economic, political, and social stability, thus fostering the resilience of the European Union project.

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Contents

List of abbreviations xi
Foreword xiii
Preface xv
Acknowledgements xix

Florence Report Part A

Florence Report Part A at a Glance 1
Overcoming the Reduced Responsibility Model 5
Marco Buti, Giancarlo Corsetti, Anna Peychev

1. Introduction
2. The New World
3. The Long Rise and Sudden Fall of the European Model of Reduced Responsibility
4. From Goals to Strategy: Building a New European Social Contract
5. Conclusion: Rethinking European Solidarity

Florence Report Part B

Florence Report Part B at a Glance 51

Section I - Framing the European Project: Political Economy Under Pressure

1. André Sapir | Medium-Term Geopolitical Scenarios for the World and Implications for the EU 63
2. Moreno Bertoldi and Marco Buti | The New Triad Leading US Capitalism 77
3. Poul F. Kjaer | Securitizing Europe: From the Euro to Value Chains 93
4. Vivien A. Schmidt | The Twin Political Challenges for the EU: US Geopolitical Disruption and National Populist Fragmentation 107
5. Marco Buti and Marcello Messori | European Integration at a Time of National Identity Politics 121

Section II - Securing Policy Space from Within EU Systemic Frameworks

6. Daniel Fernandes and Anton Hemerijck | The Macroeconomic Dividend of Social Investment Welfare Provision in an Age of Fragmentation 137

7. Lucio Pench | Fiscal Rules and EMU: Past, Present, and Future 159

8. Amy Verdun | Differentiation and Euro Adoption: Policy Options for Reducing Fragmentation under Geopolitical Pressure 181

9. Giancarlo Corsetti and Leonardo Melosi | Stablecoins and Digital Currencies: Implications for Fragmentation and Multipolarity 195

10. Erik Fossing Nielsen | The European Savings Surplus: the Need for Policies to Lower the Risk and to Encourage its Financing of European Growth 211

Section III - Sustaining EU Competitiveness Between Geoeconomics and Structural Trends

11. Bernard Hoekman | Responding to Global Trade Disorder 223

12. Marco Ratto and Werner Roeger | Global Effects of Recent US Policies: How to mitigate negative spillovers to Europe? 237

13. Florian Le Gallo, Amélie Robinette, Valentine Salmon | Facing Geo-Economic Threats: The European Union's Economic Security and the Single Market 253

14. Jacques Pelkmans | After Letta and Draghi: Empowering the Single Market in Earnest? 271

15. Irene Agnolucci | Pushing the Frontiers of Europe: The Role of the Important Projects of Common European Interest 285

16. Jos Delbeke and Simone Tagliapietra | A Strong Clean Industrial Deal to Reconcile Europe's Decarbonization, Competitiveness and Security Objectives 299

17. Andrea Gazzani | The Economic Implications of AI: Opportunities and Challenges 313

Section IV - Financing Collective Action: From European Public Goods to Security

18. George Papaconstantinou | The Global Commons and European Public Goods 335

19. Emmanuel Mourlon-Druol | Between Economic Efficiency and Political Bargaining: A Long View on European Public Goods 349

20. Gaetano D'Adamo | The Drivers of the Evolution of the EU's Long-Term Budget 361

21. Ricardo García Antón and Tomasz P. Woźniakowski | Own Resources: A Transatlantic Perspective 375

22. Guntram Wolff and Jeromin Zettelmeyer | European Defence Markets: Overcoming National Preference and External Dependence 391

23. Andrea Capati and Sergio Fabbrini | The Segmentation of the European Union's Defence: Comparing the SAFE Instrument and the Ukraine Facility 407

24. Luisa Marin | Common Procurement in Defence and the Strategic Autonomy of the Union: A First Appraisal 423

Section V - Financing Growth Through Savings, Investment, and Capital Markets

25. Daniel Kapp and Laura Parisi | Unlocking Capital for Europe's Future 443

26. Giancarlo Corsetti, Atanas Pekanov, Giulia Sestieri | Breaking the High-Saving, Low-Growth Trap: Europe's Savings and Investment Union 463

27. Giancarlo Corsetti, Atanas Pekanov, Giulia Sestieri | Rebalancing at Home to Adjust Abroad: Europe's Savings and Investment Union in a New Global Order 479

28. David Murphy | Addressing Fragmentation in EU Post-Trade Infrastructure – A Proportional Approach 495

29. Loukas Kaskarelis, Mathias Skrutkowski, Rolf Strauch | Policy Priorities for the Savings and Investments Union 513

30. Fabrizio Venditti, Michele Caivano, Pietro Cova, Kevin Pallara, Massimiliano Pisani | The Economic Impact of European Capital Market Integration 531

List of Abbreviations

ACER – EU Agency for the Cooperation of Energy Regulators
AI – Artificial Intelligence
ASEAN – Association of Southeast Asian Nations
BIS – Bank of International Settlements
CAP – Common Agricultural Policy
CBAM – Carbon Border Adjustment Mechanism
CCP – Central Counterparty
CSD – Central Securities Depository
CEE – Central and Eastern Europe
CFSP – Common Foreign and Security Policy
CID – Clean Industrial Deal
CJEU – Court of Justice of the European Union
CMU – Capital Markets Union
CPTPP – Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CSDP – Common Security and Defence Policy
DG – Directorate-General (European Commission)
DLT – Distributed Ledger Technology
DSA – Debt Sustainability Analysis
DTCC – Depository Trust & Clearing Corporation
EBA – European Banking Authority
EC – European Commission
ECB – European Central Bank
ECOFIN – Economic and Financial Affairs Council
ECSC – European Coal and Steel Community
EDA – European Defence Agency
EDIRPA – European Defence Industry Reinforcement through Common Procurement Act
EDP – Excessive Deficit Procedure
EEC – European Economic Community
EFB – European Fiscal Board
EIB – European Investment Bank
EIOPA – European Insurance and Occupational Pensions Authority
EMU – Economic and Monetary Union
ENTSOG – European Network of Transmission System Operators for Gas
EP – European Parliament
EPG – European Public Good
ERC – European Research Council
ERM – Exchange Rate Mechanism

ERM II – Exchange Rate Mechanism II
ESG – Environmental, Social and Governance
ESM – European Stability Mechanism
ESMA – European Securities and Markets Authority
ETS – Emissions Trading System
EU – European Union
FDI – Foreign Direct Investment
FID – First Industrial Deployment
GATT – General Agreement on Tariffs and Trade
GDP – Gross Domestic Product
GFC – Global Financial Crisis
GNI – Gross National Income
GPT – General-Purpose Technology
GVC – Global Value Chain
ICT – Information and Communication Technology
IMF – International Monetary Fund
IPCEI – Important Projects of Common European Interest
LLM – Large Language Models
LNG – Liquefied Natural Gas
MFF – Multiannual Financial Framework
NATO – North Atlantic Treaty Organization
NGEU – NextGenerationEU
OECD – Organisation for Economic Co-operation and Development
OMT – Outright Monetary Transactions
PEPP – Pandemic Emergency Purchase Programme
PESCO – Permanent Structured Cooperation
PSPP – Public Sector Purchase Programme
R&D – Research and Development
RDI – Research, Development and Innovation
RRF – Recovery and Resilience Facility
SAFE – Security Action for Europe
SCF – Social Climate Fund
SDR – Special Drawing Rights
SGP – Stability and Growth Pact
SIU – Savings and Investment Union
SME – Small and Medium-sized Enterprises
SURE – Support to mitigate Unemployment Risks in an Emergency
TEU – Treaty on European Union
TFEU – Treaty on the Functioning of the European Union
TPI – Transmission Protection Instrument
UN – United Nations
US – United States
VAT – Value Added Tax
WTO – World Trade Organization

Foreword

Europe no longer has the luxury of innocence. The international order that for decades allowed the Union to prosper while delegating key responsibilities outward has fractured, perhaps irreversibly. In this sense, the EMU Lab Florence Report 2026, Reconfiguring Europe in a Fractured Global Economy, edited by Buti, Corsetti, and Peychev, arrives as a timely contribution, and as a necessary one, refusing both nostalgia and fatalism. It convincingly tells us that we should not care if and how Europe can return to yesterday's 'equilibrium;' it asks whether Europe still has the political imagination to build a new one.

This is precisely where the report resonates with the entire European University Institute and its mission: institutions of knowledge must move beyond technical solutionism. Universities need to recover the capacity to address the larger normative questions of our time: what kind of society we want, what kind of Europe we need, and what forms of solidarity can sustain freedom, democracy, and social justice in an age of uncertainty. The Florence Report speaks in that register. Avoiding technocratic solutions and abstract federalism, the report is a detailed and ambitious call for Europe to transform constraint into capacity, to create policy space through common action, shared investment, and mutual insurance.

Fragmentation is not Europe's destiny; too often, it is the result of political choices and incomplete institutions. Against this drift, the report proposes a renewed European social contract grounded in reciprocity and in pragmatic federalism where collective scale is indispensable. That is why this volume matters. It reminds us that Europe's future will not be secured by fear, nor by managerial adjustment alone, but by the courage to think, act, and invest together.

Patrizia Nanz
President of the European University Institute

Preface

The Florence Report is the flagship initiative of the Economic and Monetary Union Laboratory (EMU Lab) at the Robert Schman Centre for Advanced Studies of the European University Institute. The Lab was launched in 2024 as a joint initiative of the Pierre Werner Chair and the Tommaso Padoa-Schioppa Chair, with the core objective of contributing analyses and policy proposals to the debate on Economic and Monetary Union. In creating a multidisciplinary workspace, the Lab has fostered synergies among policy experts, practitioners, and academia. Through this collaborative effort, we seek to gain a deeper understanding of the multifaceted economic and political dynamics at play in the EMU and the European Union (EU), and contribute policy proposals for the way forward. To this end, and especially in preparing the publication of this report, the Lab has organized lectures, workshops, conferences, and working groups, with reflections published in academic articles, op-eds, and blogs.

The EMU Lab was conceived in a global economic and political environment that, while changing rapidly, was still quite different and much more benign than the one we live in today. Indeed, in our call for contributions to this report in the Spring of 2025, we envisioned a more nuanced context:

> Fragmentation is a clear and present danger for the European Union. Novel geopolitical dynamics are superimposed on the already disruptive effects of accelerated technological innovation and climate change. These realities become ever more tangible for electorates and are increasingly consequential to European politics. As a result, existential economic and social issues such as job security, defence, migration, energy, and industry-level shifts are back on the agenda after decades of relative calm and prosperity under the EU flag. While there is widespread understanding that the solution to these conflating crises and the issues raised by their effects on competitiveness, growth, and equality is best found on the supranational level with European unity, the alignment of national and EU interests cannot be taken for granted. In this context, the risk of slow economic agony may well be superseded by the risk of political implosion right here and right now. Europeans cannot escape the issue of how to re-orient our growth model to make it sustainable and less vulnerable to external and internal shocks. Neither can we avoid the question of how to finance the future of our social, democratic, and political model. This will require the creation of policy space for action by tackling fragmentation from within, thereby also insuring ourselves against fragmentation from without.

While these words fully resonate with the spirit and goals of the Florence Report, they fall short of capturing the extent of the challenge Europe faces vis-à-vis the radical discontinuity in the global order experienced since their writing. The events unfolding as we publish in April 2026 — too many to list, all too important to offer a selection — leave no room for disagreement that the international order is past a point of rupture. The dramatic developments currently in play have forced us to consider the external dimension of the European integration process even more carefully and have made this research all the more urgent.

Europe, the Union and its member states, are caught off balance. Although where the current evolution settles is as yet unclear, by its nature it has already undermined the tenets on which the EU founded its own global role, institutional setting, and policy agenda. Most crucially, the international context that long framed the trajectory of European development has vanished, making the model upon which the EU long based the progress of its institutional and policy evolution — what we have named the 'reduced responsibility' model — entirely dysfunctional.

And so, the Florence Report explores how Europe can navigate a world that has fundamentally changed with its various contributions discussing the roots and dimensions of fragmentation, both globally and within Europe; examining how these developments constrain policy space for action at both the national and EU governance levels; and clarifying the various dimensions of this interplay to chart a course for a more cohesive, resilient, and sovereign Europe. In addition to proposing new ideas, the Report reexamines established governance frameworks, recasting them to articulate a coherent and accessible renewed policy agenda fit for the purposes of serving Europe in today's destructive nexus between geopolitical, economic, and structural challenges.

Before we delve into the matter of it, a caveat is in order. This report has been written under the assumption that the global economy, while fracturing along geopolitical lines, will hold together. We take comfort from the experience of the past year: economically, the impact of the US tariff shock on the global economy appears relatively contained and global trade in 2025 continued to outpace economic activity. Furthermore, EU growth reached 1.5%, up from 1.1% the previous year and broadly in line with the International Monetary Fund's forecast of October 2024 (IMF, 2024). Despite a tripling of US tariffs on EU goods and an appreciation of the euro against the dollar, European exports to the US did not collapse, they actually increased slightly, by 3.4%.

However, the risk that the wars on the EU's borders could lead to a collapse of the global economy and, by extension, the European economy, remains a clear and present danger. Should the current negative supply shocks prove

even more severe and persistent, the resilience of the global economy would be tested to its core. The EU must stand ready to shift into crisis-management mode. This does not mean setting aside the policy agenda advocated in this report to give priority to urgent responses; on the contrary, it would necessitate its accelerated implementation. For once, the EU must demonstrate to third countries, to the markets, and especially to its citizens, that it is both ready and capable of taking its destiny into its own hands. A good place to start might be the self-realization that Europe has a lot more agency than it seems to believe, especially so as a Union much stronger than the sum of its parts.

The Florence Report is made up of two Parts – A and B.

Part A is a contribution by the editors, which sets out the overarching themes of the discussion to follow, without however shying away from presenting their own assessment. The focus of the contribution is a careful layout of the undoing of Europe's reduced responsibility model, covering a historical review of the economic and geopolitical tectonic shifts that have culminated in the currently reverberating shocks, and the effects on the evolution and present-day state of Europe's and the EU's governance and economic model. This review is followed by a discussion of a three-pronged policy agenda — a proposal for a renewed community method aimed to promote a new multipolar system, develop the SIU, and support an adequate supply of European Public Goods — based on Europe-specific trajectories in technology and productivity, consistent with the European social model.

Then follows Part B of the Report with no less than thirty original contributions drawing on the combined expertise of academics, practitioners, and policy professionals who have collaborated with the EMU Lab since its inception. The authors bring various disciplinary perspectives, examine different facets of EU and global fragmentation, and focus on diverse policy areas in an attempt to reconfigure Europe in this new world order. Even so, their analyses converge towards a similar comprehensive conclusion: Europe's ability to act globally is first and foremost inhibited domestically with governments best advised to address these challenges in a coordinated manner and to confront them collectively. Credibility on the internal front will be a conditio sine qua non for credibility abroad.

The contents of Part B of the Florence Report is first presented in a brief General Summary. The works in Part B are organized in a narrative which develops through II. Securing Policy Space from Within EU Systemic Frameworks, III. Sustaining EU Competitiveness Between Geoeconomics and Structural Trends, IV. Financing Collective Action: From European Public Goods to Security, V. Financing Growth Through Savings, Investment, and Capital Markets.

Acknowledgments

The Florence Report includes chapters by economists, political scientists, lawyers, historians, policymakers, and practitioners. We would like to thank all contributors for their intellectual engagement and gracious attitude in responding to our comments. We would also like to thank the EMU Lab's Advisory Committee, the Internal Steering Board, and Secretariat. Their constant constructive advice has been crucial in shaping the structure and content of this report.

The Lab and this report have benefited greatly from the active input and research support of EUI early career researchers Michele Castegini, Alina Kempf, Odysseas Konstantinakos, and Diego Vila. Furthermore, our work has been enriched by the constant input of rigorous research conducted at the EUI. Scholarship at the forefront of law, social and political sciences, history, and economics from across the Institute's departments and schools engage with the Economic and Monetary Union from various academic lenses, which have continually helped us focus our own perspective.

We thank the President of the EUI, Patrizia Nanz, and the Secretary General, Armando Barucco, as well as their predecessors Renaud Dehousse and Marco del Panta, the Director of the Schuman Centre, Erik Jones, and the Provosts, Giacomo Calzolari and Josephine van Zeben, for encouraging the EMU Lab and its initiatives. The spirit and motivation of the EMU Lab is rooted in the unique nature of the EUI, integrating high-profile research and graduate teaching — its academic core — with policy work.

Last, but not least, we gratefully acknowledge the financial support of the Banque de France, Banca d'Italia, Banca Intesa Sanpaolo, UniCredit, and Pirelli for the Tommaso Padoa-Schioppa Chair, as well as the Luxembourg government's support of the Pierre Werner Chair. Their vision in supporting EUI chairs devoted to developing research analysis and proposals that contribute to the progress of European integration cannot be praised enough. We have benefitted from their generosity, but they obviously do not bear any responsibility for the views and opinions expressed in this Report, let alone for any mistakes, which remain with us and our fellow contributing authors.

THE 2026 EMU LAB FLORENCE REPORT

Part A

Overcoming the Reduced Responsibility Model

The Florence Report Part A at a Glance

As of spring 2026, the global order has arrived at a point of rupture. The unfolding dramatic developments — spanning wars, geopolitical shifts, and trade disruptions — have invalidated the multilateral rule-of-law system which long underpinned the European Union's (EU) integration, moulded its institutional design, and supported its economic development.

For decades, the EU operated under what this report has termed the 'reduced responsibility model,' which allowed member states to rely on United States (US) protection to under-invest in defence, counted on the vast American market to absorb exports and external surpluses, and anchored financial stability to US-led hegemonic governance of international law and trade institutions. This governance model enabled the Union to progress — most notably, through the creation of the Single Market, the launch of the euro, and enlargement — without, however, fully developing its institutions to internalise fundamental responsibilities in the key areas of security, economic development, and financial stability.

The ongoing transformation reflects a deeper shift of global power and economic relations. The US has moved away from its traditional role as guarantor of multilateralism towards a transactional approach, while weaponizing economic instruments for geopolitical gains. At the same time, China has consolidated its global economic standing through scale, industrial policy, and the creation of strategic dependencies across key sectors. These developments are reshaping global trade, finance, and technology, and increasing systemic risk. The system is no longer defined by cooperation and predictability, but by geopolitical rivalry and competing strategic models. The shift is not cyclical but structural, meaning that the relative benign external conditions that sustained Europe's development are unlikely to reappear.

The restructuring has exposed the weaknesses of the EU institutional and economic architecture that were developed under the reduced responsibility model. External shocks increasingly interact with internal structural deficiencies, creating an adverse feedback loop that risks fragmenting Europe's policy space and amplifying divergences among member states. But European

fragmentation and polarization are neither fundamental nor inevitable. Rather, they are the result of shortcomings in governance, institutional, and policy design that can be remedied through collective action.

Overcoming the now dysfunctional 'reduced responsibility' template requires creating an institutional setting that favours long-term collective gains over short-term national costs. The central implication is clear: Europe's future stability and influence depend on its ability to align integration, financial capacity, and strategic objectives in a coherent and politically sustainable framework. A pragmatic approach to collective action can balance political and institutional feasibility with economic necessity.

Our analysis and arguments build on four core 'priors.' First, growth and competitiveness are not ends in themselves, but necessary conditions to sustain Europe's social model in the face of demographic and climate challenges. Second, the European social model is not a constraint on economic dynamism; rather, it has been demonstrated to underpin stability, to support labour market efficiency, and to foster innovation and risk taking. Third, the perception of a powerless Europe is misleading: as a Union committed to the primacy of law and a market-based economy, the EU has the ability to safeguard and shape the future rules-based international order. Finally, while joint decision-making is essential to harnessing economies of scale and addressing common challenges, political constraints — particularly from national identity politics — limit the scope for federal integration, requiring instead a focus on targeted and pragmatic forms of cooperation.

The strategic shift out of the reduced responsibility model can be articulated in a three-pronged policy agenda. First, Europe should strengthen its role in shaping a multipolar global order by supporting multilateralism and building alliances with other middle powers. Europe has both the opportunity and the responsibility to contribute to the provision of global public goods, including climate stability, financial cooperation, and rules-based trade. This requires not only external engagement, but also a domestic capacity to act credibly and consistently. The second item on the policy agenda is completing the Saving and Investment Union, to help overcome financial fragmentation, improve capital allocation, and support innovation and growth. Fragmented financial markets currently limit the efficient mobilisation of savings and constrain investment, particularly in high-growth and innovative sectors that can significantly improve European productivity and competitiveness. The final item is the adequate supply of European Public Goods — particularly in defence, infrastructure, and technology — aimed at improving economic performance (hence, the resilience of the European social model), as well as

strategic autonomy in an increasingly contested global environment. These are areas where national provision is insufficient, while collective action can generate significant economies of scale and scope.

Delivering on this agenda can start today with a more effective and harmonized use of existing tools, including the EU budget, regulatory frameworks, and coordination mechanisms. When deployed in a targeted and integrated manner, these instruments can reinforce one another, unlocking investment and enhancing policy effectiveness. Most crucially, in the path ahead, the EU must confront the fundamental issues inhibiting its productivity. Rather than merely attempting to catch-up with the US or China, it should exploit its dynamic comparative advantage by boosting its own innovation trajectories combining efficiency, equity and sustainability. What is required is pragmatism in prioritising functional outcomes while dealing with political and institutional constraints.

However, the end of the reduced responsibility model also calls into question the relationship between member states and the Union, pointing to the need for a renewed European Social Contract. Moving beyond this model requires rebuilding trust, solidarity, and a shared sense of purpose, all fundamental to enabling the very possibility for institutional reform, effective coordination, and collective action. This can be achieved by recognizing the need for 'insurance-based solidarity' in a world where shocks can be expected to be ever more frequent and intense with countries' vulnerability to such events becoming more symmetric.

In an increasingly risky environment, pooling sovereignty can achieve outcomes — economic resilience, social stability, and strategic autonomy — that cannot be secured alone by individual member states, with mutual trust providing the 'intertemporal glue' that allows communities to see the flow of benefits accruing to them over time from entering this mutual insurance contract, even when there are not immediate gains in the short term.

As long as European policy capacity remains subdued with politics dominated by short-termism, Europe will be in a 'fragmentation trap:' even if further integration demonstrably creates policy space and raises welfare across the Union, national political narratives frame shared sovereignty as a zero-sum game. Short-termism in policy behavior may lead to missing opportunities for larger gains over time that could obtained by joining forces towards common priorities. Addressing this type of opposition to power-sharing and the pressure from vested interests in the status quo is perhaps the most significant strategic hurdle for the EU in the new global order.

This underscores the need for the EU to move beyond a purely intergovernmental model, where the ability of member states to opt out can

encourage myopic thinking and weaken commitment to common goals. Within the constraints of the current legal framework (and in light of future EU enlargement), progress will likely advance through the initiative of groups of member states. Without undermining the legal and institutional integrity of the Union, it is plausible that in key areas — such as defence and financial integration — smaller vanguards will move first and for the better. The challenge will be to ensure that these initiatives remain open and scalable, enabling broader participation over time, rather than giving rise to volatile, ad hoc coalitions. Failing this, there is a concrete risk of an EU à la carte, where fragmented cooperation undermines effectiveness and gradually erodes institutional cohesion.

The end of the era of the reduced responsibility model forces a fundamental shift in how European integration is understood and operationalised. Rather than viewing integration as a constraint on national policy space, integration needs to be pursued as a means of creating policy capacity. By trading a degree of formal sovereignty for collective security and prosperity, member states gain a level of global relevance that no single nation can achieve alone.

Ultimately, the Union's future trajectory will depend on its ability to align integration, financial capacity, and strategic objectives within a coherent and politically sustainable framework and to utilise already present governance and institutional capacities. In a fractured global economy, Europe's capacity to take responsibility and act collectively will determine not only its economic performance, but also its role and relevance on the international scene.

Overcoming the Reduced Responsibility Model

Marco Buti, Giancarlo Corsetti, Anna Peychev

Abstract

This contribution introduces the concept of the European Union's 'reduced responsibility model,' under which integration advanced within a favourable global environment with over-reliance on external security, market demand, and financial stability, that limited the development of robust and comprehensive internal governance institutions. Reinterpreting European integration through this lens demonstrates the extent of the Union's vulnerability to external crises mutually reinforcing policy-driven fragmentation. The breakdown of the international order — now characterized by geopolitical rivalry, competing economic models, and weakening multilateral governance — has exposed these structural weaknesses and risks creating a 'fragmentation trap' between the need for collective action and national political constraints. The contribution proposes a pragmatic way forward towards strengthening European Union integration, based on stronger coordination, institutional reform, and joint decision-making. It advances a three-pronged policy agenda: strengthening multilateralism, developing a Savings and Investment Union, and expanding European Public Goods, to form the basis of a renewed European Social Contract. This contract — grounded in mutual insurance, shared responsibility, and forward-looking governance — will be essential to rebuilding trust, enabling collective action, and ensuring long-term stability in Europe.

Keywords: Reduced responsibility model; Fragmentation; Policy space; Rules-based multilateralism; Solidarity.

1. Introduction

The European Union (EU) can no longer rely on its 'reduced responsibility' model. We believe this term best describes the governance and institutional framework and evolution of Europe, moulded in a very specific and now bygone international context, which allowed the member states and the Union to: (i) under-invest in common defence by relying on the US for military protection; (ii) count on the large US market to absorb their exports and surpluses, as well as on an evolving rule-of-law based international trade system; and (iii) anchor their

institutions of monetary and financial stability to the US hegemonic governance of the international monetary and financial market.

With the waning of the international order as we knew it, the reduced responsibility model has lost the external structures — geopolitical and economic — that rationalized and supported European economic and institutional progress in spite of its inherent deficiencies. Past shifts in these external structures, e.g. energy or financial shocks, may have caused crises in Europe, but were always successfully tackled without the need to abandon the fundamental blueprint of reliance on a relatively benign international environment. Today, Europe has no choice but to recognize that this environment has gone and to find a new model of stability.

All this, by now, is well understood. The key issue remains to identify a new model of stability to replace the obsolete reduced responsibility template, and then how to go about it.

First and foremost, Europe must act at home. Certain elements of the new effective model are both unavoidable and straightforward: coordination and enhanced power sharing to create policy space at both Union and member state level; an institutional setting favouring the long view, where decisions that may have heterogenous benefits and costs in the short run can be compensated over time to ensure a balanced distribution of the net gains across borders; the overcoming of rules (like unanimity) that risk delay or prevent timely decision-making (especially urgent in turbulent times and essential in view of future enlargements), without however demoting European cooperation (and risking an EU à la carte); and an overarching process where common interests find representation in convincing institutional and policy solutions.

If this sounds like some form of European federalism, that is because perhaps it is. Unfortunately, current events, which have all but shattered the global geopolitical and economic order, cannot accommodate Europe's latest sensibilities — perhaps outright aversion — to the term 'federalism.' That being said, it is true that the feasibility of any future policy approach to solving the Union's predicament is intrinsically linked to political perception. This is why various permutations of the rather inevitable and single conclusion pointing to federalism have come to attract policymakers' attention. 'Pragmatic federalism' — as defined by Mario Draghi (2025) and the Manifesto for EU reform (Manifesto for Europe, 2023) — may well provide a more politically-acceptable spin on the federal anathema (Mourlon-Druol, 2024), but it does not change the nature of what is required of Europe in this hour.

Terminology aside, our assessment starts with the acknowledgement of an increasing gap between needs and feasibility: the institutional and policy

developments that could provide a convincing response to the current challenges clash with the ability of national political systems to metabolize the need for reforms and change. Through a 'more and smarter' Europe (call it what you will), member states could effectively respond to external threats and internal challenges, create policy space, and achieve a global geopolitical influence otherwise unattainable to individual governments. Yet national politics increasingly resort to zero-sum narratives, according to which any progress in this direction amounts to an unacceptable transfer of sovereignty to the EU level. There is widespread alignment in the politics of denial of global commons, outside and within Europe. The gap between what we could achieve collectively, and nationalistic narratives of Europe as a drag on sovereignty, foreshadows what is best described as a 'fragmentation trap:' further integration would raise welfare both at the Union and member state levels, however governments may perceive more immediate benefits from pursuing national goals which deviate from coordinated actions and common European initiatives. Overcoming the fear of power-sharing and the pressure from vested interests in the status quo that feed political resistance to more Europe, may just be Europe's most important strategic challenge in the new global order.

Before delving into the argument of our contribution below, and a discussions of the conditions under which Europe can pursue its aims successfully, we find it appropriate to state upfront four priors, or convictions, that motivated the endeavour behind the EMU Lab, and permeate the analysis contained in this report.

First, we are firmly convinced about the fundamental importance of enhancing European economic growth prospects and competitiveness, but we stress these are not an end in themselves. A high productivity economy is what European societies need in order to overcome the challenges of ageing and climate change, and avoid the deterioration of its social model in the current geopolitical storm. That is why any productivity-enhancing policies put forth must be supported by political consensus about their objectives.

Second, and relatedly, the European social model is not and should not be treated as a burden on innovation and economic dynamics. In fact, social security is a net contributor to economic stability and can be designed to further support the integration of European citizens in productive and individually fulfilling activities, favouring a good match between workers' talents and training, and jobs, reconciling job market flexibility with social sustainability, and boosting innovation and risk-taking. To be explicit in our vision for the future: the prosperity of an ageing society is rooted not only in an appropriate

expansion of the service sector and old-age assistance, but equally in substantial investment in talents, well-being, and the social and technical skills of the young generations.

Third, the image of a powerless Europe is both inaccurate and self-defeating. For a start, as a Union of democracies based on the primacy of law and a reliance on markets governed with appropriate regulation, and an aversion to wars and open conflict, Europe is poised to play a leading role in preserving the rule-of-law-based system of international relations, the only global context in which modern democracies can thrive.

Finally, while we believe that joint decision-making is a must for Europe to reap the benefits of economies of scale and scope, we are also fully aware that the political conditions do not exist to move anywhere near a United States of Europe, i.e., a fully federal system. The rising importance of national 'identity politics' in many EU countries severely constrain the extent to which sovereignty can be shared at the EU level. That being said, the current external circumstances may nonetheless facilitate the identification of critical nodes and common needs in key policy areas where the EU could be empowered to carry out well-designed common projects. Building on a positive citizens' attitude towards European integration, such an approach could contribute to ease political constraints and eventually help tackle the Union's current woes.

These priors both inform our views on why the new global order constitutes a true existential threat to Europe as we know it and clarify our approach to policy assessment and proposals for an alternative design.

The remainder of Part A of the Florence Report is structured as follows. Section 2 examines the transformation of the global environment, outlining the geopolitical and economic fault lines that are reshaping international relations. The content is particularly focused on the roles of the United States and China — in service of clarifying the constraints and challenges which must Europe's confront in the new world order. Section 3 then reinterprets the historical evolution of the European Union's integration through the lens of the reduced responsibility model. The argument highlights how past successes were enabled by external conditions that no longer hold with their erosion now exposing structural vulnerabilities in the EU institutional and policy framework. The reduced responsibility model, once suited to support brave initiatives, is now outright harmful should it persist. Building on this diagnosis, Section 4 then presents a pragmatic policy agenda to overcome the reduced responsibility model. It identifies three strategic objectives: (i) strengthening multilateralism in line with Europe's vision and values for a stable global order, (ii) advancing the Savings and Investment Union (SIU), and (iii) ensuring adequate provision of European Public Goods (EPGs) and the available

policy and governance instruments: the Multiannual Financial Framework, fiscal coordination via the European Semester, and regulatory powers, that could restore policy space and strengthen Europe's capacity to act towards a renewed European Social Contract. Section 5 concludes by drawing together the main insights and implications for Europe's future trajectory, emphasising that Europe is moving towards a more integrated but also more complex system of governance. It emphasises that overcoming fragmentation requires more than institutional adjustment: it depends on rebuilding trust, solidarity, and a shared sense of purpose among member states and European citizens. A renewed European Social Contract — based on foresight and mutual insurance — is presented as essential to supporting collective action and long-term stability.

2. The New World

We begin by examining the transformation of the global environment that long underpinned Europe's development, focusing on the evolving roles of the United States and China. The section traces the shift from US-led hegemony to a more fragmented and contested system, where geopolitical rivalry, economic imbalances, and competing policy models are reshaping global trade, finance, and security. It is the interaction between these two powers, which redefines the external conditions facing Europe. Clearly, 'we are not in Kansas anymore.'[1] Europe must now navigate a more unstable and competitive environment, requiring a reassessment of its role and strategic positioning.

The post-war US hegemony

For many decades, the world evolved under US hegemony. From its dominant position, the US offered three 'public goods' that both shaped and supported the international order: i) a defence umbrella to Western democracies; ii) a large market absorbing surpluses from the rest of the world (especially from the mid 1990s onward); and iii) a system of global governance based on multilateral institutions and rules of law. It is imperative to point out that in all these dimensions the US acted with the objective of first and foremost serving US interests.

Internationalism and the end of history

In particular, the multilateralism and rules of law embedded in the Bretton Woods institutions and other variable geography fora like the G5, G7, G20,

1 This draws freely from the now celebrated line 'Toto, I've a feeling we're not in Kansas anymore,' spoken by Judy Garland in her memorable role as Dorothy in the 1939 film classic The Wizard of Oz.

were structured in recognition of the dominant role of the US. This construct was based on the sheer economic and political weight of the hegemon as well as the primacy of an institutional model whose desirability was taken for granted, up to theorizing the eventual culmination of its success as the 'end of history.' Admittedly, in this context, the use of the term 'public good' is somewhat 'chiaroscuro.'

As effectively put by Mark Carney in Davos (2026), the international system held on to a narrative which everyone knew ironed over its own contradictions and unpleasant aspects. That said, it was a narrative that supported many decades of largely smooth growth and resilience to crises. By now, of course, we are fully aware that the system was not effective in preventing the accumulation of disruptive imbalances that have led to the diffusion of an alternative narrative, turning the world almost upside down. In a way, one could argue that the old narrative crashed on a gamble, that the progressive inclusion of different regions in the open market economy would lead countries to assimilate the foundational principles of Western democracies as their own, or at least to lead countries to accept the rules of the game as dictated by the US. Paradoxically, however, it is in the US that the gamble on the end of history seems to have gone awry in the most spectacular way.

Hegemony as global insurance

The US long shaped international economic and political relations through its role as a 'global insurance' provider. Echoing Adam Posen's analysis in the Third EMU Lab Annual Lecture (2026), the American presence was key in guaranteeing security, rule of law, macroeconomic and financial stability. This type of global security allowed countries to save on defence spending, thus releasing national funds for more socially-aware and productive purposes, and was crucial in the growth of trade, production, and value chains. From a macroeconomic perspective, the US also guaranteed a dynamic and ever-growing market for the goods and services produced by the rest of the world. Meanwhile, US treasuries served as a global safe asset, traded in a deep and liquid market. By the same token, the US presided over the international dialogue on financial stability and the expansion of global and international banking and intermediaries.

Private insurers charge a risk premium. Similarly, countries providing global insurance also benefit from the macroeconomic analogue of a premium from the rest of the world, in the form of (a) very low borrowing costs, including but not limited to 'convenience yields' on their assets; and (b) a high market valuation of their domestic human, physical, and financial capital. In other words, as the global insurer, while the US reduced the

variability of income and spending abroad in bad times, in exchange the US could achieve a high level of demand and consumption thanks both to access to cheap foreign finance for its deficit and higher wealth (Corsetti et al., 2026). The dollar was unquestionably the dominant currency in both the assets and goods market, in the denomination of government debt by emerging markets, as well as in trade credit.

The insurance provided by the US was uniquely effective in so far as it actually reduced the likelihood of the very risks it ensured against. The US defence and security umbrella raised prosperity world-wide by preventing scenarios of conflicts from disrupting trade and production chains. Especially after the Global Financial Crisis (GFC), with the extension of swap lines by the Federal Reserve, the US eliminated the prospect of damaging belief-driven market runs on intermediaries that could spread over real asset and economic activity.

In short, one could think of two types of insurance: one providing resources ex post to regions hit by negative events; the other, ex ante removing the conditions for negative events to occur at all, hence pre-empting the need to pay out resources ex post. We will return to this distinction below in the context of its implications for the EU. For now, what is relevant is that the US long provided both kinds of insurance and the EU long benefited from them.

From Hegemony to (Competition for) Primacy

What went wrong? Analyses abound. We shall spare another comprehensive account here and limit our discussion to key factors.

The roots of a faltering US hegemony

First, in spite of positive growth rates, US economic weight in the global economy declined relatively to the rest of the world — driven mainly by the growth of Asia — undermining its ability to exert power via the multilateral institutions and international legal framework it once dominated. This decline has been a complex process where economics and politics are interwoven with trends in demography and technology. Second, the failure of advanced economies to address the distributional consequences of hyper-globalization fed mistrust both of the multilateral approach to international relations, and of the existing democratic institutions as a framework capable of achieving an acceptable balance between efficiency, fairness, and inclusivity. And so, the 'end of history' has been moving further away from the initial, Panglossian, blueprint of the post-war, market-based democracy heralded by the US.

Both headlines above are well understood, as is the disruptive role of the rise of China, following its access to the global trading system in the 2000s. Between

2001 and 2021, China's trade grew more than four times that of the rest of the world. China's WTO membership reduced policy uncertainty for Chinese firms and international firms contemplating relocation of production to China. This resulted in a boom in Chinese export value to the US with new large exporters from China increasingly competing with domestic US firms or simply replacing domestic with Chinese production. Most crucially, China's WTO membership corresponded to a progressive and fast rise in quality and technological sophistication of the goods and services produced by the country, whose firms progressively gained in the market share and are increasingly exercising commensurate market power (Corsetti et al., 2018). China's industrial success was strongly enhanced by a policy strategy favouring implicitly, or even explicitly, technology appropriation and market scale through legal protectionism and subsidies, which prompted waves of Western criticisms but did not derail the process of Chinese integration in global trade and value chains.[2]

Reflecting this relative decline of US economic weight, the challenge to its hegemony in multilateral institutionalism has been multifaceted, most apparent in trade, concerning disputes and standards,[3] but also clear in climate change, concerning the relative costs and efforts to address it. One may argue that the US could have responded to this challenge in a number of ways, redressing their global role without pursuing a radical rupture with the past. Instead, the politics in the country pushed for a confrontational approach.

The rise of the 'grievance narrative'

A recurrent problem in systems where a country or region provides international 'insurance' is that the costs for the insurer and the benefits for the insured are apparent and relatively straightforward to quantify, whereas the benefits accruing to the insurer remain elusive. As mentioned above, these benefits are mostly in terms of high asset valuation and wealth, systemic stability, and scope for risk management. US politics found it relatively easy to misrepresent them and recast the perception of its costs and benefits through a 'grievance narrative' (Baldwin, 2025).

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2 This was clearly evident even at the time, as exemplified by the barrage of Western criticism of the 2015 Five Year Plans to support inward technology transfer and industrial development, raising issues in the infringement on foreign-owned intellectual property.

3 Take the increasing irritation of the US regarding the dispute. The WTO was successful in resolving conflicts through its Dispute Resolution System from its founding in 1995. But, beginning with President Obama's administration (2009-2017), the US became frustrated by the outcome of several cases. This frustration led President Trump to 'paralyse' or 'shut down' the WTO's Dispute Resolution System during his first term in office (2017-2021). President Biden continued Trump's policies to keep the WTO Dispute Resolution System 'on pause' or 'in limbo.'

It is worth articulating this narrative here, stressing the populist take that has recast US global hegemony in a completely new light: the US long provided a large market for other countries to prosper through export-led strategies, with nothing in return;[4] the US granted a defence umbrella allowing other countries to free benefit from the peace dividend, which is no longer acceptable to American taxpayers; the US invested in innovation allowing other countries to appropriate ideas and technology, self-harming its own economic leadership and military security; the US has opened its borders to foreigners, granting them income and wealth at the expense of employment opportunities and the welfare for US citizens. The list could go on, as the grievance narrative can be applied to every chapter of international relations.

Primacy in a multipolar world

Abandoning the multilateral, rule-of-law approach, the US has recast its hegemony as primacy, to be affirmed as a power relationship in which other countries, regions, and institutions cannot but accept their own subordinate role, as a precondition for not being damaged, economically, politically, or militarily, by the US. In this new framework of international relations, size counts more than ideological alignment. Hence, the US cannot but welcome external fragmentation of regions into smaller units in competition with each other for US protection, driving down both the price and prize for their efforts. Recent documents from the US administration (notably the National Security Strategy) leave no doubt that, in this new approach, US support for ideologically aligned political counterparties, and casting national interests in opposition to international cooperation and supranational institutions, is a strategic approach which ultimately seeks to consolidate the US's relative weight in international negotiations.

The specific manifestations of US primacy may change in the future, but the clock will not be turned back.[5] While it is difficult at this point to predict in detail the new geography of economic and power relations that will emerge from the current rupture, there are a number of highly plausible scenarios that Europe cannot ignore.

As articulated by Bertoldi and Buti (2025), one may indeed envision a world where, in the coming decades, two colliding superpowers interact following distinct

4 The Davos speech by President Trump exemplified this point by stating that the US allows the host country to market their watches without giving anything to the US.

5 The emergence of problems with the old US mode of international engagement preceded the first Trump administration. The tariff policies and initiatives of disengagement from the WTO decided in that administration were confirmed by the Biden administration.

strategies. The United States has become an 'extractive superpower,' simultaneously focusing on maintaining and using its bilateral leverage. In this strategy, the lead of the US in global markets and technology remains pivotal; through bilateral bargaining, the US can extract better terms from partners (and private enterprises) who have long benefited from its contribution to global demand, the liquidity of its financial markets, and the dynamism of its innovation, but also ensure that, especially on the latter, the rest of the world is kept at a significant distance from the frontier. National security will lie at the core of this strategy. The rise of Chinese military power has made outsourcing of manufacturing a strategic liability, leading the US to prioritize security in all dimensions of international relations.

In parallel, China has evolved into a 'dependency superpower.' Its extraordinary growth is built on a model driven by investment and massive exports relying on extensive subsidies, in this it is not that different from other growth miracles in East Asia. Because of its scale, China has managed to use its growth to engineer 'strategic dependence.' By dominating critical segments of technology and materials supply chains, it has made itself an unavoidable economic partner, binding others into asymmetric dependencies. This is a strategic advantage that grants significant political leverage. China has not been shy in using it, very carefully and effectively, in reaction to the US confrontational turn in international trade.[6]

Global implications of conflicting objectives

The new global economic landscape is currently being shaped by actions and announcements that are not necessarily in line with each other, with the resulting conflicting objectives only adding uncertainty to an already unstable global environment.

According to its current administration, the US is simultaneously pursuing two major goals: re-industrialization (including reshoring and the expansion of the defence sector) and a significant reduction in its trade deficit. However, in national accounting terms, the current account balance is defined by the difference between national savings and investment. The US drive for re-industrialization necessitates a surge in investment, which, all else being equal, worsens the external deficit. To achieve its second goal of trade rebalancing,

6 Taking a long-run perspective, the Belt and Road Initiative is an obvious example of this strategy in action, reinforcing dependence through a network of closely linked cross-border infrastructures, typically financed with loans tying local governments to China, also through debt. This dependency can be expected to play a crucial role in China's recent effort to reduce its own vulnerabilities to foreign shocks and pressure. The stated 'dual circulation' approach to rebalance domestic demand towards consumption would imply addressing the scars from the housing and local debt crises (the internal circulation) while keeping its presence and ties in the international market (the external circulation).

the US would need either a massive increase in domestic savings or a reduction in the income paid to foreign holders of US assets. Given the current fiscal trajectory, an increase in domestic savings is highly unlikely. It would take a reversal of the tax cuts at the core of the Big Beautiful Bill 2025 Act,[7] and arguably some additional and rather significant measures, to contain spending and raise federal revenue. Tampering with debt obligations risks a destabilizing spike in borrowing costs. So, any temporary reduction in the fiscal and external burden would be offset by a higher speed in debt accumulation over time, without mentioning global effects on the stability of international financial markets that are bound to spill back onto domestic US markets.

Meanwhile, China faces its own internal tensions. On the one hand, there is global and internal pressure for China to boost domestic consumption to rebalance demand away from investment and exports. Internally, this rebalancing requires careful management of the large debt and financial fragilities associated with the exceptionally fast rise in real estate investment in recent decades. History and logic suggest that the macroeconomic and financial metabolization of these internal imbalances takes time, so the engine of consumption growth in aggregate demand can be expected to phase in slowly. On the other hand, Beijing remains committed to achieving absolute technological leadership in sectors that serve global markets, the engine of its 'dependency model.' Viewing the external balance as the difference between exports and imports, China's drive for competitiveness and the development of 'new quality productive forces' at the expense of domestic consumption keep exports high and imports low, resulting in a persistent and massive external surplus. This reinforces China's role as a global creditor but deepens the imbalances with its trading partners.

Global reverberations

Because of these contrasting strategies, it is unlikely that external imbalances at a global level will recede soon. The US will keep running deficits, China a surplus, at least over the foreseeable future, unless something dramatic happens, such as a crisis translating into a sudden stop, with far reaching implications for currencies and asset prices.

Much of the current debate focuses on the potential disruptions from sudden stops in vertical production chains, which in turn motivate policies and investment aimed at increasing resilience. These are obviously important

7 The 'One Big Beautiful Bill Act of 2025' (OBBBA), signed into law on 4 July 2025, permanently extended the 2017 tax cuts, eliminates taxes on tips/overtime, and funds border wall construction. The bill was financed by cutting clean energy incentives and reducing funding for social programmes.

concerns: how to identify vulnerabilities, assessing the appropriate response, financing the costs of production and trade insurance in re-designing the regional and sectoral geography of production. Yet over time, technological innovation will create substitutes to critical materials, automatization and robotics will reduce the cost of internally supplied intermediates and goods, which should help overcome 'sudden stop' disruptions.

We should not lose sight, however, of another type of — equally threatening — effects. The ongoing regionalization of trade and the reconfiguration of supply chains are already shifting the patterns of Foreign Direct Investment (FDI), with an impact on the market structure in internal and international markets. Geopolitical developments are fundamentally altering their oligopolistic structure. In a world fragmented into competing blocs, the combination of tariffs, trade barriers, and security-driven industrial policies will likely lead to a significant increase in market concentration with the emergence of dominant 'national champions' or large-scale regional firms. This is likely to have profound implications (Corsetti, 2025a; Cheng et al., 2026):

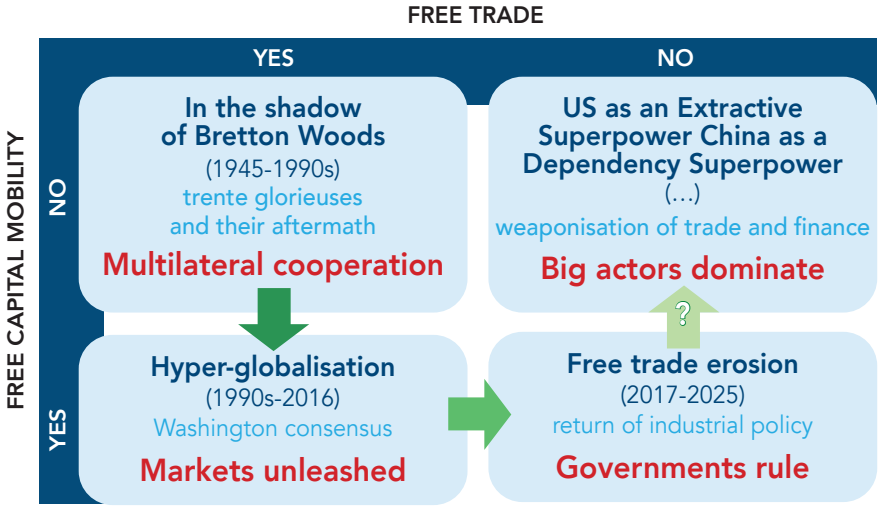
- **Welfare loss**: Increased market power in the hands of a few dominant players leads to higher real prices and reduced availability of goods.
- **Income inequality**: Market concentration tends to worsen imbalances in income distribution.
- **Innovation stagnation**: Dominant firms can create barriers to entry, preventing smaller, innovative companies from challenging the status quo.
- **Political capture**: Concentration of economic power inevitably leads to closer, potentially distortive connections between 'big money' and the political process.

Trade fragmentation cannot but impact on global financial flows. The accumulation of massive public and private cross-border liabilities makes the system highly sensitive to policy shocks. Tariffs and trade restrictions may undermine the ability of some countries to service their debts, threatening the resilience of the international monetary system.

As fiscal pressures mount, governments may be tempted to restrict not only the trade of goods but also the mobility of capital, marking a move towards financial repression to manage domestic debt. Should this happen, we would have come almost full circle: from the Bretton Woods era of gradually freer trade and limited capital mobility, through the hyper-globalization of free trade and full capital mobility, then the Trump 1.0–Biden progressive erosion of free trade but fully free capital mobility, to the highly plausible, final step of constraints on

all goods, services, and capital. There is little doubt, such fragmentation of the global economy and finance, only heightened by their widespread weaponization, would bring us to a pre-Bretton Woods arrangement with strategic absolute advantages primed over Ricardian relative advantages. We illustrate this almost complete — as of yet uncertain — evolution in Figure 1.

Figure 1 Coming (almost) full circle – international trade and finance



Source: Authors' elaboration, drawing on Corsetti (2025b).

Shifting risks: geopolitics meets structural trends

Developments in the global markets for goods and services and global investment flows correspond to a profound shift in the risk profiles of countries and regions. In the perception of investors, the US mutated from a safe haven, supplying the world with safe assets, to a relatively risky region, supplying assets that, while still benefitting from the depth and liquidity of their markets, are progressively losing their shine.

This mutation — for one is conflicted in calling it an evolution — prompts three comments. First, risk does not necessarily undermine the centrality of US assets and currency in the global markets. What matters is their *relative* riskiness. As long as investors perceive the rest of the world as being less dependable in terms of investor rights, taxation, and expropriation risks, US assets will still be over-represented (relative to GDP weight) in international portfolios.

Second, and relatedly, risk is compensated ex ante. US equities have been paying comparatively high premia, especially relative to equities issued in other advanced countries, for a long time now. Reflecting this, international investment in the US

has rebalanced away from treasuries and corporate bonds, in favour of equities. At the time of writing, about 20% of US equities are in the hands of non-US residents. The valuation of these equities is now weighing strongly on the net asset position of the country. Capital gains in the US stock market correspond to a rise in external liabilities, i.e., they tend to raise the cost of US external liabilities.[8]

Last but not least, risk foreshadows the possibility of particularly adverse developments. These may originate in the corporate sector (i.e., a strong reprising of investment in AI and other technologies) or in fiscal and regulatory policies. As already mentioned, the fiscal trajectory of the US may well prompt either higher 'fiscal inflation,' or capital controls and financial repression measures, aiming to contain the costs of borrowing or both. Yields on the US Treasuries have been drifting up, beyond what can be explained by the disappearance of 'convenience yields.'

Another important question concerns the extent to which risk considerations shape the foreign policy of the US in its transition from hegemon to primacy. To put it bluntly: the way to maintain its centrality in the global geopolitical system with a deteriorating risk profile is to make other geopolitical regions relatively riskier. Whether or not intentionally, one can detect a clear strategy in this direction, which challenges all regions but especially Europe, as it primarily hinges upon the EU's institutional imbalance. A divided Europe is weaker and riskier, a collection of small to medium-size countries that may end up acting strategically against each other, played by the dominant power.

A strategy of creating and shifting geopolitical risk across regions feeds into a world already destabilized by the relentless deterioration of climate and demography, and the abrupt novelty brought on by the latest wave of technological innovation. A non-cooperative global environment will only exacerbate the negative effects of these trends by either systematically denying or explicitly taking advantage of cross-border spillovers through beggar-thy-neighbour policies (think of the race to control fresh water). One thing is certain, a widely shared zero-sum approach to managing structural trends, with strategies shaped by the conviction that own gains can only be achieved against foreign losses, will only magnify global costs.

To be sure, the current wave of innovation — centred on Artificial Intelligence (namely 'Agentic AI'), robotics, and scalable capital — can be expected to reshape the organization of production, the level and composition of

8 It is sometimes claimed that the large capital gains now accruing to non-US residents on their holding of US assets is a manifestation of the 'exorbitant duties' at times of crises following the 'exorbitant privilege' of issuing the safe assets at low borrowing costs. This interpretation misses the change in the assessment of the geography of relative risk over the recent decades, which requires a different interpretative framework. In addition, the equity premia in the US have been very high for a long time, it does not coincide with a crisis period.

employment, and the distribution of income. However, reliance on technology is bound to be hindered by a fragmented governance of technological innovation and transition, as well as raising economic challenges of its own. The rising importance of sectors characterized by extreme economies of scale will lead to a profound reconfiguration of global markets, whereby certain governments will capture massive price rents and market power.[9] As stressed by the Draghi Report (2024), these considerations motivate the case for fully exploiting the scale of Europe's market and production-innovation network, and as discussed below, the case for a substantial effort in institutional, regulatory, and governance progress. Ignoring the challenge is no solution. A fragmented Europe, giving up on investing in own innovative technologies, will face harsh social consequences from declining productivity and competitiveness.

Given the status quo, demographic shifts are already affecting productivity and undermining the sustainability of the welfare state. The EU's median age has increased by over two years in the last decade. An aging population increases the fiscal burden of health and social services while making sovereign debt harder to service. In addition, Europe is bound to face the full consequences of regional imbalances with growing demographic disparities, i.e. aging in the West has gone hand in hand with very different demographic dynamics in other regions, intensifying migratory pressures and regional instability.

Finally, the rising frequency of natural disasters and desertification increases competition for essential resources like water, energy, and critical raw materials. Resource scarcity raises the spectre of conflict — whether institutional, regulatory, or in recent years, even military —, urging a rethink of Europe's security and defence frameworks. In a world dominated by a zero-sum approach to the exercise of power, providing the essential 'global commons' needed to combat climate change becomes increasingly difficult as the scale of the required investment and insurance grows.

Policymakers must navigate these trends while burdened by high public debt. The primary balance is set to worsen due to defence and investment needs, interest rates are rising as old bonds are refinanced, and potential growth remains sluggish. Barring a 'productivity miracle' from AI, the fiscal room for manoeuvre is rapidly shrinking as public debt will trend up in the next years.

9 According to a report by McKinsey&Company (2024), the EU leads in only two of ten foundational technologies (clean tech and new materials). The Draghi report (2024) further highlights stagnant productivity compared to the US and China.

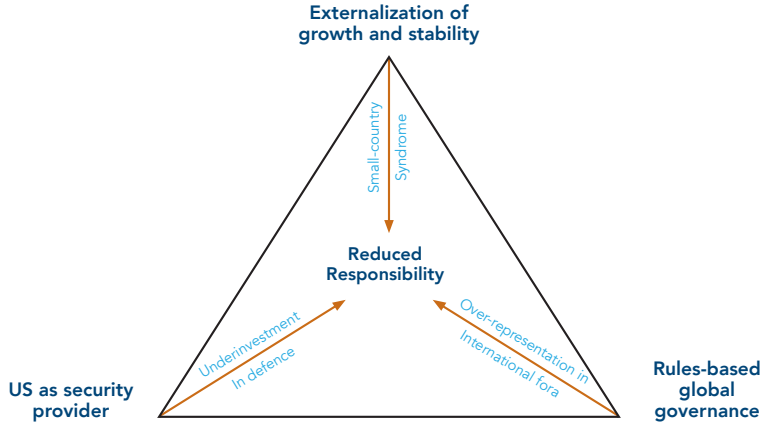
3. The long rise and sudden fall of the European model of reduced responsibility

What does this radical change in the international order mean for Europe? This question is best addressed by revisiting the historical evolution of European integration through the lens of the reduced responsibility model. Section 3 takes a step back to reflect on how the global order — prior to the recent rupture — shaped the historical evolution of European integration and underpinned its economic growth. However, the favourable global environment enabled progress without fully developed institutions, with successive crises exposing the fragility of this approach. By distinguishing between heterogeneity and policy-driven fragmentation, Section 3 highlights how internal divisions have constrained policy space and amplified economic divergence in reaction to environmental pressures. The section concludes by outlining alternative paths forward, with Europe now facing a structural choice between deeper integration and progressive fragmentation.

The EU through the lens of reduced responsibility

So far, we have elaborated on the idea that the post-World War II global order allowed Europe to progress with its integration without taking either the financial burden or full political responsibility that such progress entails. This approach especially concerned the design and resilience of its institutions, the effectiveness of its policies, and the strategic governance of its external relations. In that environment, EU Member States could bypass the political and economic hurdles implicit in defining a common defence and external policy, complete the Single Market, and set up resilient macroeconomic and financial institutions.

Figure 2 The EU model of reduced responsibility



Source: Authors' elaboration.

Here, we complete our 'reduced responsibility' argument, stressing that the various EU integration initiatives were never a passive reflection of global circumstances and developments — at each stage, Europeans have been motivated by political and aspirational drivers — supporting their ability to take advantage of and adapt to the changing environment. Yet, indeed, each institutional advance was systematically bound by and complementary to external geopolitical and economic developments.

From the Single Market to the euro

The EU Single Market in the 1980s and early 1990s came in response to the deregulation and liberalization of markets among advanced economies, spearheaded by the US. European countries understood the advantages of collective reform to internalize spillovers and reduce costs. And yet, as pointed out by the Letta Report (2024), the project fell short of providing a plan for the integration of the energy, communication, and transport sectors, as well as payment infrastructures and regulation, thus failing to produce sufficient scale for European firms to compete globally, especially so in these sectors. Member states continued to operate embracing outward export-led strategies, in large part targeting the US, rather than focusing on the growth of the internal market and stimulating domestic demand.

Implementing the One Market, One Money project (European Commission [EC], 1990), of creating the euro (1999) as laid out by the Treaty of Maastricht (1992), was another giant step forward for Europe as a Union. Similarly to the global dynamics surrounding the birth of the Single Market, it is well understood that, politically, the project for the euro was set in motion by German re-unification following the fall of the Berlin Wall and the collapse of the Soviet Union and. It should be equally clear that its smooth launch was greatly favoured by an international environment marked by the Great Moderation (from the mid 1980s to the GFC) during which credit, macroeconomic, and geopolitical risks were systematically underpriced, the expansion of trade seemed limitless, and global stability was taken for granted.

This external context made the political compromise at the heart of the EMU project possible. It allowed EU Member States to go ahead with the single currency without taking 'full responsibility' for it: they did not create an institutional framework that could guarantee the single currency's resilience to changes in the international environment that it was forged in and deliver inclusive prosperity for European citizens.

If it were not for the politics that led to Europe's abdication and self-constraint with regard to both the Single Market and the euro, arguably, much of the recent

history of the EU might have unfolded differently. The region could have developed a more competitive, more integrated, and more socially-oriented economy, supported by: a strong EU-level macroeconomic framework to contain imbalances (the large intra-euro area [EA] current account deficits were widely debated at the time); the use of cheap finance to create an efficient infrastructure interconnecting the Single Market, or set up a centralized fiscal capacity to supply European Public Goods (EPGs) and ensure an adequate EU macroeconomic policy mix.

Missed opportunities may indeed be difficult to consider, but the same cannot be said of the real costs that the incomplete nature of the EMU led to (Buti & Corsetti, 2024). In the first years of the new currency, debt issued by different governments with varying risk profiles traded at similar prices, as if it were underpinned by a single and complete European financial, monetary, and fiscal (macroeconomic) framework. Without such a structure, however, the underpricing of risk led to severe misallocation of investment across sectors and regions, at both micro and macro levels, and the accumulation of substantial imbalances financed primarily through cross border bank debt, planting the seeds of the eurozone sovereign debt crisis in the 2010s.

It is a foregone conclusion, still worth repeating, that Europe could have avoided the idiosyncratic financial and macroeconomic collapse experienced during the 2010s, if it had a proper risk-sharing macroeconomic and financial governance framework, instead of resting on the pretence that the Stability and Growth Pact (SGP) and the no bail out clause would be sufficient to pre-empt crises altogether.

Europe's Cooperative Reflex under External Pressure

At the eruption of the 2008 financial crisis, a short-lived global cooperative reflex — elevating the G20 as a premier forum for global cooperation orchestrating financial reforms and liquidity support — allowed Europe to sail on in spite of the fragility of its architecture. The temporary nature of this phenomenon became apparent soon enough with the euro-area sovereign debt crisis, which put an abrupt end to this comfort and created deep mistrust and division among member states. Yet, in keeping with Europe's well-established pattern of 'failing forward' and 'being forged in crises,' the depth of the economic, social, financial, and institutional damage forced governments towards solutions involving new forms of cooperation, even if mostly at the intergovernmental — as opposed to supranational — level. We will return to this point in the following section.-

It is important not to overlook that the handling of the crisis was greatly facilitated because the global commons remained open and rules-based.

The US recovered faster than Europe, supporting global demand, and China still offered a growing external market, meaning that Germany could renew its reliance on an export-led model, while rebalancing production chains taking advantage of the EU Eastern enlargement, and other member countries could take relief from exploiting the global export market. This was not to last.

Following in short order, causing one European crisis after another, the cracks in the old model of international relations were becoming increasingly difficult for Europe to ignore with the 2014 Russian annexation of Crimea, the Brexit vote, and the election of Donald Trump in 2016. The latter signalled a turn in political sentiment against the existing rule-based global order.

Remarkably — along with the halt of the global economy — these tensions temporarily subsided during the eruption of the Covid-19 pandemic. Europe succeeded in holding together, thanks in part to a 'benign coincidence' of factors: the exogenous and symmetric nature of the shock, the long-term vision adopted by European leaders, and a favourable alignment of national and international electoral cycles. These unforeseen, but serendipitous, circumstances allowed European governments to cross the Rubicon of EU commons borrowing under NextGenerationEU (NGEU), indicating a mending of trust between national governments, even if forced by the extreme circumstances. This too, was not to last.

The Russian war of aggression in Ukraine and the second Trump administration seem to have sealed the fate of the EU's previously supportive international environment, forcing it to take on responsibilities long blissfully ignored. At the same time, the interaction between internal and external fragmentation has intensified. External shocks now reinforce internal divergences, increasing the risk of fragmentation both within the EU and in its external economic relations, including trends towards regionalization or renationalization.

Fragmentation destroys policy space

The history and political debates on the EU suggest the importance of understanding fragmentation as clearly distinguished from heterogeneity. Heterogeneity — member states have different economies, institutions, social structures, etc. — is a fundamental feature of the Union, even if it is often portrayed as a problem frustrating the political ambition of the EU. However, it may also be portrayed as an asset, creating opportunities for risk sharing and gains from specialization. Fragmentation, on the contrary, is 'policy-made'. It may be semi-structural, e.g., due to the unwillingness of

member countries to overcome domestic institution hurdles to agree on a common defence policy and infrastructure.

The most damaging manifestation of fragmentation is endogenous polarization that follows policy failures in containing imbalances and destabilizing shocks. The evolution of the euro, from its introduction to the sovereign debt crisis, provides an outstanding — if unfortunate — example. As discussed above, in the first years into the life of the euro, institutional and policy deficiency in the architecture of the common currency could not prevent the accumulation of large and unsustainable intra-EA gross assets and liabilities positions, associated with inefficient investment in non-tradable sectors and domestic monopolies in services in many countries. With the eruption of the GFC, these imbalances fed fiscal and financial instability, causing the collapse of fiscal coordination, whether institutional or informal. Although triggered by the external shock of the global financial crisis, this situation was amplified by internal institutional weaknesses and political divergence within the EU. Without a convincing macroeconomic and financial stabilization policy anchoring sovereign spreads, debt markets became vulnerable to belief-driven market dynamics.—

The effects of fragmentation are best illustrated by comparing the economic performance of the euro area (EA) and the US over the years following the GFC. In 2008-2009, average unemployment rose and the difference between the best performing and worst performing states widened in both regions. However, through the 2010s, the US managed to contain the effects of the crisis on both aggregate GDP growth and the dispersion of unemployment among the US states. The EA did exactly the opposite. As ECB policy rates remained stuck at the effective lower bound, the polarization of financial and fiscal conditions (the key consequence of fragmentation) hindered fiscal policies. Crisis countries could not but pursue contractionary spending cuts and tax hikes; non-crisis countries preferred to follow precautionary austerity (to distinguish themselves from the first group in the eyes of the market). Without any political support for EU fiscal initiatives, this meant that EA growth remained subdued in the aggregate. So, lack of fiscal — or, more generally, policy — space was at the same time the cause and effect of fragmentation and an endogenous polarization in financial conditions opened a chasm in economic performance across regions (Buti & Corsetti, 2024). It took time before political conditions allowed some limited cooperative response, with the creation of the ESM and the ECB engagement in interventions that rule out belief-driven market dynamics destabilizing bond markets. While these

initiatives stopped much of the disruptive doom loops between fiscal, banking, and economic activity crises in weak countries, this meant that while US growth was bouncing back with the economic activity of its states converging, EA growth remained subdued in the aggregate and growth rate differentials among member states remained elevated.

As indicated, under the current US administration, fragmentation risks have become systemic and pervasive, cutting across borders. Strong centrifugal forces presage rising geopolitical tensions and intensifying competition over critical resources. An insufficient and tepid response by Europe could raise once again the spectre of an endogenous involution, where markets and policymakers' expectations of decline become self-validating not because of fundamental weaknesses in the European economic and social system, but because of a two-way feedback between investors' pessimistic beliefs, low investment, and inadequate policies.

Which way forward?

A global environment that turns from friendly and supportive to a source of shocks, threats, and instability shakes the EU's reduced responsibility model to its core, forcing a fundamental choice about what may replace it. Given the need for Europe to overcome the limitations in market and economic size, as well as to enhance its access to external resources, the logical response would be naturally structured around common engagement in key areas: defence, infrastructure, macroeconomic, and international governance. Motivating this approach is the idea that the perceived costs of compromise across national positions on the design of EU-level initiatives would be more than compensated by gains from the effectiveness of policy instruments and the extent to which these can be used in the interest of Europe as a whole—thus creating more policy space. Past experience shows that effective decisions at the European level create policy space also at the national level. For instance, the pandemic response crossed red lines at the EU level to boost national fiscal spaces by reducing tensions in financial markets. In addition, at the international level, a common front would allow the EU to exercise much greater influence relative to individual countries acting non-cooperatively.

Concretely, short of a federal union, bold common action — by exploiting economies of scale and scope — could reduce the cost and raise the effectiveness of European defence, fill inefficient gaps in European infrastructures, reduce borrowing costs in financing common projects, moderate vulnerabilities to large macroeconomic shocks, and strengthen the role of Europe in contributing to transition to a stable multipolar system.

Looking forward, the need for coordinated action in strategic areas is likely to entail 'coalitions of the willing' aggregated around specific common interests. This is unavoidable, given the legal framework and decision-making constraints of the Treaty. The key question is whether these coalitions of member states will act as a vanguard in the gradual evolution towards a stable Europe — e.g., overcoming the problems linked to unanimity rules and vetoes — or, on the contrary, this approach will de facto become a permanent framework for opting out, allowing countries to pick and choose according to their short-term interests, hence resulting in an 'EU à la carte.'

Therefore, two divergent paths may be envisaged, based on the current debate and Europe's record. In the first option, in the spirit of a renewed Community method, a critical mass of member states can help pave the way for deeper integration, particularly in areas like defence where today the EU has limited competences and remains constrained by unanimity rules. As in the case of the euro area, over time, other EU members would join the initial group. In the second option, intergovernmental cooperation becomes fragmented across separate policy areas and, marred by opportunistic opt-outs, leads to the progressive deterioration and loss of common endeavours, and eventually to the hollowing out of European institutions. Table 1 offers a synthetic visualization of this point.

Table 1: Response to the crisis of the reduced responsibility model

Different paths	Intergovernmental approach	Renewed Community method
Defence and security	Reliance on higher national spending and ad-hoc coalitions for limited issues.	Creation of a Defence Union and a Single Market for defence.
Growth and stability	Retreat into neo-mercantilism, national industrial policies, and fragmented financial systems.	Development of a central fiscal capacity, a safe asset, and strengthening the euro's international role.
Global governance	Network of bilateral national agreements with third parties.	Unified push for a new multipolar system.

Source: Authors' elaboration

The common thread underlying this argument is as simple as this: the collapse of the global military, economic, and financial safety nets is an issue that even the most ardent supporters of national sovereignty have to reckon with, and shakes the past EU model out of its comfort zone. While

addressing the same question (how to overcome the crisis of the reduced responsibility model), however, the answers Europeans may arrive at along the two paths are profoundly different in terms of what Europe can achieve with respect to the effectiveness of its initiatives and the resilience of its social and economic systems.

The danger of 'EU à la carte' is that it would be fragile and constantly changing by definition, member countries could simply move out of any coalition they perceive not to deliver on their short term interests, thereby failing to recognize the implications for other members or, for that matter, their citizens. The design of common policies on specific items by variable and overlapping groups of countries will not only be inefficient, but impractical, as it risks generating conflicting approaches across different policy domains. A resulting divided Europe will be a weak Europe with its institutional integrity undermined over time. That is not a promising proposition in a non-cooperative future global environment, which will produce shocks with increasing frequency and intensity, likely to create extreme turbulence in interests and alliances. At the time of writing, national and international policies of EU Member States already appear to be pulling in different directions vis-à-vis the international environment, oscillating between standing up to and betting on the benevolence of superpowers.

4. From Goals to Strategy: Building a New European Social Contract

Progress in European integration and economic resilience — on rebuilding policy space within existing constraints — requires a fundamental departure from the narrative of uniform decline. To this end, Section 4 first addresses the need to identify EU-specific technological trajectories that reconcile efficiency, equity, and sustainability. This requires a strong financial framework to support innovation and create the conditions for investment in Europe. We then set out a three-pronged agenda that articulates a renewed Community method: building multipolarity, pressing ahead with SIU, and reorienting the EU budget towards the supply of EPGs. In essence, this all boils down to defining a New European Social Contract. This entails a fundamental shift from a Europe perceived as a constraint on policy space to a Europe that creates policy space, where member states trade a degree of national sovereignty for collective economic and social security, sustainable growth, and global relevance. Such a contract would prioritize massive

common investment in innovation, decarbonization, and defence — funded by common debt — streamlining EU governance, and focusing on European Public Goods that no single nation can provide alone.

Searching for EU-Specific Technological Trajectories

The EU's primary challenge in the sector of frontier technologies is not about 'closing a gap' through imitation of the US, but rather about identifying and scaling up specific European technological trajectories that could successfully combine efficiency, equity, and sustainability.

The European Nordic model provides an inspiration for this synthesis, particularly regarding the efficiency-equity nexus. Their success is rooted in two pillars: the first consists of well-functioning product and labour markets that facilitate the dynamic reallocation of capital and labour towards emerging comparative advantages and technologies; the second consists of a welfare system that acts as an engine of innovation rather than a burden on competitiveness. By investing heavily in human capital, these systems fuel the knowledge economy, while a robust safety net lowers the personal cost of failure, thereby incentivizing the high-stakes risk-taking essential for radical innovation.

From a risk-management perspective, there is no contradiction between a well-designed welfare state and innovation and growth. Rather than a constraint on entrepreneurship and a drag on fiscal policy, a social safety net can foster flexibility in the labour market, enhance participation in the financial market (through pension funds) so as to convey resources towards innovative investment, and empower risk-taking as required to manage large shocks and socio-economic change, defining the core of a new European Social Contract.

This much is supported by evidence. According to the Knowledge Economy Index proposed by Diessner et al. (2025) — which tracks the knowledge-intensity of national economies by weighting technology alongside high-level skills — nations such as Sweden, Denmark, Germany, Finland, and the Netherlands have performed competitively between 1995 and 2020 even when measured against the US. Buti et al. (2025) arrive at similarly positive conclusions about Nordic countries, demonstrating they remain at the global forefront of investment in innovative technologies.

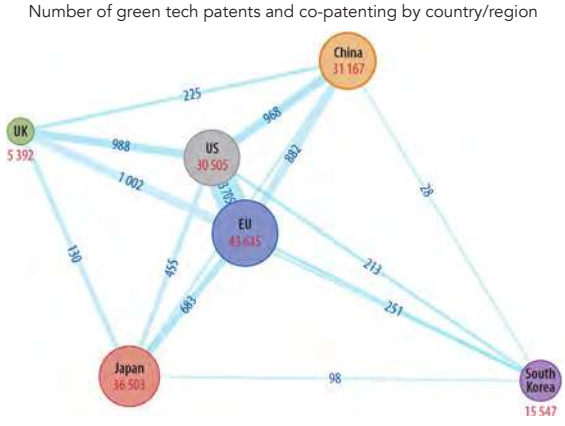
Figure 3 EU-specific technological trajectories: the Nordic way

		2000-2008	2009-2015	2016-2019	2020-2021	2000-2021
Continental Europe	Total investment	23.6%	22.7%	23.5%	24.3%	22.7%
	Traditional technologies	6.7%	6.3%	6.8%	6.5%	6.4%
	Innovative technologies	3.9%	4.5%	5.0%	5.4%	4.4%
Eastern Europe	Total investment	24.9%	24.2%	23.8%	24.8%	23.2%
	Traditional technologies	9.4%	9.3%	9.5%	9.2%	8.9%
	Innovative technologies	2.4%	2.5%	2.7%	3.2%	2.5%
Mediterranean Countries	Total investment	25.0%	20.1%	19.8%	21.3%	21.5%
	Traditional technologies	7.5%	6.2%	6.8%	6.9%	6.7%
	Innovative technologies	2.9%	3.4%	3.9%	4.3%	3.3%
Nordic Countries	Total investment	24.9%	24.4%	26.6%	27.5%	24.1%
	Traditional technologies	6.7%	6.5%	7.2%	6.8%	6.4%
	Innovative technologies	6.3%	6.8%	7.0%	7.9%	6.4%

Source: Adapted from Buti et al. (2025).

A similar logic applies to the efficiency-sustainability nexus, where the EU displays a clear first-mover advantage. As shown in Figure 4, the EU, alongside China, leads the world in green technology patents, significantly outpacing the US. This leadership is corroborated by McKinsey (2024), which identifies Europe as a global leader in clean-tech and advanced materials. Consequently, retreating from the Green Transition would be a strategic error, undermining not only climate goals but also one of Europe's most promising competitive advantages in the global market.

Figure 4 EU-specific technological trajectories: the EU as a central node in green technology collaboration networks



Source: EIB (2025).
Note: Each circle (or node) represents a country or region. The size of the node is proportional to the number of patents for the country/region (quantified within each nodes). The lines connecting the nodes ('edges') represent co-patenting links between the countries or regions. The edge labels denote the number of co-patent applications between the connected countries or regions.

In the second EMU Lab Annual Lecture, Philippe Aghion (2025) highlighted that the AI revolution holds significant potential to drive growth and employment, provided that institutions and policies are reformed to fully harness its benefits. Realizing European technological trajectories presupposes effective 'innovation governance.' A 'catch-up obsession' in the digital and AI sectors — where US incumbency is strongest — may not provide the appropriate guidance. A more effective strategy could instead focus on deployment and application. The EU should take a leaf out of the US playbook and create institutions comparable to the Advanced Research Project Agencies (ARPAs)[10] to facilitate the move from fundamental research to deployment in breakthrough technologies and strategic fields (e.g., defence, energy, health). As stressed by Aghion et al. (2025), this would also help attract US-based researchers who have expressed their misgivings about current US policies in science and technology.

A potential stumbling block for innovation governance is regulation. At this point, Europe has the opportunity to embrace a balanced approach, avoiding both rigid *ex-ante* regulation corridors that stifle innovation, and laissez-faire ones where generalized opposition to rules cannot but lead to the disproportionate market power of Big Tech, as the US experience suggests. A built-for-purpose framework should carefully navigate between these two extremes, balancing rules-based guardrails with the discretionary flexibility required for high-risk innovative investments. Squaring this circle is not outside the reach of the EU and would, in fact, demonstrate what a well-functioning Union can deliver.

Walking a fine line between scale and regulation, Europe could nurture the emergence of large champions without necessarily paying the high economic and political costs associated with inefficient and destabilizing market power. Consider, for example, the concrete risks of excessive accumulation and misuse of power foreshadowed by the breakthroughs in AI and robotics where economies of scale and first-mover advantages are bound to consolidate the dominant position of monopolistic conglomerates. In the US, we observe strong feedback loops between economic and political power, wherein giant corporations may hold significant lobby influence over politicians, while simultaneously serving as an economic arm of political groups. The EU has an advantage for moderating this type of risk. It can afford to boost the scale of the Single Market through genuine cross-border integration, while keeping tight antitrust regulation at arm's length from national politics.

10 US Advanced Research Projects Agencies (ARPAs) are government-backed organisations designed to fund high-risk, high-reward research that is too uncertain or long-term for traditional public funding or private markets. They include the Advanced Research Projects Agency–Energy (ARPA-E), Advanced Research Projects Agency for Health (ARPA-H), Intelligence Advanced Research Projects Activity (IARPA), Advanced Research Projects Agency–Infrastructure (ARPA-I).

Indeed, as highlighted by Isabel Schnabel in the first EMU-Lab Annual Lecture (2024), deeper integration and financial markets, underpinned by a supportive regulatory framework are key to stimulating investment. Furthermore, from a financial perspective, European heterogeneity, production specialization, and the need for investment in sectors where Europe lags behind, offer diversification and opportunities for profit for domestic and international investors alike. However, reportedly — and understandably — investors are reluctant to take these opportunities now, given the fragmentation of financial markets and divergent national regulation, which creates legal barriers, information hurdles and costs, and attaches cross-border administrative risks to portfolio positions.

The reality is that a dynamic expansion of innovation and investment — supporting corporate growth, technological adoption, and scale — would be difficult to achieve in a Single Market whose macroeconomic and financial stability remains vulnerable to large shocks. Without a proper macroeconomic and financial stability framework disruptions can weaken policy coordination and generate cross-border financial fragmentation, leaving markets free to polarize borrowing conditions and costs across borders and fuel reinforcing crises across banking, corporate, and fiscal sectors, ultimately depressing demand and economic performance. Note that this is exactly what happened during the 2010-12 crisis in the EA (i.e., the eurozone sovereign debt crisis), the memory of which cannot but make corporates wary of sustaining the costs for frontier R&D or scaling up at the risk of suffering a meltdown of their markets caused by an insufficient or ineffective macro and financial governance (Draghi 2024b).

This is a surmountable challenge — Europe must come to its senses, creating a true Single Market for finance along with the appropriate macroeconomic insurance against (endogenous) fragmentation risk. Rebalancing the perception of this risk would vastly improve the attractiveness of European assets, which could be further strengthened with the issuance of a common European safe asset.

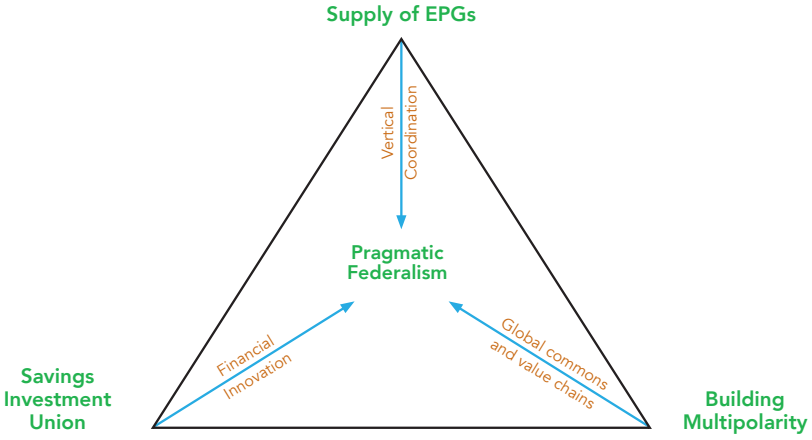
Overcoming Reduced Responsibility: A Three-Pronged Policy Agenda

As argued above, Europe is at a critical juncture: its reduced-responsibility institutional framework is under growing geopolitical strain, requiring a strategy to rebuild policy space and counter fragmentation. Joint decision-making is an essential step to overcoming this crisis. However, it is clear that the current political climate would not permit institutional shifts towards a fully federal system. In this search for a new model, we should be wary of the temptation

to search for quick fix institutional solutions, which are unlikely to deliver as a universal remedy for all.11 That is why we argue for a pragmatic approach, a pragmatic federalism for a new European Social Contract, better suited to addressing the EU's current economic and geopolitical challenges, resting on a set of established policy priorities and existing policy tools.

This approach is built around a three pronged policy agenda: (i) strengthening multilateralism in line with Europe's vision and values for a stable global order, (ii) advancing the Savings and Investment Union (SIU), and (iii) ensuring adequate provision of European Public Goods (EPGs).

Figure 5 Overcoming the reduced responsibility model



Source: Authors' elaboration.

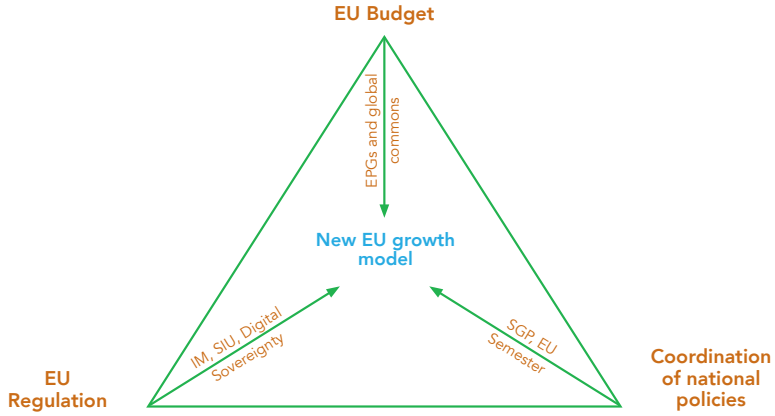
Delivering on this agenda requires utilizing existing and readily available instruments that the EU already has at its disposal, specifically, the Multiannual Financial Framework (i.e., the EU budget), fiscal coordination via the SGP within the European Semester, and its regulatory powers. A

11 Take the proposal to abolish unanimity in EU decision-making. Such a move would certainly help to address the obstruction tactics of anti-EU countries and is a conditio sine qua non in view of future enlargement that will bring the EU to 35+ members. However, one should be aware that the fundamental problem interfering with EU policies and developments in the last several years has been not so much the opportunistic behaviour of nationalistic leaders, but the discord at the core of the EU, which has led to the impasse of the Franco-German motor. By the same token, take the proposal to attributiethe right of initiative to the European Parliament. Those in favour of such reform hope to raise the profile of the democratically elected body and foster a truly European dimension in the legislative action. These are clearly commendable points. Yet, one should be aware that, given the present fragmentation of the Parliament and the option of forming variable majorities, such reform — while reducing the role of the Commission — would likely exacerbate the current problems attributed to the shortcomings of the Commission.

successful growth strategy requires that these are employed in a targeted and integrated manner — rather than in isolated silos — allowing mutual reinforcement of effectiveness and efficiency.

For instance, in the past, an inadequate centralized budget usually led to over-reliance on the EU's regulatory function — or 'soft coordination' — to drive change. More recently, insufficient EU resources have led to a loosening of state aid provisions, risking the integrity of the Single Market. A systemic forward-looking approach would ensure that regulatory standards, budgetary resources, and policy coordination work in tandem to support overarching technological priorities rather than operating in silos, thereby facilitating much-needed public investment in research and development (R&D) as well as human capital. The Important Project of Common European Instruments (IPCEI), if strengthened to encompass EU financing, is a promising tool to pursue a centralized industrial policy to deliver EU specific technological trajectories. The stronger link between EU transfers and common priorities envisaged under NGEU and now proposed by the Commission for the 2028-34 MFF is also a step in right the direction of rethinking subsidiarity and vertical coordination.[12] Figures 6 illustrates.

Figure 6 Harnessing the EU policy tools



Source: Authors' elaboration.

Clearly, not all projects or measures can be undertaken at the same time. The criteria for selecting the most promising interventions within these areas should be their ability to generate positive spillovers beyond their direct

12 This time, there may be enough stress from the environment to force EU Member States to act with foresight, without falling into the demeaning historical patterns of Denial, Panic, Action, and Complacency. We have seen this over and over, most recently in the temporary nature of NextGenerationEU (NGEU) and the stalled progress of the Banking Union.

impact, such as their capacity to create cumulative improvements that shape European citizens' positive experience and perception of the EU. In essence, priority projects should target critical nodes within key policy areas, specific leverage points that create multiplier effects and gradually loosen political gridlock. If these are paired with a medium-term vision that builds on existing public support for European integration, it could go a long way to effectively addressing the Union's current challenges.

The remainder of this section sets out the specific steps and actions that can support the effective implementation of the agenda.

Building a multipolar world

The assault on multilateralism and the rule of law by the US risks a severe deterioration of the global commons, undermining policy cooperation on climate, health, digital governance, financial stability, among others. A key strategic question for Europe, therefore, is how to assume a credible and consistent leadership role in safeguarding global public goods. This will ultimately depend on the EU's capacity to underpin its external ambitions with a robust and coherent domestic agenda.

The retreat of the US from global multilateralism presents an opportunity for Europe to fill the vacuum. Relevant to this end is Canadian Prime Minister Mark Carney's 'bottom-up' strategy for middle powers, aiming to rebuild multilateralism through coalitions of the willing (Carney, 2026). In principle, because of its sheer size, experience in market regulation, the primacy of law for citizens and corporations, the EU is extremely well positioned to promote global cooperation and the supply of essential public goods.

But in a non-cooperative world, global leadership can only be exercised by relying on a sufficient level of strategic autonomy, which is where an ambitious agenda for EU institutional reform becomes crucial. How can Europe consolidate robust and resilient production chains, payment platforms, cybersecurity, or common defence? Is there a realistic prospect for the euro to gain influence in international financial markets?

It is as of yet unclear where shifting global geopolitical and economic alliances will ultimately settle, but one can expect that the new equilibrium will require competing centres to manage their mutual vulnerabilities. And while there is no readily available blueprint to follow in constructing Europe's role for a recast multipolar world order, Bertoldi and Buti (2026) suggest a number of fundamental and complimentary policy priorities to consider.

First, to strengthen political and economic ties and reinforce an open trading system, middle powers should be encouraged to develop new networks of free-

trade agreements — such as the EU–India or EU-Mercosur initiatives[13] — while also expanding existing economic ties, deepening cooperation across major trade blocs, and forging strategic economic partnerships, a most notable example in this regard being the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Second, they should prioritize supply-chain diversification. As the US increasingly uses protectionism to reshore production and redirect investment, middle powers have a shared interest in building more autonomous supply chains, particularly in sectors dominated by the US and China, such as digital infrastructure and AI. Over time, these efforts should strengthen domestic and regional demand, thereby reducing reliance on both Chinese inputs and access to US markets. Third, restoring and safeguarding the rules-based global trading system requires meaningful reform of the World Trade Organization (WTO). To this end, EU Member States should cooperate with other middle powers towards a coordinated post-US trade agenda and the development of a joint framework to uphold free and fair trade. Fourth, the legitimacy of such a coalition will depend on its support for the world's most vulnerable economies. The EU should lead efforts to close the $60 billion gap left by cuts to USAID (Pichon et al., 2025), with Team Europe — a humanitarian and development-aid initiative bringing together EU institutions and member states[14] — reallocating part of its €90 billion budget and encouraging partners such as Canada, Japan, and Australia to follow suit.

Additionally, the global climate agenda must be reinvigorated. In light of the US retreat from climate leadership and its opposition to clean energy policies, middle powers have both the opportunity and the responsibility to advance the green transition. Finally, in shaping a new multipolar system of geoeconomic relations, the EU must reassess its complex relationship with China, which simultaneously remains a partner, a competitor, and a systemic rival. This will require a more calibrated and coherent approach, preserving channels for cooperation where interests align, while managing strategic dependencies and addressing areas of economic and political contention. The key issue will be whether China can be engaged in rebuilding the multilateral trade system in earnest. For this to happen, it will have to shed its dependency model.

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13 More information is available on the designated European Commission websites for EU-India Free Trade Agreement, Investment Protection Agreement and Geographical Indications Agreement at https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/india/eu-india-agreements_en, and The EU-Mercosur trade agreement at https://commission.europa.eu/topics/trade/eu-mercosur-trade-agreement_en?utm_source=chatgpt.com.

14 More information can be found on the designated European Commission website for Team Europe Initiatives at https://international-partnerships.ec.europa.eu/policies/team-europe-initiatives_en (accessed 12 April 2026).

This internationalization cannot occur in a vacuum, it requires a credible, unified external presence and a proactive capacity for security and crisis management. The emergence of Central Bank Digital Currencies (CBDCs) and private digital assets is reshaping the global monetary landscape and introduces a new variable into the quest for multipolarity (see discussion by Bénassy-Quéré, 2025) . Over time, these innovations could provide the infrastructure for a more diversified currency system, gradually eroding the dominance of the US dollar and contributing to a more multipolar monetary order.

Savings and Investment Union going beyond Capital Markets Union

An inward gazing United States compels the EU to confront its significant dependence on American technology and market scale. To date, as highlighted in the Letta (2024) and Draghi (2024a) reports, Europe has fallen short in cultivating innovation in strategic technological sectors, reversing weak productivity dynamics, or fully integrating the Single Market to achieve economies of scale. If the US continues to constrain the global 'innovation commons,' the EU will no longer be able to postpone strengthening its internal capacity, an objective that would also contribute to de-risking its relatiionship with China.

At the heart of this rather inevitable transition is the capacity to channel resources into investments that bolster innovation and productivity. This is the true purpose of a functional Savings and Investment Union (SIU) — essential for sustaining income per capita, standards of living, and inclusive resilience across European regions — of which the Capital Markets Union (CMU) is only a component.

According to the widely accepted view, Europe should rely on its abundant private wealth to energize markets. For this to work, the European financial sector must evolve from a bank-dominated model to a system of intermediation able to channel resources into high-risk innovative ventures while satisfying households' demand for assets with attractive risk-return profiles. Appropriate financing and a unified market will allow European firms to innovate and scale up. To this end, it is essential to allow the recently proposed 28th regime (EC, 2026) to be effectively implemented.

This report argues that a successful SIU is far more than an articulation (with relabelling) of the CMU. It is doubtful that innovation can be spurred by relying exclusively on private actors; by itself, CMU is unlikely to stop corporate migration to foreign, deeper, and larger markets, or transform the European economy. Instead, an effective SIU requires a comprehensive approach to reforms concerning:

- **The system of intermediation** – developing entities like pension funds at scale through careful reform of domestic and EU legislation.
- **Structural regulatory alignment** – a reassessment of business laws, judicial systems, and bankruptcy codes to make the EU attractive for both financial and non-financial corporates. This does not imply homogeneity, but a reliable baseline for cross-border operations.
- **A European safe asset** – essential for liquidity and as a benchmark for stability, that markets cannot provide.

The success of the SIU will rest on the tangible benefits it can provide to EU citizens. Boosting productivity is the only way to preserve the European welfare state amid an aging population. While Europe could theoretically rely on US leadership in AI or robotics, e.g. in the health sector, US standards and pricing are shaped by private providers and may be incompatible with Europe's public-based systems and regulatory framework. Similar logic applies to the defence and security industries.

A European safe asset is crucial for boosting the benefits of SIU. A common safe asset would improve the borrowing conditions of the Union, as it would trade at a liquidity premium. Furthermore, it would provide a robust alternative to dollar-denominated assets for collateral and liquidity management. Multiple proposals stressing the benefits from (and the need for) a European safe asset traded in deep and liquid markets adopt a 'stock approach', entertaining the conversion of a substantial portion of outstanding national debt into European debt, supported by some financial engineering that can guarantee a low risk profile (see, e.g. Blanchard & Ubide, 2025). While the stock approach could bolster the international status of the euro and facilitate the completion of SIU, thereby enhancing Europe's strategic autonomy, it is widely perceived as 'mutualizing the past', a concept that struggles to align with current national political incentives. Even if safeguards are implemented to avoid joint-and-several guarantees, the stigma of debt-sharing remains a significant hurdle.

Alternative schemes concerned with political feasibility typically adopt a 'flow approach', linking the issuance of common bonds to the funding of specific EPGs (see, e.g. Anev Janse et al., 2025). The flow approach (i.e., 'mutualising the future') is viewed as more politically viable, particularly if common issuance is directed toward high-priority sectors like EU defence projects.

A pragmatic middle ground could start by consolidating debt issuance by the European Commission, the European Investment Bank (EIB), and the European Stability Mechanism (ESM). While technically complex, a common issuance should not face insurmountable barriers. This relatively small reform would yield two critical benefits, in terms of Maturity Structure and Market Status. First, it would allow the EU to build a comprehensive yield curve; second,

EU debt could finally transition from being treated as 'supranational' to being recognized as 'sovereign' by investors and to be included in major market indices. All that being said, while the arguments to power ahead with SIU are overwhelming, progress has been slow. Unlike the Banking Union, the stumbling block is not ideological resistance and division, but the complexity of the endeavour, substantial differences among national legislative, governance and legal systems, and powerful domestic and international actors that profit from regulatory arbitrage and quasi-monopolistic positions. Politically, national governments pay lip service to the 'imperative' to make capital markets integration a success but, d*e facto*, there are no political champions to lead the way.

What will it take to move beyond the current gridlock?

First, the conceptual shift from CMU to SIU provides the opportunity for a new approach and a new narrative. The emphasis should be put on its role for enhancing the EU's geopolitical stance and fostering its strategic autonomy: without a fully integrated financial market and a safe asset, the EU will remain vulnerable to shocks and unable to play an effective role in global governance. Moreover, the euro would continue to play second fiddle on international markets, leaving EU businesses more exposed to extra-territorial sanctions. A complete financial union with a safe asset is key to boosting the role of the euro as a global currency and hence moving to true monetary sovereignty.

To regain momentum, the emphasis should shift to the role of capital markets in fostering green transition and competitiveness, going beyond the attempt of simply catching up with the US or China. As argued above, investments on the required scale will not be possible without simultaneously mobilizing public and private capital. Decarbonization and bridging the digital divide involve investment projects that are typically highly risky so they cannot be financed by ordinary banks; unless Europe starts to move away from its bank-centric financial model, it will fail to deliver on the double transition.

Second, the SIU policy agenda is very wide and complex. The EU must prioritize measures that would make a tangible difference 'on the ground' in real economy, in the everyday lives of European citizens. An appropriate example would be the development of securitization instruments in support of small and medium sized enterprises. Last, but not least, as the experience of the Banking Union has shown and as widely accepted by scholars (e.g. Veron, 2025), the creation of a single supervisor through the reform of European Securities and Markets Authority (ESMA) will be essential to progress.

Supplying and financing European Public Goods

The traditional architecture of the EU budget is becoming increasingly anachronistic in an era of 'weaponized interdependence' and systemic competition. As external support for global stability weakens, the EU budget must evolve from a primarily redistributive instrument into a strategic tool for advancing both its internal and external priorities. This reform is not merely a technical adjustment but a fundamental necessity for maintaining the European social and economic model. The European Commission's July 2025 proposal on the new Multiannual Financial Framework (MFF) is a positive step in this direction.

Applying Buti and Papaconstantinou's (2025) framework of evaluation — based on budget composition, flexibility, and size — the current MFF performs well on the first two counts. It reflects a reorientation of spending towards competitiveness and global action and enhances the ability to reallocate resources in response to shocks. However, constraints on size — with the EU budget still barely exceeding 1% of GDP — mean it remains insufficient to meet the scale of the Union's current challenges, and especially the need to provide EPGs on sufficient scale.

EPGs are defined as those goods optimally supplied at the supranational level, so as to exploit economies of scale and scope, and mitigate concerns over coordination and appropriation when decisions are taken at the national level. Identifying EPGs rests on a synthesis of arguments combining public economics, fiscal federalism, and the practicalities of EU integration. The key features of EPGs are best explained through three distinct lenses: economic, institutional, and political.

While EPGs can enhance efficiency and lower provision costs, their delivery requires member states to share sovereignty, shifting decision-making authority from national capitals to Brussels. For this to be acceptable, the *perceived* benefits in efficiency and scale must clearly outweigh concerns over the dilution of national control. Moreover, national preferences regarding EPGs are not uniform, as different types of public goods reflect varying national priorities. In this context, Buti & Messori (2026) suggest a useful distinction based on Innovative and Solidarity EPGs:

- **Innovative EPGs**: aim to help Europe improve innovation and productivity, e.g., transnational AI R&D, green transition infrastructure, and next-generation telecommunications.
- **Solidarity EPGs**: These focus on strengthening social inclusion and protecting the European welfare model, e.g., EU-wide platforms for worker mobility/skills, centralized pandemic prevention, and the integration of migrants into the labour market.

Member states closer to the technological frontier — which happen to partially coincide with those with robust national welfare systems — may prefer Innovative EPGs to exploit economies of scale, but resist spending EU money on Solidarity EPGs, so as to maintain full national control over social policy. Conversely, member states with weaker welfare systems, or those further from the technological frontier, may prioritize EPGs that foster solidarity to shore up their social models. From their vantage point, sovereignty transfers for innovative EPGs are high cost with low immediate returns. Securing the success of the next MFF would depend on finding a balance between these preferences, bundling different types of EPGs together to ensure that every member state sees enough benefits from the sovereignty transfer.

That being said, a key argument in this report is that the perceived trade-off between Innovative and Solidarity EPGs is largely misleading. Well-designed safety nets do not merely serve social fairness objectives; they also enhance efficiency by enabling greater risk-taking, facilitating labour mobility, and supporting investment in innovative but risky areas. By reducing the individual cost of failure, solidarity-oriented policies can strengthen the conditions under which innovation thrives. In this sense, Solidarity EPGs can complement, rather than compete with, Innovative EPGs, suggesting that the tension between the two is more political than economic.

Fulfilling strategic priorities by advancing different types of EPGs in a mutually reinforcing way requires closer coordination between national and EU budgets, with a view to developing a 'European budgetary system.' A useful distinction can be drawn between 'genuine EPGs,' which by their nature can only be provided at the EU level (e.g. safeguarding the integrity of the Single Market), and EPGs 'by aggregation,' where the EU adds value by coordinating national provision that would otherwise remain fragmented and inefficient (Buti & Papaconstantinou, 2022).

Defence stands out as most urgent of the former category. Considering the evolving stance of the US administration toward NATO, it has become a clear, collective necessity. This is also the area where economies of scale are most evident — through joint procurement and the development of a genuine Single Market for defence — and where the costs of inaction at the European level are becoming increasingly untenable.

These rising spending pressures bring to the fore the need to reconsider the overall budget ceiling and to identify new 'own resources.' These are required not only to service and repay the debt accumulated under NGEU, but also to provide the EU with more autonomous revenue to respond flexibly to crises and evolving strategic priorities.

However, the new own resources proposed by the Commission — such as a corporate tax on large firms, levies on tobacco and e-waste, and adjustments to the EU Emmissions Trading System (ETS) or the Cardbon Border Adjustment Mechanism (CBAM) revenues — remain too limited to meet these objectives, while more ambitious steps, including common debt issuance, remain politically constrained. In the current context, member states are reluctant to cede tax bases and often raise legal or constitutional objections at the national level.

To overcome this resistance, any expansion of EU own resources must be clearly linked to the provision of EPGs. If designed appropriately, and with the overall tax burden at the national level remaining broadly unchanged, such a shift could yield net benefits: more efficient provision of public goods at the EU level would be matched by a corresponding reduction in national public spending.
Advancing any reform of the EU budget would require overcoming entrenched vested interests that benefit from the status quo. This, in turn, calls for sustained public engagement: keeping attention focused on the stakes of reform, openly challenging attempts to dilute or block key innovations, and clearly linking proposals to evolving economic and geopolitical pressures. Experiences such as the European Citizens' Panels15 suggest that, when properly communicated, public opinion can support ambitious reforms, thereby raising the political cost for reluctant Member States of obstructing progress. This is consistent with survey evidence (e.g., the Eurobarometer), that indicates that citizens are often more open to empowering the EU than national authorities, in line with political economy insights that governments may adopt positions shaped by the preferences of marginal voters.

5. Conclusion: Rethinking European Solidarity

What could once have been considered neutral global commons — energy, finance, and climate — have become explicitly weaponized. A strong drive towards protectionism and the strategic use of industrial policy undermined the reach and stability of the world trading system. The external environment that Europe relied on for its growth, stability, and resilience did not just weaken, nor did it disappear; worse still, it became a source of shocks and exposed its vulnerability to foreign threats in many dimensions. The US and China both moved towards interventionism,

15 The Panels are deliberative forums composed of randomly selected citizens from across the EU who meet to discuss key policy issues and provide recommendations to EU institutions. For more information, see the designated European Commission website Citizens' Engagement Platform: Your space to participate in EU policymaking at https://citizens.ec.europa.eu/index_en (accessed 12 April 2026).

leaving Europe's export-led model orphaned between two superpowers that now prioritized their own strategic dominance over global stability. European countries and the EU are caught in a pincer, making the status quo hardly sustainable and, absent adequate measures, foreshadowing the prospect of external marginalization and internal deterioration of living standards.

Europe is neither powerless, nor in irreversible decline. In fact, as Adam Posen reasoned in his EMU Lab annual lecture, since EU support of rules-based international relations is becoming an increasingly scarce commodity worldwide, its value is rising. Not to let this opportunity go wasted, or worse, let Europe succumb to the narrative of decline, it is necessary to prevent the ongoing revolution in international relations from generating fragmentation of the European political and economic space. Given the existing political and institutional constraints, there is space for constructive initiatives aimed at reinforcing global commons: creating an efficient infrastructure; scaling up the Single Market, reframing its financial system to channel resources to innovation and investment and offer reliable financial instruments to households and firms; supporting productivity-enhancing technological trajectories; and empowering the welfare state as a set of policies reconciling efficiency with equity.

Concretely, this can be achieved through a variety of actions, the most important of which we think include: completing the Single Market, thus allowing European corporations to boost their scale across the Union and enable them to project globally; creating a genuine Capital Markets Union; bolstering the EU budget; launching a European safe asset; pursuing effective governance of innovation and technological progress; and defining a smart strategy to navigate the geopolitical drifts set in motion by the US.

In light of recent experience and the constraints of the EU legal framework, progress will most likely be advanced through the initiative of various groups of member states. The challenge will be to design a path along which leading initiatives can help to gradually broaden participation among member states, instead of splintering into a multiplicity of ventures that risk eroding the EU's institutional integrity.

It is important to emphasize here that the EU can do much better than to place the innovation gaps with the US and China at the centre of its economic, regulatory, and social strategy. Rather, it should identify specific European technological trajectories that balance efficiency, equity, and sustainability. This path cannot be pursued with the benefit of a blueprint of technological catch-up. It will have to be much more pragmatic, firmly anchored in a quintessentially European social and economic foundation, and free of the

perception that European delays in digital and AI innovations are so deep as to be insurmountable.

Eventually, institutional reforms will be the key to success. While there may be no institutional silver bullet to rely on at this stage, perhaps it is high time to confront foundational issues. In this respect, it is hard to envision the kind of institutional and political development that would empower Europe in the new global context without rethinking the concept of solidarity within the EU.

This brings us to the work of the late Jürgen Habermas. A profound thinker and a true European intellectual leader, Habermas offered an inspirational critique of the EU's management of the sovereign debt crisis that resonates loudly with today's European challenges. He heralded the idea of abandoning an altruistic or 'charitable' model of cooperation in favour of a more robust, insurance-based contract of solidarity (Habermas, 2008). Beyond its undeniable moral appeal, this concept can be envisioned as a structural necessity to improving efficiency and stabilization in Europe. Solidarity should be regarded as a reciprocal commitment to mutual support and a common political project. This would allow EU Member States to accept possible short-term disadvantages to secure long-term stability, provided there is a credible expectation that others will do the same in analogous circumstances.

Insurance-based solidarity would help address the scarcity of political capital for redistribution between EU Member States, as well as the deep aversion to 'transfer union' in some of them. It could be the basis of a new European Social Contract. A large body of literature — especially involving EUI and EMU Lab researchers — provides a rigorous conceptual framework to design the institutions of sustainable cooperation and risk-sharing in the EU (See, e.g. Ábrahám et al., 2025; Liu et al., 2023; Ábrahám et al., 2023; Ferrari & Rogantini Picco, 2023). There are two necessary conditions for such social contract to be viable.

First, member states cannot operate under the presumption that their relative exposure to shocks would never change, i.e., assuming they will always be on the creditor side of the table or that they can predict which specific exogenous shock (migratory, environmental, or geopolitical) will strike next. A sufficiently high level of 'ex ante ignorance' (i.e., the 'veil of ignorance' in Rawlsian terms) regarding a country's exposure to shocks is key to incentivizing a system that minimizes collective risk. During the euro debt crisis, opposition to common 'insurance' was inflexible for some EU members — starting with Germany — which perceived themselves to be in a permanently stronger position than others. These countries rejected the solidarity paradigm on the grounds that transfers would only run one way, thereby exacerbating the moral

hazard distortions that caused the fiscal crisis in the first place. Yet, if anything, the 2015 migration crisis demonstrated that even Germany — traditionally a pillar of stability although reliant on an export-led growth model — can be left more exposed to shocks than the generally perceived as 'weaker' Mediterranean periphery. Given that increasing global fractures and endemic uncertainty, i.e. geopolitical, energy, and climate instability, will affect the typology of shocks in unpredictable ways and create vulnerability across the board, joint insurance is sure to benefit all EU countries.

Second, trust among EU Member States would be an essential condition to enforcing an insurance-based solidarity contract, working as the 'intertemporal glue' that binds together the signatories of the social contract. This condition is less likely to be satisfied in a Europe of nations operating across variable ad hoc coalitions based on specific interests: in such an intergovernmental model, the 'exit option' tends to intensify short-termism and undermine trust. Moreover, in such a model, instead of being the forerunner of more advanced integration, coalitions of the willing would give rise to a 'Europe à la carte' that is bound to prove highly ineffective and ultimately unsustainable. Such circumstances would create the opportunity to move crisis management away from 'temporary Hamiltonianism' — i.e., bold leaps that turn out to be one-off exceptions once the immediate danger recedes, as recently and spectacularly exemplified by NGEU — towards long lasting reform. It will also offer no functional alternative to the reduced responsibility model, which has so far prevented agreement on a suitable permanent fiscal capacity, leaving the EU 'stammering' in the face of the systemic shifts the world is currently experiencing.

Both of these conditions — ex ante ignorance and mutual trust — and the institutions that may be charged with enforcing the contract, will ensure a low political discount rate, counteracting the tendency of governments to prioritize immediate power preservation over medium-term welfare. Casting solidarity in the new world as a two-way street would help address the scarcity of political capital for redistribution between EU member countries and a deep aversion toward a 'transfer union,' in some of them.

Ultimately, Habermas's diagnosis — and the work of economists and political scientists on insurance — is arguably more relevant today than ever. It also has a much better chance to succeed: according to Eurobarometer data, there is no lack of popular support favouring a stronger role of the EU to deliver common priorities. The dissolution of Europe, if it comes, will be the ultimate consequence of a destructive spiral activated by opportunism among politicians, most certainly not in service to their electorates. This outcome can be avoided if the EU envisions and agrees on a new European

Social Contract defined by foresight and insurance-based solidarity, both of which will be essential requirements for navigating the new world where old alliances and certainties have vanished. The analyses and policy avenues in the Florence Report are meant as a contribution to buttress the intellectual case for such a Contract.

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THE 2026 EMU LAB FLORENCE REPORT

Part B

Reconfiguring Europe in a Fractured Global Economy

The Florence Report Part B at a Glance

The Florence Report Part B includes no less than thirty original contributions drawing on the combined expertise of academics, practitioners, and policy professionals. Each, in their own way, explores the roots and implications of geopolitical and economic fragmentation within and without the EU and attempts to reconfigure the concept of Europe and its Union in the new global order. Along with submitting novel ideas, authors revisit and consolidate established policy approaches adapted to the current pressing realities. These analyses and proposals are organized in a narrative across five thematic sections, which collectively advance a coherent and pragmatic policy agenda for a sustainable economic and political future of the European Union. A common thread emerges: EU Member States are faced with both domestic and foreign challenges that exacerbate one another. External shocks — from shifts in US policy to the breakdown of global trade rules — interact with internal structural weaknesses, exposing the limits of EU institutional design and policy capacity. In turn, these circumstances inhibit Europe's ability to adapt with and react to the changing global environment. A common conclusion is drawn: European governments are best served to attend to these predicaments holistically and to face them collectively.

Section I – Framing the European Project: Political Economy Under Pressure

We begin by *Framing the European Project: Political Economy Under Pressure* in Section I, where authors highlight the global origins of Europe's woes. In a world where power, security, and economic relations are increasingly intertwined, Europeans now face an increasingly transactional international system, shaped by the weaponization of economic instruments for geopolitical ends. What is more, this new global environment no longer supports the reduced responsibility model — security guarantees, trade networks, and international institutionalism — that Europe long benefited from. Constrained by domestic political fragmentation, Europe's ability for a collective response has become inversely proportional to the growing need for it. This paradox not only inhibits adequate and timely policy action, but risks altogether paralyzing Europe's policy response.

Andre Sapir leads with a chapter situating Europe in an emerging multipolar world marked by declining US hegemony, rising great-power rivalry with China, and uncertain pathways for global cooperation. He concludes that while the two superpowers will largely shape the three possible long-term scenarios — the collapse of cooperation, rival blocs led by the US and China, or renewed multilateralism — Europe has a chance to influence these tectonic shifts, but it will depend on strengthening its own capabilities and reducing strategic dependencies.

Against this backdrop, **Moreno Bertoldi** and **Marco Buti** analyse the changes in US capitalist structures that are bound to further complicate Europe's position. A reconfiguration of US capitalism around a new nexus of Big Tech, crypto, and fossil fuels has resulted in a more transactional and extractive approach to global economic relations, which has identified the EU's regulatory autonomy as a target in negotiations. Going forward, the turn taken by American capitalism under Trump risks contagion, encouraging similar patterns elsewhere, including Europe, with its overall impact pernicious and likely to endure well beyond Trump 2.0.

Poul F Kjaer then outlines how external pressures — specifically, the weaponization of value chains, payment infrastructures, and currencies — aggravate a deeper and more fundamental structural weakness of the EU: the incomplete institutional embedding of its currency. He argues that this nexus, the current economic and security challenges, present a strategic opportunity for Europe if treated as mutually conditioning with a 'societal security' approach, underpinned by institutional reforms and democratic legitimacy.

Laying out the political scene, **Vivien Schmidt** connects the dots between US domestic political disruption and the wave of populism sweeping through EU Member States. She points out that for Europe, as a Union, meeting the increased need for collective action at the international level is only possible by first overcoming internal divisions and rebuilding political support closest to home. **Marco Buti** and **Marcello Messori** continue this discussion in the section's concluding chapter, describing how national identity politics obstruct progress on strengthening the strategic autonomy of the Union. A strong economic case for the deepening of EU integration is not enough in an environment where the political costs of sharing sovereignty override its economic benefits. They argue for a 'retooling strategy' to make collective action viable again.

Section II – Securing Policy Space from Within EU Systemic Frameworks

A second key theme of the Florence Report concerns the nature and limits of the EU's key frameworks — social, economic, monetary, and financial —

which condition the response of both member states and the Union to the transformed geopolitical environment at home and abroad. Section II *Securing Policy Space from Within EU Systemic Frameworks* examines practical solutions to consolidate and expand this policy space towards growth, resilience, and macroeconomic stability, to guarantee a Union fit for the purposes of the new world order.

Anton Hemerijck and **Daniel Fernandes** begin by challenging the common view that welfare systems constrain economic performance. They show instead that social investment and solidarity through education, childcare, and active labour market policies support employment, productivity, and fiscal sustainability by strengthening human capital across the life cycle, thus inviting policymakers to reconsider preconceived and erroneous notions about the social welfare model in European societies. The question remains, to find room for solidarity within the institutional constraints of the EMU.

Lucio Pench helps elucidate this matter, following with a deep dive into the fiscal governance history of the EMU, where the core tension between centralized monetary policy and decentralized and divergent national fiscal priorities remains unresolved. He argues, that while the economic rulebook remains a work in progress — continually evolving in response to crises and shifting economic priorities, misunderstood as either too strict or too loose — it has succeeded in shaping national fiscal behaviour. Its latest recalibration offers scope for gradual progress, particularly by strengthening national ownership through shared standards for medium-term planning and robust independent fiscal institutions.

Amy Verdun moves the focus towards the design of the monetary union, specifically, the differentiated integration of the euro area, to demonstrate how institutional design can reinforce fragmentation. Mindful that geopolitical pressures keep increasing the strategic value of cohesion, she invites policymakers to consider more inclusive pathways for euro area participation, carefully balanced with credible economic, monetary, and legal convergence. **Giancarlo Corsetti** and **Leonardo Melosi** zoom out to examine the structural changes brought about by the global rise of digital currencies and stablecoins. They consider the implications for the euro, from issues with monetary jurisdiction and transmission to the single currency's international role in a more fragmented system rife with geopolitical rivalry. For Europe, preserving monetary sovereignty in the context of digitized finance will require pairing digital innovation with common safe assets, credible public digital money, and strong institutional support.

Erik Fossing Nielsen is also concerned with global spillover effects, arguing that shifting geopolitics, especially more aggressive US foreign policies,

require Europe to urgently rethink its economic and financial strategies. He approaches Europe's persistent savings surplus as both a strength in need of operationalising and a vulnerability in need of mediating. To this end, he calls for revising the regulation of European investments in US assets, reconsidering their risk-free treatment, and updating financial and tax policies to reflect geopolitical risks and help redirect European capital towards domestic growth-conducive investment.

Section III – Advancing EU Competitiveness Between Geoeconomics and Structural Trends

The Florence Report then turns to a comprehensive study of the EU Single Market for the purposes of *Advancing EU Competitiveness Between Geoeconomics and Structural Trends* in Section II. The breakdown of global trade rules, rising geoeconomic tensions, and accelerating climate and technological change exert immense pressures on the European competitiveness model and regulatory framework, as well as in trade relations both within and beyond the Single Market. There is a recurring theme across the contributions: the EU must rethink both the manner of its external engagement and its internal policy architecture if any effort to sustain and advance European competitiveness in this contested global environment is to succeed.

Bernard Hoekman opens by documenting the erosion of the multilateral trading system that has long underpinned EU trade policy, driven in particular by unilateral actions from the US and China. He proposes that the EU should renew its efforts to sustain rules-based trade while actively pursuing WTO reform, new trade agreements, and plurilateral cooperation with like-minded partners. Hoekman warns that achieving this will require a shift in mindset towards greater regulatory cooperation and flexibility, which will ultimately determine whether the EU can lead in preserving a rules-based global trade system. **Marco Ratto** and **Werner Roeger** quantify the macroeconomic consequences for Europe of the recent US policy shift towards tariffs and tax cuts. They argue these are best understood as a new fiscal approach with lasting effects that will generate negative growth spillovers for the EU, particularly through lower investment and growth and regardless of exchange rate dynamics. In this context, targeted domestic policy responses — such as lower labour and capital taxes, and higher VAT-financed public investment — emerge as key tools to mitigate these adverse impacts. **Florian Le Gallo, Amélie Robinette,** and **Valentine Salmon** follow with an examination of Europe's evolving economic security response to these very same global dynamics. They present a framework built on export controls, trade defence, and FDI screening, which can help advance the resilience of the

Single Market, but only if it strikes the right balance between protecting strategic interests while remaining open to trade and investment.

This external dimension is closely tied to internal challenges. In this context, **Jacques Pelkmans** continues the reflection with a wide-ranging study of persistent fragmentation in the Single Market. Despite the extensive economic evidence of national welfare gains owed to deeper integration and the damage to competitiveness and long-term growth owed to fragmentation, political will remains the biggest constraint on further progress on the Single Market. Rather than incremental reforms, Pelkmans calls for political commitment and decisive policy leaps, contending that only bold, coordinated action can credibly and fully empower the Single Market, and help sustain the Union at the forefront of global economic competitiveness.

Alongside market integration, new industrial policy tools are taking shape to help guide the EU through the changing global environment. **Irene Agnolucci** presents Important Projects of Common European Interest (IPCEIs) as a central instrument for a coordinated public response to address market weakness and failures, foster innovation, and build transnational value chains, noting however, certain governance challenges and participation divergences of the framework.

These intellectual and policy efforts to advance EU competitiveness cannot ignore the broader structural trends sweeping through the global economy, most notably climate change and technological advancements. **Jos Delbeke** and **Simone Tagliapietra** place decarbonization at the core of Europe's strategic response. They position the energy transition not only as a climate objective but as a means to reduce dependencies and strengthen industrial capacity, with the Clean Industrial Deal aligning climate objectives with competitiveness and energy security in line with the volatile global context.

Finally, **Andrea Gazzani** explores artificial intelligence (AI) as a new general-purpose technology with great promise for boosting productivity gains. Acknowledging popular concerns on future job displacement, the author emphasizes that AI may also create new roles and support overall employment through broader economic effects. He warns, however, that Europe's structural reliance on foreign technologies risks limiting its ability to capture these benefits, secure strategic autonomy, and expand the development of domestic capabilities.

Section IV – Financing Collective Action: From European Public Goods to Security

Section IV *Financing Collective Action: From European Public Goods to Security* examines how the EU can finance and govern collective action in an environment

where security, investment, and sovereignty are increasingly intertwined. An overview of the narrative suggests that increasing the supply of European Public Goods (EPGs) is the appropriate means for the EU's European governments to strengthen economic competitiveness and secure strategic autonomy whilst preserving social solidarity and economic efficiency. However, delivering such goods raises fundamental questions about financing sources and governance best practices. Progress on these issues — specifically the gradual expansion of shared fiscal capacity through evolution of the EU budget, the debate on own resources, and the emergence of new co-financing instruments in defence — seems driven more by necessity than by design.

George Papaconstantinou starts off by reframing EPGs as a strategic response to internal fragmentation with the potential to enhance EU global leadership and support global commons. Focusing on climate, defence, and AI policy, Papaconstantinou examines the political conditions for effective delivery and demonstrates how EPGs could contribute to European integration, competitiveness, and strategic autonomy, while underpinning a pragmatic European response to growing global fragmentation.

Emmanuel Mourlon-Druol follows with a historical account of centralized spending in the EU, suggesting that policymakers should reconsider their approach to seeking further fiscal integration by steering clear of purely technocratic arguments founded on economic efficiency. The feasibility of continued collective action has rarely followed economic logic alone, he highlights, with progress instead predicated on political bargaining, specific crises, and the emergence of a shared understanding of common interest.

These dynamics are reflected in the evolution of the EU budget itself, as **Gaetano D'Adamo** explains. While often seen as slow and incremental, D'Adamo shows that, driven by factors such as political trade-offs and the cost of inaction, the Multiannual Financial Framework (MFF) has actually undergone major structural changes in response to EU crises evolving from a purely redistributive into an investment and stabilization tool. This shift, D'Adamo warns, creates a tension at the heart of the MFF with the flexibility needed for crisis-response reducing the predictability expected for rules-based long term financial planning.

As demands on the EU budget increase, particularly in defence, the question of financing becomes central. **Tomasz P. Woźniakowski** and **Ricardo García Antón** argue that reliance on national contributions and temporary borrowing is increasingly untenable, pointing to the need for a more autonomous fiscal capacity based on EU-level revenues. They draw on early US fiscal history to demonstrate the potential of indirect taxation to support federal spending

without immediate reliance on income taxation and conclude that the EU is equally well positioned to develop its own tax capacity — initially through VAT or excise-based resources and, eventually, income-based taxes — as a sustainable source for the financing of common defence.

Guntram Wolff and **Jeromin Zettelmeyer** continue the defence theme and illustrate what a common European defence market should look like. They diagnose current fragmentation owing to disparate national procurement practices, lack of scale, and significant dependence on US technology, which could result in insufficient rearmament and inefficient spending of common funds. A way forward is charted through deeper integration based on standardization and joint procurement, and shared financing and ownership of strategic assets, underpinned by political agreement to enforce common rules and earnest cooperation. **Andrea Capati** and **Sergio Fabbrini** follow in agreement that European defence, and related industrial and financial policies, are in disarray. They highlight how the hybrid common financing arrangements set up in response to Europe's security challenges, specifically the SAFE programme and the Ukraine Facility, albeit similar in purpose, produce contrasting outcomes, decentralized national control in defence versus centralized EU authority in financial assistance. This segmentation reflects deeper political and strategic differences among member states, preventing a coherent European security framework. In this context, **Luisa Marin** analyses common procurement clauses in EU funding instruments as a gradual, pragmatic form of 'integration through funding.' By aligning incentives and pooling demand, she argues that joint procurement offers a pathway to strengthen coordination and autonomy without the need for complete centralization, allowing instead an incremental but evolving model of European collective action that can foster pragmatic federalism and strengthen strategic autonomy.

Section V – Financing Growth Through Savings, Investment, and Capital Markets

It follows, then, that protecting European citizens' standard of living and political and social cohesion by sustaining EU economic competitiveness and supporting growth and innovation amid global fragmentation and geopolitical rivalry, leads to a fundamental policy challenge, the mobilization of funds. The concluding Section V *Financing Growth Through Savings, Investment, and Capital Markets* presents the Savings and Investment Union (SIU) as fundamental to achieving these ends. The contributions converge on the need to redirect savings towards productive investment through deeper capital market integration, improved financial infrastructure, and targeted policy reforms.

Daniel Kapp and **Laura Parisi** lead with an examination of the structural weaknesses of European capital markets, identifying key bottlenecks along the investment lifecycle, which constrain market depth, hinder investment, and reinforce Europe's reliance on foreign financial systems. They argue for reforms in three main areas: mobilizing household savings, strengthening EU-level supervision, and improving innovation financing (including venture capital and exit markets), stressing these must be coordinated and pursued together, as progress in one area depends on advances in the others. Building on this diagnosis, **Giancarlo Corsetti, Atanas Pekanov,** and **Giulia Sestieri** further the case for SIU as a central strategy to redirecting savings towards productive investment. They show how integrated capital markets can raise returns for savers, lower firms' cost of capital, and enhance risk sharing, helping break the high-saving–low-growth equilibrium that undermines productivity and competitiveness. This argument is substantiated in their **subsequent chapter**, which examines the benefits of SIU in the current volatile geopolitical environment by reducing exposure to external imbalances and supporting a more stable international adjustment.

However, as **David Murphy** points out, achieving these goals requires addressing persistent inefficiencies and fragmentation in financial infrastructures. Post-trade presents a particularly severe case in this regard, with legal, operational, and regulatory differences across member states raising costs and reducing market efficiency. He proposes a proportional reform strategy — centred on EU-level supervision of systemically important infrastructures, combined with interoperability, data harmonization, and targeted legal changes — to avoid overly burdensome or unrealistic large-scale harmonization.

Loukas Kaskarelis, Mathias Skrutkowski, and **Rolf Strauch** contribute further to the design of SIU, arguing that policymakers should focus on two key priorities: pension reform to mobilize long-term capital and the development of a European securitization platform to channel funding towards firms, especially SMEs. In support, they show how shifting towards funded pensions can further capital market depth and reduce fiscal pressures from ageing, while securitization can diversify funding and strengthen the financial resilience of SMEs and, by extension, Europe's long term growth prospects.

The last word falls to **Fabrizio Venditti, Michele Caivano, Pietro Cova, Kevin Pallara,** and **Massimiliano Pisani**, who quantify the macroeconomic gains for the EU economy from capital market integration. They examine two main channels: reduced cost of capital (price effects) and a shift towards higher-quality, innovation-driven investment (quality effects), potentially supported by a European safe asset. Their model simulations

suggest integration in capital markets — the SIU, if delivered properly — could significantly raise investment and GDP, especially if additional capital is directed towards R&D.

Collectively, the Florence Report suggests that Europe is moving towards a more integrated but also more complex system of governance, in order to manage the strain caused by external and internal geoeconomic and political sources of fragmentation. The contributions highlight the constraints of existing institutional arrangements and the diverse preferences of member states, while also pointing to the emerging reform pathways across the single currency and the Single Market frameworks, alongside a growing need for greater collective action, funding, and deeper financial and capital market integration. Authors converge on the idea that the success of this endeavour will rest on Europe's ability to align internal integration, financial capacity, and strategic objectives in a coherent and politically sustainable way. The chapters that follow provide detailed analyses and policy proposals that translate these broad challenges into concrete areas of action, guiding the reader through the evolving agenda for a more economically resilient and politically cohesive European Union.

Section I

Framing the European Project: Political Economy Under Pressure

Global geopolitical fragmentation and domestic political divides are reshaping Europe's strategic environment and exerting immense pressures on the political economy of the Union. Decades of social and market integration are put into question at the same time and by the same factors which force Europe to assert its collective strategic autonomy. The contributions in this section lay out Europe's economic, political, and security predicament brought on by the undoing of the reduced responsibility model, which Europe thrived on for decades.

Medium-Term Geopolitical Scenarios for the World and Implications for the EU

André Sapir *

Abstract

This paper analyses the transformation of the post-World War Two international order and assesses its implications for the European Union. It argues that the erosion of United States-led hegemony, the rise of China, and renewed great-power rivalry have ushered in a multipolar world marked by instability and contested rules. The paper develops three medium-term geopolitical scenarios for 2030–2035: a collapse of international cooperation, a fragmented world of blocs centred on the United States and China, and a reinvention of multilateralism. These scenarios are evaluated in terms of welfare, global governance, and the EU's strategic position. The analysis concludes that while outcomes depend primarily on the two superpowers, the European Union can influence which scenario emerges. To do so, Europe must strengthen competitiveness, reduce strategic dependencies, enhance defence and technological capabilities, and build coalitions with like-minded partners. Strategic autonomy is framed as a prerequisite for agency in a volatile multipolar order.

Keywords: International Order; Multipolar World; Europe; Competitiveness; Strategic Autonomy.

1. Introduction

Since the end of the Second World War, Europe and much of the world have enjoyed an extended period of relative stability, economic growth, and international order. While tensions, crises, and localized conflicts have occurred throughout this time, none have matched the intensity and complexity of the challenges emerging over the past decade. The deepening strategic rivalry between the United States (US) and China, Russia's aggressive invasion of Ukraine, and the increasingly confrontational posture of the US Administration towards Europe following President Trump's re-election

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have collectively created a geopolitical environment of unprecedented uncertainty. Unlike previous episodes, the very foundations of both the international and transatlantic orders are now being actively contested. This shift poses an existential threat to the European Union, whose military security and economic prosperity have long depended on these orders, most notably on the United States' role as the stabilizing and benevolent hegemon of the Western world.

This paper begins by outlining the current geopolitical landscape, then presents three scenarios that Europe may face between 2030 and 2035. It proceeds to examine Europe's policy options in response to these scenarios and concludes with reflections on the desirability and feasibility of these choices.

2. The Geopolitical State of Affairs

The postwar economic order has gone through three phases: a bipolar Cold War period; a unipolar post-Cold War period; and the current multipolar period, with the return of great power competition.

The bipolar Cold War period

During the Cold War, the world was divided into two spheres, east and west, which were political rivals with minimal economic relations between them. Countries in both spheres belonged to the global political institutions created after the Second World War under the leadership of the US, the United Nations, and its specialized agencies. But only those in the western sphere joined the new economic institutions. Most developing countries, which were previously colonies of western countries, became and remained non-aligned after independence, maintaining a degree of political distance from the two spheres. The world was bipolar, configured around two superpowers: the US as 'leader of the free world' and the Soviet Union as the main country in the communist camp, though increasingly in competition with China. The western camp lived in a 'liberal international order' in which crucial international public goods in trade, finance and defence were provided by the United States acting as its 'benevolent hegemon'.

The unipolar post-Cold War period

With the collapse of the Berlin Wall and the end of the Soviet Union, liberal democracy appeared to have 'triumphed as the final form of human government' (Fukuyama, 1992). In geopolitical terms, this meant that all countries could now join the liberal international order.

With China and Russia taking major steps to liberalize their economies, it looked as if Fukuyama's 'end of history' (Fukuyama, 1992) was approaching, not only in an ideological sense but also geopolitically. Economic liberalization in the former eastern sphere and in many developing countries, together with the rapid introduction of information technologies created 'One World' with opportunities for more people in more places to compete, connect, and collaborate more than ever. This ushered in a period of truly global trade and investment integration — often referred to as 'hyperglobalization' — dominated by purely economic incentives and global value chains (GVCs), with little or no geopolitical constraints (see Antras, 2020; Kjaer, this report).

This unipolar period, with the United States commonly viewed as the sole superpower, seemed to be working fairly well for nearly two decades. The US continued to act as a 'benevolent hegemon' and the liberal international order thrived, with democracy spreading around the world, and hyperglobalization delivering rapid economic growth to both rich and poor parts of the world.

However, according to geopolitical realists such as Mearsheimer (2019), the liberal international order was bound to fail because it contained the seeds of its own destruction. First, the spread of western-style democracy produced a nationalist backlash in some countries, including China and Russia. Second, hyperglobalization produced faster growth but also contributed to greater income inequality and financial instability, both of which contributed to a populist backlash in advanced countries, especially the US, after the Great Financial Crisis. Third, hyperglobalization was particularly helpful in promoting faster growth in China and other export-oriented developing countries. The 'rise of China...along with the revival of Russian power ... brought the unipolar era to a close' (Mearsheimer, 2019: 8). As Kagan (2008: 4) argued, '[t]he end of the Cold War did not bring the end of history, but rather a return to a historical norm: competition among great powers'.

The return of Great Power competition

Central to the current era are the rise of China and the gradual withdrawal of the US from its role as 'benevolent hegemon'. This shift accelerated with President Trump's push to blatantly violate post-Second World War rules and norms, including with his 'reciprocal' tariffs (which are in fact unilateral rather than reciprocal and violate the cornerstone of the General Agreement on Tariffs and Trade (GATT) and World Trade Organization (WTO) regime, which forbids countries from discriminating between their trading partners). Trump has also launched assaults against international law, democratic norms, and institutions. One way to describe the present United States is

as a 'coercive hegemon', even if the term 'hegemon' itself does not fit well with the new multipolar age[1]. In fact, the contradiction between the two — multipolarity and hegemony — describes well the current geopolitical situation, which is in a state of flux.

Though the US is not the hegemon it was during the unipolar post-Cold War period, or even the bipolar Cold War era, it retains exceptional features that set it aside from other major powers, including China and the European Union. The US retains superiority in four areas: economy, finance, technology, and military. China is the only country that partly rivals the US in all of these areas, except finance. While the European Union (EU) has strengths in some of these areas, it is clearly dominated by the US, and increasingly by China.

The international system is in a state of flux and disorder. In trade, the WTO has been greatly weakened by the willingness of the US, the world's largest importer of goods, to openly violate international rules. These rules have, in any case, become partly outdated, as the behaviour of China, the world's largest exporter of goods, is incompatible with the spirit (but not the letter) of the liberal economic order that the WTO embodies.

In money and finance, although there has been no formal international system since the collapse of Bretton Woods in 1973, a global order nonetheless persists. A central pillar of this order is the role of the US dollar in international payments and as a store of value.

Finally, in international security, the already fragile world order has been severely damaged by Russia's full-scale invasion of Ukraine in 2022. Europeans have rightly interpreted this as a painful wake-up call and a turning point, especially in light of Donald Trump's questioning of the North Atlantic Treaty Organization (NATO).

3. Three Geopolitical Scenarios for the Coming Decade

By 2030-2035, the world will likely witness the continuation or even increase in US-China geopolitical rivalry and increasing multipolarity, with no country willing or able to play the role of global hegemon providing overall insurance to the international system. There will be a dozen major powers falling into three tiers:

- China and the US, the two superpowers.
- The EU, India, and Russia, the other (potential) great powers.

1 Others have characterized the contemporary United States as an 'extractive superpower' (Bertoldi & Buti, 2025).

- Regional powers in Africa (Nigeria, South Africa), Asia (Indonesia, Japan), the Middle East (Turkey, Saudi Arabia), and South America (Brazil).

The three scenarios envisioned here vary with respect to two parameters: the degree of intensity in the US-China geopolitical rivalry; and the willingness and capacity of other major powers and other countries to organize rules-based international cooperation and institutions.

Scenario 1: collapse of international cooperation

Scenario 1 is defined as a non-cooperative equilibrium across the three tiers of powers. By 2030-2035, there are only loose and opportunistic alliances between countries, and a bare minimum of international cooperation. The global public goods created after the Second World War (United Nations [UN], International Monetary Fund [IMF], World Bank [WTO]) have lost relevance or ceased to exist, mainly because of the intense geopolitical competition between the US and China, with neither willing or able to provide or promote international public goods, and both acting coercively towards other countries.

The only global public good that continues to be provided in this scenario might be some degree of control of nuclear proliferation, the area with the biggest potential negative global externality. Another area with a very large potential negative global externality, climate change, is one of the victims of the collapse of the international order, propelled by a doom loop involving domestic and international conflict. Major powers with low social cohesion, high public debts, and high levels of support for populist politicians oppose international cooperation and institutions. Meanwhile, nationalist and populist policies reduce economic growth and countries' ability to address the economic consequences of ageing and climate change (Funke et al., 2023), further increasing domestic discontent and international conflicts.

Scenario 1 closely relates to the 'Kindleberger trap', a term coined by Joseph Nye to warn — a few weeks before the start of the first Trump presidency — of the risk of a situation in which neither the declining superpower, the US, nor the ascending one, China, is able or willing to assume the role of 'benevolent hegemon' (Nye, 2017). Since Kindleberger's original contribution (1973), it has been widely agreed that such a role must be played by one of the great powers to sustain a liberal international order, as the US did for the Western sphere during the Cold War period or globally during the much shorter period of hyperglobalization. Scenario 1 lacks any such hegemon.

Scenario 2: back to a world of blocs

In this scenario the world splits into three groups: a US-led bloc, a China-led bloc, and a non-aligned set of countries. There are two variants, depending on the degree of interdependence between the US and China blocs:

- **In the decoupling variant**, the US-China geopolitical rivalry is intense, and after more than a decade of economic (trade, finance, technology) and political fragmentation, the two blocs are detached from one another, perhaps not as much as was the case between the western and eastern blocs during the Cold War, but far more than is the case in 2026.[2]
- **In the derisking variant**, the US-China geopolitical competition is somewhat less intense, and the two blocs remain fairly interdependent, managing the risks of such interdependence with 'intelligent economic security policy' (Farrell & Newman, 2023). This is in line with what President Biden's National Security Advisor, Jake Sullivan (2023), advocated with his 'small yard, high fence' policy: selective decoupling in areas where national security is at stake.

The first variant amounts to a new Cold War, with little relationship between the US-led and China-led blocs, except for security issues handled by the two superpowers. The second variant is probably more realistic, though harder to grasp. In particular, it is not clear what the exact perimeter of the 'small yard' would be, nor whether it would be possible to really keep it 'small'. After all, what constitutes 'national security' or even 'economic security' is highly subjective. In addition, imports and supplier relationships that pose a risk to economic security are very hard to pinpoint empirically (Pisani-Ferry et al., 2024).

In both variants, global cooperation would likely be more extensive than in scenario 1. In particular, the two blocs may agree to cooperate not only on nuclear proliferation, but also on climate change. Global economic institutions including the IMF, World Bank, and the WTO would retain meaningful roles.

In the decoupling variant, however, these roles would be much reduced, even compared to their already diminished levels in 2024, i.e., before the de-facto US exit from the WTO in 2025. In particular, trade governance would probably revert to the pre-WTO days, when GATT members enjoyed more 'policy space' (meaning they could be more protectionist) and there was no

2 Gopinath et al. (2025) also assumed a situation in which the world splits in three groups: a US-aligned bloc, a China-aligned bloc and non-aligned countries. They found that this split will have less detrimental effects on trade than during the Cold War, because they assume that non-aligned countries will act as 'connectors' between the two geopolitical blocs, as they have been doing since trade fragmentation started around 2018.

Appellate Body to adjudicate disputes, the resolution of which was left to diplomats and politicians rather than judges.

In the de-risking variant, the two blocs should in principle be ready to cooperate more closely than in the decoupling variant, and economic institutions including the IMF, World Bank, and the WTO should retain greater roles, with some redefinitions to meet demands from the Global South, which would presumably remain non-aligned with the two blocs.

In terms of membership of the two blocs, it is fair to assume that countries that are likely to remain security-dependent on the US for geographical reasons, such as South Korea or Japan, will be part of the US bloc. It is less clear with which bloc the EU would align, assuming it has become less security-dependent on the US and therefore has the ability to make a choice. It would largely depend on whether the US continues to act coercively or not. If it does, then the EU would probably not want to belong to the US-led bloc and would instead be non-aligned. On the other hand, if the US returned to more cooperative behaviour, then the EU would likely continue to align with the US, though it would presumably want a better arrangement than it currently enjoys.

Scenario 3: multilateralism reinvented

In scenario 3, the two superpowers, although remaining rivals in some areas, agree to cooperate to provide global public goods in all areas that have potential negative externalities, including nuclear proliferation, climate change, trade, and finance, because they have discovered (perhaps after having passed painfully through scenarios 1 and 2) that not tackling common problems through common efforts and institutions has a high cost, not only for others but also for themselves.

In this idealistic scenario, a new international order would be established. This would involve reforming multilateral global institutions including the UN, the IMF, World Bank, and WTO to guarantee a greater role for the Global South, which remained largely non-aligned in scenario 2, and to respond better to their development goals, while ensuring international security and dealing with global warming. This new order would not depend on the ability or willingness of a superpower to provide global public goods. Instead, the new international order would be managed by a new grouping composed of China, the United States, Brazil, the EU, India, the African Union, and maybe one or two more countries. In its most idealistic variant, this new grouping would take over from China, France, Russia, the UK, and US as the new permanent members of the UN Security Council.

A less idealistic, though still ambitious, variant of this scenario would assume that the US-China rivalry will preclude the participation of the two

superpowers in the reinvention of the multilateral rules-based order, at least initially. In this variant, a coalition of countries, involving the EU, the UK, Norway, Canada, and a small group of like-minded countries from the Global North (including Japan and Korea) and the Global South, would take the initiative, hoping that the US will join them at a later stage. China, however, may be part of the coalition for some issues (such as climate change), though not for others (such as trade).

The above analysis offers two key takeaways for the European Union. First, the three scenarios can be ranked according to the desirability of their implications. Scenario 1 (multipolarity with international disorder) is the least desirable, as international cooperation on global public goods would be largely absent, armed conflicts would likely be frequent, and protectionism would dominate. Scenario 2 (multipolarity with strong elements of bipolarity and some multilateralism within each bloc) would be preferable, as it would establish some international rules — strong within the blocs and weaker between them — and offer greater capacity to address global challenges than scenario 1. Scenario 3 (multipolarity with multilateralism) is the most desirable, fostering cooperation and more effective global governance.

Second, the likelihood of any of these scenarios unfolding depends primarily on the actions of the two superpowers. However, other actors, including the EU, can also exert significant influence, particularly if they act collectively. The EU and its allies may not only affect which scenario becomes reality but also shape its specific form. By coordinating with partners, the EU could help steer the world towards scenario 3, promoting multilateral cooperation; alternatively, it could influence scenario 2 by strengthening international institutions and carefully deciding the degree of alignment with the United States.

4. Policy Implications for Europe

The most important strategic choice facing Europe is whether it wants to shape its own destiny and influence which scenario unfolds in 2030–35, or instead accept the role of a scenario-taker, allowing China and the United States to determine the outcome.

Paradoxically, given that the EU already views China (since 2019) as a 'partner, competitor and strategic rival' and the United States as (still) its 'closest and most important partner,' though with increasing trepidation, the strategic choice that it faces has more consequences for the EU-US relationship than for the EU-China relationship. It is precisely because the EU is far more closely intertwined with the US than with China that the increasing uncertainty about

the future geopolitical course of the US compared to the relatively more certain trajectory of China obliges the EU to reflect more on its relationship with its transatlantic partner than with China.

Contrary to what President Trump often alleges, the trade and investment relationship between the EU and the US is nearly balanced. In 2023, the EU exported €823 billion of goods and services to the US and imported €774 billion of goods and services from the US, but with the EU exporting more goods than services and importing more services than goods (European Commission [EC], 2025b). In addition, the US accounted for roughly 20% of extra-EU trade (goods plus services), with the EU accounting for a similar share of US trade. Moreover, roughly 30% of the extra-EU stock of FDI was located in the US (Eurostat, 2025), while the share of the US global FDI stock being located in the EU was around 50% (Tafara et al., 2024).

In areas such as energy, finance, technology, and especially defence, the relationship is clearly unbalanced, with the EU remaining highly dependent on the US. In earlier times, this imbalance was not a concern to Europeans. However, in the current geopolitical era, marked by growing US coercion, it has become a serious issue, as the July 2025 EU-US trade deal (EC, 2025a) clearly illustrated.

This deal carried a huge imbalance between what the EU offered to the US (a lot) and what the US offered to the EU (nothing, except refraining from potentially imposing higher trade penalties). The EU was subjected to coercion by the US not because it is more dependent on the US for trade and investment than the US is dependent on the EU, but because of the EU's relative weakness in strategic areas like energy, finance, technology, and especially defence. This explains why the EU decided not to use its anti-coercion instrument (ACI) — enacted in 2023 for a situation 'where third countries interfere in the legitimate sovereign choices of the Union or a Member State by applying or threatening to apply measures affecting trade or investment' — to respond to the US unilateral tariff increase in 2025.

If Europe wants to shape how the medium-term scenario unfolds, it will need far greater strategic autonomy than it currently possesses. Achieving this will require decisive action on both the domestic and international fronts. The EU agenda is straightforward: it largely consists of implementing the Draghi (2024) and Letta (2024) reports, since Europe cannot hope to achieve greater strategic autonomy without strengthening its competitiveness.

Team Europe has been slow to act on the reports, despite their broad support in Brussels and across most EU capitals. This delay can be traced to two main factors. First, they present an extensive menu of recommendations rather than a clearly defined policy package. This was likely a deliberate choice, leaving it to the presidents of the European Commission and the European

Council to determine priorities and sequencing. Second, even if consolidated into a package, many of the proposed measures would require a level of political leadership that Team Europe has shown in moments of acute crisis, such as the Covid pandemic or the war in Ukraine, but that is much harder to mobilize for long-standing challenges like Europe's competitiveness.[3]

At the informal European Council retreat on 12 February 2026, EU leaders seem to have 'agreed on a set of priority areas to strengthen EU competitiveness and strategic autonomy' (European Council, 2025). Building on this agreement, the Commission is expected to present a roadmap on 'One Europe, One Market' at the March 2026 European Council meeting.

According to the statement made by the president of the European Commission after the retreat (EC, 2026), the One Europe, One Market package will rest on five pillars: reducing the administrative burden; establishing a 28th regime and a Savings and Investment Union with deep and liquid capital markets to support investment and competitiveness; building an integrated energy market; strengthening Digital Europe; and implementing newly agreed trade agreements with partners such as India, Indonesia, and Mercosur.

Taken together, the One Europe, One Market pillars address important structural impediments to Europe's competitiveness and, if fully implemented, would strengthen the EU's strategic autonomy (see Pelkmans, this report). Much will depend on political prioritization, speed of delivery, and the willingness of member states to accept deeper integration in areas that directly affect national sovereignty.

5. Conclusion

Strengthening competitiveness is necessary for Europe if it is to achieve strategic autonomy, but it is not sufficient. Competitiveness provides the economic and technological foundation to reduce dependence on external powers, yet strategic autonomy also requires political cohesion, resilience in critical sectors, and the ability to act decisively under external pressure. Without these complementary capacities, even a highly competitive Europe could remain vulnerable to coercion. Economic strength must therefore be paired with institutional mechanisms that coordinate policies across member states and translate capacity into leverage.

3 The quest for European competitiveness among European leaders dates back at least to the 1990s with the Competitiveness Advisory Group chaired by former Italian prime minister Carlo Ciampi, like Mario Draghi and Enrico Letta, which produced four reports on the causes of, and remedies for, Europe's competitiveness challenges (Ciampi 1995a, 1995b, 1996a, 1996b).

Beyond initiatives such as the One Europe, One Market programme, Europe must pursue technological and industrial sovereignty. Critical supply chains — from semiconductors to rare earth elements and energy infrastructure — must be secure and, where possible, under European control. Strategic investment in research and development, particularly in emerging technologies, is essential. Without control over key technologies and inputs, economic competitiveness alone cannot guarantee genuine strategic independence.

Robust defence and security capabilities are equally vital. Strategic autonomy requires Europe to act more independently in cyber defence, energy security, and military readiness. Competitiveness in the defence industries must be complemented by integrated planning, joint procurement, and rapid-response capabilities across the EU. Only through these measures can Europe reduce reliance on external powers and assert itself credibly in security affairs.

Strategic autonomy should not be mistaken for self-reliance or protectionism. Europe must remain an open, rules-based actor, defending an international order rooted in law and shared norms. The post-World War Two system, which enabled the EU and a relatively stable global order, now faces pressure not only from China and Russia, but increasingly from the United States. Global challenges, from nuclear proliferation to climate change, demand collective solutions and effective governance.

Europe cannot act alone. As Canadian Prime Minister Mark Carney emphasized at Davos in January 2026, middle powers cannot rely on the global system to safeguard their interests; they must cooperate with like-minded states to build collective leverage in a multipolar world (Carney, 2026). Europe's strategic autonomy must therefore rest not only on competitiveness and cohesion, but also on working through coalitions of the willing across the Global North and South. Such coalitions would enable Europe to shape its strategic environment rather than merely react to great powers.

In short, strategic autonomy is about agency, not isolation. It links economic and technological strength, integrated defence and security capabilities, and coherent foreign policy with proactive coalition-building. By combining internal resilience with external partnerships, Europe can shape global outcomes and advance a multilateral order capable of addressing both geopolitical uncertainties and global challenges that transcend any single power.

Europe's agenda in the new geopolitical environment is clear. The question is whether it, alongside other middle powers, can rise to the challenge.

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The New Triad Leading US Capitalism

Moreno Bertoldi and Marco Buti *

Abstract

Under Trump 2.0, US capitalism is undergoing a profound transformation. Globalized capitalism, driven by the tech and financial sectors within a service sector-based economy, is now being replaced by a new economic triad, strongly connected with the new administration: (a) the Big Tech oligarchy, (b) crypto business, and (c) the fossil fuel industry. To paper over the triad's internal inconsistencies, the Trump administration is heightening the 'extractive' nature of US superpower. In this drive, it will try to weaken and dismantle counterpowers, like the European Union, which have the potential to oppose such an outcome.

Keywords: US Crony Capitalism; Big Tech; Crypto Business; Fossil Fuel Industry; Extractive Superpower.

1. Introduction

For a considerable time, the United States (US) prided itself on having developed a capitalist system driven by competition both in domestic and international markets, with limited government interference. Under President Trump 2.0 US capitalism is undergoing dramatic changes. In particular, we are witnessing the rise of a new economic triad: (a) the Big Tech oligarchy, (b) crypto business, and (c) the fossil fuel sector.

Each component of the triad enjoys privileged, rent-seeking positions thanks to their connections with the Trump administration and the president himself. Still, the new economic triad is fragile as it faces macroeconomic inconsistencies and internal tensions. One way to mitigate these contradictions may be to 'externalize' them by heightening the extractive nature of the US superpower through unequal deals coercing US partners to invest in the US, to purchase American goods, and to adapt their regulations to US standards. In its drive to further extraction, the Trump administration could be trying

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to weaken and dismantle counterpowers that have the potential to oppose such an outcome.

The aim of this paper is to investigate US capitalism's new triad, its internal dynamics and its domestic and global implications. It is organized as follows: in Section 2, we sketch out the evolution of US capitalism from the neoliberal era to the aftermath of the Great Financial Crisis (GFC); Section 3 analyses the transition from the Trump 1.0 to the Trump 2.0 presidencies and, with it, the rise of a new form of US capitalism; in Section 4, we assess the weaknesses and contradictions of the new triad leading US capitalism and the efforts made by the Trump administration to externalize them; the final section concludes.

2. US Capitalism from the Neoliberal Era to the Aftermath of the GFC

US capitalism in the neoliberal era

From the 1980s until the GFC, the US fully embraced globalization, which, over the years, was mostly driven by its tech and financial companies. Domestically, it was becoming a service sector-based economy, while its manufacturing sector declined, with entire segments being delocalized. Still, many US multinational manufacturing companies thrived, with profitability boosted by the development of complex global supply chains that allowed the lowering of costs and a boost to productivity.

At the political level, there was a large bipartisan consensus that America stood for free trade and supported the rules-based liberal international order that was itself created at the end of World War II (Frankel & Orszag, 2002; Frieden, 2006). Although still lobbying hard in Washington DC to protect their own interests, from the 1980s US CEOs embraced Ronald Reagan's dictum of markets as the solution and government as the problem. Therefore, deregulation or light regulation, market-driven solutions, a strong anti-trust policy were the preferred policy instruments to be used to enhance US competitiveness. Neoliberalism became the hegemonic narrative (Gerstle, 2022). Both Democratic and Republican administrations believed that globalization was something worth supporting and promoting, as it could improve the welfare of US citizens (through low-price goods imports and the capital flows that the country would attract from the rest of the world), and strengthen American power around the world.

Reforming US capitalism in the aftermath of the GFC

The GFC put into question some of the pillars of the neoliberal consensus. In the financial sector, excessive deregulation and insufficient oversight led to disaster, monetary policy had to turn 'unconventional' to avoid a downward spiral and fiscal policy had to come to the rescue to stabilize the economy (Blanchard et al., 2012; Eichengreen, 2015; Tooze, 2018; Gerstle, 2022). As Robert Lucas quipped: 'Everyone is a Keynesian in a foxhole.' National governments in advanced countries could not tackle alone both the GFC and its global spillovers: international economic cooperation involving emerging economies was needed, which led to the rise of the G20. Moreover, new global issues, *in primis* climate change, came to the fore, requiring a coordinated regulatory and financial effort to bring global warming under control, leading in 2016 to the signing of the Paris Agreement on Climate Change.

However, in parallel to this push for larger, more sustainable, and more inclusive forms of international cooperation, the US and most advanced countries witnessed a rise of forces that opposed further economic opening and invoked a return to national sovereignty, as well as protectionist policies (Fukuyama, 2022; Wolf, 2023). As the intellectual hegemony of neoliberalism was shaken, the positive impact of globalisation was called into question, on the understanding that it had not benefitted American blue-collar workers and parts of the middle class (Autor et al., 2016). On the left of the political spectrum, there were calls for more government intervention, tighter regulations to protect labour and environmental standards, ambitious redistributive policies to reduce income and wealth inequalities, and strong opposition to new trade deals. On the political right, globalization was opposed on the grounds that it had favoured globalist *élites* at the expenses of local communities, led to the destruction of good American jobs, favoured uncontrolled immigration flows (so as to keep the labour costs of the US workforce low), and promoted cultural and value 'relativism', watering down the 'true' American identity.

The post-GFC years also saw the emergence of dynamic, rapidly expanding high-tech companies that adopted disruptive and cutting-edge technologies (Haskel & Westlake, 2018; Acemoglu & Johnson, 2023; Taplin 2023). These companies were physically based in the US and operated from US territory, although they needed input and human capital from the rest of the world. Once successful in the US market, these hyper-scalers' could rapidly conquer large shares of the global market, with billions of users. Their expansion since the GFC has been impressive. For instance, the value of the so-called Magnificent Seven big tech companies (Apple, Microsoft, NVIDIA, Alphabet, Meta, Amazon, Tesla) grew almost 18 times larger

between 2012 (the first year all seven companies were public) and 2024, when they accounted for more than half of S&P 500 gains and represented 35% of its value (up from around 10% in 2012).

Because of the nature of their business, these companies can easily acquire monopolistic or quasi-monopolistic powers: they do not compete *in* the market but *for* the market. As they have been revolutionizing the world, their CEOs want minimum or no interference from public authorities and regulators and have successfully lobbied Washington to be lightly regulated. As a result, the links of these companies to globalization processes were of a different nature than those of big manufacturing and financial multinationals. Big tech companies aimed at a world where the US would impose its standards; they requested the US government use its long arm to avoid their foreign operations being hindered by national (and European) regulations and competition policies, or finding themselves subject to significant taxation in the places where they made their profits.

In the immediate aftermath of the GFC, another novel industry emerged, this time in the financial domain: cryptocurrencies (Ammous, 2018; Alden, 2023). Cryptocurrencies combine cryptographic systems with blockchain - a shared public ledger, to offer a payment system not controlled by central banks or governments, to provide secure, anonymous, and direct peer-to-peer transactions without transiting through the traditional financial sector. Although their share in global financial markets is still relatively low, cryptocurrencies, together with the digital currencies issued by central banks, have huge potential because, as pointed out by Rosa and Larsen (2024), they are part of the 'race for the future of money', a future that will be increasingly digital. Therefore, despite concerns regarding financial stability risks, tax evasion, and money laundering, the industry has continued to grow (at the end of 2024 it reached 3 trillion US$ global value) and in the last presidential elections became the largest corporate donor. Crypto companies rightly perceived that in the 2024 elections the wind was blowing in their favour, so they could roll back the regulations and industry scrutiny introduced during the Biden presidency.

Finally, the energy sector became an important driver of the post-GFC US recovery thanks to the shale oil and gas revolution and the investment that came with it (Zehan, 2017). The Biden administration's Inflation Reduction Act of 2022 put in place an industrial policy for clean energy and green production and stronger regulations to fight climate change. Still, for geopolitical reasons related to the Russian invasion of Ukraine, the fossil fuel industry (with the exception of coal) did not suffer a major setback

and surpassed previous production records: in 2024 the US was the world's largest fossil fuel producer, while crude oil, refined oil, LNG and related productions were by far the top US exported products (about 500 billion dollars in total, i.e., almost 25% of US total goods exports).

3. The New Triad of US Capitalism

From Trump 1.0 to Trump 2.0

In 2016 Donald Trump was elected president on a populist and ethno-nationalist platform that broke several Republican taboos. His administration embraced protectionism, mostly directed against China. Still, the relatively high tariffs imposed against the Asian giant did not trigger the promised re-industrialisation of the country. Trump's policies were not able yet to change the balance of power inside US capitalism, although they planted the seeds for it. The global liberal order was weakened, but not erased.

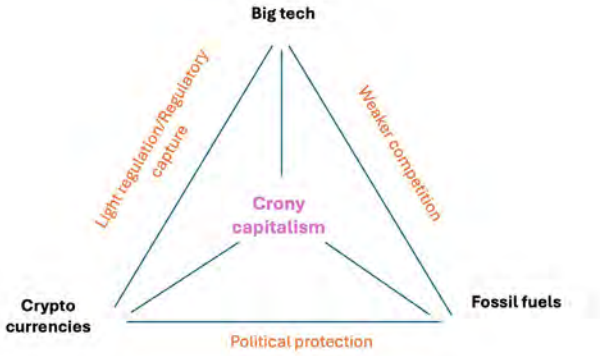
Domestically, there was a worrying development that did not escape some observers. As pointed out by Anne Krueger, 'Under Trump, the United States has begun to epitomize crony capitalism, whereby political leaders extend benefits and protection to businesses in exchange for political acquiescence and economic favors' (Krueger, 2020).

With Joe Biden's election in 2020, US capitalism returned to the track set in the aftermath of the GFC. The partial, but limited, misalignment that occurred during the first Trump presidency did not seem to have derailed it. But the realignment did not last.

In 2025, Donald Trump returned to the White House with an ambitious project that, if fully implemented, would change US capitalism and the institutional balance of power. Open transactionalism with the private sector became the trademark of the new administration and, as a result, the degeneration into crony capitalism denounced by Anne Krueger in 2020 accelerated dramatically. In addition, under Trump 2.0 and with the active support of his administration, a new triad leading US capitalism came to the fore, shaping it: cryptocurrencies, Big Tech, and fossil fuels.

The new triad and its main interconnections with the Trump administration's open transactionalism are summarized in Figure 1. As spelled out below, the new triad is benefiting from light regulations and regulatory capture, the weakening of competition, as well as political protection, which are all characteristic feats of crony capitalism.

Figure 1 The new triad of US capitalism and the Trump administration



Source: Authors' elaboration.

The first corner: cryptocurrencies

The most striking case of the new administration's open transactionalism involves cryptocurrencies. Since his return to the White House, Trump has openly promoted the boom of the crypto industry, which he and his family have invested large private sums in. It is true that the US government may have a strategic interest in promoting cryptocurrencies in general and stablecoins in particular, both to ensure that the dollar remains the key currency in international financial transactions and for domestic policy goals, as the greater the demand for these instruments, the larger the indirect demand for US Treasuries (Johnson et al., 2025). This would push yields down, making it cheaper for the US government to service and issue debt. However, if lightly or badly regulated, stablecoins and cryptocurrencies have the potential to trigger a severe financial crisis.

The executive orders introduced by Trump aimed at maximizing cryptocurrencies valuations instead of securing risk regulation. With Executive Order 14178 Trump revoked part of the previous administration's crypto guidance and prohibited the development, issuance or promotion of a US Federal Reserve digital currency. With the successive Executive Order 14233, he created a Strategic Bitcoin Reserve, authorized a US Digital Asset Stockpile, which may include other cryptocurrencies beyond Bitcoin, and positioned digital assets as reserve assets held by the federal government. Crypto regulation passed by Congress (the GENIUS Act) or still under discussion (the CLARITY Act) has been criticized by many economists as inadequate in preventing money laundering, avoiding tax evasion, and ensuring the stability of the US financial system (e.g., Johnson 2025; Tirole, 2025).

All possible obstacles and objections vis-à-vis cryptocurrencies and their riskiness were swept under the carpet. The Trump administration appointed

crypto-enthusiasts at the helm of the agencies that are supposed to regulate these markets. Even more worryingly, many criminal proceedings against companies under investigation for illegal practices were dropped, with a climate of impunity spreading in the sector. In the case of crypto, politics and money have become intertwined giving rise to cronyism, a huge conflict of interest, and a high risk of financial instability.

The second corner: big tech oligarchy

The nature of the relationship between the Trump administration and the 'Big Tech oligarchy' (Harrington, 2024) — CEOs of hyperscaler companies and other Big Tech companies — is different, more symbiotic, than the one with crypto.

Ahead of the presidential elections, the Big Tech oligarchy was fully aware that, whoever the new president would be, he or she would have real power over their companies, because of the federal government's regulatory and oversight powers, its capability to pressure reluctant international partners to change too stringent regulations and allow unconditional access to data. They also counted on the possibility of easing export restrictions vis-à-vis China, still a very important market for some of these companies. Therefore, it was very important for Big Tech oligarchs to get along with the political power, in particular at a moment when the Artificial Intelligence (AI) revolution was coming to fruition, and huge investments were in preparation.

On his side, Trump forged an alliance with the tech oligarchy to support his America First project.

Trump has used his leverage on Big Tech oligarchs to extract sizeable donations, support for his policies, as well as large investment commitments unrelated to economic soundness (Table 1). In exchange, faithful to his open transactionalist policies, the president has rewarded Big Tech companies with favourable executive orders, the most important of which have been: (i) Executive Order 14179 aimed at reducing barriers by revoking prior policies seen as hindering AI progress, at creating a permissive environment for major technology and AI companies to scale products rapidly, and at directing federal agencies to support AI growth rather than impose constraints; and (ii) Executive Order 14365 aimed at creating a national AI regulatory framework and pre-empting state-level AI regulations that may impose tough or divergent requirements. The introduction of a single federal standard sheds light on substantive restrictions for AI, reduces compliance costs and regulatory risks for large AI companies. Last but not least, at an international level, the Trump administration is using its strong leverage to impose American standards and light regulations to ensure and strengthen US Big Tech's global dominance.

Whilst the alliance between the Big Tech oligarchy and the Trump administration is less unbalanced than in the case of crypto, the symbiotic relationship that aligns Trump and Big Tech can also be considered a form of crony capitalism: the Big Tech oligarchy gets what it wants from the federal government and in exchange makes hefty political donations and gives subservient support for the president's policies.

Table 1 Commitments to invest in the US by Big Tech companies

Companies	In billion US$
Apple	600
Softbank/OpenAI/Oracle (Stargate Project)	500
NVIDIA	500
Micron	200
IBM	150
TSMC	100

Source: The White House (2025b).

The third corner: fossil fuels

A sector that has returned to play a prominent role during the second Trump presidency is the fossil fuel industry. As mentioned previously, it was thriving already before Trump's return to the White House. Since his re-election, Donald Trump has heavily favoured the fossil fuel industry, in particular by passing two landmarks executive orders: (i) Executive Order 14154 that directs agencies to review and remove regulatory burdens on domestic fossil fuel production and reverse prior climate/energy regulations; and (ii) Executive Order 14156, which declares an energy emergency that facilitates expanded fossil fuel production and infrastructure, overriding certain environmental constraints. In addition, he has also issued executive orders aimed at rescinding climate finance plans and at resuming LNG export permit processing and reversing restrictions on drilling and production on federal land. Finally, the AI boom and the construction of large data centres requiring large amounts of energy created a good complementarity between the AI and the energy sector.

With the dismantling of the clean energy sector (in 2025 the Trump administration stopped the completion of projects already at a very advanced stage of implementation), an important competitor has been taken out of the market and fossil fuel companies have reclaimed their status as uncontested leaders in the energy sector, including in the provision of electricity to the AI sector needs, even at the cost of creating local shortages because of the

curtailing on clean energy projects[1]. For its part, the fossil fuel industry has not shied from financing Trump initiatives, projects, and funds for future political campaigns. Against this background, it is clear that Trump's open transactionalism is also at work in the case of the fossil fuel industry: political and regulatory favours in exchange for economic favours and donations, in a much more explicit way than in past US presidencies.

Based on the developments described above, a comparison can be made between the form of US capitalism that emerged in the aftermath of the GFC and the form of US capitalism that Trump and his administration are trying to put in place.

Table 2 A Tale of Two Forms of US Capitalism

	US capitalism post-GFC	US capitalism under Trump
Nature:	- Oligopolistic/competitive - Market driven - Profit driven - Globalized, but with growing calls for protection	- Monopolistic/oligopolistic - Crony capitalism - Rent seeking - America First/protectionist
Driving Sectors:	- High-tech - Finance - Clean and fossil fuel energy - Services (domestic market)	- Big Tech and AI - Cryptocurrencies - Fossil fuel energy - Manufacturing (aspirational)
Relation with political power:	- Lobbying - Relative regulatory independence	- Open transactionalism - Regulatory capture - Federal government acting as a broker
Level of corruption:	Low/medium	High
International specialization:	- Elevated: Efficient (but shrinking) manufacturing, integrated in complex global supply chains. - Selective reindustrialization - Variable geometry multilateralism	- Declining: Efforts to rebuild supply chains inside the US by using tariffs and investment coercion vis-à-vis trading partners. - Across the board reindustrialization - Unilateralism/Extractive approach vis-à-vis the rest of the world
Financial stability risks:	- Low/medium. - Finance partly regulated to a void a new GFC	- Elevated. - Crypto currencies and deregulated finance to boost economic growth, reduce financing costs of the federal government and boost the international role of the dollar
Misallocation of resources:	Relatively low	High
Global challenges:	Commitment to address them, in particular climate change	Withdrawal from previous commitments

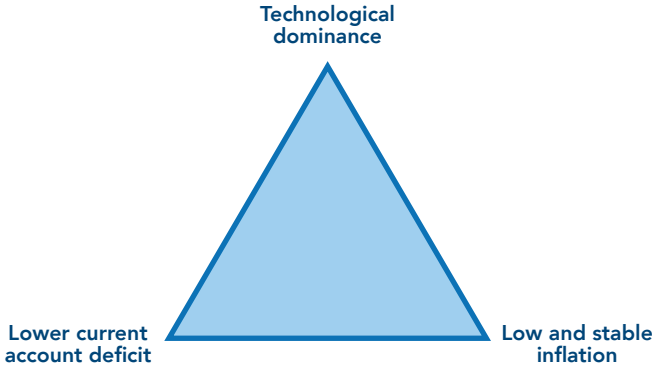
1 Between 2010 and 2024 the share of renewables in the production of electricity increased from 14% to 24%. Therefore, the rollback of clean energy at a moment when there has been a strong rise in the demand for electricity has had an impact both in terms of quantities and prices.

4. Weaknesses and Contradictions of US Capitalism's New Triad

The macroeconomic trilemma

Trump's pursuit of tech supremacy through a dramatic increase in investment has produced a policy trilemma that cannot be solved easily (Bertoldi & Buti, 2026). The other two corners of the trilemma are: (i) a lower current account deficit (one of Trump's major economic objectives); and (ii) low and stable inflation (which is needed to address the so-called affordability crisis, i.e., the increasing difficulty of a large and growing number of people in affording basic necessities). However, the three objectives are incompatible: only two can be achieved at the same time.

Figure 2 The US macroeconomic trilemma



To consolidate its tech dominance through massive foreign investment, the US must continue implementing deregulatory policies while pursuing extractive practices vis-à-vis foreign countries and companies. This goal, however, will conflict with either the objective of keeping inflation low or that of reducing the trade deficit. To reduce its external deficit, US savings must rise and the dollar must depreciate. This can be achieved if the Federal Reserve aggressively slashes interest rates; however, this would result in higher inflation. New tariffs, tolerance of inflation and a weaker dollar can help reduce the external deficit and prop up investment. However, this set of policies will keep inflation above target and worsen the affordability crisis. If the United States wants to achieve tech dominance and lower inflation simultaneously, some tariffs will have to be reduced, and monetary policy will need to be less accommodative. The ensuing capital inflows will appreciate the dollar, the counterpart of which will be a persistent current account deficit. The inability to solve the trilemma will test the solidity of the new economic triad, which is not fully aligned with macroeconomic issues.

The triad's own contradictions

The various components of the triad are developing at different speeds, which creates tensions among them and, more generally, inside the various sectors of the economy. The Big-Tech sector is moving fast and is among the major beneficiaries of Trump's form of crony capitalism. The valuation of the Magnificent Seven has risen beyond the record levels reached in 2024, from 17 trillion US$ at the moment of Trump's election to above 21 trillion US$ at the end of 2025, performing better than the S&P 500 and increasing their already large share in it. Trump's executive orders in favour of Big Tech and AI have played an important role in this outcome.

On the other hand, outside of the Big Tech oligarchy, many businesses feel conflicted about how President Trump is reshaping US capitalism. Due to their lack of scale, small and medium-sized companies are not just unable to secure access and the benefits of Trump's crony capitalism, but actively suffer from it. As a result, they have been hit by tariffs, higher electricity costs, and rising health insurance premiums. Since Trump's return to the White House, small business employment has declined (Krugman, 2025b). For small companies, Trump's American golden age has become an unfulfilled promise.

The US fossil fuel sector is benefiting from the AI boom and the large demand for energy it is creating. However, the brutal downsizing of clean energy projects has created power supply shortages, which have resulted in increased household electricity prices, especially in areas where data centres are located. This has upset local residents, prompting the Trump administration to urge Big Tech to secure the power needed for their enterprises.

Moreover, although the fossil fuel industry is benefiting from the Trump administration's crusade against clean energy, it is suffering from the rise in oil production around the world that this crusade is fuelling. As a result, the US shale oil industry is struggling to keep oil prices above the break-even point. While over the medium to long-term Trump's policies are a blessing for the fossil fuel industry (as the clean energy competitor has been heavily penalized), in the short-term the benefits have been limited as oil prices have declined.

Turning to crypto, after an initial boom that lasted until autumn 2025, the sector has performed less well than Big Tech/AI and has faced a remarkable value correction (Bitcoin lost almost 30% of its value, other crypto currencies had even worse performances). While the decline was initially triggered by a liquidation of crypto leverage, it accelerated after the defeat of the Republican Party in gubernatorial and mayoral elections in early November. As Paul Krugman (2025a) pointed out, 'the crypto crash in part reflects a realization that the political patronage the industry was relying on may not continue'. However,

this political patronage has become even more necessary as the crypto drawbacks are becoming increasingly evident. Since, as noted by Jean Tirole (2025), 'its valuation ... will collapse if confidence evaporates,' crypto badly needs political support to avoid such an outcome. Crypto seems, therefore, trapped in the crony capitalism system to whose building it enthusiastically contributed.

The externalization of internal inconsistencies

The internal inconsistencies of the economic triad leading US capitalism cannot be reconciled in the short term, so there will be a temptation to 'externalize' them by heightening the extractive nature of the US superpower. Many expected at the beginning of his mandate that Trump would be an isolationist. However, they misread what Make America Great Again really meant, i.e., it was time for the rest of the world to bend the knee and pay tribute to the US hegemonic power. As a result, the international involvement of the United States in world affairs has, if anything, increased. However, this involvement has not been aimed at preserving the global liberal order but at dismantling and replacing it with a system based on superpower competition, with the US at its centre, since, as stated in the National Security Strategy of 2025, 'the outsized influence of larger, richer, and stronger nations is a timeless truth of international relations.' (The White House, 2025a: 10)

The first year of the Trump presidency has been remarkable in terms of resource extraction from the rest of the world (Bertoldi & Buti, 2025a, 2025b). Through a range of policies — including unequal trade agreements with numerous countries, the imposition of extensive tariffs on the rest of the world, demands that allies commit to investing in the United States and purchasing American goods in exchange for lower tariffs and continued military cooperation, and the refusal to contribute further to addressing global challenges such as climate change — the Trump administration has consistently extracted income and wealth from the rest of the world (Bertoldi & Buti, 2025a).

Still, securing the permanence of the economic triad despite its internal inconsistencies and addressing the weakening of domestic political support call for further externalization. Recent developments regarding US aggressive outreach seem to indicate that the Trump administration will further heighten the 'extractive' nature of US superpower. To this end, it will try to weaken and dismantle counterpowers, like the European Union (EU), that have the potential to oppose such developments. For instance, the Trump administration has indicated that it would be willing to reduce or cut high US tariffs on some EU products with a certain content of steel and aluminium (which the EU considers should not be hit by these tariffs) if the EU agrees to adjust its digital rulebook (the Digital Services Act and the Digital Markets

Act) and make it more 'balanced'. Pressure is also mounting to reduce crypto regulations so as to allow US-based crypto companies to become dominant players in global markets. Finally, Trump has clearly indicated an escalation of the crusade against clean energy and in favour of fossil fuels, so as to boost further the global role of US oil and gas companies. US extractive policies are therefore going to continue, and possibly to intensify, with the new triad leading US capitalism among the main beneficiaries.

5. Conclusion

The profound transformation that US capitalism is undergoing under Trump 2.0 will have major domestic and international repercussions.

In the short and medium-term, the risks are mainly related to the economic and financial implications of AI and crypto. The burst of the possible AI investment bubble could lead to a sharp slowdown in the US and global economy. In addition, a weakly and/or badly regulated cryptocurrency sector has the potential to trigger a new systemic financial crisis. These developments will heighten the trade-offs already enshrined in the US macroeconomic trilemma, thereby hindering an effective policy response.

The longer-term risks are, however, even more worrying. First, crony capitalism will stifle innovation and competition, which will slow the dynamism of the US economy. Moreover, by creating rent positions for the politically connected, perpetuating privilege and allowing the capture of government by business interests, it will exacerbate US wealth and income inequalities and increase the polarization of US society. Second, the externalization of the triad's own contradictions and the American retreat from global governance will aggravate the extractive nature of US superpower and lead to an under-supply of global commons. The rise of the fossil fuel industry will delay or even reverse the efforts to fight global warming, thereby worsening the climate crisis.

However, the most problematic implications of the regression of US capitalism are related to the interpenetration of private and public interests. A weakly or badly regulated social media and AI sector can have catastrophic political and social consequences, which could undermine liberal democracies and produce devastating fragmentation and fault lines within a society. Moreover, Trump's open transactionalism is making the already unhealthy relationship between money and politics much worse. As the first year of the second Trump administration showed, the quality and even the nature of American democracy have been negatively affected by these developments. The political spillovers could be exceptionally far-reaching as the US regression towards crony capitalism risks

'inspiring' other countries. The combined effect of these factors will produce harmful effects that will last well beyond Trump 2.0.

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Securitizing Europe: From the Euro to Value Chains

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Abstract

In a narrow macroeconomic sense, and through successive crises, the euro has delivered a high degree of monetary stability for over two decades. Its core vulnerability is that it remains insufficiently embedded in a corresponding political economy architecture, which presumes a monetary union normally resting on complementary regimes for fiscal capacity, capital markets, taxation, labour markets, and crisis management. Coupled with this weakness, the EU is now entering an era of fragmented globalization in which currencies, payment infrastructures, and value chains are increasingly weaponized. This contribution argues that these two challenges should be addressed together through a societal security agenda. Building strategic autonomy in defence, energy, digital infrastructure, and critical value chains requires financing, risk-sharing and credible euro-denominated financial depth. A functional 'upward spiral' can link security, competitiveness, and the green transition, provided that institutional coupling and democratic legitimacy are treated as first-order constraints.

Keywords: Euro; Strategic Autonomy; Societal Security; Geoeconomics; Value Chains.

1. Introduction

In a narrow sense the euro has proven resilient. Since 1999 the European Central Bank (ECB) has maintained a credible commitment to price stability and, despite exceptional shocks, inflation expectations have largely remained anchored (European Central Bank [ECB], 2021). The euro has also consolidated a stable position as the second most important currency in the world economy, sustaining a significant role in international reserves, invoicing, and financial markets (ECB, 2021). Yet durability should not be confused with completeness. The euro remains institutionally 'thin' relative

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to the scale of the political economy it aspires to organize. A monetary union is not merely a technical arrangement of monetary policy; it is a societal institution that presupposes a dense and credible environment of fiscal capacity, financial infrastructures, legal harmonization, labour market adjustment mechanisms and political legitimacy.

Two transformations sharpen this diagnosis. Externally, the EU is moving from an era of liberalizing globalization to one of fragmented globalization (Kjaer, 2025). Interdependence persists, but it is increasingly filtered through distrust, risk management and coercive leverage. In such a setting, currencies, payment infrastructures and access to liquidity become instruments of statecraft, while value and supply chains turn into potential channels of disruption and extortion (Farrell & Newman, 2019; Kirshner, 1995). Internally, the euro area still lacks a stable and encompassing set of complementary regimes — most notably a permanent fiscal capacity and a fully integrated capital market — that would normally surround a monetary union (De Grauwe, 2016; Jones et al., 2016). The euro thus faces an external power challenge and an internal embedding challenge that reinforce each other.

The central claim developed here is that these challenges should be addressed together through a societal security agenda. 'Societal security' is used in a concrete sense: the protection of core societal functions and critical infrastructures — energy systems, digital infrastructures, payment systems, and supply and value chains — under conditions of geopolitical competition and hybrid disruption (Buzan et al., 1998; European Commission [EC], 2023a). In this view, the euro is not merely a currency but one component in a wider architecture of strategic autonomy. At the same time, strategic autonomy is not achievable without a credible euro ecosystem. Security, competitiveness, and the green transition are therefore best analysed as coupled processes rather than separate policy silos.

2. Fragmented Globalization and the Return of Geoeconomics

Globalization is not going away — communication, travel, and cross-border production will remain globally extensive — but the political conditions under which interdependence is organized are changing. The post-1990 expectation that dense interdependence would naturally generate cooperation has been replaced by a 'no-trust' baseline. Strategic rivalry and conflict are no longer treated as anomalies but as structural features of world politics, which are then projected into economic relations.

Three tendencies define this environment. First, geoeconomic competition has been normalized. Export controls, investment screening, industrial subsidies, sanctions, and technology standards are now mainstream tools in the United States and China, and the EU is responding through an 'economic security' agenda and the vocabulary of 'open strategic autonomy' (Blackwill & Harris, 2016; EC, 2023a). Second, interdependence is reinterpreted as vulnerability. Global value chains are not merely efficiency devices; they are also channels through which disruption can be transmitted, intentionally or unintentionally. What appeared as benign market integration is increasingly recognized as network centrality and bottleneck control (Farrell & Newman, 2019). Third, the line between public and private power is blurred. Critical infrastructures — cloud computing, undersea cables, payments platforms, semiconductor ecosystems — are often controlled by private actors, yet function as strategic assets. The problem is therefore less one of 'state versus market' than one of how to govern infrastructures that are simultaneously economic and security-relevant.

In this environment, currencies matter in power terms. The US dollar is not only a currency but a core infrastructure of global finance, embedded in a dense ecosystem of US Treasury markets, Federal Reserve liquidity, legal institutions, and network centrality (Eichengreen, 2011). That ecosystem enables both resilience and leverage. Sanctions efficacy, for example, is strengthened by the dollar's role in payments and reserves and by the dominance of dollar-linked financial intermediaries (Drezner, 2015). The EU does not need to mimic the US model; it needs to reduce asymmetric dependencies and improve its ability to act under adverse conditions. Monetary autonomy, in other words, is not achieved by issuing a currency. It is achieved by building the institutional and infrastructural environment that makes the currency usable and credible in conditions of stress.

3. From the Euro to Payments: Monetary Sovereignty Under Stress

The euro's external relevance depends on more than monetary stability. It depends on whether European actors can reliably transact, borrow, and invest in euro-denominated markets under adverse conditions. The pandemic and the war against Ukraine accelerated a reconsideration of critical infrastructures, including financial infrastructures. In retail payments, Europe remains heavily dependent on non-European card schemes and payment intermediaries. In wholesale finance, messaging and settlement infrastructures are globally interconnected and, in practice, exposed to extraterritorial pressures. In the new

geoeconomic environment, these dependencies are increasingly interpreted as strategic vulnerabilities.

The digital euro project is emblematic. The ECB presents the digital euro primarily as a complement to cash that preserves central bank money as an anchor in a digitalizing economy, while supporting competition and resilience in retail payments (ECB, 2023). But the strategic dimension is equally important. A credible digital euro could reduce dependence on external payment infrastructures and ensure that the euro remains a usable and sovereign means of payment even under adverse conditions. It would also strengthen the ECB's capacity to maintain the monetary anchor if private payment platforms become dominant, thereby protecting monetary sovereignty in a broad sense.

More generally, payment infrastructures should be understood as a component of critical infrastructure policy. The EU has already moved in this direction through initiatives on instant payments and through regulatory attention to operational resilience in finance. Yet the strategic problem is deeper: a monetary union's autonomy is constrained if the key rails on which transactions run are outside its control. The euro therefore needs to be embedded in a European payments and settlement ecosystem with robust cyber resilience, clear governance, and credible contingency planning. This is not an argument for autarky; it is an argument for redundancy and reduced exposure to coercive leverage.

4. The Euro and the Problem of Institutional Embeddedness

The euro was designed as a rules-based monetary union. The premise was that monetary stability combined with fiscal rules and market discipline would be sufficient to generate convergence and prevent destabilizing imbalances. The sovereign debt crisis demonstrated the limits of that design. Monetary integration without commensurate fiscal and financial integration produces a fragile situation: in benign conditions, private credit and capital flows can sustain growth; in adverse conditions, market panic can turn into a self-fulfilling liquidity crisis for sovereigns and banks (De Grauwe, 2016).

The institutional response in the 2010s was substantial but incomplete. The ECB expanded its toolkit, culminating in commitments that were widely interpreted as stabilizing the euro area through lender-of-last-resort-like functions (Verdun, 2015). Banking union was initiated, creating a single supervisory mechanism and a single resolution mechanism, yet banking union

remains incomplete without a fully-fledged common deposit insurance scheme and without a sufficiently credible common fiscal backstop. Capital markets union has proceeded slowly, leaving Europe with fragmented legal regimes and barriers to cross-border risk sharing (EC, 2020). As a result, the euro area still lacks the type of integrated financial system that a monetary union requires for both efficiency and stability.

A useful historical contrast is not primarily the long evolution of the US dollar, which was embedded in a federal fiscal and legal order early on, but post-war Western Europe's broader attempts to embed monetary stability in encompassing political economies. The 1948 West German currency reform, for example, was embedded in a broader restructuring of labour markets, welfare institutions, competition policy, and industrial strategy (Kjaer, 2019). More generally, post-war Western Europe built varieties of embedded capitalism, different institutional settlements that coupled monetary policy, industrial policy, welfare systems, and labour markets (Esping-Andersen, 1990; Hall & Soskice, 2001). Monetary stability was not treated as a purely technocratic objective; it was embedded in social compromise and institutionalized expectations.

The euro area has only partially developed such coupling mechanisms. This produces three structural problems. First, adjustment burdens remain uneven. In a monetary union, external devaluation is unavailable, so adjustment occurs through internal devaluation, unemployment or fiscal contraction. These mechanisms are politically destabilizing and have contributed to distributive conflicts both within and between member states. Second, risk sharing remains insufficient. A monetary union without cross-border fiscal and financial risk sharing transmits shocks in pro-cyclical ways, thereby threatening both cohesion and legitimacy. Third, the euro lacks a stable political narrative capable of legitimizing deeper integration. In the absence of a shared understanding of mutual responsibility, reforms are framed as technocratic fixes or as zero-sum transfers.

The broader point is that the euro's institutional deficit is a societal deficit. Monetary integration changes the conditions of social solidarity, distributive conflict, and state capacity. A currency is an institution that presupposes a society, understood as a shared space of legal norms, fiscal commitments, and expectations of mutual responsiveness. The euro area has moved some distance towards such a societal space through common supervision, crisis instruments, and limited common borrowing. But it has not built a stable and politically robust framework that can sustain the currency under conditions of persistent geopolitical and economic stress.

5. External Drivers and Integration as Political Economy Reconfiguration

European integration is often narrated as an internal peace project, a narrative that is important but incomplete. Major integration steps have repeatedly been catalysed by external developments: Cold War security, decolonization, global competition, German unification, and Eastern enlargement. Integration has unfolded through a series of externally triggered bargains that reconfigured Europe's political economy. The Single European Act (1986) and the Treaties of Maastricht (1992), Amsterdam (1997) and Lisbon (2009) were here the core frameworks. This pattern matters because it provides a lens for understanding the present. The current conjuncture — marked by Russia's aggression, US-China rivalry and broader instability — again creates external pressure that can open windows for institutional change.

The immediate policy implication is not merely higher defence spending. It is the need to build autonomous capacity across a range of domains that have traditionally been treated as separate: conventional deterrence and territorial defence, resilience against hybrid threats, secure digital infrastructures, energy autonomy, and critical value-chain security. The EU's 'Strategic Compass' signals such an ambition and reflects an emerging strategic culture (Council of the European Union, 2022). Yet ambitions require capabilities, and capabilities require institutions that can mobilize resources, coordinate actors, and distribute costs.

Even if core military capabilities remain partly intergovernmental, EU-level instruments are decisive. Defence industrial policy, common procurement, innovation, and standard-setting require internal market and regulatory tools. Financing at the necessary scale implies common borrowing and deeper euro-denominated capital markets. Societal security against hybrid threats depends on the regulation and governance of critical infrastructures, including digital networks, energy grids, ports, undersea cables, cloud services, and payment systems. The EU is, in other words, pushed towards a comprehensive political economy approach. The euro becomes a central node within this approach because it structures financing, payments, and the capacity to act.

6. Societal Securitization and the 'Upward Spiral' Logic

A societal security agenda entails treating security, competitiveness, and sustainability as coupled systems rather than as separate silos. The EU is often diagnosed with an investment and competitiveness gap, reflected in fragmented capital markets, slower productivity growth, and limited scale-up of firms. In parallel, the green transition requires massive investment

and security imperatives require rapid scaling of defence and critical infrastructure, objectives that can conflict. Yet they can also be mutually reinforcing if organized through an 'upward spiral' of capacity building.

Three transitions are required on compressed timelines. First, a military transition: capabilities, procurement, industrial scaling, and interoperability. Second, a digital transition: secure data infrastructures, resilient networks, trusted cloud and AI capacity, and cyber defence. Third, an energy transition: decarbonization combined with security of supply, including grids, storage, and critical technologies. Each transition is capital intensive, requires coordination and entails distributional consequences. Without fiscal and financial capacity, strategies remain declaratory. Conversely, investments that are designed narrowly can produce fragmentation, subsidy races, and political backlash.

The upward spiral logic is that investments in one domain can generate spillovers in others. Defence procurement can stimulate technological capabilities with civilian spillovers, as seen historically in aerospace and digital technologies; energy transition policies can reduce exposure to external suppliers while creating industrial opportunities; digital sovereignty measures can protect infrastructures while enabling competitive industries. Yet for these spillovers to materialize, the EU must overcome institutional fragmentation and align incentives across member states. In the absence of coupling mechanisms, spillovers remain accidental and integration remains reactive.

This is also where securitization theory is relevant. In the Copenhagen School account, securitization involves framing an issue as an existential threat in order to justify extraordinary measures (Buzan et al., 1998). The EU's present discourse partly resembles this logic. Yet a permanent 'state of exception' would undermine democratic legitimacy and the rules-based character of the European project. The challenge is therefore to institutionalize security-driven integration through ordinary legal and budgetary instruments, while ensuring transparent accountability. Societal securitization must be understood as a governance strategy rather than as a rhetorical emergency.

7. Euro, Capital Markets, and Fiscal Capacity: the Three Monetary Reforms

If societal security is the organizing frame, three euro-related reforms become central: (1) a standing stabilization and investment capacity at EU or euro-area level; (2) completion of the banking union and the capital markets union; and (3) resilient European payment infrastructures.

Fiscal and investment capacity is necessary for two reasons. First, macroeconomic stabilization: asymmetric shocks will recur, and a monetary union without a fiscal backstop is structurally fragile. Second, strategic investment: defence, energy, and digital infrastructure require multi-year, predictable funding streams that cannot be fully delivered through fragmented national budgets, especially under tight fiscal constraints. NextGenerationEU demonstrated that common borrowing is feasible, can mobilize substantial resources, and can be linked to reform and investment objectives. The key question is whether this remains a one-off response to an exceptional crisis, or whether it becomes institutionalized as a permanent capacity.

Institutionalization does not imply unlimited fiscal federalism. It implies a predictable instrument for collective investment and crisis stabilization under clear governance rules. In a security context, such a capacity also has signalling value because it communicates commitment and reduces uncertainty about Europe's ability to sustain long-term projects. Without it, the EU risks oscillating between ad hoc responses and prolonged underinvestment.

Completion of the banking union and the capital markets union is equally decisive. European capital markets remain fragmented along legal, supervisory and fiscal lines. Fragmentation raises the cost of capital, inhibits scale-up of firms, and channels European savings into non-European markets. In security terms, it limits the EU's ability to finance its own priorities and increases dependence on external liquidity conditions. Reform priorities are well known: reducing barriers to cross-border investment, improving supervisory convergence, harmonizing or aligning insolvency and securities law where feasible, and strengthening market infrastructures. The Commission's CMU action plan points in this direction, but progress has been slow (EC, 2020). The slow pace is politically understandable — law, taxation, and insolvency touch core sovereign prerogatives — but the geopolitical environment increases the cost of delay.

The third pillar is payment infrastructures. Payment sovereignty is not a secondary technical issue but a component of critical infrastructure. A resilient European payments ecosystem requires instant payments, robust settlement infrastructures, and governance arrangements that reduce dependency on non-European intermediaries. The digital euro may be part of this solution, but it must be embedded in a broader infrastructure strategy that includes operational resilience standards and contingency planning (ECB, 2023). The euro's strategic autonomy depends on whether European actors can pay, settle, and access liquidity within their own jurisdiction even if global networks become contested.

8. Value Chains and Industrial Policy: Securing Critical Nodes

The euro's institutional completion cannot be separated from industrial policy and value-chain security. In a fragmented world, the EU must identify and secure critical nodes in value chains: raw materials, semiconductors, pharmaceuticals, defence inputs, energy technologies, and key digital components. The EU's critical raw materials framework reflects this shift towards mapping dependencies and reducing vulnerabilities through diversification, domestic capacity, and strategic partnerships (Regulation (EU) 2024/1252). The Green Deal Industrial Plan similarly signals a turn towards industrial policy as a means of securing capacity in net-zero technologies (EC, 2023b).

A workable European approach should be grounded in the internal market but updated for the current era. The internal market was built primarily to remove barriers to trade and investment, and it now also needs to function as an instrument for resilience and strategic autonomy. That implies a more proactive conception: common standards for critical infrastructures, coordinated stockpiles where appropriate, joint procurement, and targeted support for strategic industries, while maintaining competition where possible and preventing internal subsidy-driven fragmentation.

Securing value chains also requires institutional alignment across multiple regimes. Investment screening and export control regimes must be coordinated with competition policy, state aid, and research funding. Sustainability objectives must be integrated with security objectives rather than traded off in ad hoc fashion. The green transition is therefore best understood not only as an environmental project but also as an energy security and industrial strategy. The key is to ensure that regulatory frameworks do not produce new dependencies, for example through concentrated supply chains for critical technologies or through overreliance on external processing capacity for raw materials.

A key governance question is how to prevent a patchwork of national strategies from undermining the internal market. If strategic autonomy is pursued through uncoordinated subsidies and national security exceptions, the EU risks reproducing internally the very fragmentation it seeks to avoid externally. The policy response should therefore prioritize common instruments and common criteria. The EU's emerging toolbox — investment screening, anti-coercion measures, and coordinated export control discussions — should be coupled with internal market disciplines and with financing instruments that enable smaller and fiscally constrained member states to participate on equal terms. Otherwise, security policy will amplify intra-European divergence, which would weaken both the euro and the Union's external leverage.

The euro matters in this context because value-chain security is capital intensive. Reshoring, diversification, stockpiling, and industrial scaling require long-term finance. If Europe continues to export a substantial share of its savings to external capital markets, while financing its own investments under tighter and more fragmented national constraints, strategic autonomy remains aspirational. A deeper euro-denominated capital market and a credible fiscal instrument are therefore not only macroeconomic reforms; they are enablers of industrial strategy and value-chain resilience.

9. Building a European Society: Legitimacy, Solidarity and the Internal Political Constraint

A societal security agenda will fail if it is perceived as a technocratic project detached from distributive realities. The post-1980 turn towards micro-oriented governance — outsourcing, privatization, and market-mimicking competition in the public sector — contributed to fragmentation and socio-economic polarization in many member states. The political consequence has been increased support for anti-system parties and a decline in trust in institutions (see Schmidt, this report). Security-driven integration that neglects social cohesion risks intensifying these dynamics, thereby weakening the internal foundations of strategic autonomy.

Two legitimacy constraints follow. First, distributive fairness is a security issue. Societies with deep internal divides are more vulnerable to external manipulation and internal destabilization. Second, institutional reforms must be explainable in terms of shared benefits and mutual responsibilities. The language of 'solidarity' is politically contested, but the functional need for risk sharing is unavoidable in a monetary union confronted with large shocks and strategic investment needs. If risk sharing is not institutionalized, it reappears in disguised forms, through crisis instruments, central bank interventions, and politically contentious bargaining.

This implies that the euro's institutional completion cannot be reduced to fiscal rules or market discipline. It requires a broader social settlement: credible pathways for upward mobility, investment in skills and education, and labour-market regimes that support adjustment without permanent precarization. These are primarily national competences, but EU-level instruments can support them through funding, coordination, and, in certain domains, minimum standards. In a societal security context, cohesion policy and social investment are not peripheral, they are part of resilience.

A further constraint is constitutional. Security-driven integration can easily invite executive dominance and fast-track decision-making. In EU terms, this risks reproducing a familiar pattern in which crisis governance relies on the European Council, the Eurogroup, and specialized agencies, while parliamentary channels and contestation lag behind. The euro crisis was a formative example: decisions with far-reaching distributive effects were often presented as 'no alternative' solutions, justified by market pressure and legal necessity. In the short run, such practices can stabilize the system; in the long run, they can erode trust and create fertile ground for anti-system mobilization (Scharpf, 2014). A societal security agenda should therefore be designed from the outset with ordinary-law procedures, clear competence allocations, and robust oversight, rather than treated as a temporary exceptionalism.

The second legitimacy dimension is external. If the EU pursues strategic autonomy, it will necessarily affect third countries through standards, trade policy, investment screening, and export controls. Such external effects will be interpreted through the lens of power rather than through the EU's self-description as a regulatory and normative polity. A credible external strategy therefore requires internal coherence: rules must be stable, decisions predictable, and justifications intelligible. In this regard, the euro's international role is not only a technical question but also a reputational one. A currency gains strength when it is backed by institutions perceived as reliable, legally constrained, and capable of acting decisively in crises (Eichengreen, 2011).

Finally, the societal aspect of securitization should not be misunderstood as a call for autarky. Strategic autonomy is compatible with openness if openness is organized through diversification and redundancy rather than through single points of failure. The relevant benchmark is not self-sufficiency but the capacity to sustain core societal functions under stress. In this sense, the EU's economic security agenda can be understood as an attempt to translate classic political-economy concerns — embeddedness, resilience, and collective capacity — into a contemporary setting characterized by global value chains and networked infrastructures (Polanyi, 1944; Farrell & Newman, 2019).

In sum, the challenges ahead imply a move towards a European society in the singular (Von Bogdandy, 2024). A society characterized by shared norms, a coherent institutional architecture, and a synchronization of societal activities, including economic cycles.

10. Policy Implications: Coupling Monetary and Security Agendas

A euro-centred societal security strategy suggests six policy priorities.

- **Consolidate a standing EU-level fiscal and investment capacity**. Common borrowing should be institutionalized for strategic investment and macro-stabilization in crises, with clear governance, transparency, and accountability.
- **Complete banking union and accelerate capital markets union**. This includes breaking the sovereign–bank loop, strengthening common backstops, and reducing legal and supervisory fragmentation to create genuine cross-border risk sharing and investment capacity (EC, 2020).
- **Build resilient European payment and settlement infrastructures**. The digital euro, instant payments, and secure clearing infrastructures should be treated as critical infrastructure, with corresponding operational resilience standards and contingency arrangements (ECB, 2023).
- **Operationalize open strategic autonomy in value chains.** The EU should map and secure critical nodes, use joint procurement and targeted industrial policy, and maintain internal market coherence to avoid subsidy-driven fragmentation (EC, 2023a; Regulation (EU) 2024/1252).
- **Integrate sustainability with security and competitiveness.** The green transition should be designed as an energy security and industrial strategy, not merely as an emissions-reduction programme. This requires predictable regulation and investment frameworks that prioritize European capacity (EC, 2023b).
- **Embed security integration in democratic legitimacy.** Increased EU-level capacity must be coupled with parliamentary oversight, transparent conditionality, and narrative clarity on how security, prosperity, and cohesion are jointly served.

11. Conclusion

The euro's historical record is better than many critics acknowledge. Yet its institutional architecture remains incomplete relative to the geopolitical and socio-economic environment the EU now faces. Fragmented globalization turns monetary and financial arrangements into instruments of power and vulnerability. At the same time, European societal security — defence, digital

resilience, energy autonomy, and value-chain security — requires financing, risk sharing, and institutional capacity that cannot be delivered through a narrow monetary policy framework alone.

The strategic opportunity is to treat these challenges as mutually conditioning. The euro can become a central component of European strategic autonomy if it is embedded in a broader political economy: a standing fiscal and investment capacity, deeper capital markets, resilient payment infrastructures, and coherent value-chain policy. Achieving this requires institutional coupling and democratic legitimacy. The alternative is continued reliance on ad hoc crisis management and external infrastructures, which is an increasingly risky strategy in a no-trust world. Hence, the way forward is to think in comprehensive societal terms.

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The Twin Political Challenges for the EU: US Geopolitical Disruption and National Populist Fragmentation

Vivien A. Schmidt *

Abstract

This paper focuses on the twin political challenges faced by the EU, one from the outside, constituted by the US's disruptive geopolitics combined with its destabilizing geoeconomics and destructive domestic politics, the other from the inside, resulting from the fragmentation of Europe's political landscape. How the EU responds to these challenges depends on its ability to reinvent its external relations while simultaneously reviving its financial and industrial capacity. But the policy space necessary to generate such solutions risks being restricted by Europe's growing populist fragmentation, especially by the extreme right's increasing influence and power. Only with policies that successfully respond to citizens' discontent will the EU be able to reduce the populist fragmentation that restricts the policy space required to generate solutions to both of its external and internal challenges. This chapter addresses these twin challenges and how the EU might overcome them through new policies and discourse.

Keywords: Geopolitics; Geoeconomics; Populism; Trump Administration; European Union.

1. Introduction

The European Union (EU) is facing a set of twin political challenges, one from the outside, the other from the inside. The EU's external political challenges stem mainly from the Trump administration's foreign policies and pronouncements which, together with its domestic politics, spell the end of the United States (US) as a stable world hegemon as well as a beacon for democracy. The EU's internal political challenges are a consequence of the fragmentation related to homegrown populist leaders and parties on the extreme right, likely to make it more difficult for Europe to respond effectively

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to the external challenges or the internal discontents that have given rise to populism in the first place.

The key words to characterize the external political challenges from the US are the '3 D's' of disruption, destabilization, and destruction. The Trump administration's geopolitics has disrupted the international world order through its undermining of traditional alliances, its decoupling from long-standing security collaborations and arrangements, its withdrawal from international institutions and assistance, and its disregard for international law in its adventurist military incursions. Underpinning US geopolitics is the geoeconomics which has destabilized international economic relations through the volatility of US tariff-setting, the dismantling of international and domestic regulatory regimes, as well as the launching of America First industrial policies. Accompanying the geopolitics and geoeconomics is the destruction of American democratic institutions and practices.

US external geopolitical disruption and geoeonomic destabilization have left the EU searching for new ways to navigate the emerging new world (dis) order while scrambling to address its own weaknesses, in security, industrial, climate, and social investment. US internal destruction has left the EU worried about the indirect encouragement of the extreme-right populist leaders and parties responsible for growing EU political fragmentation and difficulties for EU governance.

Addressing the EU's weaknesses, however, requires member states to make common cause and reach optimal agreements. While this has never been easy, it is likely to become increasingly difficult as a result of the risks from growing populist fragmentation in Europe. The words key to understanding such fragmentation are populism's four 'M's': message, messenger, medium, and milieu (Schmidt, 2022, 2025a). Populist 'us-versus-them,' post-truth messages are disseminated by anti-system, charismatic messengers primarily through the medium of social media echo chambers and traditional media amplifiers, which resonate in the milieu of people feeling economically left behind, worrying about loss of social status, and wanting to take back political control.

This is a critical moment for the EU in terms of its place in the world as a geopolitical player and a geoeconomic power as well as of its survival as a liberal democratic polity. These are all interlinked, since without the internal cohesion needed for effective governance in response to a changing world political and economic order, the EU is unlikely to thrive, or in a worst case scenario, even survive (Sapir, this report). The catch-22 in all of this is that for the EU to have the policy space needed to respond to the external challenges, it also has to

address the internal problems fuelling populist discontent. But solving those internal problems depends in part on agreement on the new initiatives, which may be stymied by the populist fragmentation the EU is seeking to overcome, and that increasingly restricts the EU's policy space.

2. External Challenges to the EU

During Trump's first mandate (2017-2021), US policies and politics were chaotic. In his second mandate (2025-current), his policies have been disruptive and destabilizing externally, his politics destructive internally, with both together hastening the US's own decline as world hegemon while unravelling the international *status quo ante*.

The US's disruptive geopolitics

The instances of the US's disruptive geopolitics are too many to describe in any detail, but are worth enumerating to highlight the severity of the challenges facing Europe and the world. To begin with, the US nullified its soft power by closing down humanitarian assistance through US AID on day one; by pulling out of sixty-six major international institutions; and by drawing back from long-standing multilateral alliances and security agreements in favour of bilateral deal-making. In so doing, it has sidelined the UN as well as traditional diplomacy in promises to settle wars, and it has equivocated on membership in NATO and on support for Ukraine. Moreover, the adventurism of US extra-territorial military actions, although not new, has reached new levels of intensity in the Middle East, Africa, and South America, for which it invented the 'Donroe doctrine,' to justify military incursions that violate international law. Finally, the destabilization has also involved attacking allies with hostile statements such as turning Canada into the US's 51st state, buying Greenland, and claiming in the US's National Security Strategy that the EU is one of the oppressive 'transnational bodies that undermine political liberty and sovereignty,' with Europe on the road to 'civilizational erasure' due to (non-white) immigration and limits on 'freedom of expression' (racist hate speech).

Such geopolitical destabilization seems intended to take the world back to the 19th century of imperial overreach, when it was governed by 'spheres of influence.' But the US today, unlike the British empire, say, is committed only to gunboat diplomacy, without ambitions to occupy and rule the countries it targets or to cultivate soft power through convincing narratives of progress and broad diplomatic alliances (O'Toole, 2026). Moreover, its particular brand of foreign relations, through bullying allies and appeasing rivals or perceived 'enemies,' can

in no way attain the peaceful coexistence that Trump claims to want, in particular because dividing the world into spheres of influence is not a reliable method for promoting peace (Walt, 2026). Equally important, Trump's cowboy diplomacy along with his erratic behaviour and rejection of US traditional soft power has meant the loss of trust in the US by allies and rival powers alike.

The US's destabilizing geoeconomics

These geopolitical disruptions are accompanied by the US's destabilization of international economic relations, regulations, and world trade. The outsized tariffs that the US unilaterally imposed on countries across the globe have produced tremendous uncertainty for world trade because of the arbitrariness of the numbers, the horse-trading and back-pedalling, along with the punitive ways in which they have been used to gain concessions in other areas. Equally problematic, not just for the global economy but the future of the planet, is US all-out support for fossil fuels to 'drill-baby-drill' while pulling out of the Paris Climate agreements and ending domestic support for green energy. US opposition to international regulations and standard-setting is another destabilizing influence, including the assault against EU digital regulations, the forced revision of the OECD agreement on a universal minimum corporate tax in order to exempt US firms, and the suspension of the Foreign Corrupt Practices Act of 1977.

US geoeconomic dominance also operates through international dependence on the interconnected complexes of US-owned or controlled global technological platforms (tech stacks), including in communications, global finance, semiconductors, and weapons systems. But what started as benign dependence has become a kind of 'weaponized interdependence,' as the US government has increasingly used American technological systems to impose its will, say, by imposing financial sanctions and semiconductor export controls (and enforcing compliance) or engaging in digital surveillance. Whereas China recognized the potential for such weaponization already over a decade ago, and built its own interconnected technological stack to ensure its independence, the EU has done little so far to build its own technological capacity as insurance against economic coercion, not only from the US but equally from China (Farrell & Newman, 2025).

Such weaponized interdependence is only likely to expand further with the Trump administration's massive defence-tech spending to the benefit of AI firms owned by Trump-friendly billionaires, combined with its increasingly interventionist industrial policy focused on 'economic' security, as the government takes equity stakes in private firms deemed necessary to secure critical supply chains.

The Trump administration's destructive domestic policies and politics

And as if all of this were not enough, accompanying these disruptive and destabilizing geopolitical and geoeconomic policies have been the Trump administration's domestic policies and politics, which risk destroying American democracy as a result of their authoritarian drift. Since taking office, the Trump Administration has virtually upended the US constitutional order by undermining the separation of powers key to liberal democracy in favour of executive power. The actions are too numerous to list in full, since they touch every aspect of government. Most notable have been the executive grab for power and the side-lining of Congress; the weakening of the rule of law and the weaponization of the Department of Justice; the militarization of the border police and the politicization of the military; the reduction of governing capacity through mass personnel firings and agency closures; the incursions on academic freedom and media freedoms; the threats to free and fair elections, and much, much more.

Although there has certainly been pushback against many of these actions in the US, it has done little to stop the juggernaut. The descent into authoritarianism is a real risk for the US, in particular given a president with unprecedented powers who told the New York Times (Sanger et al., 2026) that the only constraint he accepts is 'my own morality. My own mind. It's the only thing that can stop me,' and then added that 'I don't need international law.' This bodes ill not only for US domestic politics but equally for its geopolitics, and especially for the EU, where respect for international law, rule of law, regulation, and liberal democracy is part of its fundamental values and identity.

3. Internal Challenges to the EU

The external challenges for the EU from the US also feed into the EU's internal challenges, in particular with regard to US domestic policies and politics. While US geopolitics and geoeconomics make it more difficult for European mainstream leaders and parties to govern effectively, US domestic politics add to the EU's already significant political fragmentation. This results not only from the direct encouragement of the Trump administration and US far right networks and platforms. It also derives more simply from their mimetic effects on far right European leaders and parties.

Policy impact of political fragmentation

The influence of US domestic politics on Europe's far right have already had an impact on the EU's ability to deal with US geopolitical and geoeconomic policies.

The EU's weak stance on tariff negotiations, for example, has much to do with the way in which the far right has hamstrung it by pushing appeasement rather than negotiation as equals. This was driven not only by Trump-friendly far right leaders urging pragmatism, such as Prime Minister Giorgia Meloni, but also by centre right leader German Chancellor Friedrich Merz, worried not just about German exports but equally about a recession that would be to the benefit of the far right Alternative für Deutschland (AfD) political party. But in giving in to Washington, the EU has not only increased its dependence on the US while cutting against its own interests, including with buy-American provisions for military hardware and liquified national gas (LNG), but has also given more grist to the mill for the far right, for which pledges to increase defence spending feed into the far right's 'guns versus butter' narrative (Matthijs & Tocci, 2026).

With or without the US, however, the EU faces major problems of governance stemming from the agenda-setting power of homegrown populist leaders and parties across Europe. When in power, extreme right governments are able to delay or veto EU level agreements. When in opposition, they exert indirect pressure on mainstream leaders, in particular on the centre right, not only at the EU level but also at the national one, to harden immigration policies, water down climate policies, or cut the welfare state (for immigrants) (Schmidt, 2025a).

Understanding populism

The electoral success of the extreme right in recent years can best be understood in terms of the 4 M's of populism: message, messenger, medium, and milieu. The messages are characterized by an angry political style that appeals to emotions with 'us-vs-them,' post-truth rhetoric that is anti-immigrant, anti-minority, climate sceptic, ultra-nationalist, and welfare chauvinist in its political content. The messengers consist of leaders with charisma and authenticity claiming to embody the 'real' people against 'the other,' supported by special advisers, trusted cadre, anti-system parties, social movements, and networks of followers. The medium disseminates the messages through the echo-chambers of social media and the amplifiers of the traditional media, increasingly owned by billionaires pushing extreme right messaging. The milieu represents the socio-economic sources of discontent by people feeling left behind by globalization, and worried about the cost of living; the socio-cultural discontent of people concerned about loss of status and the 'changing faces' of the nation resulting from immigration; and the political discontent of people wanting to take back control from unresponsive governments in which they have lost trust and increasingly question their legitimacy (Schmidt

2022, 2025a). Such political discontents are exacerbated by the multilevel EU, which is portrayed in populists' messaging as responsible for the socio-economic discontents resulting from hyper-globalization and austerity; for the socio-cultural discontents because encouraging or failing to stem the tide of immigration; and for the political discontents by being overly-technocratic while lacking in accountability and transparency as well as political legitimacy, because people's voices cannot be heard (Schmidt, 2020: Ch. 10).

In increasing numbers of EU member states, the extreme right is already in power, either governing largely alone or with other extreme right parties. Speculation has it that by 2027 other countries will follow suit, most importantly France, with the extreme right's potential victory in the presidential elections. This could mean that the EU Council by 2027 would be a majority extreme right. The only good news is that they don't agree on the geopolitical and geoeconomic issues, although they are all hostile to any increases in power for the EU. And the one saving grace from Trump's derogatory discourse about Europe and his administration's threats to European sovereignty (e.g., Greenland), interests (viz. tariffs), and self-respect (on identity) — along with the violent drama in US cities — is that this has begun to alienate even extreme right parties, or at least their voters.

4. What Response from Europe to the External Disruption?

How can or should the EU respond to the US's disruptive and destabilizing geopolitics and geoeconomics at a time when US democracy may very well be collapsing? Only by developing new EU understandings and goals alongside concrete policies that address not only the external disruption but also the internal fragmentation.

What is to be done: optimal new understandings and goals

First and foremost, European leaders must come to terms with the fact that there is no going back to the *status quo ante*. The US had already been drifting away from its traditional commitments and practices long before the current Trump administration supercharged the shift with its massive increase in spending on defence and economic security through America First state industrial policy and investment, and its treatment of former allies as 'vassals.'

One of the main problems for European leaders in the short term is how to respond to US aggressive discourse and actions. The EU's attempts to assuage Trump have not worked. To the contrary, they have been seen as signs of weakness.

The EU is strongest when it speaks with one voice, with the Commission clear, the member states in the Council united, as in the cases of the War in Ukraine and of Greenland. Firmness always works better than subordination (Tocci 2026). Moreover, in a world likely to end up in the medium and long-term with a multi-polar system made up of spheres of influence, the EU needs to find ways to ensure that it is not left out in the cold. As Canadian Prime Minister Mark Carney (2026) put it in his speech to the World Economic Forum, 'In a world of great-power rivalry, the countries in between have a choice—compete with each other for favour or combine to create a third path with impact.'

The question for the EU is how does it become a serious 'geopolitical' actor. Part of this surely means doing more than just talking about strategic autonomy; it means actually doing it, including taking on major responsibilities in NATO (Howorth, 2019). Moreover, for the EU's regional security, in particular given the uncertainties around the trans-Atlantic partnership in NATO, the EU would do well to consider forging new cross-regional alliances in its larger neighbourhood, such as creating a new EurAsian Security Order (Howorth, 2025). This also means that the EU should stake out its own reasoned position on trade relations with China, rather than either blindly following the US's intermittently hostile approach or caving to China. Instead, it should diversify its sources of energy and its trade relations without abandoning the transatlantic relationship or its close ties with the US (Matthijs & Tocci, 2026).

But for the EU to ensure that it is able to engage in credible geopolitics, it also needs to ensure its geoeconomic vitality. This requires the reinvention of both competition policy and state aid rules to enable the creation of globally competitive, EU-based industrial giants along with the revision of the fiscal rules while expanding EU level debt, so as to enable the supercharging of investment not only in security, climate, and industry but also in social investment.

How to do it: practical suggestions

Much of the practical thinking on what to do and how to actualize such new understandings and goals has already been laid out in the 2024 separate reports by Enrico Letta and Mario Draghi (Letta, 2024; Draghi, 2024). One extremely important element is missing from both reports, however. There is no consideration of how the constraints on investment imposed by the restrictive fiscal (deficit and debt) rules of the Eurozone's Stability and Growth Pact undermine the ambitious plans for revitalizing the EU's economy (Schmidt, 2025b). In 2024, the EU returned to 'governing by the rules and ruling by the numbers' (Schmidt, 2020), with only slightly revised numbers and longer time

frames for member states to meet their targets, and without any new EU level investment fund. The consequences for public investment are not encouraging, either to close the investment gaps needed to promote EU economic growth and competitiveness (Boivin & Darvas, 2025) or to meet the EU's ambitious targets with regard to the green transition (Greentervention, 2023).

Although a new security architecture is in the process of being put in place (Fabbrini & Fabbrini, 2026), it lacks serious money. Moreover, the Commission's invocation of the escape clause to exclude national defence spending from the calculation of countries' deficits and debt in order to encourage investment seems for the moment to have done little more than green light what countries had already decided for themselves — most notably Germany — while leaving countries without the fiscal space unlikely to invest, such as France, Italy, and Spain (Fabbrini & Fabbrini, 2026). This makes for asymmetric capability and insufficient investment in EU-wide defence projects.

An additional problem with regard to the easing of the fiscal rules on defence spending is that it risks crowding out other investments, in particular on the green transition, on industrial innovation, or on social investment. With regard to the green transition, encouraging member states to meet the targets is essential not just for the good of the planet but also because the EU has an opportunity to use its lead in this area to capitalize on becoming a decarbonized zone, fuelling climate-friendly industrial growth while avoiding the fossil fuel trap of dependency on US LNG. One way of supporting this would be to include climate in the European Semester, by aligning it with socio-economic governance and connecting it to competitiveness (Massart, 2026). Another would be to consider it in an expanded definition of defence, as climate security, so as to treat it under the defence escape clause.

Industrial policy is another important area of concern, as is social investment. Studies show that the EU could recharge its domestic growth engines while remaining within the fiscal rules for the member states by also using the escape clause for industrial policy, without which the EU will not be able to meet the external challenges on digital platforms and AI coming not only from the US but also from China (Heimberger & Dabrowski, 2025). Social investment should also be added to those areas considered under the escape clause, given that it too is a domestic driver of economic growth, with industrial productivity and innovation closely tied to education and up-skilling (Hemerijck & Fernandes, this report).

But fiscal rules exemptions on their own do nothing to create a more fully European economy. Only with some form of EU level debt, or Eurobonds, can the EU address its security, climate, and industrial and social investment

needs. Moreover, with real EU investment capacity would also come financial autonomy, because it would serve to create a deep and liquid Eurobond market that would underpin a European financial ecosystem able to serve the EU's many needs, thereby further reducing the EU's dependence on the United States (Blanchard & Uribe, 2025).

But how, then, to gain agreement on these ambitious goals and policies? Only by overcoming the internal political fragmentation.

5. What Response from Europe to the Internal Fragmentation?

Can Europe overcome its populist fragmentation to reach EU level agreements while responding to the internal sources of populist discontent? Trump has already been doing some of the job for European leaders, since the more egregious the rhetoric and harmful the policies, the more likely it is that European citizens across the political spectrum will support further EU level integration to address the geopolitical and geoeconomic challenges. But this requires EU leaders to come to agreement at the EU level while addressing the national sources of discontent.

While the biggest obstacles to agreement come from the populist far right, mainstream leaders have also created stumbling blocks, in particular when it comes to the need for major EU level investment. Germany in particular, supported by the 'frugals,' has resisted any form of permanent EU debt, preferring mega national investment instead. But for agreement, not only do mainstream governments need to 'see the light' but so do at least some populist-controlled governments or centre-right governments in coalition with the populist extremes. This, however, requires EU leaders not only to 'relearn the language of power,' but also to start deploying 'the power of language' (Van Middelaar, 2026).

The 4 M's can be useful here. The EU's new messages should deploy a political style that instils passion rather than anger, is inclusive by appealing to 'all the people' rather than exclusive to the populists' 'real people,' and truth-telling rather than lies and bullshit (see Frankfurt, 2005). The messages' content should contain new visions of a stronger, super-charged EU with new narratives that directly confront the populists' anti-system litany, by admitting to the problems but proposing ambitious new solutions that address them, explained in non-technical, user-friendly language, such as Letta's 'Savings and Investment Union' in place of the Capital Markets Union. The EU's discourse could emphasize the importance of standing together, to defend European sovereignty and identity along with the sovereignty of its member

states; to make Europe 'great again' (MEGA) by guaranteeing a place for itself at the table in a world of rival superpowers with zones of influence, in coordination with other middle powers; and to protect the interests as well as culture and identity of all Europeans. In time, even the extremes on the right may come to see the importance of the EU as necessary to protect citizens against the 'predators' and bullies of world politics (Ganesh, 2026).

Moreover, in direct opposition to populist attacks on the EU as 'the other,' Trump's attacks provide the opportunity for European leaders to cast the US as 'the other,' and to benefit from the kind of populist us-vs-them approach taken by the extremes. For this to work, however, there need not be the demonization or Manichean views of the US as enemy, just a clear demonstration that Europe stands firm against US bullying and unreasonable demands, whether with regard to tariffs, Greenland, or climate-friendly policies. Energy independence from US LNG as much as Russian gas and oil can be the justification for continuing with the Green Deal, rather than backing away from it (as has been the case lately).

For such messages to resonate, however, the EU also needs inspiring messengers. This may very well depend on developing a new generation of European (and national) leaders with authenticity, able to speak to people in appealing ordinary language, with charisma that is joyful, or even boring, not bullying. Moreover, their messages need to be able to circulate on social media with algorithms that do not reinforce anger and extreme right messaging, and traditional media that is not owned by billionaires who promote polarizing ideas alone. This means that the EU needs to have its own digital platforms, as well as robust regulation. Finally, none of this will be able to make inroads unless the problems related to the milieu, as the socio-economic, socio-cultural, and political sources of discontent, are addressed. And this means not only implementing the EU level investment solutions discussed above, but also dealing with the EU's long-discussed democratic deficit by finding ways to bring EU citizens closer to EU decision-making through both national and EU level means (Schmidt 2020: Ch. 10)

6. Conclusion

In sum, can the EU successfully overcome its twin political challenges, external and internal? This chapter answers in the affirmative, but on two conditions. First, the EU needs to respond pro-actively to the new and unprecedented geopolitical disruption and geoeconomic destabilization from a democracy-destroying, declining US hegemon by turbocharging investment in its own

future. This means establishing EU level investment funds and national level escape clauses in defence, security, industrial, climate, and social investment. And second, the EU must address its internal fragmentation by coming up with new messages containing robust visions of a stronger Europe, with reinforcing national narratives articulated by charismatic messengers made up of a new generation of leaders whose messages are disseminated through new, well-regulated Europe-sourced social media and traditional media that respond to people's economic, social, and political sources of discontent, themselves dependent for a solution on the new EU-led investments. Only through these dual responses can the EU overcome the catch-22 that benefits the populist extremes. Without 'big' EU-level solutions helping tackle member state level problems stoking national discontent, the populist extreme will continue to gain power across capitals. The EU has a small window of opportunity in which to make the big leap forward, after which the window may close for a very long time, leaving Europe to drift, slowly losing its geopolitical position, geoeconomic power, and even its liberal democratic commitments, so as to become increasingly irrelevant by the middle of the 21st century, except perhaps as a medieval amusement park for other powers.

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European Integration at a Time of National Identity Politics

Marco Buti and Marcello Messori *

Abstract

The current economic, institutional, and geopolitical challenges call for a substantial strengthening of European integration by securing real strategic autonomy and reforming the growth model. To achieve this, the European Union (EU) should complete the construction of the Single Market and create a central fiscal capacity to finance an array of European Public Goods (EPGs). In terms of cost-benefit analysis, it can be shown that, despite heterogeneous national preferences, appropriate packages of EPGs can meet the interest of each EU Member State. However, the dominance of 'identity politics' puts severe constraints on sovereignty sharing at the EU level. A 'retooling' strategy could help ease these constraints. If coupled with a medium-term approach, building on citizens' favourable attitude to European integration, such a strategy might provide a way forward to tackle the Union's current woes.

Keywords: European Integration; Identity Politics; Sovereignty; European Public Goods; Retooling strategy.

1. Introduction

The current economic, institutional, and geopolitical challenges call for substantial reforms in the European Union (EU). The proliferation of military conflicts at the EU's borders and the impending crisis of the liberal democracies have undermined the EU's global comparative advantages based on the rule of law, market-friendly regulations, and soft power. The race between the United States (US) and China to acquire dominant positions on the technological frontier have led to market concentration centred on a limited few big corporations that have trampled on competition rules and antitrust principles, favouring the replacement of open multilateral relationships with bilateral arm-wrestling between large powers (e.g., Bertoldi & Buti, 2025; this report). This

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new setting is increasingly challenging the EU's economic and social model based on mature technologies, a plethora of small firms, persistent positive net exports, and large social spending.

In recent work (Buti & Messori, 2024; 2025), we have suggested that the EU should pursue an external agenda based on strategic autonomy, and implement an internal agenda aimed at combining economic innovations, 'green' transition, and social fairness. To reach these results, the EU should complete its Single Market and create a Central Fiscal Capacity (CFC) to supply European Public Goods (EPGs). The latter should become the main pillars of a European industrial policy and the drivers of private innovative investment able to develop advanced services and push the EU industrial sector out of its current 'mature technology' trap (e.g., Fuest et al., 2024). EPGs should also strengthen the EU social model.

In Buti and Messori (2024), we developed a highly stylized model to analyse the supply and composition of EPGs. A transfer of national sovereignty to European institutions would be required to finance and produce them. The institutional costs of the transfer would be offset by the net economic benefits of EPGs. EU countries have heterogeneous preferences over different types of EPGs: countries with the most advanced production systems (notably, the Nordic countries) would benefit from a centralized supply of innovative EPGs (hereafter, EPG-I); countries with relatively ineffective social spending (notably the Southern countries) would benefit from a centralized supply of EPGs aiming at enhancing cross-country solidarity (hereafter, EPG-S). Our model shows that, despite the costs of sovereignty transfer, the heterogeneity in national preferences, and the asymmetries in the institutional power of member states (labelled as 'bargaining power'), there are combinations of EPG-I and EPG-S that are Pareto-improving: a given increase in centralization in favour of the EU leads to positive gains for each member state. Therefore, there is room for further national transfers to European sovereignty that will lead to economic advantages for each EU country and for the EU as a whole.

Given the compelling need for structural changes in the organization of the EU, we should observe a higher propensity to increase the supply of EPG-I and EPG-S. However, in reality, the opposite is true. Instead of increasing the supply of EPGs, the main effort of several member states has been the reduction of the EU's constraints on State Aids to pursue national industrial policies, a behaviour that risks fragmenting the Single Market.

This paper aims to offer an explanation as to why economic and institutional advantages are not a sufficient condition to finance and produce an adequate amount of EPGs and to propose a viable way forward. We do so by introducing

the concept of 'identity politics' in our analytical framework. In Section 2, we discuss how the prevalence of nationalistic or reactionary identity politics (hereafter, national identity politics) leads to political constraints, which in turn can alter the economic and institutional relations between European sovereignty and national interests. Section 3 argues that these constraints have now become binding in most EU member states, thereby hampering further transfers of national sovereignty to the European level despite net economic advantages. Sections 4 illustrates the institutional consequences of what we call the 'trilemma of European political integration'. Section 5 discusses a 'retooling strategy' that may help tackle the current stalemate in integration. The final section concludes.

2. Political Preferences and Economic Equilibria

Identity politics is currently a central axis of EU institutional dynamics. Since the global financial crisis (GFC: 2007–2009), which morphed into a sovereign debt crisis in the euro area in the 2010s, many scholars (e.g., Kriesi et al., 2008, 2012; Norris & Inglehart, 2019) have demonstrated that the consequences of globalization and increasing wealth inequalities have affected the economic and social fabric of even the most affluent EU Member States. Political preferences started to be dominated by widespread anxieties related to the perception of lost status, fragile skills, and an uneasy cultural mix. Uncertainty was fuelled by the acceleration of technological change, the challenges of the digital transition, the diffusion of artificial intelligence, the related polarization of competences required to cover the new jobs, and the threat of massive migration. As a reaction, conservative and inward-looking preferences started to prevail. This attitude was further strengthened by the ageing of the European population and inadequate policy responses from the public authorities.

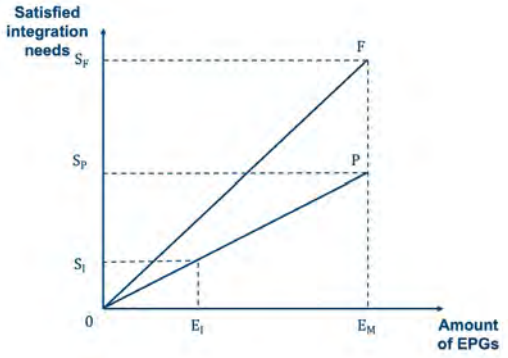
Traditionally, EU societies have been based on ideological roots that set symbolic and actual boundaries (e.g., the protection of free individual choice, subject to their compatibility with collective norms), which played a crucial role in shaping social interactions within liberal democracies (see Constant, 1819). One of the main results was the belief in collective action directed towards making different interests compatible and supporting the weakest segments of the population. This set of principles also gave rise to the so-called 'post-functionalist approach' based on multilevel management. The GFC and its evolution have shaken the trust in these principles and in the related social organization (Hooghe & Marks, 2001, 2009, 2018). As a result, liberal democracy has been undermined in several EU countries.

In this new setting, large sections of the population have asked for simplified, reassuring political messages which create the illusion that the best response to the growing complexity would be to restore old systems by providing new conservative social arrangements. This attitude has given rise to institutional preferences that prime short-term individual security over inclusion, and nationalism over cooperative international relations (Mudde, 2009). In the EU, this trend has resulted in a conservative (or even reactionary) national identity politics whereby any step aimed at fostering European integration is perceived as a threat towards national security and political autonomy (de Vries, 2018).

These dynamics have been intensified by the worsening of geo-political conflicts, US President Trump's reduction of international relations to naked power games, and EU economic stagnation. The 2022 Russian invasion of Ukraine and the related worsening of the energy crisis should have encouraged the promotion of central agreements on a common security system as a safeguard of EU integrity. Whilst steps forward have been made, short-term national interests have hindered the setting up of a common energy strategy and the construction of a truly European defence industry. The overall outcome has been a political and institutional stalemate (Schimmelfennig, 2024). In our conceptual framework, this outcome implies that even equilibria characterized by a combination of EPG-I and EPG-S that would be economically favourable to each EU member state have proven politically unfeasible.

Figure 1 presents, in a simplified manner, the gap between economic integration needs and political feasibility in the EU.

Figure 1: Economic equilibria and political feasibility



Source: Authors' elaboration.

On the horizontal axis, we refer to the supply of EPGs as an indicator of the feasible transfers of national sovereignty to European institutions. On the

vertical axis, we indicate the needs of EU integration that would be satisfied by each level of EPGs. *OF*, labelled as the 'full adequacy' line, is composed of the set of points where each increasing level of EPGs satisfies the corresponding level of EU integration needs and improves the gains of each country. *OF* is drawn under the extreme assumption of uniform national preferences. Hence, it allows us to fully exploit the available gains of EU integration by reaching the equilibrium point *F*, which is bounded upward by the amount of EPGs supplied at the maximum national transfer of sovereignty (E_M on the horizontal axis of Figure 1)[1].

In the real world, the *OF* benchmark can hardly be achieved, largely because of two factors characterizing the EU: heterogeneous national preferences and different national bargaining powers. Hence, Figure 1 includes the *OP* line, which is composed of the set of points where the composition of EPGs is constrained by the two factors just mentioned. *OP*, here labelled 'partial adequacy' line, reproduces the features of the *OF* line but with a lower slope. Given that the national transfer of sovereignty to the EU (and the related supply of EPGs) continues to be upward limited by E_M, the ideal amount and combination of EPGs and the corresponding equilibrium *F* cannot be achieved. The new equilibrium is represented by point *P*; and the related gap in terms of the satisfaction of EU integration needs is equal to $S_P\,S_F$ corresponding to *PF*.[2]

3. Political Constraints in a Union of Nations

It is important to stress that neither *OF* nor *OP* take into account the variable capturing national identity politics. In the current EU setting, the latter variable introduces binding political constraints on the transfer of national sovereignty and on the related levels of EPGs below the maximum (E_M). Hence, including the national identity politics in Figure 1, the upward limit of EPGs can be represented as E_I on the horizontal axis. These national political preferences hinder the satisfaction of EU integration needs exceeding S_I, that

1 It is obvious that there are limits in the transfer of national sovereignty in favour of European integration even under homogeneous national preferences. A clear example of these limits is the achievement of a full federation overcoming the main national competencies. A more realistic view is to acknowledge that, even in a full EU federation, each country should keep a significant degree of autonomy in various fields.

2 In Buti and Messori (2024, 2025), it is assumed that the transfer of national sovereignty to EU institutions and the related amount of EPGs are given. This implies that the heterogeneous national preferences and the national bargaining power only define the combinations between EPG-I and EPG-S that are Pareto-improving. Here, we also make the amount of EPGs variable.

is, those levels included in the interval $S_I S_P$. It should be noted that all the points in this interval would be economically and institutionally beneficial to each EU Member State.

The conclusions reached above emphasize that, in the EU, the implementation of several efficient economic combinations of EPG-I and EPG-S is currently unfeasible due to national identity politics, obstructing the transfers of national sovereignty that would be necessary to carry out the EU's internal and external agenda. To provide further illustration of the negative impact of national identity politics, it is useful to compare the political willingness of member states to transfer financial resources to the EU level for the production of EPGs with their political willingness to finance and produce analogous activities at the national level. This comparison highlights the consequences of new national identity politics in the EU on the allocation of various resources as a signal of the institutional setting preferred by different member states. As mentioned in the Introduction, the relatively small size of EU Member States, considered separately, implies that national investment projects (and specifically those concerning frontier innovation) cannot incorporate the economies of scale and scope embodied in analogous investment activities carried out at European level.

Table 1 presents combinations of the country preferences over financing and production, by distinguishing between European, Intermediate, and National arrangements. Hence, we have nine quadrants. The quadrant European/European includes member states that support centralized financing and production of EPGs. At the opposite side of the spectrum, the quadrant National/National includes countries that focus exclusively on national priorities. The Intermediate category comprises three quadrants. EU-Targeted/EU-Targeted includes those member states that agree on central financing and the delivery of EPGs but only in specific fields. The combination of European financing and EU-Targeted delivery refers to countries that agree on central financing not only for Targeted European priorities but also for national priorities. Finally, the combination of European financing and national delivery characterize countries that seek EU financial support whilst remaining free to select national priorities in terms of output.

Table 1 includes our assessment of the current preferences of a subset of EU Member States.

Table 1 Various degrees of centralization

Financing → / Delivery ↓	European	EU targeted	National
European	--	--	--
EU targeted	France, Belgium, Spain, Portugal	Nordics, Baltics	--
National	Italy, EE countries	--	Germany, Austria, Netherlands

Source: Authors' elaboration

Its main message is that the 'federalist' quadrant (European/European) is empty, and the other pro-European quadrant (EU-Targeted/EU-Targeted) only includes former frugal member states that are adopting a more cooperative European attitude under the pressure of the Russian threat towards their neighbours. The Nordic countries are ready to step up EU centralized initiatives only in the specific field of defence and security to respond to the Russian threat. These two quadrants can be interpreted as intersections where national identity politics is not binding.[3] The quadrants National/National and European/National include countries that are characterized by heterogenous features (for instance, in terms of national fiscal capacity) but that overall share a conception of the EU akin to a confederation of nations. The member states belonging to European/EU-Targeted express a general pro-European orientation but adopt a somewhat opportunistic behaviour towards a portion of centralized financial resources, attributable to their domestic vulnerabilities (e.g., a limited national fiscal space).

The result of our assessment is worrisome. National political preferences across the EU show that further European integration lacks serious support from a large majority of national governments. The resulting inability to overcome market fragmentation and to supply EPGs entails a high risk that the EU becomes marginal at the international level and incapable of sustaining

3 The quadrant European/European implicitly refers to the economic equilibrium (F) on the OF line in Figure 1, whereas the quadrant EU-Targeted/EU-Targeted is compatible with the economic equilibrium (P) on the OP line. These possible equilibria do not imply that all the activities (even in a given field) must be financed and produced at the European level. They simply underline that a variety of EPGs are crucial to innovate the EU's production model, trigger private investment, and safeguard the EU's social acquis.

its inclusive society. To reduce this risk, it is necessary, in the medium term, to overcome national identity politics, and, in the short term, protect the positive European *acquis* by fending off the attempt to undermine the integrity of the Single Market and the EU social model.

This conclusion has relevant analytical and policy implications. Even if the definition of costs and benefits is extended to include meta-economic concepts, the reference to an economic 'cost-benefit' framework is insufficient to assess possible further steps in European integration: certain centralized actions are politically unfeasible and cannot be delivered at the EU level, despite their economic gains. Hence, a meaningful assessment of the EU perspective must go beyond economic policy to embody national identity politics as a crucial variable.

4. A Trilemma of Political Integration

The previous analysis implies that to bridge the gap caused by national identity politics between the needs and the feasibility of further EU integration, we should address the political integration trilemma sketched out in Figure 2.

As emphasised in the Draghi Report (2024), preserving the basic tenets of the European social model requires boosting competitiveness. However, doing so whilst keeping sovereignty at the national level entails taking the route of national industrial policies, financed by loosened State Aid discipline. As previously explained, this would lead to national investment projects often below the minimum efficiency size and undermine the integrity of the Single Market. Hence, the EU-wide objective of stronger competitiveness risks being transformed into the neo-mercantilist goal of increasing individual countries' net exports.

Figure 2 The political integration trilemma

Source: Authors' elaboration.

In a prevailing context of national identity politics, the primacy of the nation state can be combined with common financing only in exceptional circumstances and for very specific EPGs;[4] thus, EPGs could not be supplied on a regular basis. However, the centralization of financing and production at the European level is a necessary condition to reduce the technical lag of the EU economy by means of innovative trajectories compatible with the 'green' transition and social inclusion. It follows that the only possibility to bridge the gap between (economic) needs and (political) feasibility is to overcome the primacy of the nation state and to focus instead on the other two objectives set in Figure 2 (see the vertices of the triangle): common financing and competitiveness.

In the medium term, the combination of these latter two objectives puts in place what the Manifesto for Europe (2023) and Draghi (2026) have labelled 'pragmatic federalism'. This is tantamount to a significant number of EU member states shifting to the currently empty Europe/Europe quadrant and to the under-populated EU-Targeted/EU-Targeted quadrant in Table 1. However, the preceding analysis has shown that the combination of common financing and competitiveness is not feasible in the EU's current institutional setting for political reasons. The problem then becomes how to sacrifice the primacy of the nation state determined by the binding constraints of national identity politics.

It is clearly inadequate to wait and hope for an exogenous shock to alter national identity politics and political consensus in the EU. It is instead imperative that we recognize that a gradual path must be actively pursued. In the medium to long term, we should work for a reduction in the political costs of shifting sovereignty to the European level. However, steps can already be taken in the short term by pursuing efficiency-enhancing initiatives that reduce the gap between economic necessity and political feasibility whilst not requiring sizeable transfers of national sovereignty to the EU. We dub such a way forward in the short term as a 'retooling strategy'.

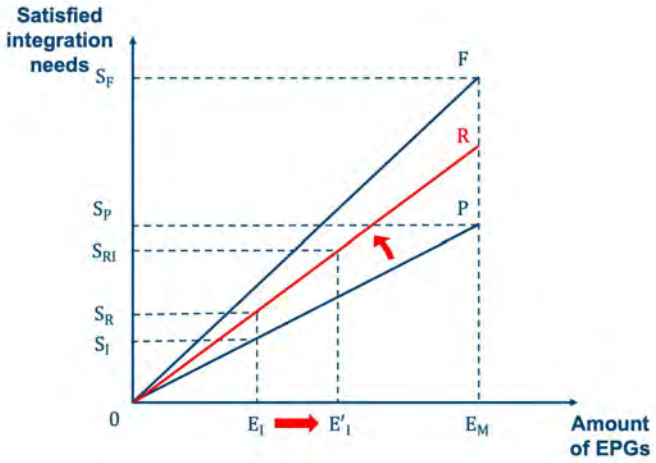
5. A Retooling Strategy

The basic logic of a retooling strategy is captured by Figure 3. This strategy puts aside the pursuit of ambitious packages of EPG-I and EPG-S to focus instead on the financing and production of those specific EPGs that do not involve significant transfers of national sovereignty. Thus, the partial adequacy line *OP*

4 An example is the joint financing of the Ukraine war effort decided by EU leaders on 18 December 2025 (see European Council, 2025). However, the fragility of the reached agreement is shown by the subsequent stalemate in its delivery (mid-March 2026).

could be twisted counterclockwise to *OR* thanks to specific initiatives compatible with the upward limit of EPGs (point E_I). Consequently, the satisfied integration needs increase from S_I to S_R.[5]

Figure 3 Enhancing EU policy space



Source: Authors' elaboration.

To clarify the point, let us use the metaphor of a water distribution system built in the past that can be assimilated into the European Single Market. Water's utilizers (the member states) benefit from the common distribution system that meets a few general rules; however, each utilizer holds the property rights and is responsible for the organization and maintenance of its national segment of this system. A radical innovation would imply the transfer of the former national organization and maintenance to the EU level to allow a technological improvement of the whole distribution system and to produce gains for each utilizer. In our setting, there is a high probability that this innovation would not be feasible given the disparate preferences of the water utilizers (i.e. the political constraints characterizing member states). However, there remains room for a more modest but positive intervention: centralized monitoring and possible adjustments at crucial junctures of the network.

This kind of intervention captures the essence of a retooling strategy. On the one hand, this centralization of localized maintenance does not involve

5 Had we extended our analysis to a medium to long-term approach, the political constraint would have to be eased to allow a shift of E_I to E'_I; and this shift would have implied a further increase of the satisfied integration needs from S_R to S_{RI}.

either a transfer of property rights or widespread reorganization of the national segments of the distribution system. On the other hand, this partial centralization cannot be reduced to a 'screwdriver strategy' aimed at fixing leaking taps or a given pipe at a juncture independent of the remaining parts of the network; it focuses, instead, on repairs that allow for innovations in strategic points and for measurable improvements in the functioning of the whole system. These effects improve the efficiency of the water distribution system without severely changing the structure of this same system. Hence, they meet the features of the retooling strategy: to produce EPGs that do not require a significant transfer of national sovereignty to the EU level.

This strategy, centred on small but interconnected steps, is easy to illustrate in general terms; however, it cannot be systematically translated into a given set of policies that are generally applicable under the binding constraints of the current national identity politics. In translating such a strategy into concrete policies, two criteria should be secured: first, significant spillovers, that is, the capacity to trigger efficiency gains in other parts of the system; and second, the feasible collection of tipping points that, taken together, may eventually ease the political constraints on sharing sovereignty.[6] In the following, we offer a few examples that meet these criteria.

A first example concerns financial tools that can support small and medium-sized firms in implementing innovative investments. A way forward would be to overcome the regulatory constraints that prevent forms of securitization in European financial markets. A second example concerns the 'Europeanization' of State aid. To move in this direction, the green light to public support of national firms should be subordinated to the devolution of a significant share of this aid to EU-wide projects (Letta, 2024). A third example is the construction of a railways network aimed at connecting EU capitals via high-speed rail transport. The IPCEI (Important Projects of Common European Interest), modified to encompass EU financing as a complement to national financing, could be an efficient tool for this purpose. The success of the railroad project could also incentivize the improvement of tangible and intangible 'mixed' investment (that is, with European and national financing) to innovate national communication networks, provided that common European standards are set and adopted.

These specific examples should go hand in hand with a rethinking of the common rules which govern the Single Market. To ensure a level-playing field, there should be a stronger use of EU regulations compared to

6 These two criteria correspond, de facto, to the attempt of gradually shifting EU member states in the quadrants European/European and EU-targeted/EU-targeted in Table 1.

EU directives because the former are directly applicable. Such a move would improve homogeneity across member states and, despite the greater details of regulations, could simplify EU legislation. However, even in the case of regulations-dominated legal framework, the actual implementation can introduce elements of heterogeneity within the EU. To limit this distortion, a more extensive use of regulations should be coupled with a more forceful implementation of Single market rules on the part of the Commission.

6. Conclusion

National identity politics currently dominates in most EU countries. This makes bridging the gap between economic necessity and political feasibility for further EU integration highly cumbersome. In the medium term, the only way to address the issue is to try achieving public consensus on some basic common principles that will help restart the integration process in earnest. The evidence of strong support from European citizens for the central supply of EPGs (see Eurobarometer, 2025) provides fertile ground on which to boost awareness for the inevitability of common actions to deliver on common priorities.

However, in the short term, even those who advocate EU integration by means of federation should recognize the necessity of operating in a second-best world. In the current institutional and political setting, there is only room for policies that gradually deepen EU integration without requiring immediate or significant transfers of national sovereignty. What we have labelled a retooling strategy should be designed to articulate that goal in practice. Given the heterogeneity of national preferences, this strategy can be supported by enhanced cooperation or Schengen-type agreements applied to some areas of the Draghi agenda (Draghi, 2024).

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Section II

Securing Policy Space From Within EU Systemic Frameworks

Europe's options for policy response to the transformed geopolitical environment and internal political pressures are conditioned on its existing systemic frameworks, whether social, economic, monetary, or financial. This section examines practical solutions to consolidate and expand this policy space towards growth, resilience, and macroeconomic stability, to guarantee a Union fit for the purposes of the new world order.

The Macroeconomic Dividend of Social Investment Welfare Provision in an Age of Fragmentation

Daniel Fernandes and Anton Hemerijck *

Abstract

This contribution examines the macroeconomic implications of social investment-oriented welfare states in the European Union (EU). Using a life-course perspective and macro-level comparative evidence from EU Member States, it shows that welfare systems combining capacitating services with inclusive income protection are associated with stronger employment performance, higher productivity, and longer working lives. These outcomes also support lower poverty rates and more sustainable public finances. The analysis challenges the view that generous welfare provision undermines competitiveness or fiscal sustainability. Instead, we find that social investment and social protection are mutually reinforcing: countries that invest consistently in childcare, education and training, active labour market policies, and active ageing also sustain robust revenue bases and inclusive distributive outcomes. We conclude that social investment is not merely a nice-to-have policy portfolio but a productive factor per se for long-term growth, cohesion, and fiscal capacity in Europe's ageing knowledge economies.

Keywords: Social Investment; Life-Course Transitions; Employment; Productivity; Fiscal Sustainability.

1. 21st Century Eurosclerosis

More than any other group of advanced countries in the Organisation for Economic Co-operation and Development (OECD) region, European polities have, since the 1950s, consistently tried to reconcile economic prosperity, liberal democracy, and social cohesion, and this with considerable success. Western Europe's success formula, together with progressive European integration,

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subsequently contributed to the fall of the Berlin Wall in 1989, opening up an eastward extension of Europe's social model. Yet, as the first quarter of the 21st century has come to a close, the enlarged European Union (EU) faces multiple challenges including the resurgence of geopolitical strife, the digital revolution, ageing populations, climate change, and illiberal backsliding. Addressing these pressures requires forward-looking responses, at both the national and supranational level, to revive Europe's success in combining economic prosperity, liberal democracy and social cohesion in a more taxing international environment.

Many pundits believe that the EU is stuck in a high-rigidity, low-growth equilibrium, reminiscent of the Eurosclerosis debate of the 1980s. At the time, the Single Market project (1986), the introduction of the Euro (1992), and the Stability and Growth Pact (1997), were expected to reinforce structural reform across the member states, especially with liberalizing insider-biased labour markets and retrenching over-generous welfare systems. Remarkably, the landmark 2024 reports by Mario Draghi and Enrico Letta on European competitiveness and the future of the Single Market, strike a different, more nuanced tone. In their view, welfare states no longer bear the blame for present-day Eurosclerosis. It is the internal market that stands still. Shaping the agenda of the European Commission under Ursula von der Leyen in her second term, the Draghi report carefully legitimates its otherwise intrusive reform prescriptions in terms of 'preserving the European Social Model'. Letta's report endorses a genuine strategy of inclusive prosperity. Barriers to competitiveness are today mostly related to EU capital market immaturity, supply-chain fragmentation, and excessive regulation. The emphasis on productivity growth through knowledge enhancement and skill development in both reports epitomizes a shift away from the limited view of competitiveness in terms of labour cost-competitiveness that informed the EU's initial policy responses to the Great Recession.

While these reports represent a welcome shift, they stop short of recognizing welfare policy as a productive factor in its own right. Framing the objective as merely preserving the European Social Model, we believe, is unnecessarily defensive in this respect. Economic prosperity depends on employment and productivity, both of which are supported by well-designed welfare states. Although the Draghi report (2024) is explicit in calling for €800 billion in public and private investment, it pays limited attention to the mobilization of workers and families and to the conditions under which human capital investments translate into higher living standards and better labour-market outcomes. Human capital is a social resource that needs to be nurtured across the entire life-course, by families, schools, training programmes, firms and organizations. On this score, differences across EU Member States are stark.

Countries with high employment and competitiveness, such as Denmark and the Netherlands, allocate social spending more evenly across children, working-age adults, and older people. In contrast, in Greece and Italy roughly two-thirds of social spending is devoted to old age, leaving limited scope for investments in children, dual-earner families, and the unemployed.

For far too long, the debate on ageing populations has focused on savings to bring down unit labour costs, fiscal deficits, and curtail old-age dependency, i.e., the ratio of working-age people to those younger and older. Demography is not destiny. The 2023 report on *The Future of Social Protection and the Welfare State* (European Commission [EC], 2023) shows that the old-age dependency ratio could remain stable if the employment rate rose to about 85% and the average retirement age were to rise to 70 years. This scenario is plausible given that today some member states reach levels of employment close to 80%, and that voluntary retirement above the official pension age is rising in these countries. Despite growing labour shortages, around 21% of Europe's working-age population remains inactive. Bringing all member states on a par with Europe's top performers could ensure 8 million women, 14 million older workers, and 11 million less-skilled workers can enter the labour market (EC, 2024). To achieve this, a new kind of welfare state is imperative! Luckily, this 'social investment' welfare state is well within Europe's reach because it already exists (Hemerijck, 2017).

Our contribution to the Florence Report is all about the supportive function of social investment reform to long-term economic prosperity and social cohesion. The pressing imperative today is surely not to retrench the fiscal burden of social protection to gross domestic product (GDP), but to redirect collective resources to capacitating social services, in the areas of childcare, skill formation and training, active ageing and long-term care. The rest of our contribution outlines the social investment framework and its theoretical foundations, before examining macro-level evidence from EU Member States on employment, growth, poverty, gender equality, and fiscal sustainability. We conclude by discussing the implications of these findings for the long-term viability of European welfare states and for Economic (and Monetary) Union governance.

2. Social Investment Beyond Redistribution

The aim of social investment is to enhance individuals' opportunities and capacities to cope with the social risks typical of post-industrial societies. Highlighting the gendered life-course perspective and multi-dimensional nature

of social risks, the Social Investment Approach (SIA) distinctively focuses on the prevention of disadvantages at crucial points of transition between life stages (Kvist, 2016). Whereas post-war social security protected (predominantly male) workers and their nuclear families against market contingencies *ex-post*, the SIA takes the contemporary work-family nexus as the linchpin of its 'capacitating' policies to develop *ex-ante* capabilities (Hemerijck, 2017).

In ideal-typical terms, social investment (SI) welfare provision rests on three interrelated functions: (1) strengthening human capital *stocks* through investment in education and training across the life course; (2) facilitating life-course and labour-market *flows* through childcare and active labour market policies; and (3) maintaining inclusive social protection *buffers*, including unemployment benefits and pensions, to provide income security in times of need (Hemerijck, 2017). These functions are complementary rather than substitutive. Social investment also extends beyond employment-related transitions to health. Preventive health supports human capital (especially in childhood), illness can hinder labour-market participation, and income protection mitigates the long-term consequences of health-related risks (Goijaerts, 2025).

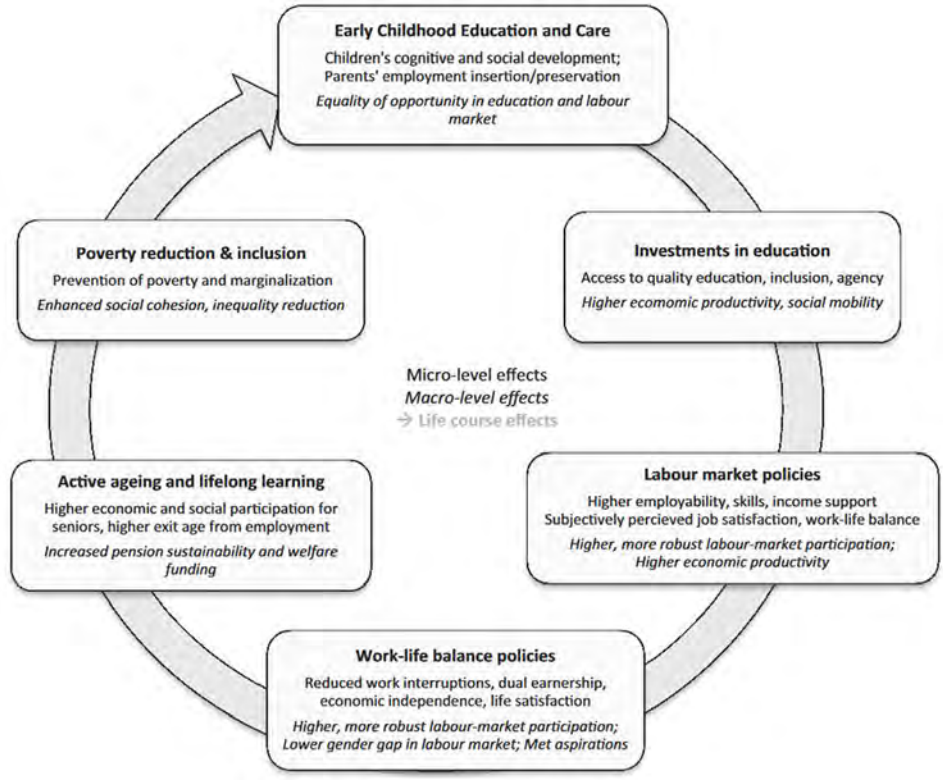
In practice, *stock*, *flow*, and *buffer* policies hardly ever perfectly align. There can be incongruities, for instance, when *buffers* generate financial disincentives in terms of the *flow* of seeking employment. For instance, long maternal leaves easily undermine gender-equity in the labour market. However, when these policies are taken together, they can create complementarities that support positive life-course outcomes at both the individual and household level, and in the aggregate through higher employment, productivity, and fiscal balance. A good example is the combination of generous unemployment benefits with training programmes geared towards skills in demand. The buffer provides income security while people upgrade their skills, enabling them to return to work in more productive and better-paid jobs, which in turn strengthens the contribution base of the welfare system.

Based on our conceptualization, it is possible to conjecture a social investment 'life-course multiplier' cycle, whereby social investment returns over the life-course generate a virtuous cycle of well-being returns (Hemerijck, 2017; Hemerijck et al., 2023). At the micro-level of individuals and households, the life-course multiplier suggests how social investments, from early childhood on, improve material household well-being (employment and income) and help mitigate social risks later in life through opportunities to gain new skills, helping to ease (gendered) labour market transitions.

The cycle starts with investments in high quality early childhood education and care (ECEC), which raise educational attainment and, with vocational

training, spill over onto higher and more productive employment later in life. When employment participation is sustained by work-life balance (WBL) provisions and active labour market policies (ALMP), supported by accessible childcare, higher levels of (female) employment and lower gender gaps can be anticipated. Better opportunities for women and men to combine parenting with paid labour could also dampen the 'fertility gap', i.e., the difference between the desired number of children (aspirational fertility) and the actual fertility rate. A final return pertains to longer careers and a higher effective retirement age, supported by active ageing, lifelong learning policies, portable and flexible pensions, and long-term care (LTC) provision (see Figure 1).

Figure 1 The social investment life-course multiplier at micro and macro level



Source: Hemerijck et al. (2023).

Social investment reform is not without its critics. Nolan (2013) casts considerable doubts on the promises of social investment, especially the idea that 'active' policies are superior to 'passive' social security provision. The most pernicious critique is that social investment policies disproportionately benefit

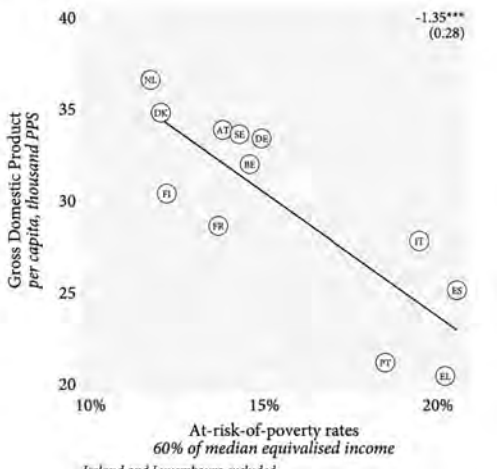
middle-class households at the expense of more vulnerable social groups in what they call the 'Matthew effects' (Cantillon and Van Lancker, 2013). These conundrums are far from settled (Plavgo & Hemerijck, 2021). Fundamentally, this critique rests on the idea that social investment replaces rather than complements social protection in the here-and-now. As we show below, social investments do not crowd out resources of income protection. On the contrary, well-designed *ex ante* investments create policy complementarities that enable more people to improve their labour-market positions, reduce reliance on *ex post* policies, and secure greater tax revenue from a larger and more productive workforce. Ultimately, higher employment and productivity generate more fiscal resources to address emerging social needs. Let's now turn to our macro-correlational empirical evidence.

3. Welfare Performance in a Life-Course Perspective

The social investment life-course multiplier logic suggests how social investments, from early childhood on, improve material household wellbeing (employment and income) and mitigate social risks later in life by helping skill formation and (gendered) labour-market transitions. The multiplier logic allows us to hypothesize that, at the macro-level, this results in benefits ranging from improved productivity, higher employment, and reduced gender gaps to lower poverty, longer careers, and later retirement, which are all crucial to economic growth and the fiscal sustainability of the welfare state in knowledge economies and ageing societies.

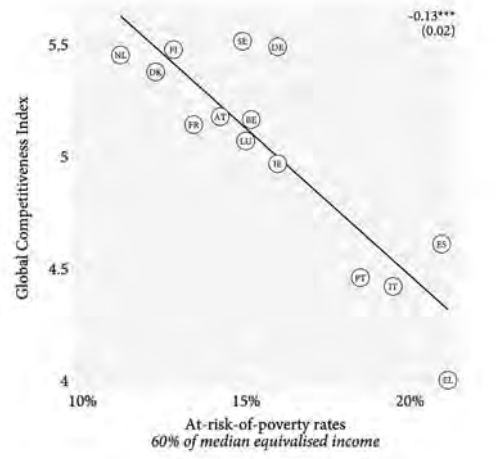
In defiance of the Matthew Effect critique, countries with higher GDP per capita and economic competitiveness are best able to maintain adequate levels of equity (Figure 2 and 3). Employment is the key driver to this relationship. There is plenty of evidence that high social spending is no obstacle to growth. Europe's big welfare spenders do better on GDP per capita and score better on competitiveness precisely because they support productivity and employment (Figure 4 and 5). High employment and high productivity go hand in hand with a welfare model based on investing in childcare, education and training, active labour market policy, active ageing, and long-term care. There is no trade-off between classic social protection and capacitating social services (Figure 5). On the contrary. Let's explore these positive externalities at the macro-level in more detail over the life-course.

Figure 2 Correlation between GDP per capita and at-risk-of-poverty rates



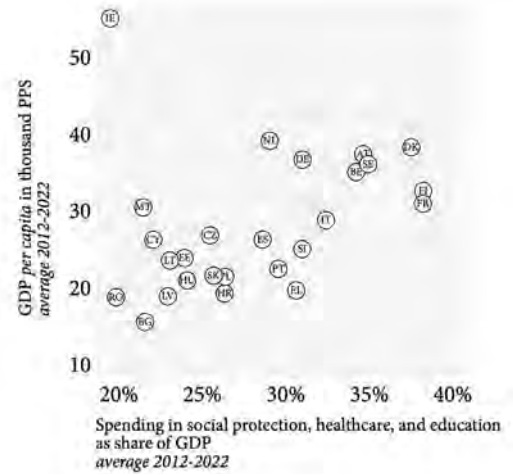
Source: Eurostat (average 2000-2023).
Note: Ireland and Luxemburg excluded.

Figure 3 Correlation between competitiveness and at-risk-of-poverty rates



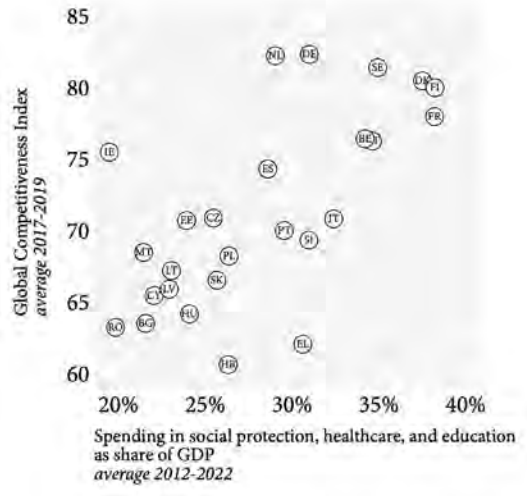
Source: Eurostat (2007-2017).

Figure 4 Social spending and GDP per capita



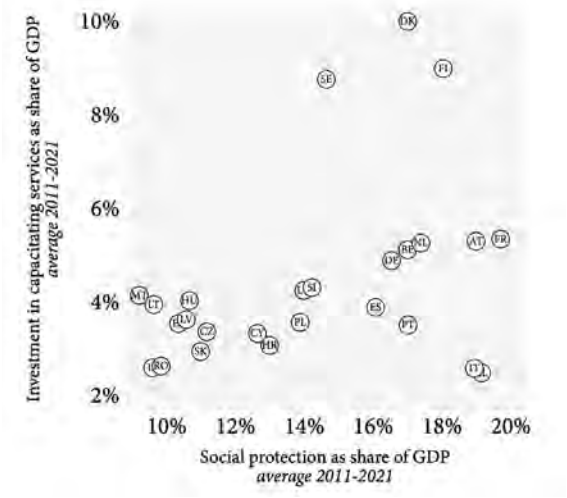
Source: Eurostat.

Figure 5 Social spending and competitiveness



Source: Eurostat, World Economic Forum

Figure 6 Social investment and social protection



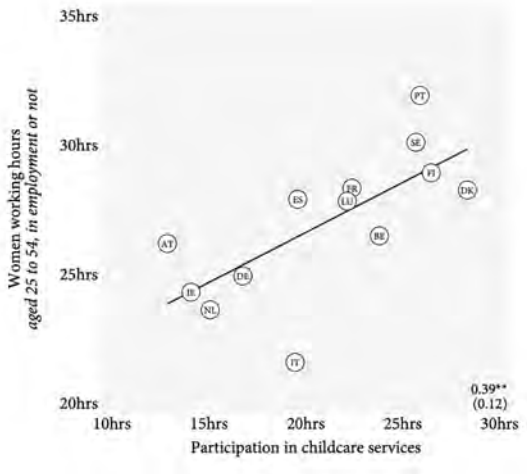
Source: Eurostat.

Early childhood education and care (ECEC)

ECEC plays a critical role at the initial stage of the family life course. For parents, access to affordable, high-quality childcare strengthens employment opportunities by reducing job interruptions and supporting more stable, gender-balanced career trajectories (Bonoli, 2013). This is particularly important because childbirth continues to penalize women's labour market participation, making them the primary beneficiaries of childcare provision.

Macro-level evidence from mature welfare states shows a strong positive association between childcare participation and women's weekly working hours (Figure 7). The expansion of childcare services over the past two decades also coincided with substantial increases in female employment (Esping-Andersen & Billari, 2015). At the same time, persistent gender gaps in employment and pay, especially following childbirth, highlight the limits of current arrangements. Long leave spells and sustained part-time work continue to constrain women's career progression and financial security, particularly in single-parent households (Hemerijck & Bokhorst, 2025).

Figure 7 Correlation between participation in childcare and women's working hours

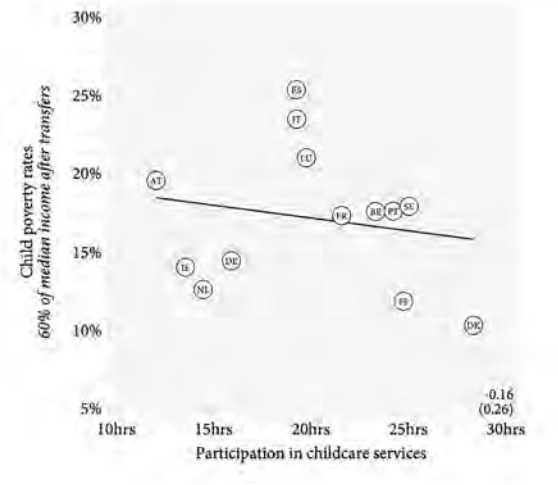


Source: Eurostat (2008-2023).

For children, investment in childcare is also expected to reduce poverty risks. By enabling parents to remain in employment, childcare provision stabilizes household income and mitigates the risk of child poverty (Hufkens et al., 2020). Our macro-level evidence is less conclusive, as we do not find a clear, direct association between childcare participation and child poverty rates (Figure 8). This likely reflects the fact that we observe childcare in isolation, without accounting for its interaction with other policies.

Existing research shows that poverty reduction is strongest when ECEC is combined with complementary measures such as parental leave, home care support, and family income assistance (Nieuwenhuis, 2022). These policies are more effective in reducing poverty when paired with childcare provision than when implemented on their own. This pattern holds even for more vulnerable groups, where generous ECEC and income support combined have the lowest probability of an individual falling into poverty (Hemerijck & Bokhorst, 2025). For policymakers, the priority is to balance these instruments so that income protection supports the transition to parenthood without undermining long-term, labour-market attachment, particularly for women.

Figure 8 Correlation between participation in childcare and child poverty



Source: Eurostat. (2005-2023).

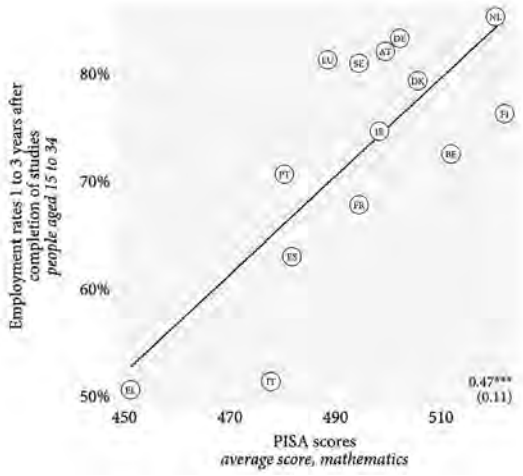
In the long run, early childhood development also translates into more productive employment by strengthening human capital formation and entry-level labour market productivity (Nelson & Stephens, 2011). By equipping children with essential cognitive and social skills, ECEC potentially reduces the need for *buffers* later in life, as individuals are better prepared for life-course transitions. Effective combinations of childcare, parental leaves, and income support for young families, reinforce influence dual-earner parental employment engagement and thus enhance gender-balance in career progression (Plavgo, 2023). Overall returns of ECEC seem to surpass any returns on social investment provisions later in life, both in terms of immediate female employment gains and long-term human capital gains, particularly among socio-economically disadvantaged children (Heckman, 2006).

Investments in education

The next phase in the life course multiplier model focuses on the quality of education. For young adults, the transition into stable employment has become longer and more fragmented. This is a critical moment, as early labour-market experiences often shape long-term career trajectories. In post-industrial economies, where socioeconomic outcomes increasingly depend on skills and qualifications, a solid education system that prepares young adults for the labour market is critical. Evidence shows that inclusive, high-quality education and vocational training strengthen professional competencies and

facilitate smoother school-to-work transitions (OECD, 2023). Our analysis supports this view: countries with higher numeracy skills among young adults, a proxy for education quality, also display higher employment rates in the first three years after graduation (Figure 9).

Figure 9 Correlation between PISA scores and employment rates 1 to 3 years after completion of studies



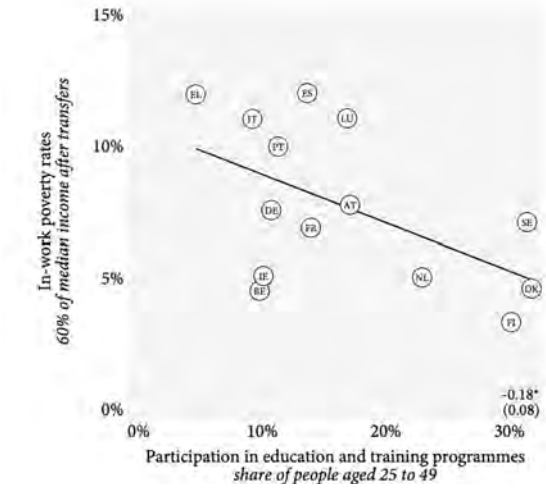
Source: Eurostat.

Inclusive, high-quality education and vocational training also help to prevent skill mismatches and youth unemployment, which are more prevalent in countries where education investment is lower and access is more unequal (Plavgo, 2023). Well-functioning education systems act as a social elevator, linking education to higher employment, stronger early-career productivity, lower poverty, and more stable labour-market transitions (Nelson & Stephens, 2011).

Active labour market policies (ALMPs)

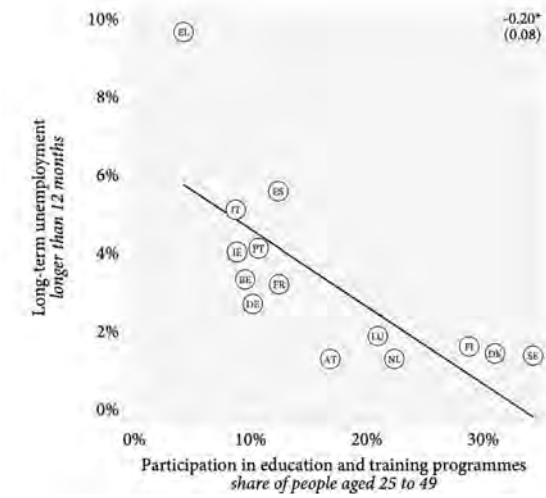
ALMPs play a crucial role in human capital *creation* and *mobilization* among the working-age population (Garritzmann, 2021). Vocational training is particularly effective in raising employment and reducing poverty, although its benefits tend to materialize in the medium to long term (Bakker & van Vliet, 2022; Card et al., 2018; Vooren et al., 2019). Job-search assistance can speed up re-entry into employment, but may also increase the risk of in-work poverty when used in isolation (Taylor-Gooby et al., 2015). Evidence shows that ALMPs are most effective when training, job-search support, and motivational components are combined (Card et al., 2018).

Figure 10 Correlation between participation in education and training and in-work poverty during prime stages of working lives



Source: Eurostat (2003-2023).

Figure 11 Correlation between participation in education and training and long-term unemployment during prime stages of working lives



Source: Eurostat (2000-2023).

In addition, higher participation in education and training is linked to lower in-work poverty during prime working ages (Figure 10) and to lower levels of long-term unemployment (Figure 11). Countries that invest more in ALMPs exhibit more dynamic labour markets, with shorter unemployment spells

and smoother re-entry into work, whereas countries with limited investment face more persistent unemployment. ALMPs thus strengthen labour-market dynamism rather than simply reducing unemployment rates. By supporting lifelong learning, they enhance the capacity of workers and firms to adapt to technological change and shifting skill demands. At the macroeconomic level, this adaptability translates into higher labour-market participation and, ultimately, stronger productivity growth.

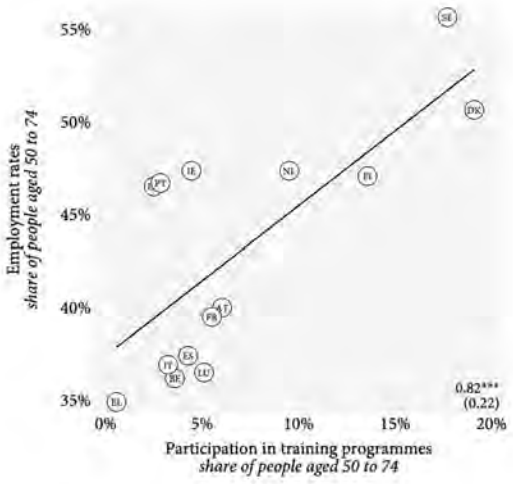
Investments in active ageing

At later stages in life, social investment focuses on three policy interventions. First, access to vocational training later in working life supports continued employment and productivity by enabling ongoing skill updating and maintaining employability. Second, flexible retirement arrangements prolong labour-market participation by allowing individuals to adjust the timing and form of their transition out of work to personal and financial circumstances. Third, adequate long-term care provision also reduces the need for family members, predominantly women, to withdraw prematurely from the labour market to provide care for older or disabled relatives (Esping-Andersen, 2016).

These policies are, in relative terms, less effective than early investments in health, education, and skills. Still, they have a clear potential to sustain economic participation and reduce social exclusion and poverty in later life. The evidence presented here supports these expectations. Countries that promote lifelong learning opportunities in later adulthood tend to display higher employment rates (Figure 12) and lower poverty rates (Figure 13).

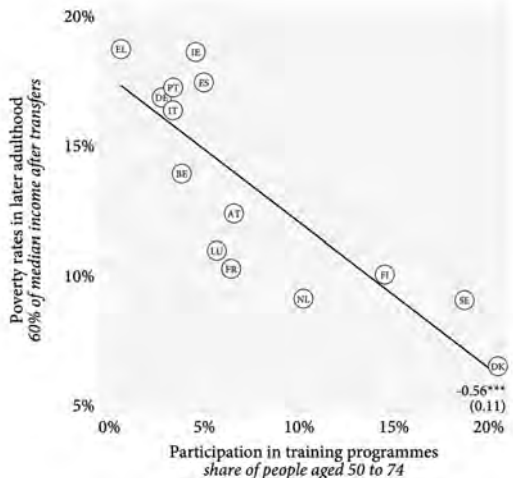
These findings bring us back to the final component of the life course multiplier. By fostering economic participation, social investment indirectly supports poverty reduction and social inclusion. At the individual level, investments made throughout the life-course improve well-being over time. Countries like the Nordics, which combine comprehensive social investment strategy throughout the life course with generous buffers, show low poverty rates across life-course stages. This raises a key question: how financially sustainable are such policy configurations? The following section addresses this issue by examining the fiscal implications of social investment.

Figure 12 Correlation between participation in education and training and employment rates during later stages of working lives and transition to retirement



Source: Eurostat (average 2000-2023).

Figure 13 Correlation between participation in education and training and poverty rates during later stages of working lives and transition to retirement



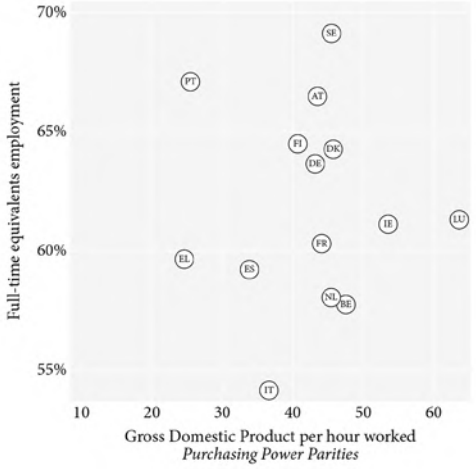
Source: Eurostat (average 2003-2023).

4. The Carrying Capacity of the Welfare State and Fiscal Sustainability

Our understanding of the macroeconomic consequences of the life-course multiplier effect is that social investment returns, accumulated over individuals' and families' lives, support aggregate economic growth and make generous welfare provision financially sustainable. Building on Musgrave and Musgrave (1989) and Myles (2002), we conceptualize the 'carrying capacity' of the welfare state as the balance between welfare obligations (benefit levels and the numbers of recipients) and the quality and quantity of the active workforce that finances these obligations.

The greatest contribution to the carrying capacity has been the rise in women's labour-market participation since the 1990s. Like demographic ageing, this evolution represents a major achievement in societal progress, but also a success that requires welfare provision to better accommodate work and family care. Because welfare benefits are typically temporary, the central policy challenge is to maintain a balance between economic productivity and adequate protection for those in need. This places considerable weight on income taxes and social contributions from the working population, which remain the main source of welfare state financing.

Figure 14 Carrying capacity



Source: OECD and Eurostat (average 2000 and 2023).

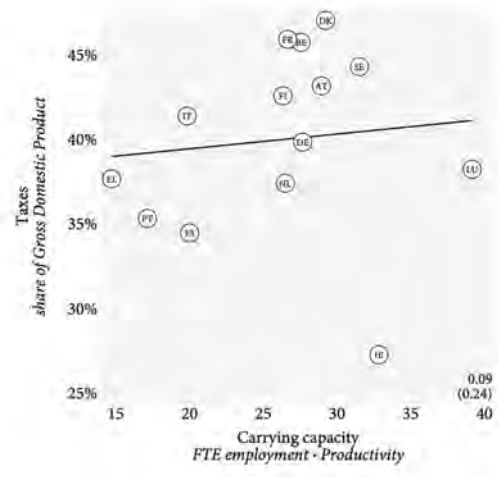
Figure 14 shows the position of each European country along these two dimensions of *quantity* and *quality* of the workforce. Countries in the upper-right quadrant enjoy a strong carrying capacity, while those in the lower-left face persistent difficulties in financing their welfare systems due to low employment and weak productivity.

How does carrying capacity correlate with the financial sustainability of welfare states? The evidence suggests that the answer does not primarily lie in taxation (Figure 15). Despite different economic cycles and major structural changes, tax and social contribution levels have remained remarkably stable across European countries over the past two decades. Most cross-national variation reflects long-standing institutional differences rather than short-term policy choices (Hemerijck, 2013).

However, among mature Western European welfare states, carrying capacity is negatively associated with lower public debt (Figure 16). Countries with weaker carrying capacity, such as Italy and Spain and to a lesser extent France, also exhibit the highest debt levels. The debt crisis of the early 2010s exposed underlying vulnerabilities in these systems. An emphasis on consumption-oriented spending, limited active employment strategies, and persistently low wages and productivity have constrained revenue generation. Faced with the political costs of benefit cuts or tax increases, governments have often relied on rising debt to bridge fiscal gaps.

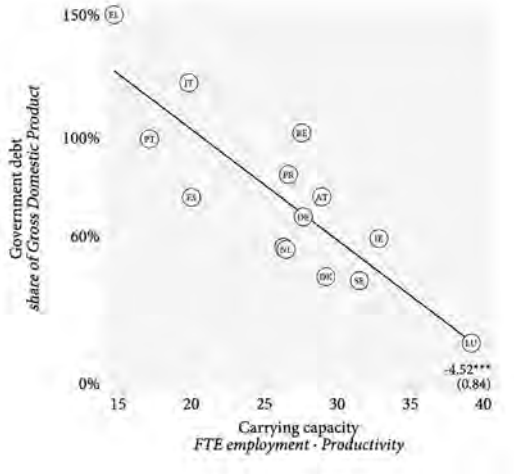
In contrast, countries with a more favourable balance between social policy and economic performance display stronger fiscal positions. This group includes Finland, Sweden, Germany, the Netherlands, and Ireland. While their policy trajectories differ, from long-standing egalitarian welfare models in the Nordic countries, to delayed recalibration towards social investment in Germany and the Netherlands, and growth strategies centred on foreign investment in Ireland, the common denominator is a stronger carrying capacity. The evidence presented throughout this chapter suggests that a sustained commitment to social investment reforms offers the most robust and durable foundation for this equilibrium.

Figure 15 Correlation between carrying capacity and taxation levels



Source: Eurostat (average 2000-2022).

Figure 16 Correlation between carrying capacity and debt levels



Source: Eurostat (average 2000-2022).

5. Conclusion: Social Investment Futures in a Fiscal Bind?

Europe has navigated a challenging decade and a half. Austerity following the euro crisis initially slowed recovery, but the aftermath of the Great Recession and the COVID-19 pandemic ushered in a reappraisal of the welfare state. Comparative evidence shows that more generous and inclusive welfare states in the EU buffered the Great Recession well, particularly by limiting household poverty. During the pandemic, large-scale furlough schemes, fiscal support, and universal healthcare systems enabled governments to protect lives and livelihoods through expanded social safety nets, increased benefit generosity, and broader coverage of non-standard workers.

EU-level action reinforced national responses. Budgetary rules were suspended to allow fiscal stimulus, supported by accommodative monetary policy. The SURE mechanism helped finance short-time work schemes and in 2020 EU leaders agreed on the €800 billion NextGenerationEU fund. Its core component, the Recovery and Resilience Facility, raised the stakes of public investment in healthcare, education, early childhood development and lifelong learning. These measures built on earlier shifts away from austerity, like the 2017 European Pillar of Social Rights, which articulated a balanced approach combining social protection, labour market activation, and capacitating family services. Overall, the pandemic cemented the view that generous welfare provision in times of need is indispensable to bounce back from major shocks.

The main lesson from our macro-level survey of the correlates of the life-course multiplier is that social investment welfare provision generates self-reinforcing economic and social returns. Social investment contributes to a triple dividend: higher and more gender-balanced employment, stronger productivity growth, and greater fiscal sustainability alongside robust social protection.

Two important messages shine through. First, social investment largely pays for itself through three direct channels: higher overall employment, higher productivity, and longer working lives. The resulting expansion of the revenue base produces two additional returns: more sustainable public finances and lower poverty rates. Second, social investment improves labour-market performance without undermining poverty reduction. Investments in childcare, in particular, are associated with lower young poverty rates by stabilizing parental employment and household income. By reducing women's employment interruptions, lifetime earnings — and thus the tax and contribution bases — improve. In this sense, the shift towards social investment does not weaken the redistributive capacity of the welfare state. Contrary to claims about negative incentives and Matthew effects, capacitating social investment and compensatory social protection are strongly complementary. The sustainability of welfare states in ageing knowledge economies therefore does not require retrenchment. Strengthening employment and productivity through well-designed social investment reforms is imperative.

For reasons of space, we cannot examine in detail how European welfare states have reformed towards social investment. Based on recent work, we know that the Nordic countries are no longer the social investment exceptions in Europe. Many other countries expanded service-oriented interventions while making social protection more inclusive. Although policy legacies and domestic constraints continue to shape reform paths, no mature EU welfare state is now entirely detached from the social investment orientation. This applies also to Italy, Greece, and notably Spain. Overall, convergence is in the works, aiming to raise employment rates, close gender gaps, lower child poverty, and ease the school-to-work transitions. Although social protection expenditure has risen after the Great Recession and Covid-19 pandemic, more people participate in European labour markets than ever, and unemployment is at a record low.

Overall, the long-term performance of knowledge economies in ageing societies depends on policy contributions to the productive side of the welfare state. When social investment reforms raise employment and productivity without constraining existing social security commitments, they effectively strengthen the carrying capacity of European welfare states and put them on a more sustainable fiscal footing without jeopardizing poverty.

Sustaining this reform momentum may require an EU-level macroeconomic framework that supports national social investment strategies. This raises questions about the accounting logic of the EU budget and E(M)U fiscal governance. In this context, proposals for a 'golden rule' that exempts social investment from fiscal constraints, as advanced by the European Commission's (2023) High-Level Group on the Future of Social Protection and the Welfare State deserve serious consideration.

In the wake of Russia's full-scale invasion of Ukraine and Donald Trump's return to the US presidency, welfare states have again become a source of concern for European policymakers. A growing political consensus is that greater outlays for defence inevitably require cuts to social security, pensions, education, and healthcare. Welfare retrenchment is once again wrongly presented as an unfortunate but unavoidable consequence of rearmament. We acknowledge the risks of framing all social spending as investment legitimizing unchecked expansion. However, treating social investment budgets narrowly as costs reflects a short-sighted accounting logic, based a false dichotomy of economic competitiveness and social cohesion, that ignores the important social policy contribution to employment and productivity. Social investment reforms are central to future prosperity, competitiveness, and well-being in Europe's ageing knowledge economies. Failing to protect these investments today will intensify fiscal pressures in the medium term, leading to weaker growth, higher unemployment, renewed fiscal stress, and increasingly divisive zero-sum politics. Implementing the recommendations of the reports by Draghi (2014) and Letta (2014) on the internal market together with a fully-fledged social investment strategy will best serve Europe's growth and social cohesion potential in our age of global fragmentation.

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Fiscal Rules and EMU: Past, Present, and Future

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Abstract

The purpose of the European Union (EU) fiscal framework, anchored in the 1992 Maastricht Treaty, can be seen as ensuring 'monetary dominance', but its rules fall short of constraining national fiscal sovereignty. The framework has evolved through three distinct periods. Initially, the 1997 Stability and Growth Pact (SGP) introduced numerical rules, which were refined in 2005 to focus on fiscal 'effort' rather than outcomes. Following the Great Financial Crisis (2007-2009), the Six-Pack and Fiscal Compact attempted to 'harden' surveillance by adding a debt reduction benchmark, though enforcement remained politically constrained. The 2020 pandemic prompted a total rule suspension and the creation of the Recovery and Resilience Facility (RRF), marking a breakthrough in common EU borrowing. The latest 2024 legislative reform represents the most radical overhaul of EU fiscal governance, replacing rigid targets with national ownership via medium-term fiscal-structural plans. The fundamental tension of Maastricht — centralized monetary policy versus decentralized national fiscal sovereignty — runs through the history of EU fiscal rules and remains unresolved. A new equilibrium, including more binding fiscal rules and a permanent central fiscal capacity, remains elusive in the absence of the required shared normative consensus. In spite of its mixed performance, the EU fiscal framework has materially influenced fiscal behaviour and holds promise for incremental progress, particularly along the dimension of national ownership through commonly accepted standards for medium-term planning and independent fiscal institutions.

Keywords: EU Integration; EMU; Fiscal Rules; Stability and Growth Pact.

1. Introduction

Ever since its inception with the 1992 Maastricht Treaty, the European Economic and Monetary Union (EMU) has been defined by a fundamental and unresolved tension: the coexistence of centralized monetary policy with decentralized national fiscal sovereignty. EU fiscal rules should be

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seen as inevitably imperfect device to bridge this architectural mismatch. As such they have been the subject of sustained criticism, on account both of their economic shortcomings, in particular, reliance on arbitrary numerical thresholds, and their failure to constrain national fiscal policies as advertised.

However, evidence suggests that EU fiscal rules have not been entirely ineffective; they have materially influenced national fiscal behaviours, while reflecting changing economic realities. Given the absence of a shared normative consensus for an overhaul of EMU's architecture, in particular, on the creation of a central fiscal capacity, fiscal rules are likely to remain a fixture of EMU for the foreseeable future. They provide a necessary, however imperfect, anchor of stability in an that is bound to remain incomplete, due to member states' fundamental reluctance to surrender budgetary autonomy.

This contribution explores these dynamics by retracing the history of the EU fiscal framework through three distinct periods: from the initial Stability and Growth Pact (SGP), through the hardening of surveillance following the Great Financial Crisis (GFC), to the radical 2024 overhaul. By analysing this evolution, the paper demonstrates how the framework continuously adapts to shifting economic priorities while remaining bound by its original 'Maastricht constitution'.

2. Fiscal Rules and the Origins of the 'Maastricht Constitution': a Misunderstood Relationship

Ever since its inception, the economic and monetary union (EMU) has included constraints on the fiscal policies of member states. The need for such constraints was already acknowledged in substance in the blueprint of EMU, the Delors Report ([Delors] Committee for the Study of Economic and Monetary Union, 1989), and was formalized, with the inclusion of quantitative criteria, in the 'constitutional' foundation of EMU, the Maastricht Treaty (Treaty on European Union [TEU]). The most intellectually attractive conceptualization of the Maastricht Treaty's rules on government deficits and debt represents them as the most visible element of a broader set of provisions meant to ensure against 'fiscal dominance,' i.e., the risk that fiscal programmes set by member states, regardless of the level of real debt, may result in persistent deviations from the price stability objective of the European Central Bank (ECB) on account of the necessity for monetary policy to ultimately back the nominal value of debt (Leeper, 2023).

In this theoretical perspective, broadly identified with the fiscal theory of the price level, the Maastricht Treaty's ban on 'excessive deficits' (Treaty on the Functioning of the European Union [TFEU], Art 126) should be seen as part of a triad of interlocking prohibitions, or 'triple lock', whose other two elements are the ban on monetary financing (Art 123 TFEU), prohibiting the ECB and national central banks to finance member states' borrowing, and the 'no-bailout' clause (Art 125 TFEU), prohibiting member states from taking responsibility for each other's debt (Cochrane et al., 2025). However theoretically appealing, this conceptualization does not reflect, or only partially reflects, the reality of the debate surrounding the 'constitutionalization' of EMU, both as a matter of economic rationale and legal formulation.

From an economic perspective, while the link between central bank independence and inflation control had long been recognized — reflecting the shift from a Keynesian to a more monetarist paradigm and supporting provisions such as the ban on monetary financing (Weber, 1993; Maes, 2023) — the need to accompany a monetary union with constraints on national fiscal policies was far more contested. The Delors Report did call for 'binding constraints on the size and the financing of budget deficits' (Delors, 1989), yet the economic rationale offered (Lamfalussy, 1989) was ambiguous. It combined scepticism about market discipline with traditional Keynesian concerns about avoiding an excessively expansionary fiscal stance that could push up interest rates, as reflected in the omission of public debt constraints. At that point, the argument about monetary versus fiscal dominance was largely absent. Without it, neither Keynesian nor monetarist perspectives provided compelling enough reasons to constrain national fiscal policies in a monetary union. Instead, much of the contemporaneous academic debate stressed the importance of preserving fiscal flexibility to respond to asymmetric shocks, or, alternatively, the need for fiscal co-insurance mechanisms (Bovenberg et al., 1991; Buiter et al., 1992; Eichengreen, 1993; Eichengreen & Frieden, 1994).

In terms of legal formulation, despite 'reference values' of 3% for deficit and 60% of GDP for deficit and debt, respectively, the Maastricht Treaty fiscal rules arguably fall short of the canonical definition of a 'permanent constraint on fiscal policy' (Kopits & Symansky, 1998). These values serve as procedural triggers for Commission and Council review, i.e., to prepare a report pursuant to Article 126(3) TFEU, rather than as automatic constraints on national budgetary politics. The procedure clearly favours institutional judgement over numerical rigidity in reflection of the prevailing view at the

time of the adoption of the Maastricht Treaty. With the assessment of one of the Commission negotiators (Italianer, 1993):

> (...) it is clear that the excessive deficit procedure is not a mechanistic procedure: the criteria or the judgement of the Commission are used to start a process which, after careful consideration of all the relevant aspects, may lead to the judgement that a Member State has an excessive deficit. Given the fact that, according to economic theory, an excessive deficit is difficult to define on the basis of strict criteria alone, this seems a balanced compromise.

Treaty interpretation (Art 126(1) TFEU) suggests the ban on 'excessive deficits' aims to avoid 'gross errors' in budgetary policy. This model aligns with 'negative' coordination based on 'proscribing' rules (Carnot, 2014) and resembles 'fiscal standards' rather than strict numerical rules (Blanchard et al., 2020). Consequently, the Treaty legal foundation to the fiscal rulebook precludes mechanical interpretations, allowing for interstitial discretionary application.

Furthermore, EU fiscal rules lack a binding legal nature. They cannot directly interfere with member states' budgets, relying instead on 'external' surveillance (Keppenne, 2019; Pench, 2024a). This excludes recourse to standard EU infringement procedures involving the Court of Justice, thus leaving the Excessive Deficit Procedure (EDP) as an essentially political process with the Council maintaining the final word (Pench, 2024a). This non-binding design was an intentional choice of the Maastricht Treaty's framers, departing from the original design foreseen by the Delors Committee (Bini-Smaghi et al., 1994; Enderlein & Rubio, 2014).

The Maastricht Treaty remains the EMU's economic constitution, its essential legal features reflecting deep constituent preferences. Ignoring these invites misrepresentations and misinterpretations of the EU fiscal framework's evolution and future. Conversely, the framework's economic rationale is open to constant re-elaboration, driven by shifting economic priorities and paradigms. While these transformations affect the framework's operation — including explicit and implicit norm changes — it has not and cannot alter the economic constitution's legal fundamentals.

3. Three Periods in the Evolution of Fiscal Rules in EMU

Focusing on the dialectic between the two forces — deep economic constitution and changing perception of economic priorities — one can identify three distinct periods in the evolution of EU fiscal governance since the launch of the single currency in 1999.

From the launch of the euro (1999) to the Great Financial Crisis (2008)

This period saw the transformation of the high-level constraints on fiscal policies of the Maastricht Treaty in a set of numerical fiscal rules known as the Stability and Growth Pact (SGP).[1] This introduced, on the one hand, a strong element of 'automaticity' in the activation and subsequent progression of the EDP, focused on the breach deficit threshold of 3%of GDP and the need for its rapid correction (hence the designation of the EDP specification as 'corrective arm' of the SGP); on the other hand, a flanking 'medium-term objective of close-to-balance-or-in-surplus' to be incorporated in national medium-term programmes, subject to monitoring by the Commission and the Council in a framework of multilateral surveillance, but effectively lacking any enforcement mechanism (so-called 'preventive arm' of the SGP).

The underlying economic rationale tended to discount the benefits of coordination of macroeconomic policies relative to the risk that such coordination could put pressure on the monetary authority to systematically accommodate expansionary fiscal policies. This meant it continued to favour a model of 'negative coordination' (Buti & Sapir, 1998).

The automaticity of the EDP was exposed as more apparent than real by the 2005 conflict that pitted the Commission against the Council over the unwillingness of the latter to step up the procedure against Germany and France for failure to correct their excessive deficit, culminating in a case before the CJEU (Case C-27/04 [*Commission v Council*]) that essentially confirmed the constitutional limits to the enforcement of EU fiscal rules (Pench, 2024a).

While leaving the underlying constitutional tension unresolved, the conflict prompted the first reform of the SGP (2005), which transformed national commitments under the EDP to correct any breach of the 3% of GDP threshold within a deadline, from an obligation of results into an obligation of best efforts towards fiscal prudence. The 2005 reform also introduced cyclical adjustment in the measurement of this effort and the definition of the medium-term objective. In the context of its continued intellectual efforts on the design of the fiscal framework, the Commission justified these revisions with an explicit reference to the emerging literature on fiscal governance as a 'balanced compromise' trading off a deterioration in simplicity/transparency against an improvement in adequacy/flexibility (European Commission [EC], 2005).

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1 The Stability and Growth Pact was originally outlined in a resolution of the European Council (1997) and in two pieces of secondary legislation: Council Regulation (EC) No 1467/97 (the so-called 'corrective arm' of the Pact, based on Article 126 TFEU establishing the excessive deficit procedure) and Council Regulation (EC) No 1466/97 (the so-called 'preventive arm' of the Pact, based on Article 121 TFEU that lays down the principles and the ('soft law') procedures of economic policy coordination).

From the Great Financial Crisis (2008) to the Pandemic Crisis (2020)

The Great Financial Crisis (2007-2009) and its Euro-area-specific sequel, the Eurozone Debt Crisis (2010-2012) induced the deepest and most wide-ranging transformation of EU economic and fiscal governance. In the domain of fiscal governance, the reaction to the crisis took the form of an unprecedented legislative package (Six-Pack, 2011). Following closely the blueprint of the Commission largely coinciding with the member states' crisis consensus (EC 2010a; EC, 2010b; European Council Task Force, 2010), the principal element of the package was a reform of the SGP in the sense of a greater emphasis of budgetary discipline, seen as a decisive contributing factor if not to the crisis, at least to its immediate aftermath.

The reform encompassed both the preventive arm and corrective arm of the SGP, the latter mainly through the operationalization of the hitherto ignored debt criterion of the EDP through a 'debt reduction benchmark' mainly through an enhanced early warning system for deviations from the medium-term budgetary objective or the path towards it. Consistent with the focus on increased budgetary discipline, the reform also included the possibility of an expanded recourse to financial sanctions for euro area countries with a decisive role for the Commission. The strengthening of the SGP was embedded in a broader set of surveillance tools, integrated in a single annual cycle (the European Semester), the assessment of countries' budgetary plans, structural reforms, and macroeconomic imbalance risks. The latter became the subject of a new dedicated procedure, the macroeconomic imbalance procedure, including the possibility of requiring from member states exhibiting particularly serious imbalances a remedial action plan, ultimately backed by financial sanctions for euro area countries.

The post-crisis reforms of fiscal rules and economic coordination have often been portrayed as a shift from the original 'soft' Maastricht model to a 'harder' one, marked by more intrusive prescriptions, stronger and more predictable enforcement, and an enhanced role for the Commission as supranational policy initiator and monitor, alongside a broader empowerment the executive function at both the national and supranational levels, potentially at the expense of democratic legitimacy and judicial oversight (de Streel, 2013; Dermine, 2018; Hoffman & Pantazatou, 2019).

This characterization, however, rests largely on a superficial reading of the reforms rather than on their actual implications. Empirically, the strengthening of the SGP does not appear to have produced a discernible improvement in compliance with either national or EU fiscal rules

(Reuter, 2019; Larch et al., 2023). This is consistent with a surveillance practice, which has been marked by the Commission's reluctance to fully utilise its expanded powers, implicitly reflecting political concerns about confrontation with member states (Pench, 2024b).

This reluctance to enforce the new fiscal rules also reflected the growing realization, following the peak of the Eurozone Sovereign Debt Crisis (2010-12), that incipient deflation, not runaway fiscal deficit, was the most immediate threat to economic recovery. Accordingly, from 2015 onwards, the Commission, while continuing to stress the rule-based nature of the fiscal framework, would emphasize the 'margins of interpretation left to the Commission' (EC, 2015). Irrespective of the economic merits of the newly found flexibility in discretion, it bears noting that the ability of the Commission to stretch and compress the rules by way of interpretation across different versions of the SGP is itself rooted in the legal foundations of the Maastricht Treaty.

Further evidence that the EU fiscal framework cannot transcend national sovereignty — a core tenet of the Maastricht Treaty — is the persistent failure to establish a central fiscal stabilization capacity. This failure is notable because it persists despite extensive economic literature proposing various models, from 'pure' stabilization funds to full euro area budgets, often designed to avoid permanent cross-country transfers (Alcidi et al. 2017; Carnot 2017). Although EU institutions and the Commission (EC, 2012; 2015; 2017) eventually championed this capacity, supported by the ECB and IMF (Koester & Sondermann, 2018; Arnold et al. 2018), no blueprint has gained sufficient traction with national governments despite these concurrent pressures.

While the EU fiscal framework's 'genetic' character remained stable, it may be argued the Great Financial and Eurozone Sovereign Debt Crises fundamentally altered the Maastricht constitution in other areas, filling the gaps that had been exposed in the original architecture, particularly through:

- **the creation of the European Stability Mechanism (ESM, 2012)** as an intergovernmental institution tasked with providing financial assistance to Euro Area Member States at risk of losing market access, strictly conditional on adjustment programmes overseen by the European Commission, the ECB and the IMF;
- **the creation of Single Supervisory Mechanism (SSM, 2012)** moving the (micro-) prudential supervision of large banks in the euro area to the ECB as the first step in the set-up of a full Banking Union, eventually including a fully integrated crisis management and resolution framework and a common deposit insurance scheme; and,

- **(arguably most important) the extraordinary expansion of the role of the ECB**. The crisis empowered it to allow unlimited TARGET2 inter-central bank credit/debit positions and use long-term refinancing to remove reserve constraints. From 2012, the Bank effectively acted as a lender of last resort to governments (De Grauwe, 2011) via the Outright Monetary Transaction (OMT) mechanism. Finally, from 2014, the ECB intervened in bond markets via the Public Securities Purchase Programme (PSPP) to depress long-term interest rates as a core quantitative easing (QE) strategy against deflation.

The ECB's central role in the Eurozone crisis response stems from its ability to act as a lender of last resort for both banks and governments. By deploying its 'high-powered-money' power, the Bank could influence the interest rate structure for the entire eurozone. This was possible thanks to the ECB's unique capacity to renegotiate its price stability mandate boundaries within the Maastricht Treaty. If in the legal conflict between the Commission and the Council (Case C-27/04), the Court effectively confirmed the power of member states to stall the Excessive Deficit Procedure (EDP), when confronted with legal challenges to the expansion of the Bank's remit, the CJEU upheld the ECB's authority. In cases regarding the legality of OMT (Case C-62/14 [*Gauweiler*]) and PSPP (Case C-493/17 [*Weiss*]), the Court rejected claims of treaty bans on monetary financing. Instead, it allowed the ECB to define the boundaries between monetary and economic policy, accepting its arguments at face value (Quinn, 2021; Peychev, 2023). Similarly, in *Pringle* (Case C-370/12) regarding the ESM, the Court interpreted the 'No Bail-Out' clause narrowly, linking the new institution's legality to the budgetary discipline of ESM conditionality (Lo Schiavo, 2013). One could say that the crisis effected a deconstruction of the 'triple lock', asserting the power of the ECB and the (creditor) member states in order to make up for the shortcomings exposed in the original Maastricht architecture.

The change in the Maastricht economic constitution has allowed for implicit ex ante risk sharing via 'monetary solidarity' against common shocks (Schelkle, 2017). While OMT and ESM offer potentially unlimited or conditional ex post risk sharing against idiosyncratic shocks, national governments still refuse to limit their fiscal sovereignty or mutualize joint liabilities. This resistance is evident in the failure of central stabilization blueprints and persisting gaps in the Banking Union. These failures, including issues with deposit insurance and sovereign exposures, stem from member states' unwillingness to cede authority over the fiscal resources required for financial stability (Veron, 2024).

From the Pandemic Crisis (2020-22) to the 2024 economic governance reform

The Covid-19 pandemic represented an unprecedented challenge to the EU economic and fiscal framework, but also an opportunity to build on the experience gained in previous crises.

The importance of policy learning was particularly evident in the response of the ECB, which did not hesitate to expand on its already enhanced mandate as lender of last resort to banks and sovereigns, by adapting and scaling up existing instruments (long-term refinancing operations and an asset purchase programme) including greater flexibility in the deployment of QE to compress cross-country yield spreads with the Pandemic Emergency Purchase Programme ([PEPP], Quaglia & Verdun, 2023).

The function of the EU fiscal framework in the policy response to the pandemic can be characterized as 'passive horizontal coordination by exception' (Pench, 2024a). With the support of member states, the Commission put forward an extensive interpretation of the 'general escape clause' introduced in the SGP by the 2012 reform, to effectively set aside all the requirements of the SGP and allow governments to pursue expansionary policies in tandem with the ECB's exceptional deployment of unconventional monetary policies. The escape clause was notably interpreted in contrast with its ostensible formulation to avoid activating the EDP and to refrain from providing quantitative guidance, even after the original justification for this interpretation — exceptional uncertainty created by the Covid-19 outbreak making it impossible to design credible adjustment paths — had clearly ceased to apply. The continued *de facto* suspension of the rules up to 2024 rather offered the simplest way to allow governments to adjust to the new crisis caused by the war on Ukraine and the associated energy shock.

The passive role of the EU fiscal framework in the pandemic crisis was overshadowed by a breakthrough in vertical coordination, namely, between national budgetary policies and the EU level. This novel approach to EU governance became the Recovery and Resilience Facility (RRF), the main instrument of the exceptional NextGenerationEU (NGEU) budgetary package (Mahieu et al., 2024). The primary breakthrough of the RRF was allowing EU borrowing on an unprecedented scale to finance member states' expenditure on pre-agreed priorities (including, in particular, the common EU goals of the green and digital transitions) through a substantial use of non-repayable grants. These were, effectively, deficit-spending programmes. The other major innovation of the RRF was the introduction of performance-based conditionality, whereby the disbursement of financial support became

tied to member states' implementation of multi-annual plans for reforms and investments broken down by (qualitative) milestones and (quantitative) targets.

Despite limitations in its construction, in particular, the explicit temporary nature and the effective preponderance of national relative to EU priorities, the RRF has caused a major shift in the common fiscal capacity model underpinning the initiative for European Public Goods (EPGs). This shift is grounded in micro-economic concepts of cross-border spillovers and economies of scale (Wyplozs, 2024; Claeys and Steinbach, 2024), aiming to generate 'European Added Value' otherwise unattainable by isolated national policies (Fuest & Pisani-Ferry, 2019). However, the definition of European public goods is often driven by a 'political rationale' (Buti et al., 2023). This includes rationalizing existing policies and expanding their remit via 'public good by aggregation' (Buti & Papaconstantinou, 2022), which allows RRF financing for domestic programmes with negligible cross-country spillovers. Following the Musgravian definition of 'fiscal functions' (Musgrave & Musgrave, 1989), the new model of fiscal capacity represents a move from a stabilization to an allocation function. Consequently, the link between a central fiscal capacity and the EMU, including its complementarity with fiscal rules — normally understood to revolve around the stabilisation gap opened by the loss of independent monetary policy coupled with constraints being placed on fiscal policies — is being de-emphasized. Whether the EPG model can overcome resistance to diluting national fiscal sovereignty remains a central question for the evolution of the EU economic constitution (see Buti & Messori, this report). As progress often depends on specific crises (Mourlon-Druol, 2024), the gaps exposed by the war on Ukraine and shifting US strategic priorities may provide the necessary impetus for further integration.

The pandemic crisis acted also as a catalyst for the most radical overhaul of EU fiscal governance, in particular, by supporting an approach tilted towards greater national ownership of fiscal programmes and by acknowledging a potential trade-off between fiscal adjustment and structural reform. However, the connection between the NGEU package and the economic governance reform package (2024), particularly the SGP reform, is best understood in terms of the general political climate allowing for bold innovations. While the NGEU breakthrough was essentially the fruit of a Franco-German agreement made possible by the extraordinary circumstances of the pandemic (Waas & Rittberger, 2023), the key elements of the economic governance reform, while undoubtedly influenced by the same circumstances, were elaborated independently within the Commission.

In fact, the initial reflections within the Commission (Pench, 2021) envisaged a significantly greater emphasis on national ownership, building on

the original Maastricht Treaty concept of 'gross error' and allowing a key role for national fiscal councils, than the proposals that were subsequently outlined and eventually adopted. There is however an essential continuity between the initial orientation made public by the Commission (EC, 2022) and the reformed SGP as eventually agreed to in 2024.[2] It revolves around the following innovations (Pench, 2024a; EC, 2024; European Fiscal Board [EFB], 2024):

- **National ownership**: medium-term, fiscal-structural plans submitted by member states (although preceded, for member states with deficits or debt in excess of the 3% and 60% of GDP reference values, by Commission guidance in the form of 'reference trajectories') are the centrepiece of the new framework, moving away from the previous one-size-fits all adjustment towards the medium-term objective of close-to-balance or in surplus;
- **Focus on debt sustainability**: the common objective of the national plans is to put debt on a plausibly downward path towards the 60% reference value (or to stay below it), while equally respecting the 3% deficit threshold. A plan's adequacy to the objective is assessed through debt sustainability analysis (DSA), including deterministic and stochastic tests (with the same DSA methodology being used by the Commission for producing reference trajectories);
- **Medium-term perspective incorporating adjustment trade-offs:** plans are expected to apply for a period of four to five years, in line with the national legislature, with the possibility of postponing the completion of the adjustment up to two years into the subsequent plan in exchange for a commitment to specific reforms and investments in line with EU priorities.

These innovations are meant to cut through the 'sedimentation' of rules and indicators, which, even if originally introduced to adapt the framework to economic reality and fill gaps in surveillance, including by way of interpretation, over time have resulted in intractable complexity (Deroose et al., 2018). The aim of simplification is notably served by the introduction of a single observable indicator for the formulation of the multi-year adjustment path and the assessment of compliance with it, based on primary expenditure (net of discretionary revenue measures). Last but not least, the focus on debt sustainability implies a considerable simplification of surveillance by effectively excluding interference in the fiscal policies of low-debt member

2 The reform consisted of an amendment of the 'corrective arm' regulation and, reflecting the overhaul of the provisions on medium-term fiscal policy and its monitoring, a replacement of the 'preventive arm' regulation by the new Regulation (EU) 2024/1263.

states (provided they keep their deficits below 3% of GDP). In contrast with the simplification aim, however, and contradicting the Commission's original design of the reform (Pench, 2023; 2024a), are the eventual introduction of 'numerical safeguards' to ensure a minimum annual reduction in debt during the adjustment period, as well as safety margins below the 3% of GDP deficit threshold after the adjustment period.

This latest reform of the SGP was complemented by a strengthening of the Directive on national budgetary frameworks (Council Directive (EU) 2024/1265, first introduced as part of the Six-Pack reform). In particular, the reform fully acknowledges the role of independent fiscal institutions, including provisions expanding their mandate (e.g., endorsing annual and multi-annual macroeconomic forecasts, providing, as of 2032 at the latest, opinions on the plans submitted by member states, monitoring compliance with domestic fiscal rules) and enhancing their institutional independence (Axioglou et al., 2023; EC, 2025). In line with the stronger medium-term dimension of the reformed SGP, the national budgetary frameworks reform seeks to strengthen domestic medium-term budgetary frameworks, in particular, their relation to annual budgets.

Finally, through provisions of the same tenor included in each piece of new legislation, the 2024 reform purports to give effect to the incorporation of the Fiscal Compact in EU law, thereby effectively putting an end to the experiment of intergovernmental incorporation into national constitutions of the substantive fiscal rules mirroring the EU rules.

4. Early Takeaways on the New EU Fiscal Rules

A comprehensive assessment- of the reformed EU fiscal framework would be premature. Its roll-out, particularly regarding its enforcement, is still under way and occurring against unusually challenging geopolitical circumstances with the war on Ukraine and the gaps it has exposed in Europe's defence capabilities (see Zettelmeyer & Wolff, this report).[3] Nevertheless, the early experience with the framework has highlighted a number of potential weaknesses, in terms of both design and implementation.

3 Concerning enforcement, often considered the key weakness of the EU fiscal framework, the main innovation of the 2024 reform consists of the repurposing of the EDP for breach of the debt criterion to enforce the correction of cumulative deviations from the medium-term adjustment path, which member states have committed to in their plans. This presupposes a record of (non-) compliance, which however could not be available, by definition, at the moment of the entry into force of the reform. For this reason the opening of EDPs in 2024, after the effective suspension of the SGP during the pandemic and energy crises, was based exclusively on the deficit criterion.

In terms of design, the main emerging critical points concern:

- **Artificial numerical benchmarks**: as already evident from their formulation, the inclusion of additional numerical safeguards (debt reduction safeguard, deficit resilience safeguards) has needlessly complicated the framework, while producing paradoxical results. Implicitly recognizing the problem, the Commission, when activating the national escape clause of the reformed SGP to allow for extra defence expenditure, has suspended the application of the safeguards, and one might expect it will find ways not to revive them (Pench, 2024a, 2025).
- **Role of the DSA**: reflecting its direct importation, with only superficial adaptation, from a pre-existing indicative framework for the medium-term risk classification of member states, the use of DSA as the main tool for determining fiscal adjustment paths has highlighted unnecessary rigidities, in particular, regarding the treatment of countries whose debt, while in excess of the 60% of GDP threshold, should not be considered at high risk in economic terms, and some paradoxical features of the framework (e.g., the more economically meaningful stochastic testing of the baseline adjustment trajectory being systematically dominated by the more economically arbitrary deterministic testing) (Pench, 2023, 2025).

In terms of implementation, emerging early weaknesses include:

- **Optimistic bias in planning**: the roll-out of the new framework has been marked by a forbearing approach by the Commission, which has often accepted national macroeconomic, and, in some cases, fiscal assumptions significantly more favourable than in its own prior guidance. This optimistic bias risks building adjustment paths that will miss the objective of putting debt on a declining path, even if the primary expenditure targets are met (EFB, 2025; Janeba & Larch, 2025). The risk is compounded by the evidence of 'unwarranted restraint' on the part of governments in involving independent fiscal institutions in the planning process (EFB, 2024).
- **A risk of nominal deficit bias in enforcement**: the early decision to allow member states to exit the EDP based only on the achievement of the 3% of GDP deficit threshold regardless of adherence to the debt-sustainability-anchored adjustment path, risks reproducing a situation in which the deficit criterion is the only one that countries care about (Pench, 2024b). As the enforcement of the adjustment path relies on the activation of the EDP for breach of the debt criterion, which, compared to the deficit criterion, remains subject to a discretionary assessment of 'relevant factors', the risk of an early devolution of the reformed SGP is real.

Importantly, weaknesses in the reformed SGP impact the credibility of the ECB's Transmission Protection Instrument (TPI), aimed at countering disorderly market dynamics unwarranted by macroeconomic fundamentals (ECB, 2022). Unlike the OMT, TPI activation does not require an ESM adjustment programme. To mitigate moral hazard, eligibility notably depends on compliance with EDP requirements. However, lax EDP enforcement — particularly regarding the debt criterion — undermines the TPI's status as a neutral tool. If the SGP fails to provide fiscal discipline, the ECB may struggle to resist pressures to suppress market dynamics that are actually justified by macroeconomic fundamentals (Arnold, 2023).

5. Conclusion: An Ever Incomplete Union with Workable Fiscal Rules?

Persistent weaknesses in the EU fiscal framework may encourage the view that the SGP is a 'hopeless failure' and the entire EU fiscal rulebook should be re-written from scratch (Wyplosz, 2012, 2015). This conclusion however seems unwarranted, for at least two reasons:

- The fact that fiscal rules do not work as advertised does not mean that they do not work at all: the balance of evidence, while highlighting the risk of endogeneity bias, tends to suggest that fiscal rules are effective commitment devices, even if formal compliance is mixed (Heinemann et al., 2018). Rules are found to act as 'points of reference' for fiscal behaviour rather than precise constraints (Reuter, 2019). The best illustration at the EU level is the 3% percent of GDP deficit threshold of the EDP, which appears to exert a 'magnet effect', successfully containing excessive deficits (Eyraud et al., 2018). Contrary to the standard critique positing a trade-off between fiscal rules and fiscal stabilization, fiscal rules are found principally not to increase pro-cyclicality and to be able to constrain fiscal volatility, and in turn output volatility, including through the reduction of risk premia (Eyraud et al., 2018; Brändle & Elsener, 2022). These findings are in line with the observation of a significant and continued increase over the last few decades in the adoption of rule-based fiscal frameworks, not only in Europe, but worldwide (Acalin et al., 2025).
- In the case of the EU fiscal framework, its limited effectiveness should be reassessed more positively against the background of the legally non-binding nature of the rules, i.e. their inability to affect the validity of national budgets, and the related fundamental unwillingness of

> member states to accept interferences with their fiscal sovereignty. Given the persistence of the core assumptions of national fiscal sovereignty, there is reason to doubt that alternatives to the rule-based approach would be significantly more effective, e.g., discarding numerical rules in favour of qualitative standards, or even viable, e.g., giving the CJEU a role in adjudicating on the correct application of the framework and enforcing compliance with it (Blanchard et al., 2020).

A move towards a 'new equilibrium', characterized by a new form of fiscal governance based on the twin pillars of a common EU fiscal capacity and supranational fiscal regulation (Buti & Fabbrini, 2023), would require a radical shift in the normative principles and shared beliefs of the highest order (meta-governance), providing the foundation for new constitutional arrangements (second-order governance) within which the management of policy issues takes place (Chang, 2016). This seems improbable, barring an existential crisis, which however could favour disintegration as much as integration, especially if associated with domestic political polarization. EMU therefore is likely to remain an 'ever incomplete union'.

Accordingly, reform of the EU fiscal framework is likely to remain prevailingly a matter of second-order incremental adjustment, even when the appearance is one of radical overhaul. The same logic predicts, *mutatis mutandis*, the unlikely occurrence of a breakthrough in crisis management and deposit insurance for the completion of the Banking Union or the development of a genuine EU fiscal capacity, even if for the sole purpose of financing EPGs. Most realistically, and optimistically, a limited version of fiscal centralisation based on the 'counterbalancing fiscal asset' approach pioneered by the RRF may still re-occur.

The above context does not exclude the possibility of real, if incremental, progress. Concerning the EU fiscal framework, the most promising avenue may be the least visible, i.e., the approach embodied by the Directive on national budgetary frameworks: progressive acceptance of minimum requirements on medium-term fiscal frameworks and independent fiscal institutions leading to the genuine national ownership of fiscal rules. Although not directly comparable to national independent fiscal institutions vis a vis member states, the European Fiscal Board (EFB), whose advisory role in relation to the Commission and the Council has been formalized and strengthened by the 2024 reform (De Lemos et al., 2024), could also provide a valuable contribution to the transparency, credibility, and, ultimately, ownership of the existing framework and its improvement over time. An ever incomplete union may still benefit from more functional, if always imperfect, fiscal rules.

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Differentiation and Euro Adoption: Policy Options for Reducing Fragmentation under Geopolitical Pressure

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Abstract

This paper examines how geopolitical pressures reshape the European Union's balance between maintaining strict convergence standards and reducing internal fragmentation and differentiation within Economic and Monetary Union (EMU). It first traces the evolution of EMU and euro adoption, showing how crisis-era governance concentrated decisions in euro-area venues and deepened insider–outsider dynamics. It then assesses the recent performance of four non-adopting member states (i.e. Czechia, Hungary, Poland, and Romania) against convergence criteria, highlighting persistent challenges with inflation, long-term interest rates, and entry into the European Exchange Rate Mechanism (ERM-II), alongside mixed but generally favourable public opinion. Finally, it analyses the implications of fragmentation and differentiation in a more contested geopolitical environment, where cohesion carries increasing strategic value. The paper argues that geopolitical pressures do not weaken monetary credibility; they shift the policy frontier towards preserving standards while lowering transitional frictions for willing adopters. It concludes with concise policy recommendations on ERM-II clarity, sequencing, inclusive coordination, and credibility-enhancing national steps.

Keywords: Euro; Euro Adoption; Differentiation; Fragmentation; Geopolitical Pressures; Member States; Policy Coordination.

1. Introduction

The European Union's (EU) governance increasingly reflects the realities of differentiated integration, especially in how euro-area members and non-members interact. The insider–outsider divide is not merely formal; it shapes who participates in crucial deliberations and how policy choices are made.

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Episodes of crisis have brought these dynamics into sharper relief, showing how institutional venues can either deepen or mitigate fragmentation across the Union. This paper addresses the following research question: How do geopolitical pressures alter the EU's calculus between maintaining strict convergence standards and reducing internal fragmentation?

During the sovereign debt crisis, decision-making frequently migrated to euro-area-only bodies, such as the Eurogroup and its working group. This shift constrained the capacity of non-euro members to influence reforms that would ultimately affect them as well. Yet exclusion was not absolute. Outsiders that aligned with prevailing organisational practices (i.e., consensus-building, procedural restraint, and adherence to shared norms) found pathways to selective inclusion in otherwise restricted discussions. These patterns persisted even when crisis causes were exogenous to national policy, as seen in the pandemic response, which favoured EU-wide mechanisms over euro-area instruments to navigate political sensitivities.

These institutional dynamics now intersect with a more demanding geopolitical environment. As external pressures intensify, the EU's ability to minimise internal sources of fragmentation becomes more strategically significant. At the same time, longstanding constraints on euro adoption remain. For member states without a currency board or fixed exchange rate, moving into the European Exchange Rate Mechanism (ERM-II) and meeting the broader convergence criteria requires sustained macroeconomic discipline and political commitment across multiple electoral cycles. Concerns about becoming 'stuck' in ERM-II and the shifting reference values, that are tied to the performance of the 'best performers', continue to add to the uncertainty for governments contemplating adoption.

From a Union-wide perspective, a more cohesive Economic and Monetary Union (EMU) promises gains in resilience and coordination but raises delicate design questions. Any approach to smoothing entry, whether through recalibration of criteria or phased pathways, must preserve the credibility of macroeconomic convergence while recognising the diversity of national political economies. The political feasibility of such changes is not uniform across member states; domestic preferences and episodes of Euroscepticism continue to shape governments' willingness to engage with reform.

Taken together, these developments position fragmentation, and the governance of insider/outsider relations, as a central strategic challenge for the EU. In light of the research question, the paper proceeds as follows. Section 2 examines the evolution of EMU and euro adoption. Section 3 reviews the experiences of four prospective adopters, Czechia, Hungary, Poland and

Romania. Section 4 analyses fragmentation and geopolitical pressures. Section 5 concludes by reflecting on the implications for the EU's capacity to reconcile monetary stability with internal cohesion.

2. The Evolution of EMU and Euro Adoption

When EMU was conceived as a policy objective after the 1992 Maastricht Treaty, it was expected that all member states would join this flagship of European integration. Some, such as Denmark and the United Kingdom at the time, obtained formal opt-outs for political reasons. Sweden refrained without a formal opt-out. For countries in Central and Eastern Europe that joined in 2004, 2007, or later, the pace of euro adoption was unclear. Research suggested differences in timing stem mainly from domestic politics and capacities (Dandashly & Verdun, 2015). Meeting the convergence criteria requires political will, and timing adoption within electoral cycles is difficult.

To adopt the euro, governments must satisfy all convergence criteria at the right time: central bank independence; low budget deficits and public debt; two years in ERM-II; and performance among the best three member states on inflation and long-term interest rates just before applying. Lithuania confronted the difficulty of this last point when, in May 2006, the European Commission judged its average inflation rate to be 2.7%, exceeding the 2.63% reference value, with one of the 'best performers' being Poland, a non-euro-area member (European Commission [EC], 2006a, 2006b; Dandashly & Verdun, 2020).

Enlargement in 2004 brought ten new members; all but Czechia, Hungary, and Poland have since adopted the euro. Of the two that joined in 2007, Bulgaria recently adopted the euro, while Romania is not likely to do so anytime soon. It is worth noting that Bulgaria operated a currency board for nearly three decades, first pegged to the deutschmark, then the euro, making it more a policy taker than a policymaker (Ardissino, 2026). Croatia, an EU member since 2013, adopted the euro in 2023. Thus, some Central and Eastern European members remained outside the euro area, while others worked hard to join.

EMU began with eleven members in 1998 with the irrevocable fixing of exchange rates, and euro notes and coins entered circulation in twelve states in 2002. Members joined thereafter and, by 2026, twenty-one member states had adopted the euro. From the outset, EMU was promoted as a driver of growth and deeper integration. It leveraged single-market scale, lowering cross-border payment costs, improving price transparency, reducing transaction costs, increasing trade, and facilitating business (De Grauwe, 2020). It could

also boost foreign direct investment and capital mobility. Although these prospects initially seemed exaggerated, recent studies suggest considerable benefits to euro membership and even spillovers for EU members not yet in the euro (Gunnella et al., 2021).

The financial crisis, the Great Recession, and the sovereign debt crisis interrupted European monetary integration and revealed needs beyond the original design: stronger banking supervision and enhanced coordination of macroeconomic governance (Verdun, 2023). They also exposed asymmetries, i.e., limited fiscal integration and core–periphery divisions (Howarth & Verdun, 2020). While EMU aimed to spur growth, the euro's introduction has not yielded dramatic growth compared with the rest of the world, particularly the United States. Studies suggest Europe's lower growth reflects multiple factors, including demographics, low productivity growth, extensive regulation, a weak market for angel/venture capital, missing leadership in recent technological revolutions, and high energy prices (Cipollone, 2024; Born, 2025; Howarth & Quaglia, 2021; see Kaskarelis et al., Venditti et al., this report).

Multiple reports stress that EMU remains incomplete (Van Rompuy, 2012; Juncker, 2015). The European Commission outlined avenues for deeper integration to harness the Single Market (EC, 2017a, 2017b, 2017c). The Draghi Report argues the EU should reduce productivity and innovation gaps vis-à-vis other global powers and proposes large annual investments, partly financed by joint debt, in technology, decarbonization, defence, and regulatory simplification (Draghi, 2024).

Euro adoption is not only an economic calculus of costs and benefits; it is also symbolic and psychological (Otrachshenko et al., 2016). Money can symbolize national identity or serve as a tool to build European identity (Risse, 2003). Giving up a national currency can be cast as a loss of sovereignty or a step towards deeper integration. These non-economic factors have shaped choices in Czechia, Hungary, and Poland, where what the euro represents has long affected adoption paths (Dandashly & Verdun, 2018). Adoption both symbolizes and deepens integration; governments in these three states have at times been less enthusiastic about European integration, dampening pushes for adoption.

Czechia exemplifies shifts in interest: the government was initially enthusiastic and targeted adoption in 2009-2010, but by 2006 that date seemed unlikely. After the financial crisis, the goal was postponed indefinitely. Euroscepticism rose, President Václav Klaus staunchly opposed the euro, and the debt crisis reinforced opposition. In 2024, there was a chance Czechia might develop an adoption plan (Reuters, 2024). Yet subsequent elections

changed the outlook as the government reverted to a more Eurosceptic stance after Andrej Babiš, who opposes adoption, returned to political leadership (Minder, 2025). This underscores the interaction of public opinion, political support, and government policy; nevertheless, many issues drive elections and government agendas, and euro adoption is rarely a decisive electoral issue.

3. Current Problems

Meeting the convergence criteria

How have the four countries (Czechia, Hungary, Poland and Romania) dealt with the convergence criteria in the period 2005-2025, with special focus on recent years? Article 140(1) of the Treaty on the Functioning of the European Union (TFEU) stipulates that the European Commission and the European Central Bank (ECB) must report to the Council once every two years on member states' progress towards fulfilling the convergence criteria required for EMU. The most recent report on member states with a derogation is the June 2024 Convergence Report (EC, 2024).

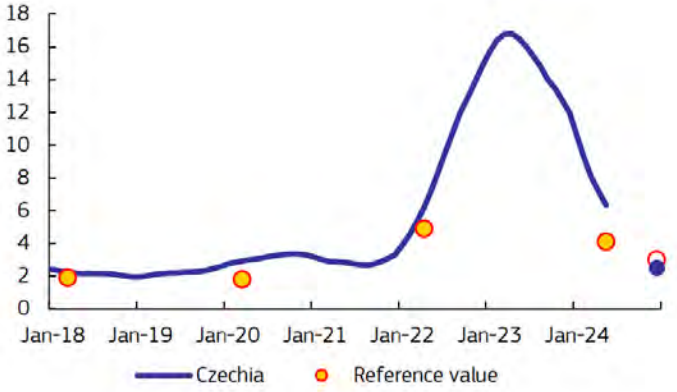
Across the entire period under consideration, none of these four countries joined the Exchange Rate Mechanism (ERM-II), which remains a core prerequisite for euro adoption. A member state must participate in ERM-II without significant tension for two years before adopting the euro. Thus, without joining the ERM-II, a country cannot be considered for euro adoption, even if it meets all other criteria. Nevertheless, the performance of the four countries on the remaining criteria merits closer examination.

Czechia and Poland performed relatively well on government debt and budgetary deficits (EC, 2024: 10, 111) whereas Hungary consistently listed much more elevated levels of debt and deficits, and Romania recorded the weakest overall performance (e.g., EC 2024, 2025). On indicators such as inflation and long-term interest rates, none of the countries performed very well. Moreover, recent geopolitical developments (Russia's full-scale invasion of Ukraine starting on 24 February 2022), significantly affected energy prices and inflation rates across the region in the period immediately preceding publication of the 2024 Convergence Report.

In the most recent assessment, Czechia met the criteria for long-term interest rate and public debt but did not meet the price stability criterion, for which the reference value stood at 4.1% in 2024. Figure 1 shows a graph from the 2024 Convergence Report (EC, 2024: 65) to demonstrate inflation performance in Czechia.

Figure 1 Czechia – Inflation criterion

(percent, 12-month moving average)

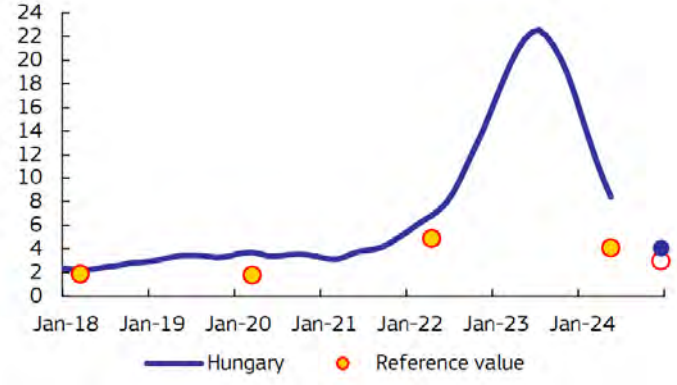


Source: Eurostat, Commission's Spring 2024 Economic Forecast.
Note: The dots at the right end of the chart show the projected reference value (red/unfilled dot) and 12-month average inflation rate (blue/solid dot) of Czechia in December 2024. The reference values for 2018, 2020 and 2022 refer to the reference values calculated in the previous convergence reports.

Hungary performed considerably worse across nearly all criteria, resulting in the Commission opening an excessive deficit procedure (EDP) against the member state (as it did for Poland, see below). Hungary also failed to meet the criterion of legal convergence. Figure 2 shows a graph from the 2024 Convergence Report (EC, 2024: 87) on Hungarian inflation.

Figure 2 Hungary – Inflation criterion

(percent, 12-month moving average)

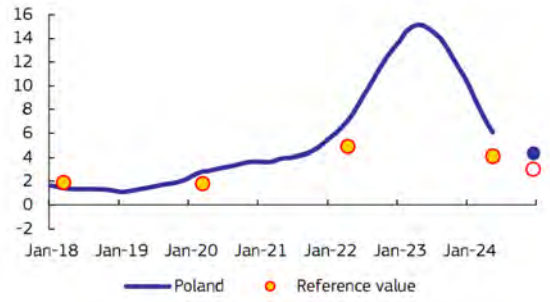


Source: Eurostat, Interim Spring 2024 Economic Forecast.
Note: The dots at the right end of the chart show the projected reference value (red/unfilled dot) and 12-month average inflation rate (blue/solid dot) of Hungary in December 2024. The reference values for 2018, 2020 and 2022 refer to the reference values calculated in the previous convergence reports.

Poland was assessed as not meeting several criteria, including the criterion of legal convergence, price stability, budgetary deficit, the direction of the public debt-to-GDP ratio, and the long-term interest rates. Similarly, Figure 3 shows a graph from the 2024 Convergence Report (EC, 2024: 106) on Polish inflation.

Figure 3 Poland – Inflation criterion

(percent, 12-month moving average)

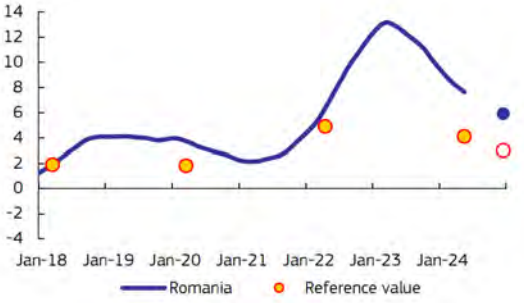


Source: Eurostat, Commission's Spring 2024 Economic Forecast.
Note: The dots at the right end of the chart show the projected reference value (red/unfilled dot) and 12-month average inflation rate (blue/solid dot) of Poland in December 2024. The reference values for 2018, 2020 and 2022 refer to the reference values calculated in the previous convergence reports.

Romania's performance was weaker still. It met none of the convergence criteria: its central bank lacked the required level of independence; inflation and long-term interest rates were too high; debt-to-GDP ratio was moving in the wrong direction, and Romania was already subject to an EDP. Figure 4 shows a graph from the 2024 Convergence Report (EC, 2024: 124) on Romanian inflation.

Figure 4: Romania – Inflation criterion

(percent, 12-month moving average)



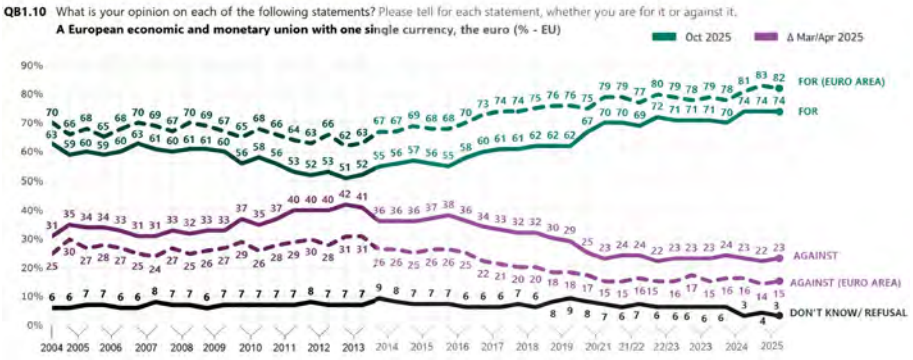
Source: Eurostat, Commission's Spring 2024 Economic Forecast.
Note: The dots at the right end of the chart show the projected reference value (red/unfilled dot) and 12-month average inflation rate (blue/solid dot) of Romania in December 2024. The reference values for 2018, 2020 and 2022 refer to the reference values calculated in the previous convergence reports.

Overall, while the nature and severity of the challenges vary, all four member states failed to meet a substantial number of criteria. A central shared obstacle is the absence from ERM-II, which has proven a barrier for states with flexible exchange rates. By contrast, countries that joined ERM-II early or had experience with currency boards or fixed-exchange-rate regimes typically found the transition to EMU less demanding. Actors in the four countries acknowledge that entering ERM-II would be politically and economically challenging, even if political will existed, as it entails relinquishing some control over monetary policy and interest-rate setting before euro adoption (Central European Times, 2024).

Problem - Public opinion and attitudes towards euro adoption

Public opinion on euro adoption has fluctuated considerably over the years. One consistent pattern is that support tends to rise after a country adopts the euro: Eurobarometer and other surveys find that public backing generally increases over time (Dreher et al., 2025). By autumn 2024, support for the euro reached its highest level ever when considering public attitudes across the entire EU, and the second-highest level recorded in the euro area in two decades (see Figure 5 below).

Figure 5 Opinion For or Against a European Economic and Monetary Union with a Single Currency, the euro



According to Flash Eurobarometer 548, significant differences exist among the four non-euro member states examined here (GESIS Leibniz Institute, 2024). Among all EU member states that do not yet use the euro, approximately 60% of citizens believe that the euro has had positive effects for those countries already using it. Support was especially high in Romania (75% in favour) and Hungary (69% in favour), while in Czechia support remained lower and showed little sign

of increasing. Across member states still using their national currencies, majorities nonetheless believe that their own country is not yet ready to adopt the euro.

4. Fragmentation and Geopolitical Challenges

Outsider status and differentiated integration

Drawing on Schilin (2024a, 2024b) and related work, we see how outsider status matters in the EU system. European Union governance increasingly reflects the dynamics of differentiated integration (Schimmelfennig, 2016; Leruth et al., 2019). This phenomenon arises from structural divides between euro-area members and non-members. Schilin's research asks whether formal institutional rules exert deeper effects than commonly assumed, arguing that the central problem for euro-outsiders lies in their vulnerability to political and procedural exclusion within EMU's architecture.

Crisis-era reconfiguration of decision-making

During the sovereign debt crisis, core decision-making shifted into venues restricted to representatives of euro-area member states, most notably the Eurogroup and the Eurogroup Working Group. This institutional reconfiguration limited outsiders' access to crucial deliberations and reform processes, effectively marginalising them from shaping EMU governance. Schilin (2024a) explains that some hindrances can be mitigated by conforming to organisational practices, norms, and ideas. Outsiders demonstrating strict compliance with insider norms of deliberation, consensus-building, and procedural restraint were selectively included in otherwise exclusive discussions; those who did not were excluded.

These dynamics persisted even when the perceived causes of crisis were unrelated to national policy. During the COVID-19 pandemic, for instance, the European Commission sought to use an EU-wide instrument — NextGenerationEU — rather than the European Stability Mechanism, in part because some member states opposed relying on a euro-area governance structure (Schilin, 2024b; Buti & Fabbrini, 2023). This episode underscored both the salience of euro-area boundaries and the political sensitivities surrounding institutional venue choice.

Geopolitical pressures and the convergence challenge

The new reality of geopolitical challenges requires EU member states to find more common ground and minimise sources of internal fragmentation. The euro is no longer treated as an instrument without geopolitical significance (Spielberger, 2025). Although EMU is integral to the European project, it

has not served as a tool of political coercion: member states have not been compelled to adopt the euro, nor has euro accession been made a condition for broader EU participation. Conversely, intervention has at times taken the form of withholding the right to adopt the euro when criteria were not met, illustrated by Lithuania's experience when it was found not to satisfy the inflation benchmark at the time of its application.

Against this backdrop, meeting the convergence criteria remains demanding, especially for member states without a currency board or fixed exchange rate regime. For governments operating under flexible exchange rates, transitioning into ERM-II and fulfilling the other convergence criteria requires substantial policy adjustment, sustained macroeconomic discipline, and political commitment over multiple electoral cycles. Some governments worry about becoming 'stuck' in ERM-II, a stage not necessarily attractive in itself. Even where political motivation exists, practical hurdles remain considerable, not least because reference values are relative and shift with the performance of the 'best performers' (which are only known after the fact).

Cohesion, credibility, and possible pathways

From the EU's perspective, it may be strategically advantageous to facilitate smoother entry into the euro area without diluting the core principles of macroeconomic convergence. In a context of heightened geopolitical tension, energy insecurity, and intensified global competition, a more cohesive EMU could enhance economic resilience and policy coordination. Considering these points raises the question of whether a recalibration of the convergence criteria — or the introduction of flexible, phased pathways to euro adoption — ought to be considered. Any reform would need to balance credibility with inclusiveness, safeguarding monetary stability while recognising the diversity of national political economies. Whether sufficient political momentum exists for such a recalibration, especially where Eurosceptic governments hold office, remains to be seen. Nonetheless, the issue is likely to gain salience as the EU seeks to strengthen internal cohesion in an increasingly uncertain geopolitical world.

5. Conclusion and Policy Recommendations

This paper has examined how geopolitical pressures influence the European Union's balance between maintaining strict convergence standards and reducing internal fragmentation. The evidence from Sections 2 to 4 shows that these pressures do not weaken the EU's commitment to monetary stability. Instead, they affect how the EU weighs the value of cohesion against the risks of loosening existing rules. The

result is a shifting balance rather than a change in principle. The EU continues to insist on credible convergence, yet it faces higher costs when political and procedural divides between euro members and non-members persist.

Section 2 showed that the evolution of EMU has produced both gains and institutional challenges. The euro was created as a tool for integration and economic efficiency. Over time, however, crisis responses have concentrated decision-making within euro-area bodies. This shift has created a gap between insiders and outsiders. It has shaped how non-members interpret the incentives and constraints attached to joining the euro. These developments matter today because they influence how governments evaluate the benefits and risks of pursuing accession.

Section 3 highlighted the practical difficulties facing the four non-adopting Central and Eastern European countries. All four have struggled with parts of the convergence criteria, especially inflation and long-term interest rates. None has yet entered ERM-II, which is an essential requirement for joining the euro. Governments with flexible exchange rates face added uncertainty, since ERM-II reduces their room for manoeuvre at a time when domestic political cycles are short. Recent external shocks, including the rise in inflation after Russia's invasion of Ukraine, have made it harder for these states to align with the reference values that guide assessments. Public opinion is often positive about the euro, but many citizens continue to believe that their own country is not ready. This reduces political incentives to advance the accession process.

Section 4 connected these national conditions to the broader geopolitical environment. Remaining outside the euro carries institutional and political costs, especially when key EU decisions take place in forums that exclude non-members. At the same time, the EU now operates in a more contested international setting. As strategic pressures grow, the cost of internal fragmentation rises as well. A stable and cohesive EMU can help the EU respond to economic shocks and geopolitical challenges. Yet strict adherence to existing criteria may slow progress for countries that have the will, but not the immediate capacity, to enter the euro area. This creates a tension between maintaining consistent rules and strengthening unity.

In light of these findings, the research question can be answered as follows. Geopolitical pressures encourage the EU to look for ways to reduce internal division without abandoning the principles that underpin monetary integration. The criteria themselves remain important, but the way they are applied and interpreted may need to reflect current realities. The challenge is not to lower standards, but to avoid unnecessary obstacles that make the pathway to adoption uncertain or unpredictable. The balance between credibility and cohesion therefore shifts, but both remain essential.

Policy recommendations

1. Clarify the path into ERM-II. The EU could offer clearer guidance on the process and expectations surrounding ERM-II participation. Greater transparency would reduce political uncertainty in prospective member states and support more stable planning.

2. Improve sequencing for countries facing external shocks. The criteria could be applied in a way that accounts for periods of volatility, especially when inflation is driven by external events. This does not require changing the criteria; it only requires acknowledging that timing matters.

3. Strengthen inclusive coordination. Non-euro members could be more regularly included in discussions that shape EMU-related reforms. This would reduce the gap between insiders and outsiders without altering formal decision-making rights.

4. Support national credibility. Prospective members can take steps to strengthen domestic institutions, such as reinforcing central bank independence and setting fiscal goals that are durable across electoral cycles. These measures help reduce uncertainty during the transition period.

5. Reduce frictions without weakening standards. Small adjustments to procedures, communication, and sequencing can make the adoption process more predictable. This would help maintain monetary stability while supporting greater cohesion within the EU.

At present, domestic political conditions in Czechia, Hungary, Poland, and Romania make rapid progress unlikely. However, political cycles change and the geopolitical environment is rapidly being altered by international events. If more pro-euro governments take office in the future, these states will face the same structural challenges identified here. A framework that preserves stability while reducing unnecessary obstacles would give them more realistic options. In a changing geopolitical environment, the EU may find that cohesion and credibility work best when they reinforce each other rather than stand in tension.

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Stablecoins and Digital Currencies: Implications for Fragmentation and Multipolarity

Giancarlo Corsetti and Leonardo Melosi *

Abstract

The international monetary system is anchored in fundamentals: economic size, institutional credibility, capital-market openness, and deep safe-asset markets. However, digital finance is transforming the channels through which currencies are produced and project influence. We discuss why and how a shift towards non-sovereign digital monetary systems could either challenge or strengthen the state's traditional monopoly over money. Traditionally, supplying international safe and liquid assets required sustained fiscal expansion by the dominant reserve issuers, mainly the US. On the one hand, persistent deficits in the US may erode long-term fiscal sustainability and, hence, trust in the dollar. On the other hand, strict fiscal restraint risks constraining the supply of the very safe assets on which global finance depends. This is the Triffin Dilemma 2.0. Digitalization may exacerbate this dilemma, but it may also offer a pathway around it, creating opportunities for the euro.

Keywords: Tokenization; Monetary Sovereignty; Digital Euro; Safe Asset Provision; Currency Competition.

1. Introduction

Money is being rebuilt for the digital age. The international monetary system as we know it is shaped primarily by macroeconomic fundamentals: the size of an economy, the credibility of its institutions, the openness of its capital markets, and the depth and liquidity of its safe-asset markets. Those ingredients still matter. But digital finance is transforming the channels through which currencies come into existence, become international, and acquire the status of international reserves and safe asset. Payment rails are becoming programmable.

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Settlement is shifting towards continuous, near-instant execution. Private actors can now construct vast monetary ecosystems without owning a branch, a clearinghouse, or even a bank charter.

2. The Digital Revolution is Reshaping the Evolution of the Global Monetary Order

To fully appreciate the nature and consequences of the current digital revolution, it is important to have some notion of how the international monetary system has evolved since the Second World War, if only in broad terms. A synthetic review of this evolution is the point of departure of our analysis (e.g., Corsetti, 2025).

In the original blueprint of Bretton Woods, the postwar architecture was built around a clear nominal anchor and a framework for cooperation. A central currency tied to a commodity reference point provided stability to the system's core, while international institutions aimed to manage adjustment and support trade and reconstruction. Capital mobility was not the objective; it was actually constrained because policymakers feared the destabilizing effects of unfettered financial flows. In this earlier environment, the system's stability relied less on market discipline and more on rules, official commitments, and managed adjustment.

The original blueprint was fragile and did not last. When domestic policy priorities in the core country began to conflict with external commitments, through the 1960s and 1970s, the nominal anchor proved difficult to sustain. The breakdown of the old anchor ushered in a period of turbulence (high inflation, sharp exchange-rate movements, and repeated realignments) until a new anchor emerged. The transition was not merely technical. It changed the political economy of monetary order, shifting the basis of trust from confidence in the promise of a fixed conversion rate with gold, to confidence in institutions and policy frameworks to pursue credible strategies delivering reasonably stable inflation and monetary order.

The transition was complex because, at the same time, the system's operating environment changed. Although rule-based multilateralism formally endured, the intellectual and institutional centre of gravity shifted decisively towards markets. Capital mobility, financial innovation, and private risk allocation came to dominate both policy thinking and the architecture of the system. Adjustment was increasingly expected to occur through price signals (exchange rates, spreads, and capital flows) rather than coordinated policy action.

In the decades following the collapse of Bretton Woods, financial deregulation and capital account liberalization expanded cross-border finance dramatically. With freer flows came a new pattern of crises, often driven by sudden reversals of capital. International institutions designed for a world of limited mobility found themselves unprepared to manage the scale of modern shocks. Yet an evolving market-led configuration proved capable of absorbing a sequence of deep regional crises, including Mexico in the mid-1990s, East Asia in 1997–98, and Russia in 1998. In each case, turbulence was severe but was kept geographically contained. The core of the system not only remained intact but strengthened its dominance.

Countries outside the core responded to the decline in the effectiveness and firepower of the Bretton Woods institutions and rising market vulnerability to beliefs-driven dynamics and liquidity crises by accumulating reserves as self-insurance. The system thus drifted towards a configuration in which the leading currency remained central even if countries increasingly adopted floating exchange rate regimes: global trade and finance continued to rely on that currency's safe assets, and the desire for insurance reinforced demand for its liabilities. In addition, the unprecedented accumulation of private wealth, often described as a global saving glut, further boosted demand for the key currency by intensifying the search for liquid, safe assets denominated in it.

The Global Financial Crisis of 2007–09 marked a turning point. The crisis began in the core of advanced financial markets and quickly spilled across borders. Paradoxically, however, a global crisis originating at the heart of the dollar-based system, ended up strengthening the leading currency role of the dollar. Under extreme stress, investors and institutions rebalanced their portfolios towards the relatively safer and deepest asset markets: the global system faced a shortage of funding liquidity in that currency. Official liquidity provision became central to stabilization not only domestically (to save the domestic banking system) but also internationally: by backstopping key funding markets and supplying liquidity through cross-border channels, the Federal Reserve effectively performed an international lender-of-last-resort function. The combination of private flight-to-quality behaviour and public liquidity support reinforced the dollar's safe-haven status and increased the world's reliance on it during turmoil.

Another profound structural challenge has since progressively but inexorably emerged, not from macroeconomic imbalances or a financial collapse, but from technology itself. The digital revolution in finance represents a new phase in the evolution of the international monetary system. Payment systems are becoming programmable, settlement is migrating towards tokenized infrastructures, and private platforms can issue globally transferable

monetary instruments at scale. Monetary competition increasingly unfolds through networks, interoperability standards, and digital balance sheets rather than solely through trade invoicing or reserve accumulation.

Crucially, this technological transformation is unfolding in a period marked by growing geopolitical fragmentation. Strategic rivalry, trade tensions, sanctions regimes, and domestic political backlash against globalization have weakened the consensus that once sustained rule-based cooperation (the implications for the world trade system and the dollar are discussed by Corsetti et al., this report).

This fragmentation has not fundamentally shaken the prevailing faith in free capital markets, at least not so far. The scale, speed, and complexity of cross-border financial flows have accelerated the development and adoption of tokenization technologies and digital finance. As capital circulates globally and continuously, market participants demand faster settlement, real-time collateral management, and programmable transfer mechanisms. Tokenization therefore emerges not as a break from financial globalization, but as the technological infrastructure required to support its further expansion.

3. Stablecoins

It is against this fragmented and increasingly contested geopolitical backdrop that stablecoins are gaining prominence. A stablecoin is a digital token designed to maintain a stable nominal value, typically through a commitment to redeem at par into a sovereign currency, backed by reserves such as short-term government securities and cash-like instruments. At first glance, stablecoins appear to be little more than a technical convenience, a faster, programmable representation of existing money. In substance, however, they constitute a new form of private monetary liability with the potential to erode the traditional boundary between wholesale and retail currency use.

One of the most significant long-term risks posed by stablecoins, if these are left unchecked, concerns their potential implications for monetary sovereignty, which requires that a country's own currency remains the dominant medium of exchange within its borders. Yet the continued unchecked expansion of digital infrastructures and dollar-backed stablecoins could pose significant adverse effects to national monetary jurisdictions by blurring boundaries and weakening monetary policy transmission. This prospect has become a growing long-term concern among non-US policymakers and helps explain initiatives such as the Digital Euro combined with the development of an all-European payment system (Bénassy-Quéré 2025a; Aldasoro et al., 2025; Lagarde, 2025; Lane, 2025; Schaaf, 2025; Cipollone, 2026).

Leaving such long-run concerns about monetary sovereignty aside, the short-run impact of stablecoins is relatively clear. Large stablecoin issuers typically back their tokens with high-quality liquid assets, commonly short-term government securities. By doing so, they become structural buyers of government debt. The additional demand they create can lower sovereign bond yields at the margin and broaden the investor base for public debt. In a world of rising pressures on national budgets, the prospect of a new, steady buyer for government paper is indeed attractive. The mechanism is also politically seductive because it appears to offer a market-driven way to reduce borrowing costs while reinforcing monetary leadership.

Over time, however, the implications are less straightforward. Stablecoins and tokenized payment infrastructures may erode some of the structural advantages historically enjoyed by dominant currencies. This is so particularly for the dollar, if US fiscal credibility continues to erode. As digital settlement networks allow transactions to be cleared seamlessly across jurisdictions and currencies, monetary competition becomes less constrained by legacy payment systems and corresponding banking structures.

In such an environment, multiple currencies may find new avenues for international use, particularly if supported by credible policy frameworks and deep financial markets. What appears in the short run as an additional source of demand for dollar-denominated assets could, over time, contribute to a new landscape with contestable monies, where several major currencies may pursue expanded opportunities to increase their international roles relative to the dollar.

4. Tokenization and Multipolarity of the IMS

Tokenization technologies, together with ongoing geopolitical realignment — most notably the relative rise of China and the gradual decline in the global economic share of the United States — may accelerate the transition towards a multipolar international monetary system (IMS). The growing concerns about fiscal sustainability in the United States, combined with the increasing weaponization of the US dollar by successive US administrations, could weaken the intrinsic appeal of the dollar as the dominant global currency. In this context, innovations in cross-border payments that lower transaction costs and raise the appeal of non-dollar-centric infrastructures, may provide the type of systemic shock that can move the international monetary system towards greater multipolarity (Bénassy-Quéré, 2025a).

A multipolar system is an international monetary system in which multiple currencies share international functions, serving, to varying degrees, as units

of account, media of exchange, stores of value, reserve assets, and providers of safe collateral, mirroring the changing distribution of global economic power.

Multipolarity may however take the form of two vastly different systems, depending on how it develops (Fahri & Maggiori, 2018). In a *conflictual* multipolar system, competing currency blocks may fragment trade, payment infrastructures, and capital markets, with financial networks aligning along geopolitical fault lines. Liquidity would be segmented, policy coordination limited, and exchange-rate and financial volatility potentially amplified. By contrast, in a *cooperative* multipolar order, currencies could coexist without destabilizing rivalry, and diversification would enhance resilience rather than generate fragmentation. Conflict is highly likely under fragmentation, where different blocks may have the incentive to act strategically disregarding negative spillovers. Avoiding this scenario requires a leadership committed to coordination, which is able to support widely accepted rules of law governing trade and capital movements, and endure the negotiation needed to design new or reformed existing international institutions capable of enforcing those rules.

It is well understood that the transition towards multipolarity faces a structural obstacle common to network industries. Monetary systems are fundamentally path dependent. Once a currency, or a stablecoin ecosystem, reaches sufficient scale, it becomes self-reinforcing. Merchants accept it because users hold it; users hold it because merchants accept it; platforms integrate it because liquidity is concentrated there; liquidity concentrates there because platforms integrate it. These feedback loops create tipping dynamics rather than smooth diversification. The incumbent currency benefits from entrenched network effects, deep asset markets, and established global trust. A challenger must simultaneously build liquidity, credibility, and usability while persuading market participants to coordinate on a new equilibrium.

5. Carving a Role for the Euro

For the euro, the goal of gaining digital traction is complicated by the absence of a sufficiently deep and unified common safe asset. This is clearly an issue constraining the expansion of euro-backed stablecoins, since their development requires clarity, uniformity, and credibility in their backing. The euro-area sovereign debt markets remain nationally segmented, with heterogeneous credit premia, liquidity conditions, and risk perceptions. A euro-denominated stablecoin backed by a basket of national government bonds would therefore embed fragmentation into its foundation. Diverging spreads would create reserve-allocation trade-offs, yield differentials, and potential doubts about resilience

under stress. Issuers could be incentivized to optimize across heterogeneous sovereign bonds, importing intra-area volatility into the digital layer. In turn, users may question the uniformity and credibility of convertibility in extreme scenarios. Digital money relies on simplicity and standardization; sovereign fragmentation undermines both.

Turning exclusively to the safest and most trusted euro-denominated sovereign assets, such as German Bunds, would not resolve the problem. The constraint is not merely one of liquidity, but of scale in a competitive global environment. The outstanding stock of Bunds is simply too limited to underpin a euro stablecoin ecosystem large enough to rival dollar-backed alternatives. In a network-driven monetary landscape characterized by winner-takes-most dynamics, insufficient scale is itself a structural disadvantage. Without a common safe asset capable of matching the depth, liquidity, and benchmark status of US Treasuries, euro-denominated stablecoins would struggle to attain the critical mass necessary for effective competition. A digital monetary architecture cannot rely on fragmented or scarce collateral if it aspires to operate at a global scale.

The result is a global digital stablecoin market overwhelmingly denominated in dollars. Dollar-backed stablecoins account for roughly 99% of a $200 billion market. The 2025 GENIUS Act reflects a strategic shift by the US government away from pursuing a Federal Reserve-issued central bank digital currency and towards a model in which regulated private stablecoins serve as the primary vehicle for the dollar's digital expansion. In light of these developments, dollar-backed stablecoins could entrench themselves within European payment infrastructures and financial platforms (Lane 2025; Schaaf 2025; Cipollone 2026). Over time, an expanding digital footprint of the dollar in European markets could translate into a de facto erosion of monetary sovereignty, as the euro's function as unit of account and settlement asset is progressively displaced in key areas of economic life.

This risk constitutes one of the central strategic rationales behind the European Central Bank's push for a digital euro. A central bank digital currency would ensure that European citizens and firms retain access to risk-free central bank money in digital form, thereby preserving the euro's role as the anchor of the payment system. It would provide a public settlement asset for increasingly tokenized financial markets and prevent core monetary infrastructure from migrating towards foreign-denominated private instruments. In essence, the digital euro is not merely a technological upgrade; it is an instrument for preserving monetary sovereignty in a rapidly evolving digital landscape (Lane, 2025).

Yet, in a competitive ecosystem where dollar-backed stablecoins continue to scale, a euro digital strategy may fail to achieve widespread adoption, thanks

to design constraints, limited usability, or especially lack of cross-border functionality. The risk is that the European Central Bank (ECB) could find itself having invested heavily in a public instrument that does not meet market preference. Again, the strong network effects and rapid first-mover advantages in digital money imply that the cost of hesitation or miscalibration may grow large. As discussed above, one possible consequence is that foreign-currency denominated tokens become entrenched before the euro has a chance to establish its digital footing. Once embedded in payment habits and financial infrastructure, displacement becomes far more difficult.

6. US and EU Policy Approaches to Stablecoins

The United States' decision to enhance the emerging stablecoin market reflects a combination of monetary, fiscal, and financial-stability considerations. To reiterate the main motivations: first, dollar-backed stablecoins reinforce the international role of the dollar. As incumbent issuer of the dominant reserve currency, the United States has strong incentives to ensure that digital financial innovation remains dollar-centred rather than allowing alternative currency areas to shape the architecture of tokenized finance. By providing regulatory clarity, US authorities help anchor stablecoin activity within the dollar ecosystem, preserving network effects that support its global use in trade, finance, and settlement.

Second, large stablecoin issuers are structural buyers of short-term US government securities. By backing tokens with Treasury bills, they generate incremental demand for public debt. In the short run, this can lower funding costs and broaden the investor base at a time of rising fiscal pressures. While such demand does not resolve underlying fiscal imbalances, which may explain the urgency for the US to act on innovations such as stablecoins, it offers a visible and politically attractive channel through which financial innovation supports sovereign financing conditions.

Third, regulation aims to mitigate financial-stability risks. Stablecoins are vulnerable to runs triggered by doubts about reserve quality or liquidity (Aldasoro et al., 2025; Bénassy-Quéré, 2025b). A disorderly loss of confidence could disrupt funding markets and transmit stress to the Treasury market itself. Establishing prudential standards, reserve requirements, and redemption safeguards reduces the likelihood that stablecoins become a source of systemic instability.

In Europe, the strategic choices are constrained by a different institutional setting. One approach, informing proposals such as the one discussed by Lucrezia Reichlin (2025), would involve granting regulated stablecoin issuers access to the central bank's facilities and reserves, thereby blending private issuance with public

backing. While enhancing the stability and competitiveness of euro-backed stablecoins, it also blurs the boundary between public and private money and may prove politically contentious within the euro area's institutional framework.

According to a second approach, the focus is on strengthening the asset side of the euro ecosystem, notably through the development of deeper and more liquid common European safe assets, such as Eurobonds. A robust market in jointly issued euro-denominated securities could provide high-quality collateral for euro-backed stablecoins and complement the rollout of the digital euro. If US dollar stablecoins begin to gain traction in European transactions, such asset-based strategy could help counter digital dollarization by reinforcing the euro's role in tokenized markets.

These approaches are not mutually exclusive. They could be pursued in parallel, alongside the introduction of a digital euro and a broader central bank digital currency framework. A coordinated strategy would strengthen the euro's capacity to compete in an increasingly digital and geopolitically fragmented monetary landscape while preserving monetary sovereignty within the euro area.

7. The Problem of Trust

Large and persistent fiscal imbalances, rising political polarization, and visible strains on democratic institutions are challenging the credibility of the fiscal and monetary framework underpinning the dollar. The stability of the post-Bretton Woods monetary order, anchored in the credibility of the US institutional framework, now appears more fragile, leaving the international monetary system in a delicate equilibrium.

The dollar is still sustained by deep and liquid financial markets and the absence of credible alternatives, and the fact that the dollar continues to occupy the central role in global trade, finance, and reserve holdings. Yet there are mounting vulnerabilities. Concerns about US fiscal sustainability and institutional stability have become widespread, alongside geopolitical realignments that are gradually shifting the global balance of economic weight and strategic influence away from the United States towards large emerging economies, most notably China (Bertaut et al., 2025).

It is against this evolving geopolitical and institutional landscape that stablecoins operate. Stablecoins do not and cannot resolve the issues underlying the possible erosion trust in the US dollar or US institutions. The stability of stablecoins ultimately rests on their convertibility at par against reserve assets. But the trust in stable coins is only as strong as the trust in the balance sheet and operational capacity of the issuers of the underlying reserve assets, and the

liquidity and depth of the markets for these assets. Even if reserves consist of short-term US government securities, safety is not intrinsic because it depends on the fiscal and institutional credibility of the sovereign and on the functioning of the Treasury market in periods of turmoil. Stablecoins therefore do not eliminate sovereign risk and do not resolve the problem of the eroding trust in the dollar.

Stablecoins also introduce additional layers of risk for their holders. Unlike insured depositors, holders are creditors of a private issuer, relying on contractual redemption mechanisms rather than deposit insurance or direct access to central bank reserves. During periods of stress, redemption depends on the issuer's ability to liquidate reserve assets rapidly and without significant price disruption. If confidence in the reserve portfolio, governance arrangements, custodial structure, or operational resilience weakens, redemption requests can surge, generating run-like dynamics even when the underlying assets are notionally 'safe' (Anadu et al., 2023; Adrian et al., 2025; Bank for International Settlements [BIS], 2025).

The principal vulnerability lies less in credit risk than in the liquidity risk under stress. Short-term Treasury bills limit duration risk and redeem at par if held to maturity, but even these bills can be difficult to liquidate smoothly during market dislocations. If redemptions surge simultaneously, forced asset sales into strained markets can crystallize losses and amplify balance-sheet pressure. Because liabilities are redeemable at par on a first-come, first-served basis, rational holders may rush to exit at the first sign of stress. The possibility of a feedback loop between digital money markets and the underlying sovereign bond market reveals that stablecoins not only inherit, but can also magnify, liquidity fragilities (Anadu et al., 2023; ECB, 2025).

Trust in a stablecoin is therefore more complex and multi-layered than trust in a sovereign currency (Panetta, 2025). It rests not only on the fiscal capacity and institutional credibility of a state, but also on the strength of a private balance sheet, the liquidity and valuation of reserve assets, the legal enforceability of redemption claims, and the technological integrity and governance of the underlying blockchain infrastructure. Any weakness in these components can undermine confidence. Such vulnerabilities are not theoretical: in March 2023, USD Coin temporarily traded below par after part of its reserves became inaccessible following the failure of Silicon Valley Bank, demonstrating how operational and liquidity shocks can disrupt the 1:1 peg. In short, while stablecoins may in principle sustain market demand for reserve assets, they do not overcome the problem of maintaining trust and confidence in them. Actually, they compound the problem by adding a new layer of vulnerabilities to liquidity runs.

As already mentioned, these vulnerabilities could, in principle, be resolved by granting stablecoin issuers access to central bank facilities. In traditional

financial systems, the most trusted forms of private money are those that are fully convertible into central bank money and operate within a framework of prudential supervision and, in extremis, access to lender-of-last-resort support. Extending the safety net to systemically important stablecoin issuers would strengthen trust in convertibility, by reducing incentives to run and thus anchoring digital liabilities more firmly to central bank reserves. While this approach has been advocated by prominent scholars (e.g., Reichlin, 2025), it represents a politically ambitious step. Granting private digital issuers access to central bank liquidity would blur the boundary between public and private money and raise difficult questions about regulatory oversight, moral hazard, and the appropriate perimeter of the central bank balance sheet.

Yet, independently of these institutional reforms, a deeper question would remain outstanding. Stablecoins, despite their technological content, ultimately bring us back to the oldest issue in monetary history: what anchors trust? In the recent past, trust in the leading currency has rested on fiscal capacity, central bank credibility, political stability, and the rule of law. In a digital environment, trust acquires additional layers: the reliability of the payment rail, the integrity of custodial arrangements, the cybersecurity of wallets and settlement processes, and the governance of the platforms where tokens circulate. A stablecoin can be stable in tranquil times while still being structurally vulnerable to operational shocks, cyber incidents, or legal disputes. Conversely, a stablecoin can be operationally excellent yet still inherit the long-run vulnerabilities of its reference sovereign.

8. The Triffin Dilemma in the Age of Digital Money

The modern global monetary system has long evolved in the shadow of the Triffin dilemma: the issuer of the leading reserve currency must preserve the credibility of its fiscal and monetary (regulatory) institutions, while simultaneously supplying the world with a sufficient stock of safe assets. Under Bretton Woods, the credibility constraint operated through gold convertibility and balance-of-payments pressures; today, it operates through fiscal sustainability and sovereign balance-sheet capacity.

Whether tensions arise from an excessive trade-deficit or excessive fiscal expansion, the reserve currency issuer ultimately confronts the same structural trade-off between preserving the credibility of the safe assets it supplies and matching the global demand for it, which is essential to support cross-border trade and finance and satisfy the need for international reserves across the globe. It was well understood that a significant contraction in the supply of safe assets would harm global liquidity conditions, creating inefficiency and undermining financial stability.

Tokenization and digital financial innovation do not solve this fundamental dilemma. They may however impinge on the trade-off between confidence and meeting global demand for liquidity, by changing the form in which safe assets are issued, traded, and mobilized.

At least since the debate on the IMF's Special Drawing Rights (SDR), several proposals to alleviate the Triffin dilemma envision frameworks that could diffuse the supply of safe assets across several currencies within a multipolar international monetary system. In such a configuration, no single country would be 'responsible' to ensure the supply of the entire stock of global safe assets. Reserve provision would instead be shared among multiple issuers — such as the United States, the euro area, and potentially other large economies — thereby mitigating the credibility–liquidity tension faced by any one sovereign. By diversifying the sources of safe collateral, a multipolar system could reduce systemic dependence on the fiscal trajectory of a single state and soften the structural asymmetry embedded in a unipolar dollar order.

However, as discussed above, multipolarity requires deep and liquid financial markets, credible legal frameworks, interoperable settlement systems, and sustained policy coordination. Without these preconditions, diversification remains limited and the system continues to gravitate towards the incumbent issuer. Multipolarity can alleviate the Triffin dilemma only if a few currencies achieve sufficient scale, credibility, and interoperability to share global safe-asset provision.

If sovereign constraints persist and multipolarity fails to materialize, a more radical evolutionary path could become conceivable: a separation of monetary issuance from fiscal capacity through non-sovereign digital protocols. Drawing on ideas reminiscent of Hayek's 'denationalization of money,' such systems embed monetary rules directly in protocol codes rather than in political institutions (Schär, 2021; Melosi, 2025). Because issuance is governed by transparent and predefined rules rather than discretionary fiscal or monetary decisions, the credibility–provision trade-off is radically reconfigured. Supply is no longer tied to the borrowing needs of a sovereign balance sheet.

Digital protocols need not rely on rigid fixed-supply mechanisms. In principle, they could incorporate algorithmic adjustment rules that mimic elements of central banking, responding to market conditions through automated mechanisms embedded in code (Bullmann et al., 2019; Arner et al., 2020). This form of 'algorithmic elasticity' would provide liquidity in a rule-bound manner while avoiding discretionary fiscal monetization. In this framework, trust migrates from sovereign balance sheets to protocol design, cryptographic verification, and governance transparency (Schär, 2021).

Whether such systems can truly reconcile flexibility with credibility is untested and thus inherently uncertain. To be effective, protocol-based monetary

arrangements must encode responses to economic contingencies in advance: it is inherently difficult to anticipate the full range of shocks that may arise. While algorithmic issuance may reduce exposure to sovereign fiscal pressures, it would also replace discretionary judgment with pre-programmed rules whose adequacy can only be tested ex post. These systems may alleviate sovereign constraints, but they would introduce new rigidities and governance risks of their own, particularly if unforeseen crises require adaptations that the code does not permit (Bullmann et al., 2019; Gorton & Zhang, 2023; Kurovskiy & Rostova, 2023).

9. Conclusion

Digitalization does not eliminate the foundations of international money; it changes the way monetary power is transmitted and contested. Stablecoins and tokenized finance may strengthen the dollar in the short term by expanding demand for US safe assets and extending dollar-based networks into new digital domains. Yet they do not solve the underlying problem of trust. On the contrary, they inherit the credibility of the sovereign assets that back them while adding new liquidity, governance, and operational vulnerabilities.

For this reason, digital finance does not resolve Triffin's dilemma. The world still depends on a large supply of safe and liquid assets, yet the credibility of the system remains tied to the fiscal and institutional strength of the sovereigns that issue them. A more cooperative multipolar order could enable different countries (their fiscal and monetary institutions) to share this burden. But network effects, fragmented markets, and geopolitical rivalry works against such cooperative solutions. For Europe in particular, preserving monetary sovereignty in the digital age will require not only innovation, but also the development of common safe assets on a sufficient scale, and credible public digital money.

Digital forms of money may transform the architecture of the international monetary system, yet stability will still depend on credible institutions, resilient public backstops, and political arrangements capable of sustaining confidence over time.

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The European Savings Surplus: the Need for Policies to Lower the Risk and to Encourage its Financing of European Growth

Erik Fossing Nielsen *

Abstract

The drastic change in the global geopolitical order during 2025, particularly US President Trump's new coercive foreign policies, including the direct military threat to America's NATO allies, calls for urgent policy adjustments in Europe. This article argues that, in addition to the many policy initiatives already being discussed and implemented, measures need to be introduced to better protect Europe's external financial assets. In particular, the regulatory treatment of the estimated €1.5-2.0 trillion presently invested in US treasuries, under the now false understanding that this is a risk-free debtor, needs to be adjusted. More broadly, regulatory and tax policies for financial claims, and their associated flows, on foreign entities should be updated to reflect the new geopolitical reality. This can, and should, be done in such a way that helps encourage the private sector to invest Europe's savings surplus in productive investments in Europe rather than abroad.

Keywords: Savings Surplus; Financial Risk; Regulatory Reform; Tax Incentives; European Investment.

1. Introduction

The geopolitical world order has changed again, and this time not for the better. The abrupt changes in international relations and the contours of what lies ahead require drastic policy reconsiderations in Europe. Many are already on the table, but not all. The risk to Europe's external financial assets has increased measurably, and the regulatory and tax policy regimes therefore need to adjust to this new reality. The required policy adjustments can, and

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should, be designed in a way that actively encourages Europe's savings surplus to be invested in productive investments in Europe instead of abroad.

2. The Long Geopolitical Shift

Before the current turbulent period, the most recent major change in the geopolitical order occurred 35 years ago when the Cold War ended with the demise of the Soviet Union. That event, famously coined as 'The End of History' by Francis Fukuyama (Fukuyama, 1992), added impetus to the global economic momentum initiated in the early 1980s by the widespread liberalization of economic activity in the Organisation for Economic Co-operation and Development (OECD) area (Boughton, 2005), as well as the reforms in China.

Those changes ushered in a better understanding among most national policymakers of the benefits of policies designed to encourage freer movement of trade, investment, and people across global markets. The policies were, in turn, anchored in rules agreed, organized, and policed in an unprecedented expansion of multilateralism. This was illustrated by, e.g., Russia and 19 other countries joining the International Monetary Fund (IMF) and the World Bank in 1992, the establishment of the World Trade Organisation (WTO) in 1995, the G20 in 1999, and the International Criminal Court in 2002.

Within Europe, these changes were magnified by a significant deepening and broadening of the integration process. In 1993, the Maastricht Treaty (Treaty on the European Union, 1992) turned the European Economic Community into the European Union (EU), and the Single Market came into effect, securing — at least in principle — the free movement of goods, services, people, and capital within the EU. In 1995, the Schengen Agreement removed internal border checks and visa policies were harmonized, and 1999-2002 saw the birth of the European Central Bank (ECB) and the euro. The attraction of European integration was widely recognized; an additional 18 countries joined the EU between 1980 and 2007 (followed by Croatia in 2013), and eight of these have since joined the eurozone (see Verdun, this report).

Even if these new global rules were not administered entirely equally to all, as pointed out by Canadian Prime Minister Mark Carney in Davos (Carney, 2026), they contributed to measurable improvements in living standards for most of the world's population. They also came with a peace dividend, which reduced fiscal pressures in the order of 1-2% of gross domestic product (GDP) in much of Europe, as well as in the US.

But it was not to last. First came a gradual reversal of the multilateral system, following the Global Financial Crisis (GFC) in 2007–08. The

GFC plunged much of the OECD area into the greatest recession since WWII, denting confidence in the prevailing 'Washington Consensus' on global economic policies and multilateral institutions. In Europe, the crisis was further aggravated by the descent into the sovereign debt crisis when the global shock exposed the inadequate construction of the euro system. Meanwhile, the fact that China escaped these crises and delivered no less than two-thirds to three-quarters of global growth in the immediate aftermath of the financial crisis raised the Chinese leadership's confidence in its own, more managed and protectionist, economic model. Concurrently, with his speech at the Munich Security Conference in 2007, President Putin announced Russia's break with the world's liberal democracies.

The GFC and its aftermath led to a reversal of some 25 years of increasing global trade and investment as a share of GDP. After having broadly doubled between 1990 and 2007, global trade as a proportion of GDP has declined since the GFC, while foreign direct investment, having increased dramatically as a share of GDP between 1990 and 2007, has since plummeted.

As the economic heyday began to wane, the political fabric in most of the OECD area began to shift from the globalization-committed political centre towards the nationalist far right. In Europe, this shift was aggravated by the immigration crisis of 2015.

In 2016, following nationalist, anti-immigration and anti-establishment campaigns, the UK voted to leave the EU, and the United States (US) elected Donald Trump president. The year after, French far-right leader Marine le Pen made it into the second round of the French presidential election, a feat she repeated in 2022. The same year, Giorgia Meloni, leader of the far-right Brothers of Italy, became prime minister in Italy as head of a far-right-centre-right coalition, while Germany and other countries' far right parties posted further gains in opinion polls and elections.

Taking advantage of the political drift in the Western world and, no doubt, partly to address domestic tensions, and in blatant violation of the Budapest Memorandum, Russia's President Putin annexed Crimea in 2014 (leading only to a slap on the wrist in the shape of his exclusion from the G8). Eight years later, he launched Russia's full-scale invasion of Ukraine. In reaction, the US, supported by Europe, weaponized the dollar's international status and the West's financial system via sanctions on Russia. Given its scale, this was a new tool in the American policy toolbox to punish countries for breaking the rules.

In late 2024, the US voted with a measurable majority to return Donald Trump to the presidency on a now turbocharged 'America First' agenda,

including a pledge to introduce significant tariffs on US imports and to close the border to immigrants.

Despite his election platform, US allies reacted to Donald Trump's return to office as if the old world order could still be salvaged. But the new reality became clear to all following his unprecedented coercive approach to foreign policy, including the introduction of tariffs (many of which have since been ruled illegal by the US Supreme Court) and military threats to the North Atlantic Treaty Organisation (NATO) allies. It fell upon Mark Carney to call it out as it is: a rupture of the global system.

In contrast to traditional US allies, China did not hesitate when it came to responding to US aggression. In response to US tariffs, it imposed a global ban on the export of rare earth minerals, and then suspended it for a year after Trump backed down. Making the response global rather than US-specific serves as a reminder of China's continued perception of Europe as a political subordinate of the US. It stands in contrast to, for example, a recent Chinese ban imposed on the export of critical materials to Japan, but Japan only. Also, as part of its regular review of its 5-year plans, China reaffirmed in 2025 its long-held strategy of supply side stimulus with a view to gaining global dominance in about ten strategic sectors.

For Europe, all this leads to one fundamental conclusion: a wholly new approach is needed, both to economic and to security policies. And that is now broadly accepted. But, I'll argue, more needs to be done.

3. Europe Needs a Policy Re-Work

Starting from a better position than generally perceived

The challenges facing Europe are substantial, but well within grasp. Importantly, Europe starts from a better position than generally perceived, and in several ways from a better place than the US.

Granted, measured in nominal common-currency terms, Europe's GDP has grown considerably less fast than the US over the past 10-15 years. The difference, however, can broadly be accounted for by: (i) the dollar appreciation vis-à-vis the euro, from about 1.40 in 2010 (still close to the OECD's estimate of long-term equilibrium) to about 1.18 at the time of writing, which skews comparisons; (ii) slower population growth (3% in the eurozone vs 11% in the US); and (iii) by the fact that Europeans worked, on average, 5% fewer hours per year during this period, while the US population made no material changes to its average work hours. As a result, productivity on a per hour worked basis, and compared in PPP terms, has not been materially different between the US and Europe (Ackerman, 2026).

Importantly, this does not raise questions about the need for European policy reforms to adapt to the new geopolitical reality and, specifically, it does not raise questions about the gap at the technology frontier between the US and Europe. That is still real, although it illustrates that Europe remains as effective as the US, in general, at adapting new technology for productive purposes.

Moreover, according to the OECD, vast US fiscal deficits in recent years have contributed to a staggering increase in US public sector debt, to about 100% of GDP, which is almost as high as the most indebted European countries, such as Italy and France (OECD, 2024, 2025). But because of the much lower tax take as a share of GDP in the US, about 18% of all US federal revenue must now be allocated to interest payments, a share that is almost double the share in Italy and some four times that in France. According to the Peterson Institute, unless policy adjustments are made, that ratio is set to increase to about 25% by the mid-2030s (Clausing & Obstfeld, 2025). The fiscal burden of the US debt and the political pressure that comes with it are therefore magnitudes greater than anywhere in Europe. Relatedly, the negative US Net International Investment Positions (NIIP) has increased to about 85% of GDP as the private sector's savings surplus has remained insufficient to compensate for the public sector's dissaving.

To be sure, Europe faced major challenges even before Donald Trump upended the geopolitical order in 2025. Demographics, climate change, and stronger defence have long been recognized as future burdens on the fiscal accounts, maybe to the tune of 2-3% of GDP over the next 5-10 years.[1]

General roadmap is already identified

The Letta and Draghi reports (Letta, 2024; Draghi, 2024) provide a widely accepted roadmap for European policy reforms. This includes the need for €800 billion in additional annual investment to close the estimated productivity gap between Europe and the US (although that gap is almost certainly overestimated in the Draghi report, as argued above).

Of Draghi's estimated €800 billion in additional investment, roughly €650 billion would likely be undertaken by the private sector, which, even if that number were to be 'only', e.g. €300-400 billion per year, would still need specific policies to attract the additional capital to be invested in Europe.

The assumption in the Draghi Report is that stimulating European domestic demand (via the public sector component of the investment drive,

1 Author's estimate, based on European Commission and OECD publicly available data and research reports.

higher spending on defence, as well as via deregulation for the private sector, the introduction of a proper capital markets union etc.) will incentivize global capital, including much of Europe's roughly €300 billion annual savings surplus, to flow to Europe to meet the increased demand.

It is my contention that a mere generalized policy stimulus risks being insufficient: rather, policies should be adjusted explicitly to incentivize European capital formation, and particularly to finance productive investment in Europe.

4. Call for Policy Adjustments

European residents' foreign financial exposure is relevant to policymakers to the extent that it carries systemic risk to European financial stability. It is also relevant as a potential source for investment in Europe. In particular, the flows — i.e. the ongoing European savings surplus which adds to the net stock of foreign assets — are of natural interest in as much as they should be incentivized to be invested in productive European investments instead of abroad.

Reduce the risk associated with Europe's external assets

Europe's total financial exposure to the rest of the world is indeed substantial. According to the ECB, eurozone residents hold €34.4 trillion (227% of GDP) in total foreign assets, of which portfolio investments account for €14.6 trillion, direct investment assets for €12.6 trillion, and other investment claims €7.2 trillion.

About one-third (€12 trillion) of the €34.4 trillion in gross assets is held in the US, of which almost €2.0 trillion is estimated to be invested in US government bonds[2]. This includes holdings by banks, pension funds, and insurance companies seeking risk-free assets as defined by current European financial regulation, and at a higher yield than alternative risk-free assets. This exposure to US treasuries is growing by €50-100 billion per year.

Deducting foreigners' holdings of assets in the eurozone leaves the NIIP of the eurozone at +€1.7 trillion (11% of GDP). This number increases by around €300 billion a year, i.e. the current account surplus.

When considering policies to better reflect the new geopolitical environment, the following four characteristics should be kept in mind.

First, liberalization of global trade, investment, and movement of labour since the 1980s is now being reversed by both the US and China. In addition to

2 Author's estimate, based on publicly available ECB and Treasury International Capital (TIC) statistics.

the introduction of higher tariffs by the US, export bans have been introduced, as well as coercive policies related to investment and other global transactions. To continue with policies as if the rest of the world remains in a 'free-movement mode' would be naïve.

Second, Trump has introduced unprecedented linkages between economic, trade, security, and other policies, including his apparent like or dislike of other political leaders. Put differently, nothing is any longer sacrosanct in global economic policies.

Third, the combination of the large US budget deficit and its increasing dependence on foreign investors for its financing (as reflected in the deteriorating NIIP) raises questions about the US government's creditworthiness (Edelberg et al, 2025; Thiagarajan, 2025), not least if one considers the possibility of future shocks (Bassa, 2025). Historically, the more and longer a government is dependent on foreign investors to fund its budgets, the greater the probability of a credit event, because both the domestic economic and political pain of such an event decrease with the share of foreign creditors (Cameron, 2026).

Fourth, Russia has turned into a military predator, involved in outright warfare as well as — reportedly — hybrid warfare in Europe. President Putin has even threatened the use of nuclear weapons.

As a first order of priority, therefore, Europe should change its financial sector regulatory regime to acknowledge that the world — and with it, the relative creditworthiness of sovereigns — has changed.

This includes two components. First, European financial regulation should be changed to acknowledge that securities issued by European sovereigns are safer — for European financial institutions — than any other asset. Ultimately, the domestic sovereign is the sovereign which sets the rules and enforces the rules across society, including for the financial sector. Put differently, in a rules-based, highly developed economy, the value of the signature of the sovereign cannot be brought into doubt, and certainly never *ex ante* via the regulatory regime.

Second, an adjustment of the reliance on credit rating agencies (four of the five most important are private US companies, the fifth is Canadian) for the relative creditworthiness of sovereigns is needed. Their record in predicting sovereign defaults, as expressed by their ratings, is historically counterproductive (Hantzsche, 2022; Vernazza, 2015). In its simplest form, this could be achieved by a matrix overlaying existing ratings to reflect the new geopolitical reality, but more fundamental changes would be desirable.

Concretely and without delay, the use of Basel III's assignment of zero risk weight to all OECD sovereigns with a rating of AA- or higher needs to be

changed as it applies to European banks' exposure to the US sovereign. The risk weight should express a preference for European government bonds, and only in exceptional circumstances should a non-European sovereign enjoy similar risk-free treatment, based on both economic variables and on its status as an undisputed European ally. It should include a quantified acknowledgement that US treasuries can no longer be treated as risk-free.

For other financial institutions, including pension funds and insurance companies, the regulatory treatment of balance sheets also needs to be updated to reflect the new world order. Specifically, the principles-based approach to pension funds' balance sheets, as well as national rules, needs to be adjusted to recognize the greater risk, by definition, of any asset outside Europe previously considered safe. Similarly, the Solvency Capital Requirements for insurance companies need to reflect the fact that previously risk-free, or low-risk, assets, including in the US, now carry more risk relative to European risk-free assets.

Encourage the savings surplus to remain in Europe

In addition, proactive policies should be introduced to directly incentivize the approximately €300 billion annual European savings surplus, at present invested abroad, to be redirected to finance productive European investment. For this, a more active use of the tax codes should be considered. In addition to the logic of encouraging Europe's savings surplus to be invested productively in Europe, such policies are also justified as prudent risk management. After all, if a credit event were to occur in the US, it would have very serious ramifications for the global financial system because of the reach of the US financial system and the role of the dollar in global finance (Vassalou, 2024). In such an event, productive investments in Europe would be less severely impacted than virtually any foreign investment. (AREL Single Market Lab et al., 2025).

Adjusting the tax code to encourage financial flows towards a political objective is considerably less controversial than is often portrayed. The US tax code included an Interest Equalization Tax between 1964 and 1974 to discourage capital outflows, and still today, US state and municipal bonds are generally exempt from federal taxation (for a related discussion, see Wozniakowski & Garcia Anton, this report). In Europe, several countries also offer preferential tax treatment to their national retail sector for sovereign bonds. Furthermore, differentiating tax rates for yields and/or capital gains for fixed income securities has long been part of the toolbox to encourage investors to favour certain, typically domestic, assets.

Furthermore, there are several arguments for introducing a differentiated tax on yields and dividends of domestic vs foreign assets, possibly constructed to be

revenue neutral. If all the EU-27 were to sign up to such changes, the tax could be designed as a direct revenue stream to the EU. More realistically, however, such policies would be agreed upon only a smaller group of the willing. The tax would then be national, but coordinated, among the participants.

Once a sizable part of Europe's capital export has been incentivized, via the suggested carrots and sticks, to be redirected to Europe instead of abroad, the need for a fully-fledged savings and investment union to allocate the capital as efficiently as possible becomes pertinent. The two key components would be the introduction of a 28th regime for EU-wide legal and regulatory matters, as well as a coordinated shift in regulation and taxation for financial assets to incentivize equity over debt financing.

5. Conclusion

Most of all, Europe needs a common capital market in which risk-willing capital can be allocated efficiently to finance not only startups, but also next-generation financing to build scale. These requirements are well laid out in the Draghi and Letta reports.

However, I emphasize that, before the additional capital can be allocated in Europe, asset allocators need to be incentivized to invest it in Europe rather than abroad. Such incentives should target both the stock of capital presently invested abroad as well as the continuing savings surplus. It should be designed both to boost capital available to Europe's investment needs, but also in recognition of the changed risk profiles for global assets.

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Section III

Sustaining EU Competitiveness Between Geoeconomics and Structural Trends

This section explores/proposes the European response to geopolitical and trade fragmentation as they interact with the pressing realities of climate change and the proliferation of new technologies. Trade disruptions call for the restructuring of international economic policy, the management of domestic fiscal implications, and regulatory means to guarantee the economic security of the Union. Projects of common interest promise a new industrial impetus that must take into consideration the implication of Europe's Climate agenda, as well as the economic implication and opportunities of AI. Collectively, these map a coordinated response to strengthen the Single Market, the engine of European competitiveness, reduce dependencies, and reposition Europe within an increasingly contested global economy.

Responding to Global Trade Disorder

Bernard Hoekman *

Abstract

Pursuit of neo-mercantilist economic strategies by the United States and China is undermining the multilateral trading system, long an anchor for European Union (EU) commercial policy. This paper argues that efforts by the EU to enhance economic resilience and competitiveness should be complemented by pursuit of World Trade Organisation reforms and comprehensive trade agreements, as well as issue-specific open plurilateral agreements with like-minded countries. Plurilateral cooperation provides important pathways for regulatory cooperation and sustaining a rules-based global trade regime. A necessary condition is greater willingness to engage with partner countries in setting standards and accommodating differences in regulatory systems. Whether the required change in mindset in EU institutions and member states can be realized will determine the prospects for EU leadership in sustaining and strengthening a rules-based global trade system.

Keywords: EU; Trade Policy; Rules-Based International Order; Plurilateral Cooperation; WTO.

1. Introduction

The international trade order is unravelling, largely because of actions by the United States (US). Following the launch of a trade war against China in 2016 and imposition of duties on imports of copper, steel, aluminium, automotive and wood products to safeguard national security, in 2025 the US increased import tariffs across the board from around 2% on average to 15-20% or more. The tariff increases were justified as necessary to raise revenues and reduce bilateral trade deficits. They also served to incentivize targeted countries to negotiate lopsided deals that complemented increased protection for US producers with preferential access to partner country markets in return for partial tariff relief. In the European Union (EU) case, a threatened 30% tariff was reduced to 15% following a bilateral agreement in which the EU agreed, inter alia, to remove tariffs on industrial

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products exported by American firms, import additional liquefied natural gas (LNG), and invest $600bn in the US.

The protectionist actions of the second Trump administration accelerated a trend of ignoring international treaty obligations that started in 2016 under Trump 1.0. The 2025 US tariff increases violated its World Trade Organisation (WTO) commitments. So did the subsequent bilateral 'deals', as the WTO requires preferential trade agreements (PTAs) to remove barriers on substantially all trade between signatories. The invocation of national security and economic emergency arguments to justify protectionist measures undermine the presumption that signatories of binding trade agreements will act in good faith when invoking exceptional circumstances.

US policy activism is motivated in part by China's use of production and export subsidies for specific sectors and state intervention in the economy. This is also a concern for the EU. In the past decade, the EU has adopted a range of new instruments that enhance its ability to respond to foreign commercial policies that adversely affect it. These measures expand the EU's capacity to counteract subsidized competition, control foreign investment in critical sectors, identify and address supply chain risks and enable the EU to respond to coercive actions by foreign countries (e.g., Foreign Subsidies Regulation (EU) 2022/2560) and the International Procurement Instrument (Regulation (EU) 2022/1031) to counteract foreign subsidies, as well as the Anti-Coercion Instrument (Regulation (EU) 2023/2675). These tools are augmented by a range of new industrial policy instruments to support a 'selective refortification' of the EU economy (Lavery, 2024) and initiatives to improve EU competitiveness.

Trade and industrial policy activism by the three major economic powers reflects different underlying objectives. The US desires to re-industrialize, eliminate merchandise trade imbalances, and retain technological leadership; China aims to expand its global manufacturing dominance in key sectors; while the EU seeks to bolster its competitiveness and bolster its ability to confront (and dissuade) attempts by large economies to use trade as a foreign policy tool and/or improve their bilateral 'terms of trade.' The EU also uses trade as an instrument to fight climate change and protect foreign workers by conditioning access to the Single Market on complying with EU-defined production process standards and values (Pelkmans, 2020). Many EU trade partners oppose the unilateral application of trade instruments for such purposes by the EU.

While trade policy activism in all three major players has adversely impacted the multilateral trade system, the immediate challenge for the EU is managing and responding to US unilateralism. This involves decisions on whether and to what extent the EU should retaliate against US tariff increases and respond to

US threats to use trade sanctions to coerce the EU into accepting US demands to revise regulatory standards or cede control of territory (i.e. Greenland). This short paper does not address this immediate question. As has become evident, the ability and thus the credibility of the EU to threaten to implement a tit-for-tat strategy is negatively affected by differences across EU Member States in economic interests and political willingness to incur the costs of escalation. Instead it focuses on the medium-term challenges of reducing trade policy uncertainty for European firms and consumers, attenuating the risks of external economic shocks, whether natural or politically driven, and bolstering Europe's strategic autonomy. These difficulties are shared by most EU trade partners. Cooperation with these countries is an obvious means to help realize these objectives. The US and China represent 26% and 20% of global gross domestic product (GDP) in nominal terms, respectively, but only 25% of global merchandise imports. The EU and the 'rest of the world' constitute 55% of world GDP and 75% of global imports. Global trade primarily occurs among the N-2 'rest of the world'.

The EU recognizes the benefits of deepening trade relations with partner countries but should pursue this more vigorously. In doing so, the EU can address the reputational damage incurred in 2025 by accepting a WTO-inconsistent bilateral deal with the US. This undercut the EU's claimed commitment to the rules-based trade order. The prospects of cooperation with the rest of the world will depend on how the EU designs its commercial, competition, and industrial policies. Bolstering EU competitiveness and economic resilience can go together with cooperation that attenuates negative spillovers for trading partners of EU policies and assisting partners achieve their development objectives. To do so, the EU needs to change the way it engages with partners.

There are two paths to pursue such cooperation. One is to work with other WTO members to establish a more effective institutional platform that can be used to re-negotiate and update the multilateral trade regime to reflect 21st century economic realities. The other path is to work with groups of like-minded countries to improve market access conditions for firms and lower international trade costs. These are complementary tracks that should be pursued in parallel.

2. WTO Reform

Given arguments by Canadian Prime Minister Mark Carney (2026) and others that the rules-based order has been fundamentally ruptured, one might question the salience of the EU engaging in WTO reform efforts. Negotiating a new multilateral trade framework requires the major WTO members to engage

with each other in good faith and credibly commit to implementing negotiated agreements. At the current juncture this is clearly unlikely, but it should not be discounted completely. The US remains an active WTO member. China has shown willingness to engage in negotiations that span sensitive policy areas (as illustrated by its request to join the Trans-Pacific Partnership) and played a leadership role in the negotiation of a draft agreement to facilitate investment. The organization continues to play an important role in providing legal certainty for much of global trade. This includes trade that occurs under preferential PTAs, as the core provisions of such agreements build on WTO disciplines and texts. More than 600 disputes have been settled and dispute resolution mechanisms continue to be used. New multilateral agreements were concluded (e.g., Agreement on Trade Facilitation (WT/L/931, 2014) and the Agreement on Fisheries Subsidies (WT/L/1144, 2022). Every year, the many technical committees and Councils of the WTO hold hundreds of meetings, addressing matters falling under the purview of a WTO agreement, ranging from transparency of national trade policies to technical barriers to trade (product standards), customs valuation, trade facilitation, trade in services, and intellectual property rights protection.

The WTO was established to provide a platform for states to negotiate reductions in the trade-distorting effects of national policies and settle trade disputes. In principle, a reformed WTO that retains the core features of the multilateral system (non-discrimination, reciprocity, transparency and third-party dispute settlement) and updates its provisions would be first best. To date, updating WTO agreements has been impeded by the unwillingness of major WTO members to launch negotiations to do so, and by WTO working practices, notably consensus-based decision-making. The current global trade disorder is not the result of the WTO failing to provide a platform for members to engage with one another. It does, but major players have chosen not to use and to accept (and engage in) veto-playing behaviour.

Key subjects for WTO reform include (1) dispute settlement procedures, (2) rules to establish 'a level playing field', (3) how to address disparities in economic development, (4) governance of trade measures for nontrade purposes, and (5) expanding the scope for incorporating plurilateral agreements that bind only signatories. The EU can play a leadership role on all of these subjects either because it has been a leading player in defending contested elements of the status quo ante (#1), has relevant experience (#2 and #3), is itself a source of the problem (#4) or has refrained from acting (#5).

Effective dispute settlement is important to sustain trade cooperation. The EU has been a strong defender of the Appellate Body and proponent of retaining appellate review. It played a leading role in establishing the Multi-

Party Interim Appeal Arbitration Arrangement (MPIA) as a substitute mechanism after the US defenestrated the Appellate Body in 2019. Greater flexibility towards accommodating alternative approaches could help resolve the issue. Dispute resolution does not necessarily require a two-stage system or one with compulsory rulings. What is needed is an independent process that considers the facts and the consistency of contested policy measures with parties' commitments, and that WTO members have strong enough incentives to sustain cooperation. The US now opposes binding third party arbitration of the type it supported when the WTO was created in 1995. So may some of the countries that have not joined the MPIA. During the General Agreement on Tariffs and Trade (GATT) years a single instance, non-binding process addressed disputes. This may be all that the US, and perhaps others, are willing to accept. If so, a solution to the conflict may involve acceptance of variable geometry, with a majority of members accepting binding review (e.g., by participating in the MPIA) and others opting out.[1] While this will reduce the value of the organization to smaller countries that cannot credibly retaliate against large economies that opt out, this has always been the case. Even with binding appellate review, the losing party may choose not to implement a ruling and accept withdrawal of equivalent concessions.

Resolution of the disagreement on dispute settlement will depend importantly on whether the EU can work with the US and China to address substantive matters, notably so-called level playing field issues. In the WTO context, this mostly concerns industrial subsidies and state intervention in the economy. Both the US and the EU view current disciplines on foreign subsidies and available mechanisms to address their adverse effects — antidumping, countervailing duties, and dispute settlement to address adverse effects on international markets — as inadequate. This has driven recourse to unilateral measures, including Section 301 of the Trade Act of 1974 (19 U.S.C. § 2411) by the US against China and the 2022 EU Foreign Subsidies Regulation (Regulation (EU) 2022/2560).

Revisiting industrial policy governance arguably must include consideration of disciplines to address restrictive business practices and abuse of market dominance in areas such as digital infrastructure services, cloud computing, e-commerce and social media platforms, i.e., the appropriate role of competition policy and sectoral regulation to address market failures. In this area, the EU can provide leadership by working with China and other WTO members to consider a competition policy-based framework that draws on the

1 Mavroidis (2025a) suggests providing countries that reject compulsory third party adjudication with an opt-out option. This implies such states revert to the regime prevailing under the GATT.

approach taken in the EU to govern subsidies, state intervention, and abuse of market power within the Single Market. Developing approaches that draw on the EU experience could provide a path forward, building on steps taken in this direction in the negotiations on the China-EU Comprehensive Agreement on Investment (Hoekman & Sapir, 2021).

The third WTO reform subject relates to reciprocity, the purported goal of the unilaterally imposed punitive US tariff increases in 2025 (Mavroidis, 2025b). The issue here is discontent from many high-income nations with past decisions reflecting disparities in economic development across members by accepting less than full reciprocity in tariff reduction commitments by developing countries. This is complemented by 'special and differential treatment' (SDT) reflected in nonreciprocal tariff preferences and long(er) transition periods for implementing provisions. A key source of disagreement is the working practice of self-designation of developing-country status; there are no criteria to determine whether a nation is a developing economy and when it should 'graduate'.[2] Further complicating matters, many developing countries have long been dissatisfied with SDT provisions, arguing these have not delivered benefits.

Debates on SDT and insufficient reciprocity are largely red herrings (Low, 2021). One reason is that starting in the mid-2000s, in large part reflecting EU leadership, a major 'aid for trade' initiative was put in place to assist developing countries in benefiting from trade opportunities and implementing WTO agreements. Most developing countries have liberalized over time, many have further reduced tariffs through PTAs, and WTO agreements on non-tariff measures apply to developing countries. China's protocol of accession to the WTO was not based on less than full reciprocity; instead, China made commitments that went beyond disciplines applying to other WTO members. While China continues to self-designate as a developing country, it has made clear it will engage with other states based on full reciprocity and not invoke SDT provisions. The path forward has already been identified, reflected in new WTO agreements, including specific provisions addressing development disparities.

The 2025 'trade deals' with developing countries, requiring the removal of tariffs on US exports in return for a partial reduction in tariff increases on developing country exports, were justified in part to assure reciprocity as defined by the US. This type of 'renegotiation' is rather different from that envisaged in the WTO, where countries raising tariffs are required to compensate, not

2 The exception are provisions targeting the UN-defined group of Least Developed Countries (LDCs).

tax, affected states. US actions to penalize poor countries, including LDCs, for successful export development strategies and demanding preferential access for US exports (in effect claiming developing country privileges itself) increases the strategic importance of sustaining the EU commitment to privileging trade with low-income economies.

The punitive use of tariffs by the US is less a matter calling for WTO reform than one for states to consider their willingness to accept US demands for de facto developing country status itself: less than full reciprocity, preferential export market access, and policy space. The lower their Most-Favored Nation (MFN) tariffs and the greater their participation in comprehensive trade agreements with each other, the lower the cost of accepting US demands. What will help are continued pursuit of trade agreements by the EU and its many partners, continued leadership in providing aid for trade, working with partners to negotiate issue-specific agreements that promote sustainable development, while sustaining rules-based trade relations that support economic development and growth.

A fourth topic for WTO reform concerns the use of trade interventions for economic or national security reasons. Such interventions reflect a mix of: an unwillingness by major players to engage on level playing field issues; decisions by certain countries to leverage supply chain chokepoints in the context of bilateral foreign policy disputes; and, in the case of the EU, decisions to leverage access to the Single Market on European values and EU-defined production process norms. Agreeing on new disciplines for subsidies and the regulation of market power, and negotiation of agreements that govern the use of trade measures to achieve environmental objectives or due diligence standards in supply chains, would do much to address the problem. Doing so requires a shift away from the unilateral imposition of trade measures to pursue non-trade objectives, in favour of frameworks that support cooperation to jointly develop performance standards, accompanied by financial and technical assistance.

Managing the invocation of essential security interests is inherently difficult, as it infringes on the sovereign right to determine what and when security threats are a serious concern, making dispute settlement unlikely to be effective. Instead, a process of peer review and deliberation offers better prospects to induce states to re-consider the invocation of national security to justify trade measures. Such a process could build on processes used in WTO committees through which members can raise and discuss 'specific trade concerns' (Wolfe, 2020; Hoekman et al., 2023) and (plurilateral) platforms through which states can consider supply chain chokepoints and collaboration to reduce the risks of potential disruptions.

Working practices and the MFN principle arguably constitute the most important WTO reform issue in the short run. This is because it directly influences the incentives for WTO members to negotiate open plurilateral agreements (OPAs) to facilitate trade and/or address policy conflicts. A problem here is that consensus across the full membership is required to incorporate an OPA into the WTO. Countries that do not participate in an OPA and thus will not apply its provisions can nonetheless block signatories from moving forward. India has played a leading role in blocking OPAs, arguing that such agreements have no place in the WTO. It can do so because of the consensus working practice.

OPAs can apply associated benefits on a non-discriminatory basis, i.e., including to non-signatories, or restrict benefits to signatories. The latter type of OPAs condition the application of the MFN principle, a central principle of the WTO. The distinction is important because non-discriminatory OPAs can be incorporated into the WTO by signatories embedding them into their WTO schedule of concessions (Hoekman & Mavroidis (2017) discuss how this can be operationalized). To date, the EU has resisted this path. If no resolution to the problem of including new OPAs into the WTO is agreed at the 14th Ministerial Conference (March 2026), the EU should implement the scheduling path, together with like-minded countries, to incorporate the outcome of the two draft OPAs negotiated in recent years (on investment facilitation and e-commerce). Continuing to accept veto-playing by a small minority of WTO members will only further erode the salience of the organization.

The scheduling path is not available for OPAs that apply on a conditional MFN basis. Relaxing the consensus constraint for such OPAs is important. Many potential agreements to reduce trade costs will involve criteria for recognition of regulatory equivalence that a state must satisfy to benefit from their provisions, i.e., benefits are by construction conditional. Insofar as is not possible to accommodate such OPAs in the WTO the EU should pursue (and participate in) them with likeminded partners outside the WTO framework. This would imply a change for the EU as it has largely limited its engagement in OPAs to the WTO.

3. Preferential Trade Agreements: From Competitive to Cooperative Regionalism

A second path towards responding to rising trade disorder is to negotiate and deepen existing PTAs, expanding the network of trade relationships governed by predictable and stable rules and enforcement mechanisms. Comprehensive trade agreements can address the range of issues that are central to WTO reform

debates; reciprocity, dispute settlement, development disparities and level playing field issues are part of every negotiation. PTAs are a core element of EU trade strategy, reflected in numerous agreements concluded over time and the renewed focus on negotiating new agreements since 2025. Recent examples are the EU-Mercosur and the EU-India trade agreements.[3] Apart from China and the US, the EU has or is negotiating PTAs with all its major trading partners.

The EU represents 15% of world nominal GDP. Collectively, the members of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) account for another 15%. These 39 countries have a strong commitment to market openness and implementation of international treaty obligations. So do those Asia-Pacific countries that are not (yet) CPTPP members: South Korea and several Association of Southeast Asian Nations (ASEAN) members (Cambodia, Indonesia, Laos, Myanmar, the Philippines, and Thailand). Other large PTAs have been formed by countries in other regions, e.g., the African Continental Free Trade Area (AfCFTA).

Establishing deeper trade relationships with other regional blocs (AfCFTA, ASEAN, CPTPP), need not involve the negotiation of a 'grand' agreement spanning all the associated countries. This would involve many years and is very likely to run into the sand. What can be envisaged is to support efforts by EU PTA-partners to conclude PTAs with each other, and for the EU to cooperate with other regional blocs to agree on shared principles and behavioural norms, e.g., a political commitment not to raise protectionist barriers against each other that are inconsistent with their WTO commitments, and to cooperate on regulatory matters that affect trade costs. This can take the form of issue-specific OPAs that lower the trade costs of regulatory heterogeneity. Potential subjects for such OPAs are manifold, ranging from trade facilitation, e.g., agreements on common de minimis customs valuation thresholds or mutual recognition of authorized economic operator regimes, to technical standards for carbon measurement or supply chain due diligence.

The scope to negotiate deep PTAs is affected by sectoral sensitivities in EU Member States and the ambit of the Commission's exclusive competence for external commercial policy. If a proposed PTA includes matters where member states retain competence, the resulting 'mixed agreements' require

3 More information is available on the designated European Commission websites for EU-India Free Trade Agreement, Investment Protection Agreement and Geographical Indications Agreement at https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/india/eu-india-agreements_en, and The EU-Mercosur trade agreement at https://commission.europa.eu/topics/trade/eu-mercosur-trade-agreement_en?utm_source=chatgpt.com (both accessed 29 March 2026).

ratification by all national parliaments and the European Parliament. This greatly increases the time needed for negotiation and ratification and, more importantly, the prospects of an agreement not being ratified. Political opposition to aspects of the agreement with Canada and the Transatlantic Trade and Investment Partnership negotiations that fell outside the exclusive mandate has affected the EU's ability to conclude deep PTAs. Even 'shallow' PTAs with large partner countries are challenging given entrenched interests that oppose liberalization and the increasing politicization of trade agreements. The January 2026 decision by the European Parliament — after 25 years of on and off again negotiations, to refer the EU-Mercosur Partnership Agreement to the European Court of Justice for an opinion on its compatibility with the EU treaties — illustrates the constraints confronting the Commission in using PTAs as a tool to deepen trade and investment relations with partner countries and enhance its strategic autonomy. Notwithstanding the likelihood of provisional application of the PTA by the EU, the episode further damaged the credibility of the EU as a partner in negotiations.

4. Issue-Specific Plurilateral Agreements

Issue-, sector- or domain-specific OPAs can complement PTAs. They are an instrument the EU should pursue more actively. Because OPAs span fewer policies and/or sectors, they are less prone to the issue linkage dynamics and politicization that affect PTAs. They permit a focus on technical cooperation to facilitate trade, e.g., recognition arrangements to reduce the costs for firms to certify compliance with regulatory requirements. OPAs can be designed to be modular, allowing countries to participate in some elements and not others, and can more easily accommodate additional membership over time as this only involves assessment of performance in a specific area (Hoekman & Sabel, 2021). As noted above, OPAs can also serve to 'connect' PTAs, providing a mechanism for signatories to deepen cooperation in a policy area without reopening the balance of negotiated market access liberalization commitments. If OPAs pursued outside the ambit of the WTO are crafted to enable 'docking' in the WTO, if and when reforms enable this, they can serve as potential stepping stones for updating the multilateral trade regime.

To mobilize business support and help the EU and its partners use OPAs to offset the costs incurred by US unilateralism and/or Chinese mercantilism, agreements must demonstrably 'move the needle' in reducing policy uncertainty, levelling the playing field among participating states and/or facilitate trade in economically meaningful ways. For example, concerted action by countries

participating in OPAs to address regulation-related costs affecting digital services-related activities would support the adoption of common regulatory approaches across participating economies.

OPAs governing trade relations and facilitating trade and investment across a broad cross-section of open economies are not only a pragmatic response to trade disorder but an appropriate one, given the heterogeneity of national contexts, preferences, and concerns. OPAs will have greater payoffs if they include China and/or the US but need not do so. What matters is that they are open to participation by any interested country. Openness and transparency are critical for OPAs to serve as potential building blocks for sustaining multilateral cooperation on trade.

Pursuit of OPAs requires institutional mechanisms that support efforts by interested countries to clarify objectives, consider prevailing policies, evaluate their effects as inputs into the development of common standards, and identify good regulatory practices that reflect and respond to local capabilities and priorities. Rather than adopting the failed approach in the WTO of using exceptions, exemptions, and transition periods as a means of addressing development disparities, OPAs can ensure that development disparities are considered and addressed explicitly. They can (and should) also encompass the provision of financial and technical assistance when needed by participating states to implement agreement provisions, drawing on EU development funding mechanisms and international organizations with the expertise and capacity pertinent to the issues or sectors of interest.

Deepening trade-related policy cooperation with the rest of the world, on which the EU relies for critical supplies and for export markets, can help enhance EU competitiveness (by fostering competition) and resilience (through diversification). Proceeding down this path calls for adjustment in 'business as usual' approaches when designing policies and regulatory instruments that impact on trade and investment decisions by firms. Rather than solely relying on internal EU technical and political mechanisms to determine what is (deemed to be) in the EU interest, OPAs call for engaging partners at the upstream stages of policy design processes and a willingness to consider the equivalence (or even superiority) of regulatory approaches used in partner countries. OPAs call for greater humility and less hubris. There should be more deliberation and less reliance on diktat, a 'my way or the highway' presumption that third countries should be expected to accept EU norms in which they have had no say.[4] The required shift in mindset needed

4 Recent examples include the Carbon Border Adjustment Mechanism (CBAM) with Regulation (EU) 2023/956, the EU Deforestation Regulation (EU) 2023/1115, and the Corporate Sustainability Due Diligence Directive (EU) 2024/1760.

for considering the potential effects on partners and working with them in developing regulatory standards and implementation methods will be challenging, even assuming a willingness in principle to work with partners. The potential payoffs are significant, however, including not only helping to attain EU competitiveness and resilience objectives more efficiently and effectively, but serving to expand and deepen rules-based approaches that underpin trade and investment relations among like-minded states.

5. Conclusion

US and Chinese trade and industrial policies call for a mix of policy reforms and initiatives to bolster EU competitiveness and resilience to supply chain shocks (including threats to weaponize trade dependence), support for reforming the multilateral trade regime embodied in the WTO, and deepen trade relationships with the many countries that confront the same challenges as the EU and that share the goal of sustaining a rules-based trade order.

A common element of the complementary policy paths the EU can pursue in responding to rising global trade disorder is plurilateral cooperation. This applies in the setting of the WTO, is part and parcel of extending PTAs, the use of OPAs to link PTAs, and working in concert with other countries on stand-alone OPAs that establish platforms for cooperation in specific domains or sectors that jointly benefit participating countries.

PTAs are important but by no means a panacea, given the challenges confronting the EU in liberalizing access to its markets in sensitive (politically powerful) sectors, differences in economic interests across the EU Member States, and the difficulty of negotiating mixed agreements. Such challenges also confront efforts to deepen intra-EU integration and realize the associated competitiveness gains. Issue- or domain-specific OPAs are not only a potential means of making piecemeal progress in reducing trade costs and expanding the network of countries that are committed to rules-based governance of trade and investment relations. They may also serve as an instrument to support deepening integration within the EU.

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Global Effects of Recent US Policies: How to mitigate negative spillovers to Europe?

Marco Ratto and Werner Roeger *

Abstract

In 2025 the US implemented unilateral import tariffs and passed tax legislation to reduce income and corporate tax rates ('Big Beautifull Bill'). We regard import tariffs as a new fiscal policy. Tariff revenues are used to finance income and corporate tax cuts to increase investment. We expect this to be a permanent policy change and address two questions. What does this mean for the EU? What are suitable fiscal options for the EU? Economic models and econometric studies suggested that unilateral tariffs lead to a real appreciation. However, this prediction did not materialize. We therefore consider two scenarios: standard response with a dollar appreciation (standard scenario); tariff without appreciation (risk scenario). We show that a permanent unilateral US tariff has negative potential growth effects in the EU, irrespective of the exchange rate. Policies to foster EU competitiveness via reducing taxes on labour, capital, and increasing public investment, VAT financed, can partially offset the tariff spillovers.

Keywords: Tariffs; Fiscal Policy; Exchange Rate; International Spillovers.

1. Introduction

One of the central goals of the United States (US) administration is to improve international competitiveness and increase investment in the US. Essential elements of this policy strategy were implemented by the US government in the summer of 2025. The Trump administration has negotiated trade deals, which are nearly complete. As a result, one can assume that the US will be able to impose unilateral tariffs on nearly all imports. This is complemented by reductions in corporate income taxes and an increase in military spending. These measures were

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announced in the 'Big Beautiful Bill', which passed in July 2025. A novel element of these two policies is that the Trump administration is using tariff revenues to finance at least part of the expansionary fiscal measures (e.g., Clausing & Obstfeld, 2025; Alessandria et al., 2025). With a 15% tariff the US administration can dispose of a stream of tariff revenues in the order of magnitude of 2% of US gross domestic product (GDP).

Nevertheless, imposing tariffs will not be costless for the US, since tariffs increase costs for imports of consumer goods and investment goods, as well as intermediate inputs for production. Many empirical studies find negative GDP effects for the country imposing tariffs (Fuceri et al., 2021). The European Commission in its 'Special Issue: the macroeconomic effect of US tariff hikes' (European Commission, 2025)[1] and the International Monetary Fund (IMF) in its 'higher (unilateral US) tariff and supply chain disruption scenario' (International Monetary Fund, 2025) arrive at negative GDP effects in the US, and negative spillover effects to the European Union (EU) at a similar magnitude.[2]

In contrast to these studies, we do not look at the US import tariff in isolation but see it as a fiscal instrument, used to finance corporate tax reduction. Monetary policy is another significant dimension. We are already seeing President Trump put pressure on the Federal Reserve (Fed) to accommodate his policies. Though it is unlikely that the Fed will give up its mandate of controlling inflation and accept fiscal dominance, it seems nevertheless conceivable that the Fed might go as far as preventing an appreciation of the dollar.[3] It seems likely that pressure on the Fed to lower interest rates is part of a US government strategy to avoid an appreciation of the dollar and even weaken the dollar. Thus, we assume exchange rate targeting, which goes some way to aligning our results with the observed stability of the dollar exchange rate since the completion of the trade deals.

Nevertheless, the movement of the dollar since the announcement of US import tariffs constitutes a challenge for standard macro models, because they predict that a unilateral import tariff will be accompanied by a (real) appreciation (Jeanne & Son 2024). This prediction is also supported by econometric studies (Ostry et al.,2025; Furceri et al., 2021), which leaves

1 See Motyovszki (2025) for a more detailed discussion.

2 It is difficult to assess the impact of a tariff in the IMF's GIMF simulation in isolation since the US tariff increase is associated with a supply chain interruption shock which reduces TFP of firms involved in international trade in both the US and RoW.

3 We show in Appendix 1 that a tariff only policy in our model also gives a negative GDP effect for the US, while a full policy mix that combines fiscal and monetary support can lead to positive effects for the US.

essentially two options. One can either assume that short term adjustment dynamics (importers have increased their stocks before the tariff) delay the eventual appreciation of the dollar or consider other hypotheses/shocks preventing a dollar appreciation.

Indeed, it cannot be ruled out that the depreciation of the dollar is the result of an updated dollar risk assessment of foreign holders of US assets: Itskhoki and Mukhin (2025), for example, argue that tariff policy without appreciation requires an increased risk premium for the dollar. Stephen Miran, the head of the Council of Economic Advisors, appointed by President Trump, has recently floated several ideas on how to correct the overvaluation of the dollar, which, in his view, results from the reserve currency status of the dollar. Prominent among these suggestions is a user fee for foreign holders of US assets or coercing foreign central banks to accept lower yield 50- or 100-year Treasury bonds. Based on the observation that the dollar depreciation in a period of increased financial market volatility has been interpreted by various economists (Clausing & Obstfeld, 2025; Jiang et al., 2025) as US assets losing their safe haven status, while foreign investors anticipate upcoming financial repression. Thus, the US is running the risk of losing the 'exorbitant privilege' of borrowing at a convenience yield in international financial markets. This scenario has the advantage of being consistent with the observed stability of the US real exchange rate. To increase the robustness of our conclusions on the effects of unilateral US import tariffs, we consider the outcome under both exchange rate targeting and rising risk premium.

Though there is a large discussion about the effects of tariffs and their international spillover effects, there is surprisingly little discussion about policy measures that can be taken up by trading partners, especially if the option of retaliation is unrealistic because of geopolitical considerations. Our focus here is on the EU policy response. The scenario we develop in this paper is based on the following interpretation of events.

The new US tariff regime is likely to be of a rather permanent nature. This suggests that the EU policy response must predominantly be based on permanent fiscal measures that support potential output, while monetary policy could be used to mitigate possible negative short run effects. As policy measures we consider three fiscal options: i) reduction of labour taxes, ii) reduction of capital taxes, or iii) an increase of public investment. Since fiscal measures are generally not self-financing and tariff financing is not an option for the EU, we consider close alternatives. Here we build on the literature on fiscal devaluations (Farhi et al., 2014; Erceg et al., 2023) and consider an

increase of value added tax (VAT),[4] which is regarded as less distortionary compared to a labour and capital tax because it also taxes economic rents and its tax base includes both domestic and imported goods. Concerning monetary policy, we assume that the European Central Bank (ECB) is targeting the nominal effective exchange rate of the euro. This allows monetary policy to be moderately accommodative to the fiscal measures.

The fiscal measures are implemented such that the debt to GDP ratio is stabilized in the long run at the historic level. The medium-term fiscal expansion is generated by an immediate reduction in tax rates and an immediate increase in public investment, combined with a gradual increase in VAT. Thus, both monetary and fiscal policy are implemented such as to avoid becoming restrictive in the short run. This implies that these measures are moderately inflationary in the short run.

Our analysis of public investment underlies the hypothesis that European governments currently undersupply public capital. This is based on the observation that the ratio of the output elasticity of public to private capital as documented in various studies (Bom & Ligthart, 2014; in't Veld, 2016) exceeds the ratio of public to private capital. Equality of these two ratios is a basic efficiency condition (e.g., Pfeiffer et al., 2021). Also, Europe currently has a lower public to private capital ratio compared to the US. This could be due to a higher stock of military equipment in the US. Since the EU intends to increase its defence capabilities this also seems a timely measure to analyse.

The quantitative results generated in this paper are based on simulations with the EU Commission's GM model (Albonico et al., 2019; Cardani et al., 2023), which is an estimated Dynamic Stochastic General Equilibrium (DSGE) model of the world economy distinguishing three regions: EU, US and Rest of the World (RoW).

2. Summary of Results

Effects of US policies

Table 1 summarizes our results. We find that a permanent unilateral US tariff has positive GDP effects in the US if accompanied by expansionary fiscal measures. Despite efficiency losses due to the terms of trade distortions, GDP rises by about 0.7% over the next 10 years, because

4 In the literature fiscal devaluations commonly refer to countries in a monetary union that cannot devalue in case of temporary adverse shocks. This literature is usually concerned with the use of temporary fiscal measures to overcome the fixed exchange rate constraint when there are in addition nominal frictions. Here we borrow the term because we look at the same fiscal measures (reduction of labour and capital taxes financed by an increase in VAT), but in our case the measures are permanent, and we are interested in the medium to long run effects of these measures.

tariff revenues are used to reduce corporate income taxes. These results are in line with the literature on optimal tariffs (Johnson, 1953). For the EU, the tariff effects are clearly negative. GDP declines on average by about 0.2%. Investment and consumption also decline. The EU tariff shock is strongly absorbed by a decline in real wages. There is, however, considerable uncertainty about the tariff effects, because it is unclear whether the dollar will eventually appreciate, as predicted in this scenario. If the dollar risk increases, the exchange rate can remain stable, and an important condition for the optimal tariff scenario does not hold any longer. Now the distortionary price effect dominates the US response. Nevertheless, the US GDP effect remains positive, since tariffs now reduce imports and there is more expenditure switching towards US goods. The negative GDP spillovers would not change significantly if the exchange rate remained unchanged because less negative import price effects from a stable euro would be offset by stronger US export market losses.

Effects of EU policies

We show that labour and capital tax reductions can offset some of the negative spillovers to consumption (labour tax) and investment (corporate tax). The positive GDP effects remain, however, negligible because of negative trade balance effects due to the euro real appreciation in the short/medium term.[5] Under our assumption of an inefficiently low public capital stock, public investment appears as the policy option with the strongest growth effects.

Table 1 Summary of key results

	GDP		Consumption		Total investment		Real wage income		Trade balance to GDP		% change wrt baseline
	EA	US	EA	US	EA	US	EA	US	EA	US	
US policy mix	-0.2	0.7	-1.0	1.6	-0.2	3.1	-1.0	1.8	-0.2	0.0	10 yr average
	-0.1	0.2	-1.2	1.0	-0.3	2.9	-1.0	-0.7	-0.1	0.1	10 yr
& loss of exorbitant privilege	-0.1	0.5	0.5	-3.0	-0.1	2.0	-0.2	-0.7	-0.5	2.4	10 yr average
	0.0	0.6	0.7	-4.0	-0.2	2.4	-0.2	-0.9	-0.5	2.9	10 y
& EU cut labour tax	-0.2	0.7	-0.8	1.6	-0.1	3.1	-1.4	1.7	-0.2	0.0	10 yr average
	0.0	0.2	-1.0	1.0	-0.2	2.9	-1.7	-0.7	-0.1	0.1	10 y
& EU cut corporate tax	-0.3	0.7	-1.1	1.5	0.4	3.0	-1.4	1.7	-0.3	0.0	10 yr average
	-0.1	0.2	-1.3	1.0	0.5	2.9	-1.7	-0.7	-0.1	0.1	10 y
& EU g. investment	0.1	0.7	-0.9	1.5	2.4	3.0	-0.9	1.7	-0.4	0.1	10 yr average
	1.4	0.2	-1.0	1.0	2.5	2.9	-12	-0.7	-0.2	0.1	10 y

5 The Euro depreciates in the long run as supply conditions from fiscal measures improve.

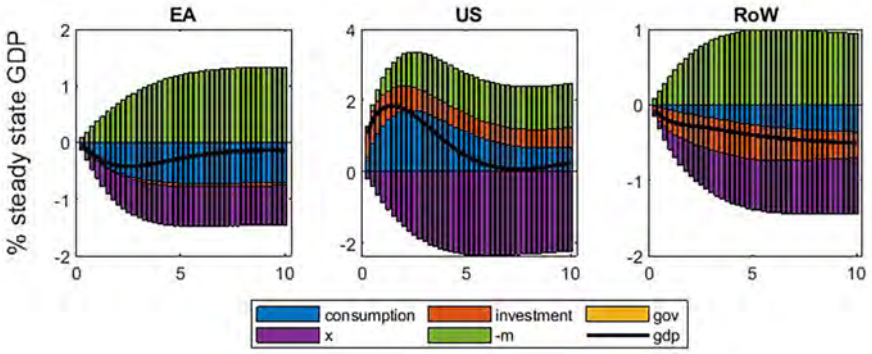
3. US Policy Scenarios

In this section we summarize the US domestic effects of the US policy mix as well as the international spillover effects. We first consider the standard scenario where the tariff is not associated with an increased dollar risk. Figures 1.1 and 1.2 summarize the effects on GDP and its components for the EU, US and RoW.[6]

Standard scenario

Figure 1.1 GDP decompositions of full US policy mix

(tariff + corporate tax reduction + XR peg)



De-globalization/efficiency loss

Common across all regions is a decline in exports and imports, because tariffs distort international relative prices. In the US, exports decline because of a dollar appreciation, and imports decline because of tariffs, which exceed the effect of the dollar appreciation. With an increase in US domestic demand induced by tax reforms and an exchange rate appreciation, the policy target of reducing the US trade deficit cannot be achieved. EU and RoW exports decline because of tariffs and imports decline because of the dollar appreciation. US tariffs and exchange rate adjustments increase import prices for all regions, which distorts production decisions and results in efficiency losses.

Unequal effects across countries

There are, nevertheless, important differences due to tariff revenues in the US. As foreseen by the 'Big Beautiful Bill' they are partly given back to the US private sector in the form of a tax cut, primarily on capital income. Using tariff revenues to lower distortionary taxes gives a boost to the US economy in the form of higher investment and consumption. Since the revenue effect is absent for the EU and

6 Appendix 1 contains additional information on the adjustment of other macroeconomic aggregates.

RoW, export losses and unfavourable terms of trade effects reduce GDP and its components. Lower investment has adverse potential output effects.

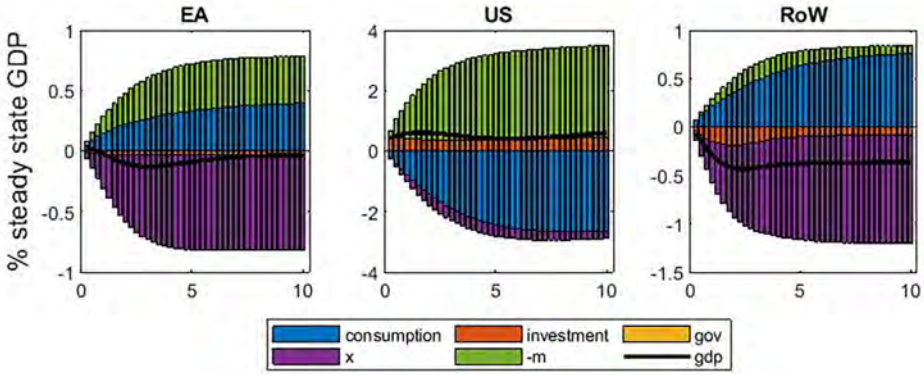
In Appendix 1, we provide a sensitivity analysis with respect to monetary policy, US corporate taxes, and the duration of US tariffs, since our analysis differs from other studies along these lines. Under strict inflation targeting, the US GDP effects could become negative in the short run but would turn positive in the medium term. International spillovers would not change significantly. Without a corporate tax reform, the tariff distortion would not be compensated, resulting in a permanent GDP loss for the US, in line with other studies mentioned above, which focus on the US tariff in isolation. Some studies assume that the tariff hike is temporary. Like in these studies we also find that in this case the US effects are less favourable. An important dimension, which deserves further attention, is the fear of international financial markets that the US pursues additional measures to prevent a real appreciation of the dollar, given concerns of an overvalued dollar in the US administration. Indeed, the absence of a real dollar appreciation constitutes a puzzle for the standard view, and, as pointed out by Clausing and Obstfeld (2025) and Jiang et al. (2025), could be the result of US assets losing their safe haven status.

Risk scenario

In this scenario, we consider that financial markets impose a risk premium on US liabilities, which permanently increases interest payments to foreign holders of US assets. To be in line with the observed absence of a dollar appreciation, we choose the size of the risk shock such that there is no significant change in the real effective value of the dollar. The tariff and fiscal policy assumptions remain as in the first scenario.

Figure 1.2 GDP decompositions of US policy mix

(tariff + corporate tax reduction + XR peg + loss of exorbitant privilege)



De-globalization/efficiency loss

With a constant US real exchange rate, tariffs continue to reduce imports and exports, but their distribution differs across countries. US exports hardly decline but imports fall strongly since exporters to the US are no longer cushioned by the dollar appreciation. A comparison with the previous scenario shows that keeping the real value of the dollar constant is important if the US trade deficit is to be permanently reduced. However, the price distortion and thereby the efficiency loss of the tariff have now increased for US firms and households. In contrast, for the EU and RoW, international prices are now hardly distorted for producers and households, but they suffer higher export losses in the US market.

Unequal effects across countries

Tariff revenues still accrue to the US government and continue to provide room for corporate tax cuts. Thus, US investment remains significantly positive, but the absence of a real dollar appreciation makes US consumers worse off. However, the US GDP effect remains positive. Under a constant real value of the dollar, the composition of US demand is shifting more strongly from imported to domestic goods. The negative GDP spillover to the EU and RoW is also not much affected. In this scenario, the international price distortion for intermediates and investment goods has disappeared, but US export losses have increased. Since this scenario is generated by a higher risk premium on US liabilities, this increases the interest income of EU households and increases the interest burden on US households, thereby increasing EU consumption while US consumption declines.

Thus, for the US, our model clearly favours retaining safe asset status in combination with unilateral tariffs. For the EU and the RoW lower interest rates from a higher risk premium of the dollar would partially outweigh the negative effects of unilateral tariffs for total consumption. However, this consumption gain would be biased towards owners of US assets. Fundamental economic conditions would worsen for the EU.[7]

4. Options for an EU Policy Response

The last section has shown that US tariffs have adverse spillover effects for the EU, even in the case that the US is losing some of its safe haven status. This could be an argument in favour of retaliation. However, geopolitical

7 See Appendix 2 for additional information about other important macroeconomic aggregates.

considerations prevent this policy option and restrict policy to fiscal and monetary actions. The permanent nature of the losses suggests that the policy response must predominantly be based on fiscal measures, while monetary policy could be used to mitigate possible negative short run effects. The adverse effects on potential output also suggest looking for fiscal measures that increase supply/potential output. Moreover, the US tariff policy can be seen as a fiscal measure that uses imports as a tax base.

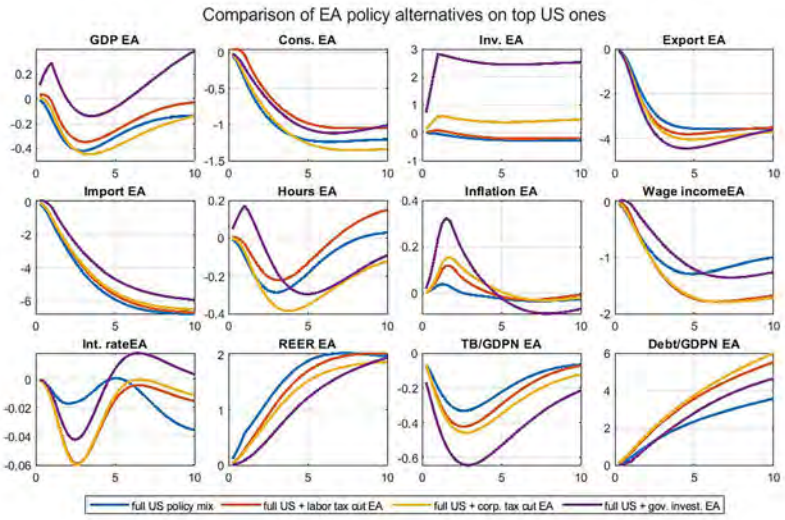
Based on these considerations, we analyse three options: reduction in labour, in capital taxes, and an increase in public investment. As a financing instrument for balancing the budget, we use VAT since, in the absence of tariff financing, this comes closest to using imports as a tax base. The combination of a reduced labour tax and increased VAT is also known in the literature as fiscal devaluation. It aims at making the tax system more efficient by reducing a more distortionary tax and increasing the less distortionary VAT (which also taxes economic rents). We generalize the concept of internal devaluation by extending VAT financing not only to compensate for labour tax reductions but also for a reduction of the corporate income tax and public investment. Concerning public investment, we use estimates of the output elasticity of public capital as provided by Bom and Ligthart (2014). These estimates suggest that public capital is currently undersupplied in the EU. This is supported by a higher ratio of public to private capital in the US.[8]

Policy implementation

We aim for a medium-term stabilization of the debt to GDP ratio at the historic level. This is achieved by an immediate reduction in tax rates to their new levels and an immediate increase in the public investment rate to its new permanent level, combined with a gradual increase of VAT with the aim of stabilizing the debt to GDP ex post in the long term. Thus, both monetary and fiscal policy are implemented such as to avoid becoming restrictive in the short and medium run. This implies that these measures are moderately inflationary in the short run, associated with a medium-term increase in the debt to GDP ratio. Concerning monetary policy, we assume that the ECB is targeting the nominal effective exchange rate of the euro. This allows monetary policy to accommodate the fiscal measures.

8 Based on these estimates the public to private capital ratio would currently be 33% below the optimum. In our scenario we make the conservative assumption that this ratio is only 15% below the optimum.

Figure 2.1 Effects of EU fiscal measures: standard scenario



We see that labour and capital tax reductions can offset some of the negative spillovers to consumption (labour tax) and investment (corporate tax). Here we consider tax reforms in the order of magnitude of 1% of GDP. These measures can increase private consumption by about 0.2% (permanently), in the case of a labour tax reduction, and partly recover the consumption loss of 1.3% due to the tariff. Investment increases by about 0.5% (permanently) in the case of a capital tax reduction. In this case, investment more than recovers the losses from the tariff (-0.1%). The positive GDP effects remain, however, negligible because of negative trade balance effects due to the real appreciation in the medium term.[9]

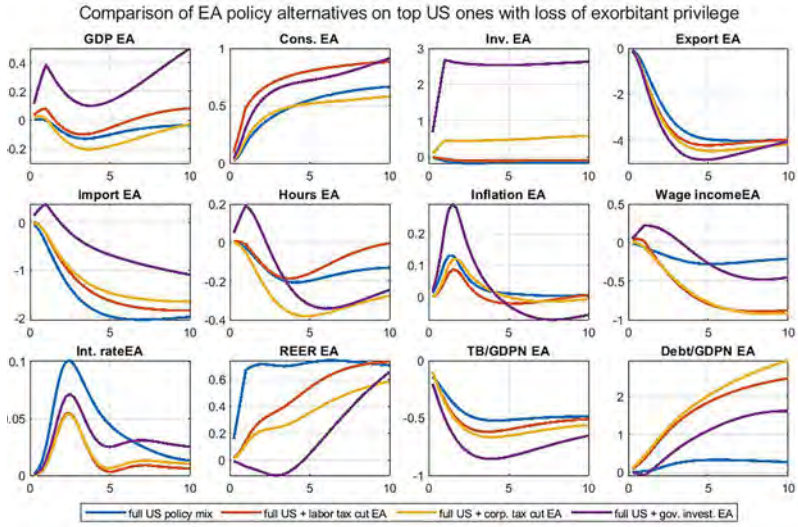
Under our assumption of an inefficiently low public capital stock, public investment appears as the policy option with the strongest growth effects. An increase in public capital increases the productivity of capital and labour, thereby increasing the demand for both factors of production. With this policy the consumption loss can be halved after 10 years (+0.3 relative to US policy only baseline). Investment is up by 2.5% and substantially exceeds baseline values. Finally, the level of GDP rises by about 0.5% after 10 years.

These measures aim at increasing the efficiency of government revenues and expenditure and generating permanent positive supply effects. Higher income expectations also stimulate domestic consumption and investment in

9 Demand effects from fiscal expansion dominate in the short run and lead to an appreciation of the euro. Since supply conditions only improve gradually, the euro only depreciates in real terms in the long run.

the short and medium run. Thus, the policies suggested here are not intended to recover export losses in the US, but rather to make the EU economy more resilient to foreign demand.

Figure 2.2 Same as Figure 2.1, with loss of exorbitant privilege by the US



Under a tariff combined with a loss of US financial market privilege, the negative spillovers are more benign and only reduce investment and real wages marginally. The effect of the fiscal measures on the relevant macroeconomic aggregates, as well as their ranking, does not change compared to the previous scenario. Because the negative spillovers are less severe, partially neutralizing the negative spillovers can be more easily achieved.

5. Conclusion

In contrast to the bulk of the recent literature on US import tariffs, this paper regards these tariffs as permanent. It will be difficult for any government following the current one to remove these tariffs since they generate a sizeable amount of government revenue. Therefore, they can be seen as a fiscal strategy of shifting tax bases onto imports. As part of this wider fiscal package, import tariffs are less harmful for the country imposing them, since they can be used to reduce distortionary taxes. We show that such a US policy scenario can have sizeable and permanent negative international spillovers. However, the dollar appreciation induced by tariffs, associated with higher US demand from lower corporate taxes and negative income effects for the RoW, prevents a decline in the US trade deficit. We show that this can only be achieved if the real value of the dollar remains

unchanged. Within the modelling framework used in this paper, this can only occur if current US policy prompts concerns in financial markets about a higher risk of holding US assets. We show that US GDP and international spillovers are fairly robust across these two scenarios since they largely imply expenditure switching effects. The loss of save haven status for US liabilities would, however, be unfavourable for US households.

While, in the literature, retaliation in the form of increasing tariffs for US exports is often considered, we regard this as an unrealistic option given that most recent trade deals do not foresee any tariff increases for US imports. A feasible fiscal option for the EU seems to be to improve the efficiency of government revenues and expenditures by financing a reduction in distortionary taxes and an increase in public investment with an increase in VAT, at least to the extent to which the former measures are not self-financing. Besides tariffs, VAT is the only fiscal instrument that is applied to imported goods; however, unlike tariffs it is also applied on domestically-produced consumption goods. We show that these policies already have positive effects on domestic demand in the short to medium run. Therefore, instead of recovering export market losses in the US they aim at making the EU economy more resilient to foreign demand.

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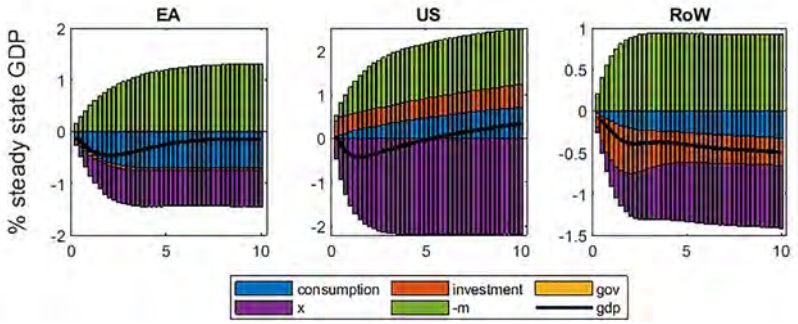
Appendix 1: Decomposing the Effects of the Individual Policies

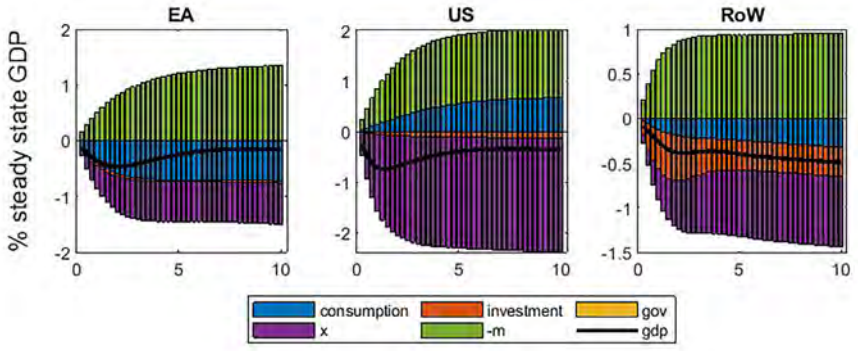
To better understand the contribution of the three US policy measures: permanent unilateral tariff, corporate tax reduction and exchange rate peg, we now show the contribution of each measure by consecutively removing policies from our US policy scenario. We start by removing the exchange rate peg (see Figure A1.1).

Figure A1.1 GDP decompositions for US policy: tariff + cut in corporate tax
(tariff + corp. tax cut)



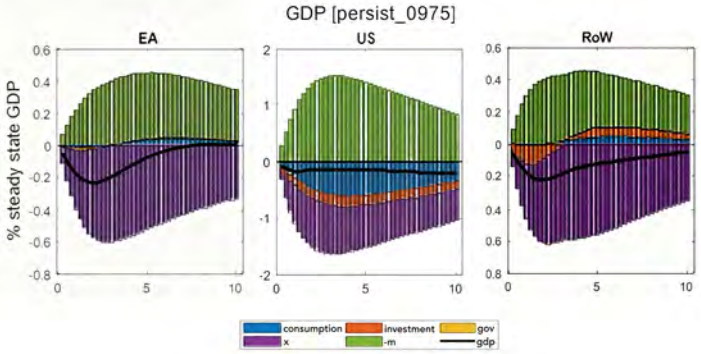
Comparing Figures A1.1 to 1.1 and 1.2 shows that monetary policy does not affect the medium term but only the short run adjustment of the economy. Now, with flexible exchange rates and the FED following a Taylor rule, US GDP initially falls, since the FED raises interest rates to fight the inflationary pressures of the tariff. This also reduces domestic demand in the short run, but it remains positive. Our monetary policy assumption does not significantly affect the spillover, which shows that it is dominated by the permanent policy measures.

Figure A1.2 GDP decompositions for US policy: tariff shock is permanent
(tariff + lump sum rebate to HHs)



Without the corporate tax reform (see Figure A1.2) US GDP is down permanently, since in this case, US firms are now only hit by a negative tariff distortion and are not compensated via a decline in distortionary taxes any longer. The permanent worsening of the terms of trade for the US (tariff increase exceeds effective dollar appreciation) permanently increases costs for production and for capital. Nevertheless, there remains a positive welfare effect in the sense of permanently higher consumption. In line with the optimal tariff literature, the favourable terms of trade gains for US consumers allow for higher consumption despite the efficiency loss inflicted by the tariff.

Figure A1.3 GDP decompositions for US policy: tariff shock is temporary



The tariff effects are, however, sensitive to the expected duration of the tariff (see Figure A1.3). If tariffs are only regarded as temporary (though persistent), the tariff hike becomes significantly less favourable for the US. Since expectations about a reduction of US trade deficits are much smaller in this case, the dollar appreciates less. Therefore, the tariff has a stronger negative supply effect for the US, since import prices increase more strongly. This also creates more imported inflation and requires a stronger interest rate response of the FED, which reduces domestic demand further. In addition, domestic demand is weaker because households and firms defer spending to periods with lower tariffs (intertemporal substitution effect). In the medium and longer term the trade-off between higher tariffs (efficiency loss) and an appreciated dollar (lower pre-tariff import prices for US consumers) becomes dis-favourable for US consumers, i.e. the efficiency losses are now strong enough to outweigh the (pre-tariff) terms of trade gains. This makes US consumers worse off. Interestingly, there is no welfare loss for EU and RoW households in this case. An expected depreciation of the dollar (expected appreciation of the Euro) over the entire transition period of the tariff hike, lowers inflationary pressures and allows the CB to lower the policy rate. This generates a stimulus for domestic demand.

Appendix 2: Tariffs with and without Adverse Financial Market Reaction

Figure A2.1 Detailed comparison of US policy mix alternatives

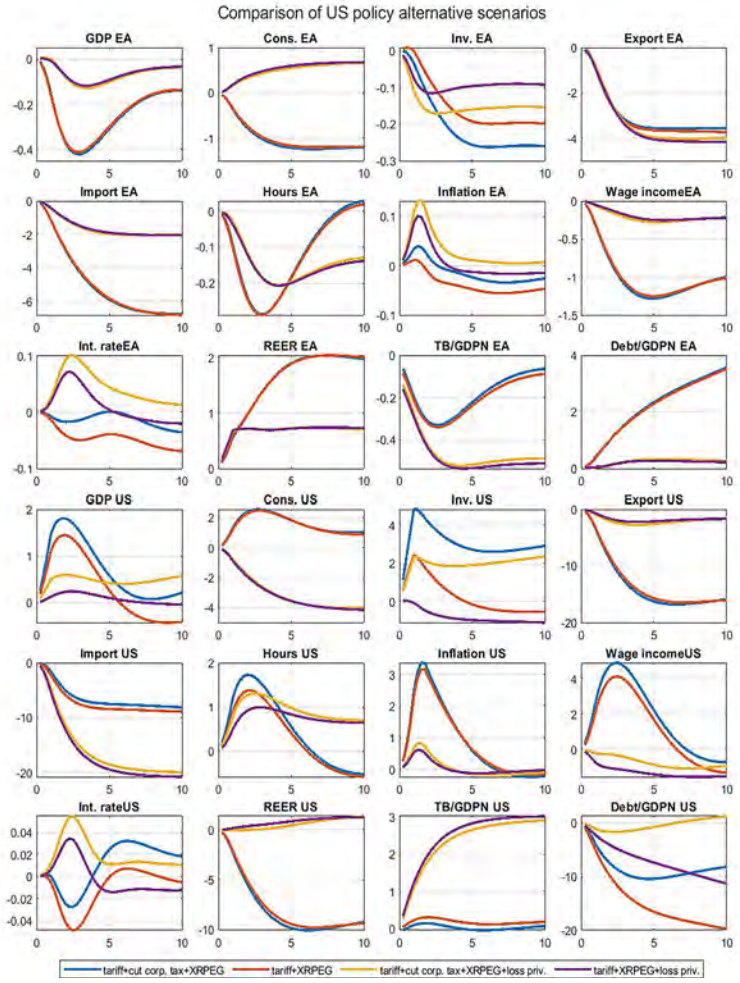
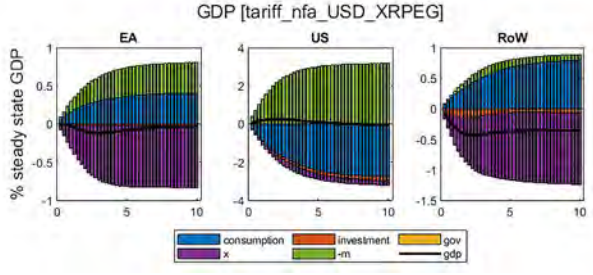


Figure A2.2 GDP decompositions of US policy mix
(tariff + lump sum rebate to HHs +XR peg) + loss of exorbitant privilege



Facing Geo-Economic Threats: The European Union's Economic Security and the Single Market

Florian Le Gallo, Amélie Robinette, Valentine Salmon *

Abstract

In response to rising global geoeconomic threats, the European Union has developed a set of policies under the banner of 'economic security,' aiming to safeguard security and sovereignty while maintaining openness to trade and investment. Whereas most of the geoeconomic literature focuses on the rivalry between the United States and China, this study examines the EU's own strategy by assessing the implementation of three key scrutiny instruments: dual-use export controls, trade defence instruments, and the screening of foreign direct investment. Our findings show that first the products most closely scrutinized by EU instruments are also those of highest geostrategic relevance, and second that countries the most scrutinized in relation to their economic bilateral relationship tend to be those least aligned geopolitically with the Union. These results suggest that the Union is shaping a policy space, associating the Single Market and its closest allies, within which it preserves economic openness, while reinforcing protection against specific external security risks.

Keywords: Economic Security; Geoeconomics; Dual-Use Export Controls; FDI Screening; Trade Defence Instruments.

1. Introduction

The European economic security strategy aims at preserving the European Union (EU) from economic threats coming from unfriendly countries. It brings together a range of existing EU policies originally designed for other specific purposes, but which nonetheless contribute to safeguarding the Union's strategic autonomy. Though not a new goal for the Europeans — protecting essential interests is intrinsic to sovereignty — economic security remains an innovative concept

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within EU policymaking, with the European Commission issuing its first formal dedicated communication in 2023 (European Commission [EC], 2023). Its deployment at the EU level reflects the EU's 'geoeconomic turn' over recent years (Adriaensen & Postnikov, 2022; Helwig & Wigell, 2022; Matthijs & Meunier, 2023), particularly given the EU's longstanding commitment to economic and financial openness to the rest of the world (Bauerle Danzman & Meunier, 2024). The growing context of external threats — from the disruptions linked to the Covid-19 pandemic, to Russia's war against Ukraine, or the resurgence of trade wars — notably thrived on this momentum, revitalizing older instruments, many of which were originally rooted in the military sphere.

So far, very few comprehensive assessments of the EU's economic security strategy allow for an evaluation of how these policies affect the Union's global economic positioning. Most existing analyses focus instead on China-United States rivalry (e.g., Gopinath et al., 2024). Yet, the European Union, as the world's second largest economic power, also plays a role in the current 'great geopolitical bargain', though it does not use traditional protectionist or coercive actions like some of its international counterparts. This article seeks to provide an analysis of the implementing practices of three EU economic security instruments in relation to counterpart countries and products: the screening of Foreign Direct Investment (FDI), export control of dual-use goods, and trade defence instruments. By weighting the scrutiny practices of EU countries by economic bilateral relationship, we design a method for capturing the EU's emerging geoeconomic positioning. Our findings suggest that the EU's practical scrutiny of potentially threatening economic transactions aligns to a significant extent with the geopolitical orientations of its member states: countries that are less politically aligned with the EU, and from which security risks may therefore be more likely, tend to be subject to deeper scrutiny. This would suggest that the European Union, without disrupting macroeconomic flows, has developed the capacity to preserve a hub of free trade and investments with its closest partners, while protecting its economies from major external economic security threats.

Section 2 of this article explores the three economic security instruments and reviews the economic literature on geoeconomic fragmentation, with a focus on the specific policy options of the European Union, which remain comparatively understudied. This section also discusses the data and methodological issues. Section 3 maps the EU's scrutiny of potentially threatening economic transactions by counterpart country and product category, assessing the overall balance of scrutiny. Section 4 evaluates scrutiny practices along the EU Member States' geopolitical alignment. Section 5 concludes by drawing some tentative lessons.

2. Which Policy for the European Union in the Face of Rising Geo-Economic Threats?

The emergence of a new European Union set of policies

The concept of preserving vital economic interests from external security threats is not new (e.g., Paulsen, 2025, for the US's case). However, it has taken different forms in recent years within the framework of European Union policies. The European Commission took a defining step in June 2023 with a first, formal communication on economic security (EC, 2023). This set out their broad strategic lines and labelled several existing mechanisms under this concept, such as foreign direct investment screening, export controls of dual-use goods, and the anti-coercion instrument, amongst others (see Appendix 1 for an overview of these policies). The strategy was further strengthened in January 2024 and December 2025 (EC, 2025), with the aim of strengthening and harmonizing the practices of the Union and its member states, emphasizing the use of existing tools from the perspective of economic security and continuing to adapt to new threats. The EU's economic security strategy therefore broadens the concept of strategic interests to include non-military sectors (such as personal data, agriculture, the press, infrastructure, or high technologies) and non-military interactions that may enable coercive actions (economic interference, cybersecurity risks, strong dependencies, etc.). This expansion follows up the development of an EU 'strategic autonomy' agenda, through which the Union acknowledges and responds more strongly to emerging geopolitical rivalries (Bauerle Danzman & Meunier, 2024). Europe has indeed shifted from a concept of 'strategic autonomy,' focused solely on military and defence matters (European Council, 2013), to a broader understanding encompassing the EU's economic vulnerabilities (EC, 2020; Council of the European Union, 2020). Yet the EU remains committed to reach a balance between protection and openness, hence the formal label of '*open* strategic autonomy'.

These policy developments in the EU represent an answer to the process of 'geopoliticization' of economic relations. Geopoliticization can be understood as 'a process whereby phenomena that were approached from a market logic and/or as domestic affairs come to be framed in terms of global power rivalries and strategic goals' (Herranz-Surralles et al., 2024: 923). In that respect, the economic security strategy represents one component of the response, since it refers to its external dimension, i.e. how to address threats arising from the economic relations with non-EU partners. The internal dimension focuses on strengthening the power and resilience of the EU economic system itself, i.e. the Single Market (notably through the Competitiveness Compass and the Savings and Investment Union policy agenda).

To what extent can the economic security strategy be measured? Methodology and literature review

Given this context of geoeconomic rivalries, our aim is to provide a comprehensive assessment of the economic positioning of the European Union vis-à-vis external trade and investment, based on the implementing practices of EU economic security policies. We follow a holistic approach that brings together the three selected economic security policies: the export controls of dual-use goods, the trade defence instruments, and the FDI screening.

EU export controls are designed to prevent the export of non-military goods that could also be used in a military context by unfriendly countries, such as navigation systems and chemical or nuclear products. Inherited in particular from the Cold War (Bromley, 2022), these national control regimes have since been greatly strengthened through various dedicated international fora (e.g., Wassenaar Arrangement, Australia Group, etc.). In Europe, where practice has been harmonized since the early 1990s, Regulation (EU) 821/2021 defines the common framework within which the member states operate, notably on the basis of the list of dual-use goods subject to control. Companies wishing to export these goods to particular destinations must undergo controls by their national authorities, in coordination with the European authorities. FDI screening, for its part, is a legacy of capital controls, which were phased out in the 1980s with financial liberalization; investment controls were maintained exclusively for internal security threats. The aim of these mechanisms is to prevent the foreign acquisition of companies that are military, strategic or essential for a country. Initially focused on defence, these controls have been considerably extended to infrastructure, health, food safety, etc. (see Barrio et al., 2025, on France's case). Within the European Union, the criteria and sectors concerned have been coordinated and harmonized since 2021 (Bencivelli et al., 2023). Lastly, trade defence instruments correspond to three EU mechanisms, which were strengthened in 2017 and 2022: anti-dumping duties, to counter the practice of selling goods abroad at a deliberately reduced price; anti-subsidy duties, to counter distortions of competition caused by public subsidies from a third country; and safeguard measures, to deal with sudden surges in low-cost export. These measures are not considered protectionist and operate under the framework of the World Trade Organisation and EU law; they are designed only to protect the European economy from unfair practices, following the identification of damage to European producers resulting from market distortions in the third country of production. The European Union has numerous use-cases, ranging from solar panels in 2013 (see Crowley and

Song, 2015) to electric vehicles in 2024. By the end of 2024, 199 European trade defence instruments were in place, which had protected over 625,000 EU jobs, according to the Commission (EC, 2025).

Based on the implementing practices of these policies, we first focus on the third countries and product sectors scrutinized by these three policies when weighted by economic bilateral relations, and then on the relation between scrutinized countries and geopolitical alignment. Our methodological choice to bring these policies together relies first on their formal enshrining under the same umbrella of EU economic security. Second, this approach is consistent with the aim of the European Commission to ensure a more strategically driven EU economic security strategy, including a strengthened institutionalization process under the same Director General and Commissioner for Trade and Economic Security (Couvreur, 2025). This approach is reiterated in the 2025 doctrine (EC, 2025), which calls for the application of existing tools through an economic security lens. Third, the political momentum regarding economic security threats also led to a stronger and closer approach on economic security from member states.

This study brings a first empirical assessment of the EU economic security strategy and contributes to two existing strands of literature, both in economic and international political economy. On the economic side, the literature has mainly focused either on the description of new barriers preventing multilateral flows in the context of 'geo-economic fragmentation' (Aiyar et al., 2023), on the effects of the China-United States trade rivalry on the path to globalization (Gopinath et al., 2024) or on the different forms of economic coercion (Mohr, 2024). These papers have helped reveal the ongoing geoeconomic turn, notably by extending earlier work on openness (Chinn and Ito [2006] on restrictions to financial flows), alongside new theoretical models of geoeconomic coercion (e.g., Clayton et al., 2025). However, these analyses neither examine the role of the European Union as a geoeconomic actor nor evaluate its own instrument, as their empirical focus generally remains on the United States and China. Some contributions in the economic literature focus on specific EU sectoral policies, such as investment screening mechanisms (Eichenauer & Wang, 2024; Faubert, 2025) or trade policy (Marchini & Popov [2025] who highlight a recent upturn in EU trade partners in this context). By contrast, our study adopts a comprehensive approach of the EU strategy, thereby complementing the existing literature.

On its side, the international political economy literature has provided a broad assessment of the EU's 'geoeconomic turn' (e.g., Herranz-Surralles et al., 2024; Bauerle Danzman & Meunier, 2024). It has notably demonstrated

that the Union has taken an original path in engaging with geoeconomic fragmentation. Structurally opposed to tariff wars and still committed to openness, the Union does not play the geoeconomic game with the same tools as other international actors, who rely on forms of 'weaponized interdependence' (Farrell & Newman, 2019) or economic statecraft (Lee, 2024). However, to the best of our knowledge, this literature is based on very limited empirical evidence on the global overview of EU implemented policies, largely due to the lack of directly available public data series. Our analysis helps fill this gap by extending empirical evidence to the EU's main economic security tools, drawing on data extracted from public reports, and by assessing the case of the European Union's 'geopolitical turn'.

We should recall two main methodological difficulties of our approach. First, the three EU policies described above are not designed for geopolitical purposes. All EU measures are country-agnostic and only focus on individual risks associated with each transaction. This means that, in practice, the Commission's assessments do not rely on any general list of risky countries or products, but exclusively on idiosyncratic threats. Our assumption, however, is that this formal process does not preclude some degree of geopoliticization of use-cases, even if this was not the original intention (e.g., Maher, 2024; Crochet & Zhou, 2024 for trade defence instruments), which is confirmed by the European Commission's December 2025 doctrine (EC, 2025d). Second, though we put the focus at the EU level, the implementation of these policies results from complex interactions between member states and the European Commission, depending on relevant procedures (see last column of Appendix 1). Nonetheless, despite these elements of complexity in the implementation of EU economic security practices, we believe that our assessment of these three policies captures the balance between the unifying role of the European Commission and the diverse positions and actions of the member states with respect to security and openness.

We mainly rely on data published by the European Commission in its annual reports on the three policies mentioned above. For export controls, we use the 2023 data from the European Commission and base our analysis on the value of granted 'individual licences' issued by member states, as these licences offer the most complete data coverage. The EU and national general export authorizations and global licences are more flexible, because the products and countries concerned are considered less 'at risk', whereas individual licences are more restrictive. This choice, driven by data availability, may over-represent sensitive cases and under-represent routine flows. In addition, by focusing only on transactions that were screened or authorized, the analysis excludes those that never materialized because firms

anticipated the cost and risk of refusal. This deterrent effect, inherent to the EU's economic security framework, means that the real impact of controls on trade is likely underestimated. These controls are compared with underlying bilateral trade data from the BACI database (Gaulier & Zignago, 2010). For investment screening mechanisms, we also rely on published annual reports, starting from the first European report on 2021 controls (EC, 2021a). This includes screenings notified by member states to the European Commission under Article 6 of Regulation (EU) 2019/452. The number of notifications is compared with the number of mergers and acquisitions by third countries reported in the various Commission Staff Working Documents. Unlike FDI balance-of-payments data, these figures are directly comparable to the number of screenings. As with export controls, deterrence effects may significantly affect the number of notified cases. The usual possibilities of refiling cases, which allows firms to adjust transactions in advance to meet security requirements, also create a bias. Lastly, for trade defence instruments, we also rely on the European Commission's annual reports, which provide longer time series. We compare the number of measures in force with the value (from BACI data) of products subject to a defence measure. For both export controls and trade defence instruments, using the BACI database rather than Eurostat Comtrade allows us to cover a larger set of countries (over 200) and products (around 5,000 at the 6-digit Harmonized System level), thus enabling sectorial analysis and ensuring closer alignment with current enforcement policies.

In order to assess the European Union's control practices vis-à-vis geoeconomic positions, we rely on country votes at the United Nations (UN) General Assembly, constructed using Bailey et al. (2017) method. The distance between the votes of two UN member states, i.e. the aggregation of all vote results, provides an indication of their geopolitical proximity. This indicator is used as a proxy in most of the literature on geoeconomic fragmentation: e.g., International Monetary Fund analyses by Gopinath et al. (2024), European Central Bank working paper by Bosone and Stamato (2024), or the Bank for International Settlements quarterly review article by Qiu et al. (2024). We also compare these results with indicators of democracy, such as those from the Varieties of Democracy (V-Dem) project run by the University of Gothenburg, Sweden (Coppedge et al., 2025), as used in the 2025 European Central Bank analysis by Marchini and Popov (2025).

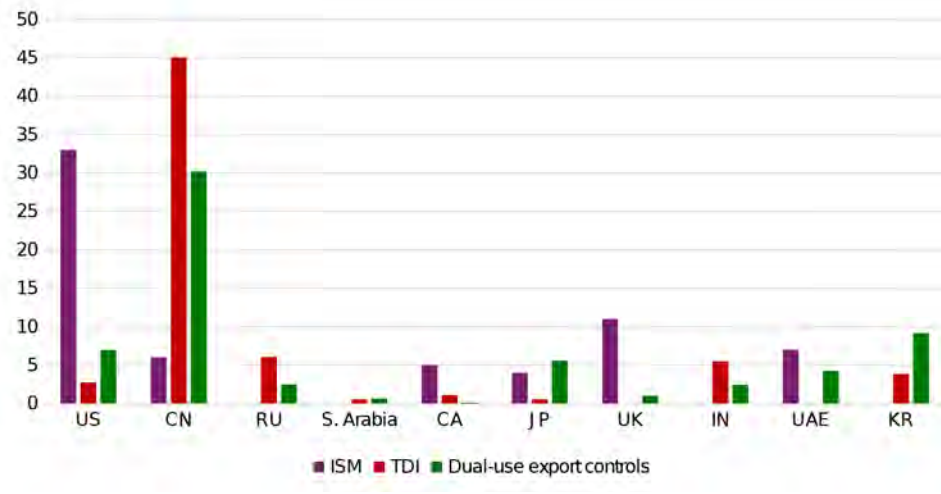
3. A Mapping of the European Union's Scrutiny Practices

From whom and from what does the European Union protect itself?

Export controls, trade defence instruments and FDI screening consist in scrutiny operated by the member states on, respectively, outgoing goods, incoming goods, and inward investment. When distributed by country of destination (for export control) and country of origin (for trade defence instruments and FDI screening), the geographical breakdown of scrutiny at the EU level largely mirrors the EU's trade and investment patterns: China, the United States, and the United Kingdom are the most scrutinized partners (Figure 1). For instance, whereas China accounts for 45 % of anti-dumping and anti-subsidy measures in 2023 and 30 % of individual licences subject to export control in 2023, it is also the EU's leading trade partner for goods. These figures on China are consistent with Maurer et al. (2025)'s analysis of newly initiated anti-dumping and anti-subsidy investigations. It confirms that China is the most scrutinized country in 2023. As for the United States, it is the most scrutinized country for FDI screening (33 %), but also the principal investor in the European Union. These results highlight the open and non-discriminatory nature of European scrutiny mechanisms. *Prima facie*, scrutiny is above all aligned with economic relationships.

Figure 1 Share of partner countries in total EU controls

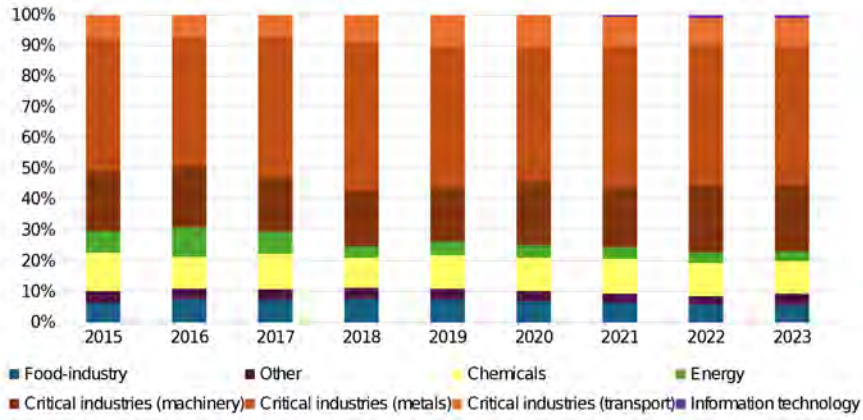
(%, 2023)



Source: European Commission; 2023 as last available data, authors' calculations.
Note: China accounted for 45 % of anti-dumping and anti-subsidy measures in force in 2023, and for 30 % of controls related to exports of dual-use goods in 2023.

The European Union's trade-related scrutiny mechanisms are not only geographically concentrated, but also selective in terms of the sectoral breakdown of products. Most of the EU's scrutiny is concentrated in the manufacturing sector, with a strong emphasis on intermediate goods. These are products used as inputs in the production of final goods, such as metals, chemicals, and components for machinery or electronics. This focus reflects the European Union's growing concern about the resilience of global value chains (EC, 2021b), especially in the aftermath of the Covid-19 pandemic. The crisis exposed vulnerabilities in Europe's industrial supply chains, prompting both policymakers and industry stakeholders to pay closer attention to the origin and security of critical inputs. Trade defence instruments increasingly aim to protect strategic inputs in manufacturing, which can be fragile, from foreign competition.

Figure 2 Distribution of TDI measures by year and types of products
(HS-6 categories)



Source: European Commission Staff Working Documents, BACI, authors' calculations.

Within the manufacturing sector, actions taken under trade defence instruments are largely concentrated on 'strategic' products over the past decade (Figure 2), as defined by the European Commission (2023). This includes final goods such as solar panels (4% of measures in 2016), but also intermediate components such as steel or aluminium components used in many European industries. With a ratio for steel and aluminium components standing at 2.79, these products appear over-represented among trade defence instruments compared to their share in extra-EU imports. This is however consistent with the EU's broader industrial and security agenda (European Council, 2024), which seeks to safeguard technological sovereignty and reduce dependencies in key sectors, notably with information technology emerging in very recent years.

To what extent is the European Union's economic security scrutiny proportionate?

The tools implemented by the European Union are not intended to block economic inflows and outflows. Their only goal is to protect the EU from certain individual risks, while maintaining the principle of openness. It is therefore worth remembering that if the three selected policies may result in a high level of scrutiny, this does not necessarily imply significant effects in terms of flows. According to the European Commission (2025b), member states' authorized exports of dual-use goods amounted to 1% of goods exported outside the European Union in 2023; export refusals only concerned 0.01% of exports (0.04% in 2022). As regards trade defence instruments, given the total number of 199 trade defence measures in force at the end of 2024, less than 1% of EU imports of goods were affected by anti-dumping and anti-subsidy measures (EC, 2025a). The order of magnitude is the same for FDI control mechanisms, with only 2% of notifications resulting in a European Commission opinion (positive, blocking or with mitigating measures; the number of blocked transactions is not known) in 2024 (EC, 2025c). The macroeconomic consequences thus appear to be rather small for the EU, though the counterfactual remains unknown. The issue is therefore not so much the number of transactions prevented by European policies, but the signal effects generated for foreign companies as well as the specific protection practices, geographical or sectoral, that this EU strategy entails.

To understand the effect of EU scrutiny from a different angle, we propose a method that consists of weighting each country share of scrutiny by the share of the same country in bilateral trade. We thus create a 'scrutiny intensity index', computed as the ratio between, for a given third country, its share in total scrutiny and its share in the EU bilateral trade (see formula below). The method takes inspiration from the equity home bias in financial literature (e.g., Ardalan, 2019), which investigates why investors tend to overinvest in domestic stocks rather than what the optimal portfolio investment strategy would entail. In our case, we put the emphasis on the 'bias', or spread, between the scrutiny distribution, which would derive from trade and investment relationships only, and current scrutiny practices. The benefit of this index is that it overcomes the distribution of scrutiny that is attributable only to the intensity of trade and investment relationship between its partners. Its limitation is, however, that in its construction it is strongly sensitive to the numerator when dealing with small samples. This scrutiny intensity index shows that some countries are over-scrutinized, meaning that their share of controls is higher than their share

in bilateral trade, while others are under-scrutinized. The higher the scrutiny intensity index, the more the country is scrutinized.

$$scrutiny\ intensity\ index\ (p) = \frac{share\ of\ i\ from\ country\ j\ in\ scrutiny\ p}{share\ of\ country\ j\ in\ the\ exchanges\ of\ k\ between\ the\ EU\ and\ country\ j}$$

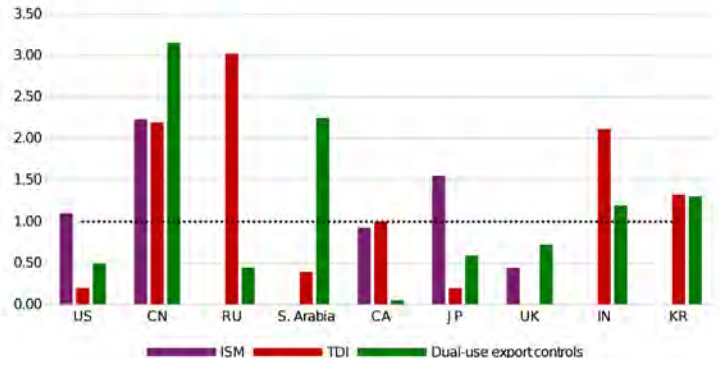
p : European economic security scrutiny policy: respectively trade defence instruments, FDI control, exports of dual-use goods.

i : subject to scrutiny: respectively number of trade defence measures in force, number of notifications of FDI screening, value of products subject to individual licenses of export control.

j : counterpart country of the sample according to policy p.

k : underlying economic exchanges: respectively total imports of goods (value), number of mergers and acquisitions, total exports of goods (value).

Figure 3 Scrutiny intensity index



Source: European Commission, BACI, authors' calculations; data for 2023.

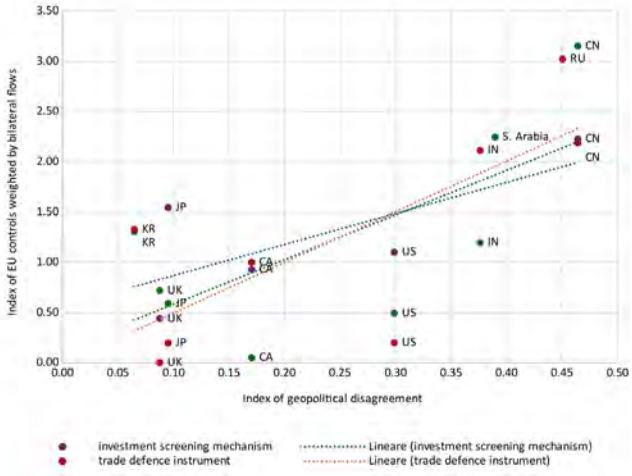
The computed ratios for 2023 show that China (including Hong Kong when available), which is also the most important trading partner, is highly scrutinized for the three types of policy with regard to its weight in bilateral economic relations. Russia is also heavily scrutinized regarding trade defence instruments. The index is zero for FDI control, because of specific FDI screening regarding Russia (EC, 2022), and because there has been no EU FDI in Russia since the start of the war with Ukraine. EU exports of dual-use goods to Russia are subject to little over-scrutiny, since such exports have almost entirely vanished. In practice, Russia has been replaced by other economic partners since the strengthening of EU sanctions (Emlinger & Lefebre, 2025). Canada and Japan appear overall slightly over-scrutinized, while India is over-scrutinized regarding trade defence instruments. South Korea, which has become a major military-industrial producer and importer in recent years (Paik, 2024), is over-scrutinized regarding dual-use goods. However, since we focus only on individual licences, a significant portion of exports to the

European Union's trusted partner countries, such as the United States, Japan, or Australia, is automatically excluded. An important part of trade flows to these destinations is indeed carried out under EU General Export Authorisations or national general licences, which allow simplified shipments without prior individual authorization. While our approach is useful for targeting sensitive or high-risk transactions, it does not capture the full scope of strategic exchanges and may present a distorted picture of the reality of dual-use goods exports. This index was also calculated using 2022 data, with qualitatively similar conclusions. Further breaks in the data series prevent us from computing longer time series for the index.

4. The European Union's Scrutiny Practices and the Geopolitical Alignment of the Union

The intensity of the scrutiny carried out by the European Union is closely related to the geopolitical alignment of the Union. Following recent literature on fragmentation (see above), we use the voting proximity scores at the UN General Assembly of member states from Bailey et al. (2017). The proximity score between two countries indicates the degree of common voting during the same session. We define an average score for the European Union, calculated as the average of the scores of the member states without individual weighting. In matters of trade or foreign policy, all countries have a say.

Figure 4: Scrutiny intensity index and geopolitical alignment *(2023)*



Source: European Commission, year 2023 for trade defence instruments, FDI screening and dual-use export control; Bailey et al., 2017 for geopolitical alignment on 2022 UN votes data.
Note: Russia's deviation index for trade defence instruments is almost 3, while geopolitical misalignment with the European Union (1 – alignment score), as measured by the average of voting proximity scores at the UN, is 0.45, one of the highest scores.

The relationship between the scrutiny index's intensity and geopolitical misalignment shows that the more geopolitically distant a country is from the European Union, the more it is subject to intense scrutiny. This is particularly the case of China for the three policies studied, of Russia for trade defence instruments, and of India for both trade defence instruments and exports of dual-use goods. The relationship is strongest for exports of dual-use goods. However, the small number of points prevents the calculation of robust regressions, and the lack of more recent data for bilateral geopolitical alignment hinders time-varying tests.

This figure suggests that the European Union engages in the 'grand geopolitical bargain' of the current international scene with some form of original tools. It does not rely on protectionist instruments or tariff war. Yet the tools the European Union uses for preventing threats arising from economic transactions also help to ensure its geopolitical consistency on the international scene. The least geopolitically aligned countries (from which we can assume that transactions could bear more risks) are indeed subject to more intensive scrutiny. Since the instruments are agnostic of the country of origin, this result would suggest that the European instruments display a form of plasticity: they do not target a specific country, but rather threats, which are mainly borne by geopolitically distant partners.

Geopolitical alignment can also be considered as an approximation for economic consistency between the European Union and third countries. Indeed, the selected policies heavily target government controlled economic systems. These types of economies, far removed from a market economy, are *de facto* found in non-democratic countries. Using other indicators capturing the intensity of democracy, notably V-Dem (Coppedge et al., 2025), we find that the less democratic countries are also the most scrutinized. This is consistent with our previous results, given that less democratic systems also have geopolitical positions that are not aligned with the EU.

Our results should be treated with caution for reasons relating to both the data and the methodology. The limited availability of data, particularly from previous years, prevents any temporal comparison. Moreover, as already pointed out, the results are based on the aggregation of data from three different types of policy, which are, in practice, only set up for individual cases regarding potential threats. Therefore, any macroeconomic interpretation must be made with caution. In particular, the implementation and degree of restrictiveness of these policies vary across member states (see Bencivelli et al., 2023 for the screening of FDI), although the revision of the Regulation (EU) 2019/452 *on establishing a framework for the screening of foreign direct investments into the Union* is expected to help to overcome disparities. In addition, the aggregation

of the three policies does not reflect the fact that they relate to different EU administrative logics and respective management (European Commission Directorates General for Trade, Competition, Growth, etc.), despite newly created common coordination structures.

5. Conclusion: Towards a Common Economic Security Policy for the Union?

Our empirical findings are in line with the literature on geo-economic fragmentation, while providing evidence of a set of European economic policies whose effects have been underexplored in empirical research. To the best of our knowledge, no global empirical evidence illustrates the geoeconomic turn' of the Union. While we do not document a change in flows due to geopolitical realignment, as some studies examine (e.g., Bolhuis et al., 2023), our results nonetheless reflect the geoeconomic policy dimension of the Union's external economic policy with economic tools implemented along geopolitical lines. These findings remain exploratory, with a limited scope of instruments and limited data coverage. Future research should integrate broader datasets and additional instruments to confirm these trends.

Economic security policies ultimately redraw a clear space between member states on the one hand and the rest of the world on the other, re-examining the concept of 'Fortress Europe' (Head & Mayer, 2022). This type of policy redefines a form of boundary between a first circle of aligned economies and a second of less aligned ones. In this sense, the economic security strategy activates a form of external economic policy vis-à-vis the rest of the world. If it were further reinforced — as suggested by the Commission's communication of December 2025 (EC, 2025d), embodying a decisive shift towards systematically embedding European economic interests at the core of its economic security architecture — this would lead to an even stronger form of 'economic rebordering' (Freudlsperger & Meunier, 2024: 1064). In the end, this may recreate space for the Single Market and its closest allies, as a trading hub shielded from the moving geo-economic pressures.

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Appendix

Table 1 Typology of European instruments

	European Union instrument	Objective	EU regulation and simplified procedure
EU policies originated from the military and security dimension of European economic protection measures	**Export control of dual-use goods**	Protect national and European security by granting licences for the export of dual-use or sensitive goods.	**Regulation (EU) 2021/821:** Control by member states with consultation by the Commission; export licences; EU list of sensitive goods; consultation of the 'Dual-Use' expert group.
	Screening of foreign direct investment (FDI)	Protect strategic assets against takeovers by foreign entities likely to threaten security or public order.	**Regulation (EU) 2019/452:** Cooperation mechanism between member states and the Commission; mandatory national screening for critical sectors; non-binding opinion from the Commission.
EU trade policy	**Anti-dumping, Anti-subsidies**	Defence tools for goods imports. Combat unfair trade practices (dumping, subsidies) affecting EU industry.	**Regulation (EU) 2015/477:** 3-step procedure: Investigation by the Commission; consultation of member states; adoption by implementing act (involving member states in comitology).
	Safeguard measures	Temporarily protect an industry against a sudden surge in imports causing serious harm.	
Most recent EU instruments directly connected to economic security threats	**Anti-Coercion Instrument**	Respond to coercive economic measures imposed by third countries against the EU or its member states.	**Regulation (EU) 2023/2675:** 3-step procedure: Investigation by the Commission; consultation of member states and Council vote; adoption by implementing act (involving member states in comitology).
	International public procurement instrument	Ensure reciprocity and fair access for European companies to foreign public procurement markets.	**Regulation (EU) 2022/1031:** Investigation by the Commission; possibility to exclude or penalize bids from non-open countries; consultation of member states.
	Foreign subsidies regulation	Prevent competition distortions caused by foreign subsidies within the EU Single Market.	**Regulation (EU) 2022/2560:** Mandatory notification of concentrations and public procurement exceeding certain thresholds; investigations by the Commission with power to impose remedies or prohibit the transaction, (involving member states in comitology).

After Letta and Draghi: Empowering the Single Market in Earnest?

Jacques Pelkmans *

Abstract

The EU is trying to deepen and empower the European Union Single Market. Although it is undeniable that a strengthened Single Market would yield additional economic welfare, this does not easily propel political leaders into action. The urgency of the situation is demonstrated by a lengthy survey of today's rampant market fragmentation from multiple academic and professional studies, further emphasized by the authoritative Letta and Draghi reports. Fragmentation undermines the EU's competitiveness, in turn pre-empting a higher long-term growth rate. Yet, deepening and empowering the Single Market has proven to be difficult and slow. This paper does not advocate for an incremental approach to improve the Single Market but, if only for the credibility of the strategy, one of decisive leaps. It is argued that the EU is best inspired by the Letta and Draghi reports when agreeing on such decisive leaps.

Keywords: EU Single Market; Fragmentation; Internal Market Barriers; Single Market Roadmap; Competitiveness.

1. Introduction

Introduced almost 70 years ago, the common market is the core of the European Union (EU). It is nowadays called the 'internal market', known to most as the Single Market, but perhaps best understood as the not-so-Single Market. Admittedly, the ideal form of the Single Market would be very hard to achieve, but equally rewarding once the EU gets there. The present contribution provides an abridged survey of today's predicament in trying to deepen and empower the EU Single Market. Given space constraints, the analytical economic underpinning has been left out, except for some cardinal references. In Section 2, the query is posed whether prospective Single Market

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gains generated by significant deepening, and indicated to different degrees by various economic research, actually engender effective EU action in politics and governance. Section 3 deals with the barriers and fragmentation in today's not-so-Single Market, using a variety of sources from academic and professional studies. It turns out that fragmentation is rampant and must be addressed in earnest. Section 4 asks whether the 2024 reports by Letta (2024) and by Draghi (2024) can provide the answer to empowering the EU Single Market. This section has been kept succinct as both reports (but above all, Draghi, given its sheer size) are very rich and diversified. Section 5 concludes.

2. Do Prospective Single Market Gains Engender Effective EU Action?

Treatises about the EU Single Market traditionally take two forms: one stream focuses on the tasks required, employing long lists of 'actions' or plans and proposals, and another stream deals with the economic — and at times, political economy, and strategic — gains that may be generated. The present contribution mainly focuses on the 'how' of deepening and possibly widening the EU Single Market. However, this is *not just another* such strategy: the EU has seen enough of those.[1] The 27 must be far more affirmative and focused, despite necessary attention going to numerous smaller issues. This will require not so much an incremental approach towards empowering the Single Market but one of decisive leaps. The other stream, studying the economic gains of deepening the Single Market, is not discussed here for reasons of space. It remains a field with lively and important economic debates.[2] Ever since the Cecchini report (Cecchini et al., 1988), four decades ago now, both types of studies have been made:

1 For a trail of initiatives over nearly 15 years following the 1985 White Paper on 'completing the internal market', see Pelkmans (2026). Commissioners Monti and Bolkestein (in resp., 1996 and 2003) did follow up a quest for deepening, with some but limited effect. One well-known proposal from Commissioner Bolkestein is the 2004 draft directive on (lightly regulated) services, which, in December 2006, was enacted as the Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market. From then, every new Commission has come up with a new Single Market Strategy, each of which do generate positive effects on economic welfare and integration but their impact primarily hinges on what the member states (i.e. the Council) embrace and subsequently implement properly, or not. And this leaves much to be desired. The European Parliament (EP) tends to be quite active but its effectiveness remains greatest when specific laws are at stake and amendments can be negotiated.

2 Four examples: Head and Mayer (2021); the survey by Dura and Pasimeni (2025); Adilbisch et al. (2025); Bernasconi et al. (2025). Especially, the use of tariff equivalents as a proxy of intra-EU barriers has led to a heated debate. These much quoted rates (44 % for goods and 110 % for services in recent IMF reporting) are misleadingly high. See Bini Smaghi (2025); Head and Mayer (2025).

those with lists of proposed 'actions' at EU level and those suggesting orders of magnitude of potential economic gains. What has hardly been studied systematically is how the two might possibly be connected. Do studies about potential economic gains of a (much) deeper Single Market incentivize EU leaders into political action? One genuinely wonders.

Perhaps economists take it for granted that the suggested economic gains render it imperative to work actively on the Single Market, only to be disappointed later, time and again. For example, one can credibly argue that the original European Economic Community treaty (1958) — with the 'common market' at its core — was a mixed success for goods and yielded next-to-nothing for services, labour, and capital after 25 years.[3] The 'EC-1992' programme launched by Jacques Delors with the 1985 White Paper on Completing the internal market (European Commission [EC], 1985) did not fare much better. It was, surely, a very ambitious programme, however it was neither written on the basis of preceding economic studies nor contained any reference to economic analyses. On the contrary, the Cecchini report (Cecchini et al., 1988) amounted to a belated economic study on the 'EC-1992' programme, attempting to fill the gaps left by Delors' famous White Paper. The unsatisfactory state of today's Single Market — even when so much deeper and also wider in reach than several decades ago — undoubtedly amounts to a rude wake-up call to leaders to prepare for firm action. Its strong links with EU competitiveness (Draghi, 2024) and the stark contrast with the current state of the American economy should render this impulse much more powerful.

Informal reports suggest that the Letta proposal for the 28th (EU) regime, a single opt-in EU rulebook simplifying cross-border entrepreneurship, was well-received by the heads of government during the informal Alden-Biesen European Council meeting of 12 February 2026.[4] If successful, the 28th regime promises to reduce fragmentation between member states and the ensuing bureaucracy in the relevant areas, which would be particularly helpful for start-ups and scale-ups, and for innovation by implication (see Murphy, this report). The 28th regime tries to realize EU market size in the relevant policy areas, not least because innovation is powerfully incentivized by the prospect of market size. As so often happens, announcements have been premature.

3 Except for FDI internally and externally. See Pelkmans (1985) for elaborate analysis.

4 Long discredited because of the Societas Europa example as well as the once proposed parallel currency, this time the 28th regime for business law is taken much more seriously. The European Parliament published a fairly detailed positive resolution about it on 20th of January 2026 (European Parliament, 2026), and recent studies have been constructive and helpful (see Garcimartin & Paulus, 2025; Thomadakis et al., 2026; Geiser, 2026).

What is different this time is the (still informal) decision to opt for a 'coalition of the willing', thereby avoiding the speed of the slowest or most immobile member state(s). This seems to have worked in the case of the Unitary Patent (since 2023), could it do so too for the 28th regime? More generally, can member states finally focus on the Single Market in earnest and address the range of lingering 'dossiers' that will be specified below? And when these dossiers run into some opposition, can a core of convinced member states go ahead in 'a coalition of the willing', thereby possibly exerting pressure on the laggards via market discipline and fear of missing out on the advantages of strengthened competitiveness?

But alas there is more. European business has convinced national governments that the EU has unreasonably ballooned the red-tape burden on enterprise, and most of all for SMEs. Clearly, there is something to this claim. The Omnibus Packages proposed by the Commission attempt to address these claims.[5] Nevertheless, it is mistaken to overly focus on these red tape details as if they are of equal or even greater importance than the general state of the Single Market. Indeed, red tape can be annoying but this is a small matter compared to the principal economic issues the EU is confronted with. When member states emphasize such issues over the long list of well-established and costly obstacles in the Single Market, they try to win a short-sighted game in the short-run (for purely domestic political reasons) whilst contributing nothing or, at best, very little towards a more robust and innovative Single Market. Member states should pay heed, instead, to the economic barriers they maintain or tolerate. The classic market integration impediments epitomized with the Court of Justice caselaw on the French ski instructors and access to control of Italian beaches — both recalled at Alden-Biesen — demonstrate just how stubborn member states can be, but these barriers are insignificant compared to the numerous obstacles still present in the core of the not-so-Single Market.

Indeed, it is sad and unwise that the Single Market debate is hijacked by the red tape campaign and old examples, rather than pursuing the proposals of the 2024 Letta and Draghi reports. As Draghi said so clearly, the EU suffers from far too many instances of fragmentation; for EU

5 Under the label of 'simplification' and after heavy pressure from business in the EU, ten omnibus proposals have been presented by the Commission in 2025, expected to reduce recurrent administrative costs by € 11.9 bn. For a summary and links, see the designated Commission webpage Simplification at https://commission.europa.eu/law/law-making-process/better-regulation/simplification-and-implementation/simplification_en (accessed 30 March 2026)

economic integration, fragmentation is a disease. Its costs are huge, not just in static welfare terms, but even more so when considered dynamically. The source and later cure of it are both in the hands of the member states. Fragmentation has been documented over decades, and again today. Do national leaders actually read the very rich policy documents in this respect? Or are national leaders paralysed by domestic political sensitivities and taboos, thereby ignoring the strategic needs of today's EU? Is national policy set by local 'red lines' instead of joint opportunities?

3. Barriers and Fragmentation in Today's Not-So-Single Market

Removing barriers is hard work based on thorough studies, detailed information, and permanent cooperation with and between the member states. It begins with the steadfast political determination to deepen the Single Market and strengthen EU competitiveness. The presentation in Table 1 cannot possibly do justice to all aspects. What Table 1 hopefully does is provide a powerful illustration of EU fragmentation in a number of important areas.

A selective anthology of barriers in the Single Market collected from recent reports, mostly from the business sector, and the barriers recognized and various solutions proposed by the Commission in its latest *Strategy for making the Single Market simple, seamless and strong* (EC,2025) are catalogued in 7 general themes, which are based on the categorization from my report on the Single Market for CEPS (Pelkmans, 2024). Groupings are obviously based on identifying overlaps between the grievances of European business and the issues recognized by the Commission, but these are not nearly as much as one might expect. That is demonstrative of both the extent and complexity of fragmentation which persists in Single Market affairs. It is also very clear that while red tape is a valid issue, it does not dominate the discussion.

Table 1 Barriers and Fragmentation in Today's EU 'Single' Market

1. Fragmentation in the EU services market under the 2006 Services Directive • professional services (some 800+); retail (esp. member state restrictions as shown in the RRI); construction.	
Business complaints	**Commission Reactions**
• Various issues in product & services regulation. • After-sales issues and too complex and diverse labour & social regulations, seen as a barrier to investment. • EU regulation about consumer protection should be more European, combined with social and environmental standards. • Territorial supply constraints (by large supermarket chains or their suppliers, causing price disparities between EU countries) to be more pro-actively tackled.	• A host of issues in (restrictive and divergent) services regulation, e.g. mutual recognition of qualifications or certification. These restrictions stifle innovation, scaling-up, and business opportunities. The aim should be the (ease of and options for) provision of pan-EU services. • Better and wider recognition of professional qualifications between member states (an old issue, with proportionality as the key). • A permanent irritant are territorial supply constraints, which cannot be tackled by EU competition policy. Firms exercise market power (but are not dominant) and fragment the EU retail market via price disparities.
2. Fragmentation in the EU services market under Sectoral Services regulation • eComms; financial & capital markets; energy; freight and passenger rail (incl. ERTMS signalling)	
• 15 barriers in transport. • The introduction of ERMTS 'l': signaling and interoperability in freight rail) is too slow. • Cross-border passenger rail should be far easier and widely available. • Fast rail connections between national capitals should be completed. • There is urgent need for drastic increases in cross-border energy interconnectors to facilitate price convergence and reduce supply constraints. • Cross-border power purchase agreements [PPAs] in electricity both facilitate flows and stabilize prices, hence greatly reduce fragmentation helping stabilize the market for long-term cross-border electricity trade.	• The sectoral services market: retail, telecoms, energy, transport and financial services is recognized as a major problem for the Single Market at large.
• Lack of consolidation in the telecoms market; Coordination, timing, operation of spectrum frequences; fully-fledged operation of EU air traffic control, SES 2+; turning copyright from a national into an EU property right.	
• Air traffic control issues in SES.	• Fragmentation persists in telecoms and the new Digital Network Act must engage in profound repair, which will be tough and unlikely to be resolved soon; • Proposals also include the Commission's 2026 Patent Package (which should include EU copyright).
4. Repairing a wrong-footed approach to European Harmonized Standards • Ever since the 2016 CJEU Elliott ruling (Case C-613/14), the Commission has largely followed a (too) legalistic, yet highly problematic approach to technical standardization, undermining the credibility of such standards worldwide. The 'Brussels effect' of such European standards is far more important than that of EU regulation as such, hence this policy is costly; there is no sound reason to undermine the EHS system.	
• Need to restore the EU regime of harmonized European standards; • Costs of non-working mutual recognition are too high (in water taps, food contact materials, etc., and where chemicals are contained in the product, e.g., tableware, children's clothing, furniture, etc.).	• Outdated harmonized product rules and lack of product compliance, sometimes massive (e.g. Chinese small packages), might have to lead to the creation of an EU Market Surveillance Authority. • In recognition of the slow progress of EU standardization – although the costs for industry matter and cooperation between business actors from different member states cannot be forced – the Commission proposes 'common specifications,' a questionable approach.

5. Improving Regulation and Enforcement, Cutting the Red Tape without increasing uncertainty	
• Lack of professionalism in public procurement, biased against non-locals usually owed to the many thousands of procurers who seldomly purchase publicly. • Germany's system of annual budgeting generates a strong bias against above-threshold public procurement contracts (i.e., favouring national purchases without EU rules). • Subtle protectionism in local public procurement via e.g. local certifications and specific labels. • Enforcement in the Single Market should be more strict at MS level and – often – more EU driven, especially in wholesale and retail all over the EU. • The Commission should have suspension injunction powers in certain cases.	• Recognition of overly complex rules: addressed in the 4th Omnibus package, including Digital and environmental rules; • Tackling the proliferation of many and often decentralized regulators and agencies, leading to overly complex procedures, not least in defence. • Reducing complexity with respect to the Extended Producer Responsibility obligations, and in the public procurement framework. • Need to improve member states' 'lack of ownership' of the Single Market, as well as their approach to proportionality. • Temporary posting of workers in other EU countries requires complex filings of data (before) which differs between EU countries. The European Labour Authority and the SMET have intervened, yet are much too timid so far. A European Social Security Pass ought to be introduced and ELA strengthened.
6. Stimulating drivers of entrepreneurship and innovation • The Single Market should be a potent force in helping drive these competitiveness factors, and especially for integrating EU capital markets with the promise of scale	
• Strong advocacy for 1) a European safe asset to stimulate a much stronger EU bond market, 2) for the proposed common consolidated corporate tax base, and 3) a compulsory single-market-test at the member state level. • A truly EU-wide and deep capital market would require firm action at 1) the national level: pension funds should move away from PAYG (pay-as-you-go) and to funded pension pillars (long term), and at 2) the EU level where fragmentation is a result of disparate legal, tax, and supervisory approaches (short term change). Thus, these agendas are demanding and cannot but take time. Moreover, it would be greatly facilitated by the completion of the Banking Union (i.e. convergence of public risk taking). In turn, it would serve as a significant boost to tapping venture capital in Europe rather than in the US. • The fragmentation in health technology assessment is lamented as absurd.	• A detailed treatment of the fragmentation hindering companies in the Single Market, incl. the 28th regime for companies interested in operating throughout the Single Market • The proposed Savings and Investment Union would improve the channels of savings to productive investments, despite a host of fragmenting barriers that have been discussed for many years. The 18 December 2025 compromise arrived at in the trialogue on the Retail Investment Strategy looks like a failure, and once again prompts fragmentation, probably because of vested interests. • The Single Market should be helpful, not difficult, for SMEs and start/scale-ups. For these companies, various omnibus proposals might well be very useful (e.g. Digital Omnibus; Defence Omnibus).
7. Green and digital transformation (without fragmentation), especially member states' inclination to first 'go national' and only subsequently 'go EU' has to be pre-empted	
• Need for greater harmonization on green and digital issues. • EU labour unions call for more effectively combining the green and digital transition, strategic positioning, social sustainability. • Issues persist with the packaging waste and waste shipment regulation (i.e., no Single Market for waste, yet) • Fragmentation in digital services, consumer protection, liability, instances of price regulation (medicines, gas, alcoholic beverages, etc.). • One Market implies one set of digital rules: EU data rules to be streamlined; the digital product passport to be used everywhere; European skills passport launched. EU digital standards are critical; common format needed for data sharing; secure EU-made digital IDs, and cloud computing.	• Addressing fragmented rules on packaging, labelling and waste —complications with respect to Digital Product Passport and EPR (extended product responsibility) which is hopelessly fragmented — too little MR. • Shifting to a data-based Single Market with a proposed EU Company certificate, which should reduce digital fragmentation in various ways, including with the Digital Identity framework and the EU business wallet. • A new EU Single Market for cloud services should be pursued urgently.

Source: (1) The selected business complaints list is extracted from Pelkmans (2024: Appendix), summarizing 10 relevant reports from EU stakeholders: business organisations, the European Parliament, labour groups, and consumers on the Single Market, specifically: EC (2020), Dahlberg et al. (2020), BusinessEurope (2023a & 2023b), ERT (2021), SMEunited (2023), Eurocommerce (2023), Eurochambres (2023), Akgüç et al. (2022), Andhov et al. (2022), DigitalEurope (2023), and BEUC (2023). (2) The Commission reactions and proposals can be found in the European Commission proposal on The Single Market: our European home market in an uncertain world, A Strategy for making the Single Market simple, seamless and strong (EC, 2025).

Note: (1) Not nearly all Commission proposals have been included, as they would increase the level of detail too much. (2) RRI = Retail Restrictiveness Index (European Commission). (3) SES = EU-based national air traffic controls. (4) ERTMS = signalling and interoperability digital system for (especially) freight rail.

The above is a clear and forceful demonstration of how much EU Member States (and the various lobbies behind them) have remained the cause of fragmentation by sticking to the status quo, by defending their turf, by dragging their feet causing undue delays, or by blocking progress. This does not mean that there is no general progress in the Single Market, but much of it has to be 'conquered', often at the cost of speed, logical solutions, uniformity (where feasible and useful), and indeed credibility. However, too often proposals get stuck and the status quo remains for too long. Here follow two examples, selected from far too many. The first is about recognition of professional qualifications, an issue which has dragged along ever since the Services Directive 2006/123/EC (if not before). The reason is obvious: the professional lobbies have an undue influence on domestic legislation, a suspicion that was demonstrated as valid when member states were obliged to hand in a sound proportionality test for all their professional requirements on two occasions, once in 2015-6 and again in 2019-20 (EC, 2024).

A second example is found in the pursuit of an EU capital market. Although the European Council announced a 'firm' intention to have an integrated EU capital market and submitted several proposals a decade ago, only a few modest ones have been implemented. Apart from a few technical improvements, so far little has been accomplished. The conviction among economists of the strong case in favour of a common EU capital market has only become still more robust. The EU has enormous savings which too often stay in bank portfolios, instead of risk investment (including venture capital supporting potentially higher growth rates), or worse, drift towards the US capital market. The case for EU capital market integration being so strong, why does it not make more — let alone, rapid — progress? Again, the private actors involved prioritise their current interests, too often limited within the national context — one hardly discerns a groundswell among private players to 'go European' — even though leading financial players could make a decisive difference.[6] Knowing that a European capital market would offer a credible alternative to bank lending, is it not obvious that the banks in Europe are, at best, 'hastening slowly' ?

4. Can Letta and Draghi Come to the Rescue?

With two prominent reports — by Letta (2024) and Draghi (2024) — published, accessible, and thoroughly discussed, government leaders would be well advised to realize the EU's predicament and many options available for more courageous Single Market action. The two reports are partly overlapping and partly

6 Readers are advised to verify many details in numerous publications from the EU Capital Market Institute, publicly available on their website at www.ecmi.eu (accessed 29 March 2026).

complementary. Letta focuses squarely on the Single Market, whereas Draghi draws a much wider study perimeter and respective analysis, i.e. including defence, competitiveness (whether via the Single Market or otherwise), remedies about 'dependencies', and ideas about investment funds. Thus, Draghi proposes to push up the EU Investment/GDP ratio by 5% points,[7] and insists that the EU must radically change in order to generate the dynamism required.

Letta favours the introduction of a 5th freedom (research, innovation and education), goes into a 'security' dimension (with an 'Economic Security Council'), advocates a stronger emphasis on enlargement (not in Draghi) and develops a strong plea for the 'right to stay' (in support of weaker regions, supported by better infrastructure, investment funds, and other means to pre-empt emigration to other areas in the EU), which is also a topic omitted in the Draghi Report.

Both Letta and Draghi lament the EU's, i.e. the member states, strong inclination *to first fragment before attempting to act together*. Such conduct renders the integration process more difficult than it would be anyway, by generating new rigidities and creating vested interests. As noted, Letta advocates a 28th regime especially for start-ups, scale-ups, mid-caps, and other companies ready to scale up, offering the option of by-passing the national market regulation regime in areas like insolvency law, excises and VAT, and selected aspects of company law. Realizing a 28th regime in this respect would be a dream for numerous companies. Apart from the considerable technical and legal complexities (see Murphy, this report) the lamentable property of European integration — that is, first fragment, creating vested interests against a common approach and subsequently attempting to (as some might call it) 'put Humpty Dumpty together again' — might render the realization of a 28th regime difficult, slow, and perhaps even unconvincing. Not because the idea is not sensible, but because member states have the greatest difficulty in actively pushing the common interest if *their* (often ill-perceived) interests are in the way. Letta and Draghi overlap in their advice on scaling up in financial services, energy, and eComms, but Draghi adds many other sectors in view of 'EU competitiveness', with the Single Market being of only secondary relevance.[8]

Draghi's horizontal recommendations are also complementary to Letta: on innovation, the skills gap, some sensitive competition issues, and governance. Curiously, he does not consider trade and FDI to be significant enough to warrant

7 Which amounts to four times the ratio of the Marshall Plan.

8 In the Draghi Report's (2024) Part B, 'Sectoral Policies', the chapters include critical raw materials, digitalisation, AI, semiconductors, clean tech, automotive, space pharma, and transport, none of which are considered by Letta (2024).

a chapter — a topic, otherwise so important for EU business and a direct extension of the Single Market[9] — but treats the issue almost as an afterthought in a Box 1 (Part A: 12). This Box (just one page) has been criticized for two particular claims. One is that 'trade policy needs to be fully aligned with the European industrial strategy', an overly general statement that is easily conceived as undermining the WTO commitments of the EU. The other is that '...Trade policy should be based on careful, case-by-case analysis rather than on general stances towards trade'. This approach could similarly undermine the EU's firm WTO commitment. Since the EU is a leading supporter of the WTO rules (in its own interest), and has remained a world leader in this respect despite the regrettable recent conduct of the US government, it is critical that this WTO commitment remains solid (see Hoekman, this report). Perhaps, it is worth reconsidering this section of the Draghi report.

Whatever the differences and opinions, both reports are extremely rich, full of useful analysis and many — at times, quite daring — solutions. At the Alden-Biesen informal gathering of the European Council (12 February 2026), Enrico Letta (2026) re-iterated the message from Draghi about the high costs of fragmentation for the EU and its long-run economic growth, adding:

> Power is built first and foremost on the strength of the internal economy, its scale and its productivity. The Single Market is the cornerstone of our sovereignty.[..] Competitiveness and sovereignty are two sides of the same coin. Fragmentation is the main reason for Europe's underperformance today. And completing the Single Market is our best response. [..] You must focus on solutions, not on red lines. Red lines are not a strategy and they will not deliver.

Fortunately, Letta has insisted on 'enhanced cooperation' between the 'willing' member states. The Unitary Patent, based on 'enhanced cooperation' and in force since 2023, represents one such success story, stimulating EU innovation. This example calls for further emulation, soon, because of the stubborn resistance amongst the member states.[10]

Letta and Draghi have come to the rescue of the EU by pointing the way, but it is the EU itself which must finalize its 'roadmap' for the Single Market, with 'hard' agreed and signed (!) deadlines. The roadmap is expected in the early spring of 2026 and should be implemented by 2029.

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9 See Pelkmans (2019) for the profound connection between EU trade and FDI policy and the Single Market.

10 Patenting under the U.P. has rapidly increased. But the path towards 2023 was a demonstration for the EU how not to do it: it took 61 years (!) before this arrangement became operational. For an explanation of the Unitary Patent system, see the designated European Commission website at https://single-market-economy.ec.europa.eu/industry/strategy/intellectual-property/patent-protection-eu/unitary-patent-system_en (accessed 30 March 2026).

5. Conclusion

Some 40 years ago, Jacques Delors' initiatives in creating a much deeper and wider EU internal market were initially not taken all that seriously, with the European Council in Milan not spending more than 10 minutes on the complex and ambitious White Paper.[11] This changed once European business began to realize in the course of 1986 that a salvo of hard decisions had been taken and market opportunities in the EU were becoming much brighter. Some spectacular intra-EU cross-border mergers followed, a spark that lit up many others in business and politics. Today, EU leaders must bring their focus to the Single Market and competitiveness. It is a must, a prerequisite, for generating credibility for an ambitious roadmap to significantly deepen the Single Market. Working through that roadmap is what the EU badly needs if only to raise its secular growth rate. Combining the Letta and Draghi reports with a sound but bold Commission strategy should be encouraged but, indispensable as always, it takes the combined energy of member state governments to act in earnest. Best all together, but where unavoidable, under 'enhanced cooperation'.

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11 Interesting, though, from the start of mid-1985, the 'troika' in the Council did take the Single market programme very serious and — often — engineered qualified majority voting (QMV), even though the legal bases for QMV in single market affairs would only become official after the ratification of the Single Act.

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Pushing the Frontiers of Europe: The Role of the Important Projects of Common European Interest

Irene Agnolucci *

Abstract

Important Projects of Common European Interest (IPCEIs) have emerged as a key instrument at the intersection of EU State aid control and European industrial policy. Authorized under Article 107(3)(b) TFEU, IPCEIs enable targeted public intervention to address significant market and systemic failures in strategic sectors, notably research, development, and innovation (RDI), and first industrial deployment (FID). This contribution examines the legal and economic rationale underpinning IPCEIs, their contribution to technological innovation and knowledge diffusion, and the governance mechanisms shaping their design and implementation. It argues that IPCEIs represent the closest expression of a European industrial policy, fostering transnational cooperation, public–private partnerships, and the development of pan-European value chains. At the same time, the analysis highlights structural challenges, including uneven member state participation and limited EU-level financing. The contribution concludes by assessing recent reform proposals aimed at strengthening governance, accelerating implementation and reinforcing the European dimension of IPCEIs.

Keywords: Important Projects of Common European Interest (IPCEIs); EU Industrial Policy; EU Strategic Autonomy; Technological Sovereignty; EU Value Chains.

1. Introduction: The Contribution of IPCEIs to Innovation and Technological Advance

The important projects of common European interest (IPCEIs) are large transnational industrial projects tackling strategic European industrial objectives, whose beneficial effects should not be limited to the participant member states, but should extend to European society at large. From a legal perspective, IPCEIs are authorized by the European Commission as State

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aid measures compatible with the internal market under Article 107(3)(b) TFEU. IPCEIs aim to invest in key industrial areas, by financing research, development, and innovation (RDI), and first industrial deployment (FID) activities. The projects are presented before the European Commission by the member states on a voluntary basis, as there are no obligations for governments to propose or to join the projects. Moreover, a specific feature of IPCEIs is their research-based nature. Indeed, IPCEIs are generally aimed at facilitating knowledge dissemination through events, clusters, and networks, in a way that IPCEIs can be a catalyst for investment to build fundamental pan-EU value chains while also contributing to the achievement of EU strategic autonomy. Therefore, if a minimum number of four member states decide to participate, they grant State aid – generally through non-discriminatory public tenders – to undertakings or research centres to carry out the activities outlined in the projects (European Commission [EC], 2023).

RDI activities, which play a pivotal role in the development of an EU industrial strategy, may require public financing because of their peculiarities. First, RDI activities are typically characterized by information asymmetries. Imperfect or limited information within markets may give rise to two distinct phenomena: adverse selection and moral hazard (Di Tommaso, et al., 2021). Adverse selection arises when lenders face difficulties in distinguishing between more and less promising projects, while moral hazard occurs when asymmetric information between lenders and borrowers alters incentives regarding the use of funds in ways that may not be mutually beneficial (Pascal Belmin & Hans Zenger, 2017). As the European Commission itself acknowledges, 'the allocation of human and financial resources may not be adequate and projects which could be valuable for society or the economy may not be carried out' (EC, 2022: point 61). Moreover, State aid may be necessary to address market failures stemming from problems in coordinating networks or negative externalities (Piechucka et al., 2024: 13, 2023: 521; Rodrik, 1996). For instance, public intervention may be required to coordinate innovation clusters among firms, as undertakings may face diverging business interests or significant administrative and legal burdens (Ambroziak, 2016: 78–79). In this context, IPCEIs represent initiatives for which public intervention is necessary, as such projects would otherwise be unfeasible or excessively costly if undertaken solely by private enterprises.

IPCEIs may facilitate the diffusion of new technologies, critical for Europe's future competitiveness, through the circulation of knowledge and key skills across different sectors, firms, organizations, centres of research, or territories. According to the European Centre for International

Political Economy (ECIPE), while China and the US show that technology diffusion through company-led commercialization is crucial for economic growth, 'for the EU, enhancing diffusion capacities by addressing internal market barriers to trade and improving digital skills is important to improve Europe's position in the global technology landscape' (Bauer et al., 2024: 5). In the European Union, Western and Nordic member states own stronger capacities for diffusion, especially Luxembourg, Ireland, Denmark, Germany, and the Netherlands. The same Report underlines that the economic divide between Western/Nordic countries and Central and Eastern European (CEE) countries is strictly intertwined with their different capacities to diffuse technology, being the CEE member states still more focused on manufacturing activities with lower digital integration (Bauer et al., 2024: 2). The effect of the diffusion of technology linked to the implementation of IPCEI-financed projects may be beneficial to Europe's growth, especially thanks to the obligation to share IPCEIs' results through conferences and similar events, to foster dissemination of knowledge and new skills.

Another peculiarity of IPCEIs is the vast degree of involvement of the private sector, which is not only the beneficiary of State aid, but also funder of the projects connected to the IPCEI. As the beneficiary of aid bears the costs of the project along with the public, IPCEIs clearly seek to stimulate private investment through public resources in important industrial fields. Such mandatory collaboration between the public and the private is rather unique in State aid policy, but it is not unknown in the literature. According to some authors, states can 'take risks and create a highly networked system of actors that harness the best of the private sector for the national good over a medium- to long-term time horizon' (Mazzucato et al., 2020; Lundvall, 2016; Mazzucato, 2014: 71). When the State acts as an entrepreneur, it does not limit itself to spend public funds, but it aims to create ecosystems, i.e., fora where all relevant actors — public, private, businesses, foundations, stakeholders, policymakers — identify which sectors and technology could best succeed in the global marketplace (Mazzucato, 2014).

IPCEI have significantly evolved in recent years since two earlier projects dealing with railway infrastructure between Sweden and Denmark and between Denmark and Germany in 2019 and 2020, (EC 2019, 2020). More recently, projects presented before the Commission have increased in number, in the variety of participant member states, in the sectors of the industry affected and stakeholders involved, thus becoming a sign of industrial activism in the EU. The most recent IPCEIs are tightly linked with EU industrial policy objectives, as they are aimed at developing key value

chains in the fields of microelectronics, batteries, hydrogen, cloud and edge computing technologies, and the digitalization of the health sector. IPCEIs have therefore managed to evolve into a unique instrument, which is at a crossroads between State aid policy and EU industrial policy (Boronat, 2024).

IPCEIs have often been nurtured thanks to thematic partnerships and alliances. One such example is the European Battery Alliance (EBA), aimed at developing an EU value chain of batteries. EBA has been funded by the European Commission, jointly with the European Investment Bank (EIB), to bring together member states, local authorities, research institutes across the EU, and other key stakeholders. Batteries are widely used in the energy and transport sectors from the raw and processed materials to the recycling phase. Since 2018, global investment in electric vehicle (EV) batteries and in battery storage has increased eightfold and fivefold, respectively, reaching a total of 150 billion US dollars in 2023 (International Energy Agency, 2024). The first IPCEI in the field of batteries was presented by seven member states — Belgium, Finland, France, Germany, Italy, Poland, and Sweden — and authorized by the European Commission in 2019 under Article 107(3)(b) TFEU, with funding of €3.2 billion, expecting to mobilize an additional €5 billion in private investments. A second IPCEI on batteries, 'European Battery Innovation', was presented by twelve member states — Austria, Belgium, Croatia, Finland, France, Germany, Greece, Italy, Poland, Slovakia, Spain, and Sweden — and authorized in January 2021, with a budget of €2.9 billion, to cover all parts of the value chain, from extraction of raw materials, design, manufacture of battery cells and packs, to recycling and disposal in a circular economy to foster sustainability.

2. The IPCEI-Making Process

The areas of strategic EU interest for potential future IPCEIs are identified by the European Commission and the member states within the Joint European Forum for IPCEI (JEF-IPCEI), which is co-led by the Directorate General for Competition (DG COMP) and the Directorate General for Internal Market, Industry, Entrepreneurship, and SMEs (DG GROW). The Forum has been organized around two levels. The high level is composed of senior officials from member states and the European Commission, who are responsible for economic and industrial policy. The technical level is composed of officials also from member states and the European Commission, directly entrusted with IPCEI matters. The Forum has been playing an important role in policy coordination, as it aligns potential new IPCEIs with the policy objectives

of EU industrial strategy. The JEF-IPCEI also aims to improve the process, speed, design, and assessment of IPCEIs based on State aid rules, through the circulation of best practices, lessons learnt, and operative framework conditions. The Forum follows the life cycle of IPCEIs, from the identification and design phases to the assessment, implementation, and evaluation of the projects. In addition, some IPCEIs are also equipped with forms of internal governance, shared by the member states and the Commission. For instance, the second IPCEI on batteries, European Battery Innovation', has been managed by a Supervisory Board, whose mandate has been detailed in the Commission decision authorizing the IPCEI. The Supervisory Board consists of a Public Authority Board, with public authorities appointed by the member states, and a Facilitation Group, composed of the chair, the deputy of the project, the coordinators of the pertaining work stream, and any additional company representatives or advisors assuming related duties, in addition to representatives of the Commission as observers and advisers without voting rights.

The European Commission's IPCEI Communication (EC, 2021) lists a series of eligibility criteria for a project to fall within the scope of Article 107(3)(b) TFEU and thus be declared compatible with the internal market. First, projects have to be presented before the Commission in the form of single or integrated projects. An integrated project consists of 'a group of single projects inserted in a common structure, roadmap or programme aiming at the same objective and based on a coherent systemic approach'. Second, the Commission assesses whether the IPCEI is of common European interest, under Section 3.2 of the IPCEI Communication. The project's characteristics are identified according to general cumulative criteria along with general positive indicators, which may show the existence of the common European interest. These provisions constitute the boundaries of the discretion afforded by the European Commission in the compatibility assessment of IPCEIs under Article 107(3)(b) TFEU.

As far as the general cumulative criteria are concerned, projects presented before the European Commission by the member states must represent a concrete, clear, and identifiable important contribution to the Union's objectives or strategies, and they must have a significant impact on sustainable growth, for example by being of major importance for the European Green Deal, the Digital Strategy, the Digital Decade and European Strategy for Data, the New Industrial Strategy for Europe and its update, NextGenerationEU, the European Health Union, the new European Research Area for research and innovation, the new Circular Economy

Action Plan, or the Union's objective to become climate neutral by 2050. Yet not every project can constitute an IPCEI, as State aid should 'overcome important market or systemic failures, preventing the project from being carried out to the same extent or in the same manner in the absence of the aid, or societal challenges, which would not otherwise be adequately addressed or remedied.' This is in line with the State aid rationale overall. Indeed, the State aid Modernisation Package (EC, 2012) defines good State aid as 'well-designed, targeted at identifying market failures and objectives of common interest', when structured in a way to keep the internal market competitive and open.

The minimum participation requirement was raised in 2021. Since these projects are relevant to the European interest, a minimum of four member states is required to present a project before the European Commission. The IPCEI Communication prescribes that all member states must be given a genuine opportunity to participate in an emerging project, thanks to, for instance, the method of contacts, alliances, meetings, or match-making events, also involving small-medium enterprises (SMEs) and start-ups. Participation is paramount, as it determines the extent of the positive effects brought about by IPCEIs. The wider the rate of participation that can be reached, the more the effects can be spread throughout the Union. For these reasons, the Commission has to ascertain in a concrete and identifiable manner that benefits must not be confined to the financing member states but extend to a wider part of the Union. Similarly, the benefits of the projects 'must not be limited to the undertakings of the sectors concerned, but they must be of wider relevance and application to the economy or society in the Union through positive spillover effects (such as having systemic effects on multiple levels of the value chain, or up- or downstream markets, or having alternative uses in other sectors or modal shift) which are clearly defined in a concrete and identifiable manner,' as per Point 18 of the IPCEI Communication (EC, 2021). Although the European Commission has made efforts to raise the participation rate among member states, data show that a specific group of member states is recurrent, e.g., Germany, France, and Italy, while others seldom or never join IPCEIs (Di Carlo et al., 2024: 16–17). Scarce participation or geographically imbalanced distribution of projects connected to IPCEIs risk limiting the impact of IPCEIs to certain territories, even though their reach should be wholly European.

Table 1 Approved IPCEIs

	Approved state AID / €, billion /	Participating member states	Participating undertakings	Projects involved	Expected private investment / €, billion /
First IPCEI on microelectronics (2018)	1.9	**5:** AUS, FRA, GER, ITA, UK	29	43	6.5
First IPCEI on batteries (2019)	3.2	**7:** BEL, FIN, FRA, GER, ITA, POL, SWE	17	23	5
Second IPCEI on batteries (2021)	2.9	**12:** AUS, BEL, CRO, FIN, FRA, GER, GRE, ITA, POL, SK, SPA, SWE	42	46	9
First hydrogen IPCEI 'Hy2Tech' (2022)	5.4	**15:** AUS, BEL, CZ, DEN, EST, FIN, FRA, GER, GRE, ITA, NL, POL, POR, SK, SPA	35	41	8.8
Second hydrogen IPCEI 'Hy2Use' (2022)	5.2	**13:** AUS, BEL, DEN, FIN, FRA, GRE, ITA, NL, POR, SK, SPA, SWE + NOR	29	35	7
Second IPCEI on microelectronics and communication technologies (2023)	8.1	**14:** AUS, CZ, GRE, FRA, GER, FIN, IRL, ITA, MT, NL, POL, ROM, SK, SPA	56	68	13.7
IPCEI on next generation cloud infrastructure and services (2023)	1.2	**7**: FRA, NL, GER, ITA, POL, HU, SPA	19	19	1.4
Third hydrogen IPCEI 'Hy2Infra' (2024)	6.9	**7:** FRA, GER, ITA, NL, POL, POR, SK	32	33	5.4
Fourth hydrogen IPCEI 'Hy2Move' (2024)	1.4	**7**: EST, FRA, GER, ITA, NL, SK, SPA	11	13	3.3
IPCEI 'Med4Cure' (2024)	1	**6:** GER, FRA, HU, ITA, SK, SPA	13	14	5.9
IPCEI 'Tech4Cure' (2025)	0.4	**5**: FRA, Hungary, ITA, SK, SI	10	10	0.8
TOTAL	**37.6**	**23 Member States + UK and Norway**	**257**	**345**	**66.8**

Source: EC (2025b).

3. The Future of IPCEIs

IPCEIs represent the closest example to European industrial policy, given their impact on pivotal industrial areas, their transnational nature, and their potential reach. Therefore, their development is paramount to boost EU growth. As crystalized by Mario Draghi (2024), 'IPCEI should be expanded to all forms of innovation that could effectively push Europe to the frontier in strategically important sectors and benefit from EU financing'. Nevertheless,

the same Report suggests that the Union should equip itself with one innovative instrument to streamline the implementation of IPCEI and achieve complete decarbonization. In that regard, the Report has recommended the establishment of a '28th regime', i.e., a special legal framework outside the 27 member states' domestic legal systems, to streamline and shorten the approval and implementation of IPCEIs, by creating one unique process for the 27 member states. While contributing to create a common European interest arising from the combination of the 27 national industrial interests, a voluntary 28th company rulebook would harmonize national legislations of corporate law and insolvency law, and enhance overall cooperation (Draghi, 2024: 64). Moreover, the Report suggests that the Union reinforce the European governance of IPCEI by setting up a permanent European coordinator. Such coordinator should be responsible for 'monitoring progress in the permit granting process and facilitating regional cooperation to ensure political backing for cross-border infrastructure from all relevant Member States'. The proposal for a coordinator highlights the European aspiration of IPCEIs. Not only would a strengthened European leading role contribute to ensure the openness of the projects and their wider reach to European society at large, but it would also make it possible to identify EU objectives more clearly and efficiently.

Given the importance of IPCEI to EU industrial policy and EU strategic autonomy, a clear mandate has been sent from the President of the Commission Ursula von der Leyen both to the Executive Vice-President of the Commission for a Clean, Just and Competitive Transition Teresa Ribera (Von der Leyen, 2024a) and to Executive Vice-President of the Commission for Prosperity and Industrial Strategy Stéphane Séjourné (Von der Leyen, 2024b) to review State aid policy to make IPCEI simpler and faster, and to lead the work on the set up of new IPCEIs for the most strategic sectors and technologies. During the recent meetings of the high and technical levels of the Joint European Forum for IPCEI, new IPCEI candidates were discussed in the Design Support Hub, i.e., the advanced semiconductor technologies, artificial intelligence, computing infrastructure continuum, circular advanced materials for clean technologies, and innovative nuclear technologies. In addition to these industrial fields, the Union urgently needs to adopt an effective strategy regarding the critical raw materials required for the energy transition. The ambitious set of climate targets, including net-zero emissions by 2050 and 42.5% of the European production of energy coming from renewable sources, requires critical raw materials, e.g., lithium, nickel, cobalt, copper, and rare earth elements. According to the European Court of Auditors (ECA, 2026), the European supply of critical raw material depends on one or a handful of third countries; for instance, China

provides 99% of the EU's magnesium and Turkey provides 99% of the EU's boron. The ECA has recommended strengthening the foundations of the EU's raw materials policy, both by ensuring that efforts to diversify imports lead to a more secure supply of critical raw materials, and by addressing the bottlenecks which hamper the progress of their production in the EU. In the recent meetings of the JEF-IPCEI, the European Commission and the member states discussed the workstream for an IPCEI in the field of critical raw materials.

However, the Draghi Report has laid out further interesting proposals for future IPCEIs. First, the Report has raised the possibility of a new 'fast-track IPCEI' in the field of semiconductors, supported by a dedicated budgetary allocation. The benefits of a new fast-track IPCEI would encompass co-financing from the EU budget and shorter approval times, to developing EU-wide semiconductor value chains. Second, the Report has tackled the EU automotive sector, facing the challenges of global competition (especially from China), digitalization and the green transition. Thus, the Report has recommended an IPCEI in the automotive sector, stressing the importance of both horizontal convergence (e.g., electrification, digitalization, and circularity), and vertical convergence (e.g., critical raw materials, batteries, transport, and charging infrastructure). The recent meetings of the IPCEI discussed the workstream for an IPCEI on clean, connected, and autonomous vehicles. Third, in the field of transportation, the Report also launched the idea of developing an IPCEI for the zero-emission flight of the future, in light of the goals of zero-emission by 2050.

Furthermore, the Draghi Report has insisted that EU budgetary tools should be reinforced. Paradoxically, and despite the European aspiration of the IPCEIs, co-funding or co-financing from a Union fund in direct or shared management can only be considered a positive indicator that the project is underpinned by common European interest, according to the IPCEI Communication (EC, 2021). In other words, there is no condition imposing mandatory co-financing through EU resources. The lack of mandatory European financing severely undermines the European aspiration of IPCEIs. Indeed, the absence of an obligation for the EU to contribute significantly lowers the participation rate and thus the outcome of IPCEIs. Member states with restricted financial capacities and scarce industrial readiness may be more willing to participate if supported by EU investments. Such a development would ensure that industrial policy is not restricted to a few member states or to certain parts of the European territory, but becomes truly European

The prime source of funding could be the next Multi-annual Financial Framework (MMF) and in particular the Connecting Europe Facility instrument, according to the Draghi Report. The latter has suggested that the next MMF

reverse the traditional approach governing the allocation of funds, pointing out that funds disbursed to individual member states instead of to concrete projects might not lead to an efficient allocation of European resources. The European Union seems to have addressed this point in the 2028-34 Multiannual Financial Framework proposal of July 2025. The Commission's proposal for the next MFF contains a second pillar dedicated to the set-up of a European Competitiveness Fund (ECF) (EC, 2025a). The ECF aims to invest in new IPCEIs throughout their life cycle, from research to the scale-up, from industrial deployment to manufacturing, in particular in single or integrated projects directly participating in an IPCEI, and follow-up projects based on the results from IPCEI, all investments of which are conditional on national co-funding.

Finally, a groundbreaking IPCEI in the field of EU defence has been launched within the European Commission's European Defence Industry Programme (EC, 2025a). In support of a common defence industry, the European Commission intends to develop European Defence Projects of Common Interest aimed at reinforcing the European defence, technological, and industrial base (EDTIB) throughout the Union, while contributing to the development of member states' military capabilities and systems of common interest and/or use, including those securing access to all operational domains, namely land, maritime, air, space, and cyber. These types of IPCEIs in the field of common defence will be partially funded through the ECF, to ensure the widest reach of IPCEIs in the Union; ultimately the development of common defence will have a positive impact on the European security interest overall.

4. Conclusion

In conclusion, IPCEI have progressively emerged as a cornerstone of the European Union's evolving industrial strategy, situated at the intersection of State aid control, innovation policy and strategic autonomy. By enabling targeted public intervention in areas affected by significant market and systemic failures, IPCEIs provide a legally grounded and economically justified framework to mobilize large-scale investments in research, development, innovation, and first industrial deployment. Their transnational structure, combined with mandatory knowledge-sharing and spillover requirements, allows IPCEIs to foster the diffusion of critical technologies and skills across borders, sectors, and value chains, thereby strengthening the Union's long-term competitiveness.

The analysis in this chapter has highlighted how IPCEIs differ from traditional State aid instruments through their research-based nature, their strong reliance on public–private cooperation and their ambition to create

pan-European industrial ecosystems. Recent projects in batteries, hydrogen, microelectronics, cloud infrastructure and health technologies, along with proposals to establish IPCEIs in further strategic fields such as semiconductors, clean connected and autonomous vehicles, critical raw materials, and common defence illustrate both the growing scope of IPCEIs and their increasing alignment with the Union's green, digital, and geopolitical objectives. At the same time, the IPCEI-making process reveals structural challenges, notably the persistent geographical concentration of participation and the limited involvement of member states with weaker fiscal or industrial capacities, which risk undermining the truly European dimension of these projects.

Looking ahead, the future effectiveness of IPCEIs will largely depend on their governance and financing architecture. Proposals such as the establishment of a '28th regime', the appointment of a permanent European coordinator, and the introduction of faster and more centralized procedures could significantly enhance the coherence and speed of implementation. Crucially, stronger and more systematic EU-level financing, notably through the European Competitiveness Fund, appears indispensable if participation is to be broadened and spillover effects maximized. If these reforms are implemented, IPCEIs may fully evolve from an exceptional State aid mechanism into a central vehicle for advancing European industrial integration, resilience, and strategic autonomy.

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A Strong Clean Industrial Deal to Reconcile Europe's Decarbonization, Competitiveness and Security Objectives

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Abstract

Recent geopolitical volatility, pointing to a rupture in the international order that extends well beyond normal political change, must be treated as a structural condition rather than an exogenous shock. For The EU, the implication is that reliance on a stable and predictable international environment can no longer be assumed. In this context, decarbonization, in particular through more electrification, appears to be the only structural way to reduce the EU's energy costs and increase its energy security in this increasingly volatile international context. There are elements to highlight. A massive amount of scaling clean technology investment should be facilitated through the creation of an Industrial Decarbonization Bank. Second, the Clean Industrial Deal (CID) should focus on demand creation for EU low-carbon products with 'European content' in the energy-intensive or materials sectors such as steel, aluminium, cement or chemicals. Third, strong international action is required through the creation of Clean Trade and Investment Partnerships. Tailor-made partnerships should be made with selected partner countries, with the aim to promote investments in new clean supply chains, offering EU market access and offtake in exchange for favourable treatment in the partner country, and the EU should opt for 'Made with Europe' rather than 'Made in Europe'. In this respect, the CID becomes the beginning of a journey redesigning many of the policies the EU has been developing over the last few decades.

Keywords: Competitiveness; Decarbonisation; Industrial Policy; Security; Clean Industrial Deal.

1. Introduction

Current global instability points to a rupture in the international order. Long-standing assumptions underpinning global economic integration — rules-based trade, policy predictability, and the credibility of long-term commitments — are

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being progressively weakened. Uncertainty is no longer treated as a temporary disruption, but increasingly as a governing feature, reshaping incentives for investment, cooperation and risk-taking across borders.

This shift has significant implications for climate policy and clean technologies, which depend on stable regulatory frameworks and long investment horizons. The reversal of climate commitments, the politicization of energy transition policies and the increased recourse to unilateral trade and industrial measures contribute to destabilizing global clean-tech markets. As a result, regulatory and geopolitical risk become structurally embedded in investment decisions, raising the cost of capital and slowing deployment at scale.

Beyond climate policy, this rupture affects the broader architecture of global economic governance. Multilateral institutions face declining effectiveness, international standards fragment, and supply-chain cooperation gives way to more transactional and bloc-based arrangements. The provision of global public goods — climate mitigation, financial stability and resilient supply chains — is increasingly subordinated to short-term political objectives (Claeys et al., 2024).

The implication for Europe is that reliance on a stable and predictable international environment can no longer be assumed. Geopolitical volatility must be treated as a structural condition rather than an exogenous shock. In this context, the European response cannot be limited to internal adjustment alone. Regulatory stability at home must be complemented by an active external strategy centred on diversification, resilience, and the development of partnerships with countries willing to commit to long-term cooperation, starting with clean technologies.

In this context, the Clean Industrial Deal (CID) takes on a fundamentally new profile: beyond an industrial and climate strategy, it becomes a core instrument of the EU's security agenda, positioning decarbonization as a pillar of strategic autonomy and, ultimately, of European freedom (European Commission [EC], 2025b). Decarbonization indeed represents the only structural way to reduce the EU's energy costs and increase its energy security in an increasingly volatile international context. A strengthening in the competitiveness of EU industry is being sought through electrification and a reduction in administrative complexity, as reflected in the so-called Omnibus Directive (EC, 2025a). This demonstrates the EU's attachment to regulatory stability and predictability as key to fostering clean investments. It is in contrast to the uncertainties created by President Trump's dismantling of clean tech policies previously put in place.

For the EU, there also is a strong security dimension to the climate agenda. The war in Ukraine and the previous over-dependence on gas imports

requires a review of its strategy on energy and raw materials. Economic resilience should address issues such as the massive increase in renewables, system flexibility, the diversification of imports both from energy resources, raw materials, and clean energy technologies. Sustainable energy security will also require deeper integration and infrastructure sharing among member states. While a comprehensive strategy to improve Europe's resilience is challenging, it also opens new opportunities, not least on more cooperation among countries investing in the green transition.

The CID aims to create a business case for the EU's clean industrial transformation, thereby focusing on six drivers: affordable energy, lead markets, financing, circularity and access to materials, global markets and partnerships, and skills. Among the wide range of topics addressed by the strategy, three main elements stand out as the key pillars of the strategy: investments, lead markets, and clean tech partnerships with selected third countries (Cornillie et al., 2025). In the following, we discuss these three pillars, focusing on what we consider to be key for their successful implementation in the years ahead.

2. Investments

The headline initiative of the CID is the creation of an Industrial Decarbonisation Bank (IDB), aiming for €100 billion in funding. This could become a significant additional incentive to owners of Emissions Trading System (ETS) installations and optimizes the use of the EU ETS revenues to bring forward the decarbonization of energy-intensive industry. The crucial issues are how the IDB will be funded and how the money will be spent (Cornillie et al., 2025).

Industrial Decarbonisation Bank auctions to scale industrial decarbonization

The IDB should focus on deployment of low-carbon technologies in a similar manner as does the Hydrogen Bank. The usefulness of repeating the calls of the Innovation Fund (EC, 2024) and the Hydrogen Bank ([EHB], EC 2023) for five more years can be questioned (Bencini et al., 2025): the Innovation Fund is focused on innovative, first of a kind projects in a wide range of sectors and technologies, while the Hydrogen Bank is restricted to only one solution driving the decarbonization of energy intensive industries. The CID suggests continuing these instruments, although a limit of €3 billion has been announced for calls related to the Hydrogen Bank. The added value of the IDB is to support the deployment of integrated decarbonization

technologies, while explicitly adding electrification (but also solutions like Carbon Capture, Utilization, and Storage [CCUS]) to the picture. This is consistent with the core idea of the CID that the EU could regain competitiveness by cutting its dependence on foreign fossil fuels in favour of electrification. It also caters for the industrial reality that decarbonization will be the result of multiple adjustments in industrial processes. Furthermore, by focusing more on deployment than on innovation, access to the IDB could be more evenly spread over the whole European Union.

As of today, most of the industrial decarbonization investments that have been announced are on hold and most decarbonization solutions have not found the offtake to scale, a catch illustrated by the steel sector Steel can be partly decarbonized through electrification and fully by using hydrogen but the current competitive situation of the European steel industry does not allow for the additional investments needed to produce 'green' steel. Through auctions, the IDB could finance the green premium to cover for those investments, in the same way as it funded the hydrogen investments under the Hydrogen Bank. Such auctions could make European steel green and competitive, thereby also creating offtake for the clean power and hydrogen projects that make these investable in turn. The same mechanism can be envisaged in part of the chemicals industry, in particular as regards fertilizers and plastics.

Securing the funding of the Industrial Decarbonisation Bank

The Commission aims for €100 billion 'based on funds in the Innovation Fund, additional revenues resulting from parts of the ETS as well as the revision of InvestEU.' Indeed, several projects approved by the Innovation Fund have been put on hold and a number of them are unlikely to materialize because they fail to achieve the financial close that will free up some of the budget. Moreover, annual revenues from auctioning allowances are expected to amount to some €40 billion in the period 2021-2030, so a part of the remaining budget could be allocated to kick-start the IDB. Using these revenues for the benefit of the IDB presupposes cooperation by the EU Member States, preferably in the form of the 'auction-as-a-service' facility for decarbonization projects being developed on their territory.

Importantly, additional support could also come through a more considered use of free allowances. When undertaking decarbonization investments, companies lose free allowances as the related emissions go down significantly. By reserving free allowances for companies in the form of a 'green premium contribution', they receive a financial incentive they can cash-in through selling the allowances on the EU ETS market. By not bringing the allowances to the auctioning platform but agreeing the rules as part of the free allocation

provisions under the EU ETS Directive, decisions could be made by qualified majority voting (QMV). Those free allowances could be reserved for the IDB, which would allocate them to the benefit of investing companies on the basis of emission reductions realized through decarbonization investments, thus the financing would depend less on the goodwill of the member states.

There are several avenues to explore for the financing of the IDB with un-auctioned allowances. First, it could be envisaged that after having implemented the current EU ETS free allocation benchmark methodology, a certain percentage (e.g., 25%) could be shaved off and be put in the IDB. This would basically redistribute part of the available free allocation away from passive incumbents and in favour of investing companies. Another avenue is in the context of the EU's Carbon Border Adjustment Mechanism (CBAM). Companies in the covered sectors are becoming nervous of the prospect of the complete phasing-out of free allowances by 2034 and may prefer a slower reduction pace than the downward path that accelerates as of 2029. The difference between the provision of free allowances in the current CBAM regulation and just such a slower pace could go to the IDB. The full implementation of CBAM would take some more time, but it would give the opportunity to assess the practicality and efficiency of the new system, and create some immediate incentives to companies bringing their investments in decarbonization forward.

According to current EU ETS legislation the market value of free allocation is still substantial. In the period 2026-2034 approximately 2.8 billion allowances will be allocated for free (Meadows et al., 2024). At current prices this represents a financial envelope of some €200 billion. The next EU ETS review could consider bringing far fewer allowances to the auctioning platform, and instead reserve more of these to reward companies investing in decarbonization via the IDB.

3. Lead Markets

The CID correctly states that 'business will only make the necessary investments if they are sure there is a market for their products'. In this respect, the CID focus is on demand creation for EU low-carbon products in the energy-intensive or materials sectors such as steel, aluminium, cement or chemicals. Creating lead markets for 'low-carbon products' with 'European content' has a double advantage: lead markets will significantly contribute to reduce greenhouse gas emissions in energy-intensive industries and can help the EU to maintain a critical level of domestic manufacturing that is deemed necessary for European autonomy and resilience (Draghi, 2024). To date, however, the willingness to pay

for the 'green premium' is limited to niche markets, for example in white goods or some high value-added products.

Pulling the market

The CID acknowledges that policy needs to support the demand for low carbon industrial goods. Public procurement is a useful starting point as it represents an annual market of €2 trillion. Moreover, public procurement will be increased substantially if EU countries ramp up their defence spending. If procurement from EU countries is favoured, as envisaged in the ReArm Europe/Readiness 2030 plan launched by the European Commission (European Commission and High Representative, 2025; see also Marin, this report), an important lead market could open for innovative European defence with a high reliance on clean industrial materials, such as steel, aluminium, and chemicals.

In addition to the increased procurement, a revision of the public procurement framework has been announced for 2026 and should, for example, allow for sustainability, resilience, and European preference criteria. Today, several member states are reluctant to include non-price criteria in their public tenders due to a limited administrative capacity or concerns over risks of corruption. Therefore, rules must be simple, and resilience and sustainability criteria must be based on clear benchmarks. The cost issue must also be duly addressed and governments should be allowed to grant a premium, up to a certain cost threshold.[1]

Low carbon standards

Private purchasing of basic materials like steel, aluminium or chemicals, represents a much more important market than public procurement. Materials such as cement, steel, and chemicals can account for up to 90% of CO2 emissions in key value chains and industries, such as construction, food, fashion, and the automotive industry (World Economic Forum & Boston Consulting Group, 2021). The CID usefully discusses ways of including requirements and non-price criteria in relevant product legislation on low-carbon steel, renewables, sustainable battery cells for cars, as well as building codes for construction. A case in point is the Energy Performance of Buildings Directive (EPBD), adopted in 2024, which aims for a zero-emissions building stock by 2050, including obligations to calculate and disclose the life-cycle emissions of buildings (Directive (EU) 2024/1275). If a similar approach is applied to electrical vehicles, CO2 legislation of cars may well shift from tailpipe emissions to the carbon embodied

1 The 'Net-Zero Industry Act' introduces the use of resilience and sustainability criteria in procurement and renewable-energy auctions, while requiring their weighting to remain compatible with State-aid rules and competitive tendering (see Regulation (EU) 2024/1735).

in the materials. This should create demand for low-carbon materials and new investment opportunities for energy-intensive industries.

There is an urgent need for definitions of what low-carbon means in practice. The CID calls for pragmatic ways to define standards, such as derived from the ETS benchmark data. A promising example is LESS (Low Emissions Steel Standard), originally defined by the German steel industry and which by now has been made compatible with other existing low-carbon steel standards. Moreover, it is useful to adopt a European wide approach for the accounting of emissions related to the use of electricity and the related carbon content, rather than national energy mixes.

Ideally, the focus will be on the final product, e.g. the building, the car, the road etc., to allow for competition between different materials. In addition, such an approach benefits from the fact that cost increases due to the use of more expensive low-carbon materials in the final product tends to be limited, i.e. the willingness to pay for the 'green premium' is more pronounced if one takes the final product perspective.

Identifying definitions and methodologies such as LESS or within the EPBD is one thing, setting the stringency is another, and that is where legislation comes in, preferably at EU level. For globally traded goods such as cars, implications for market access in third countries will need to be considered.

4. Clean Trade and Investment Partnerships

The EU's industrial policy agenda — with investments and lead markets at its core — needs to be complemented with strong international action. Events throughout 2025 demonstrated the need for a repositioning of the European Union in the world (Grabbe & Tagliapietra, 2025): the US walked away from its historical commitments to security and free trade and embarked on an anti-climate campaign, and China took the unprecedented step of tightening its rare earth export controls (Jackson et al., 2025), a decision ultimately reversed after a temporary deal sealed by Presidents Xi and Trump. This spat highlighted the geopolitical risks embedded in the highly concentrated value chains of critical minerals, which represent the foundations of strategic sectors spanning from clean tech to digital and defence (Tagliapietra et al., 2025).

The CID proposes the creation of Clean Trade and Investment Partnerships (CTIPs) 'to better align the EU's external action with its industrial policy objectives considering businesses' opportunities and needs' (EC, 2025b: 17). The core idea is to develop tailored-made partnerships with selected partner countries, with the aim of promoting investments in new clean supply chains, offering EU market access and offtake in exchange for favourable treatment in

the partner country. This is of prime importance for the EU, namely considering that the continent is poorly endowed with both energy resources and critical raw materials. A cost-competitive and secure supply of both elements is a key enabler for industrial competitiveness in both clean tech manufacturing and energy intensive production, hence the EU has no other option than to reach out to those countries that have a comparative advantage in these areas to build with them mutually beneficial partnerships.

Take the case of energy. The EU is not only poor in oil and gas resources but it also has a number of constraints in the development of renewable energy sources, such as limited endowments (sunshine and wind) and land availability. With transportation costs for imported clean energy (in the form of electricity or hydrogen) much higher than for fossil fuels, the EU cannot rely on a competitive substitution of fossil fuel imports with clean energy imports. Doing 'whatever it takes' to retain energy-intensive industries would imply a huge cost for the taxpayer (to an extent this is already the case today, considering for instance the generous energy subsidies these industries receive in many countries), with uncertain societal benefit as most of the jobs and value added are in other non-energy intensive industrial sectors. Such costs indirectly affect European households and competitive businesses in other sectors. Europe must thus be pragmatically and selectively open to the potential gains from global trade and comparative advantage.

A smart way to fuel Europe's clean industrial sector would be to import energy intensive primary tradeable products such as ammonia, methanol, and direct reduced iron (DRI) instead of producing these in the continent under prohibitive conditions (McWilliams et al., 2025). The CID should facilitate this trade in energy-intensive intermediate inputs, which are cheaper to import than energy directly. Imports of these inputs could boost the competitiveness of downstream stages in the energy-intensive value chain (such as steel production). By lowering overall energy demand and thus electricity prices, such imports would also raise EU competitiveness more broadly. In many cases, they would replace imports of less energy-intensive commodities, such as iron ore, therefore not adding to Europe's overall import dependency. The direct economic impact in terms of jobs and value added that would be offshored is unlikely to be substantial. The international benefit of such a strategy would be that it would embed third countries – especially emerging and developing economies – into clean industrial value chains. Stable European demand can help such countries develop export-driven, clean industrial strategies. Politically, this could be an important incentive that could offset the EU's CBAM as the system finally enters into force in 2026, fostering a new pushback by many

countries around the world, as also seen recently at the United Nations Climate Change Conference (COP30).

Embracing global comparative advantages thus requires European governments to first and foremost not use taxpayer money to fight the relocation of energy-intensive and tradeable primary products with generous subsidies, beyond some minimum threshold that is desirable for economic security and innovation reasons. Second, it requires developing solid CTIPs able to foster new international clean supply chains able to contribute to the competitiveness, resilience, and decarbonization objectives of all parts involved.

The EU needs a clear prioritization of CTIPs partner countries and sectors

Successful industrial policy requires clear objectives and effective instruments to pursue them. To make Clean Trade and Investment Partnerships work, the EU must first and foremost clearly identify and prioritize which international partners and which industrial sectors it needs to pursue its competitiveness, resilience, and decarbonization objectives more efficiently. Key criteria to develop such a matrix should be comparative advantage and potential complementarity with European clean supply chains. Sectors that face both competitiveness and decarbonization challenges are steel, chemicals, and non-ferrous metals, as these are also feeding into the automobile industry. Moreover, maintaining Europe's presence in these sectors is also critical from a security perspective.

Take the case of the steel sector. If the EU objective is to foster the transformation of the European steel industry, then third countries with abundant renewable energy endowments and iron ore should be prioritized by CTIPs. Industry seems to converge on the idea that the only viable way forward for the EU to produce clean steel is to operate electric arc furnaces with imported direct reduced iron (DRI) from countries like South Africa, Canada, Australia, Mauritania, Morocco, and Oman, to name a few (Agora Industry, 2025; E3G, 2025). DRI can be seen as the new raw material for the steel industry, and the European industry needs to secure its supply if it wants to retain the highly specialized and higher value-added steps of the supply chain. The production of DRI in the EU, while often promoted by policymakers at both national and regional/local level, is not viable because gas-based DRI is just too costly given the price of gas in the European market, while hydrogen-based DRI faces technical constraints and prohibitive costs. It is illustrative that most EU DRI projects, also backed by generous subsidies, have been abandoned over the last few years. Instead, CTIPs can support the European steel industry to develop new international clean supply chains.

On lead markets, the EU should opt for 'Made with Europe' rather than 'Made in Europe'

As previously illustrated, the creation of lead markets for clean tech and decarbonized industrial products, like clean steel or clean chemicals, is at the core of the CID. The revision of the Public Procurement Directive (Directive 2014/24/EU) and the launch of the Industrial Accelerator Act (EC, 2026) could deliver a useful contribution on this front. As illustrated by the 2025 State of the Union speech by President von der Leyen, the current political attitude is to go for a full-fledged 'Made in Europe' criteria, moving beyond the sustainability and resilience criteria introduced with the Net Zero Industry Act (Regulation (EU) 2024/1735). We think this is a mistake. An alternative to this policy choice would be to opt for a 'Made with Europe' criteria instead. The success of CTIPs is indeed likely to mainly depend on the EU's readiness to open its lead market for low-carbon basic and intermediate materials. This would offer stable and bankable long-term market signals to CTIP partners beyond the incentives already created through the EU ETS and CBAM.

Guaranteed offtake agreements for intermediate clean products produced in CTIP partner countries could be supported by allowing them to qualify under sustainability and resilience criteria in the EU Net-Zero Industry Act, i.e., through mutual recognition provisions. Expanding the geographical scope of such criteria to include CTIP partner countries could enhance the market potential of the EU's own clean tech manufacturing sector. Joint offtake pools or demand-aggregation platforms could also be promoted, as done with the EU Energy and Raw Materials Platform.

Supporting clean intermediate products outside the EU and linking them to guaranteed demand in Europe can help anchor investment decisions both in the EU and in partner countries and deepen industrial cooperation along clean value chains. By integrating these demand-side tools, CTIPs could help bridge the commercialization gap and de-risk those investments, making green industrialization projects in partner countries bankable and scalable, while reinforcing the EU's own industrial resilience and competitiveness. This would render the CTIP a whole-of-supply-chain tool, covering both the financing/investment phase, the production phase (through cooperation on sustainability standards, for example), and the off-take phase.

The EU must optimize the use of supply-side instruments

An important complementary element of CTIPs is to trigger mutually beneficial investment in third countries in selected clean value chains. This will require investment support, thereby entailing extensive business consultations

with industry, not only in Brussels but also with EU delegations so as to understand local barriers to investment. Blended finance instruments could be developed to foster private investments in new international clean supply chains. This might include tools already available through the Global Gateway, through new resources available in the next EU Multiannual Financial Framework (2028-2034; see D'Adamo, this report) and from the European Investment Bank, as well as from national promotional banks. CTIPs could be blended with 'classic' trade policy work to address investment barriers such as local content requirements, export restrictions, and various behind the border discriminations (Bianchi & Tocci, 2025).

Technical cooperation on setting and harmonizing green standards could also play an important role, particularly for emerging sectors such as clean steel and chemicals, for which early alignment could help shape global norms. Scaling-up new clean projects in countries rich in renewable energy and critical raw materials would help embed industrial value creation locally, promote technology transfer, and ensure that clean value chains deliver inclusive growth and environmental benefits. In this context, H2Global (a German scheme to support investment in renewable hydrogen production in non-EU countries to be imported and sold into the EU) might represent a useful case for analysis. A broader range of clean projects in third countries could also be fostered under the EU Innovation Fund, as has been usefully tried out for hydrogen. To actively promote the participation of EU companies in relevant clean projects, CTIPs might finally also provide a platform to address possible investment and trade barriers in third countries.

Effective CTIPs require a genuine whole-of-government approach

The EU has already signed dozens of climate and energy agreements, more than thirty since 2021 (van de Graaf & Gras, 2025), alongside numerous Global Gateway projects related to energy and climate, covering more than eighty countries. The EU's ever-expanding web of agreements takes many forms, encompassing raw materials partnerships with Canada and Namibia, green hydrogen agreements with Egypt and Chile, and wide-ranging Green Alliances with Japan and Norway. In addition, in October 2025 a 'Joint communication on an EU global climate and energy vision' (EC, 2025c) was adopted, announcing the creation of an EU external clean transition business council, led by an EU special coordinator. The question that arises is what then makes CTIPs different from these initiatives and what their added value is.

CTIPs should not only be developed as clean trade diplomacy platforms, but should be focused on the mobilization of private-sector investment in new international clean value chains; they should contain and valorize existing and new supply- and demand-side instruments; they should be tailor-made to clean supply chains of mutual interest between the EU and individual third countries; and they should be structured to deliver broader benefits to European industry (e.g., equipment exports, technology leadership, or downstream value retention) and society (e.g., avoiding job losses and spreading geopolitical risks in clean tech supply chains). At the same time, partner countries should see tangible benefits in the form of more investments, transfer of technology, export opportunities, and job creation, and may also raise specific issues the EU should be open to consider, such as accepting carbon credits generated under Article 6 of the Paris Agreement for emissions reductions achieved in the framework of the CTIPs.

The essence of CTIPs is an integrated approach covering entire clean product supply chains. The different international agreements mentioned above are all too often run in a fragmented manner. A strong 'whole-of-government' approach is required, in view of maximizing EU leverage and having a chance to tangibly foster private investments. Such a new industrial policy governance system, as suggested in the Draghi Report (2025), still remains to be implemented.

5. Conclusion

The EU has embarked on a necessary, but difficult, policy journey, trying to square the need to stay the course on the European Climate Law, while tackling forcefully the competitive pressures on our industry and the geopolitical challenges to our security. In order to succeed, some climate policies, introduced only recently, may need to be simplified or made more flexible. It is of high importance to keep the essential carbon pricing policies in place, but to make them more pragmatic and to support the sectors that face decarbonization challenges. For that, it is essential to make the IDB a success, to make a giant step towards home-grown lead markets, including in the defence sector, and to develop an integrated cooperation strategy with new international partners.

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The Economic Implications of AI: Opportunities and Challenges

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Abstract

Recent breakthroughs in generative artificial intelligence (AI) have placed AI at the centre of academic and policy debates. Polarized views coexist on AI's implications for aggregate productivity, growth and the labour market. Past technological revolutions can shed light on the potential effects and mechanisms at work, although AI possesses distinctive features that may alter historical patterns. Most of the public debate focuses on labour displacement and unemployment risks. Although some occupations and tasks are likely to vanish, new ones will also arise, and the general equilibrium effects could ultimately support employment. From a European perspective, AI offers opportunities amid an ageing population, such as helping to alleviate labour shortages. However, dependence on foreign AI industries poses significant risks to competitiveness and strategic autonomy. The chapter concludes by reviewing the policy debate on how Europe can reduce dependence on foreign AI industries and strengthen domestic capabilities across key layers of the AI value chain.

Keywords: Artificial Intelligence; Productivity; Labour Market; Inequality; European Strategic Autonomy.

1. Introduction

A consensus definition of artificial intelligence (AI) remains elusive, but one of the founding fathers of the field, J. McCarthy, defined it as 'the science and engineering of making machines intelligent'. This chapter focuses on the economic and policy implications of AI, with particular emphasis on generative AI, under the assumption that AI constitutes a new general-purpose technology (GPT). It abstracts from extreme scenarios such as existential risks to humankind stemming from AI or from economic singularities (Jones, 2026; Nordhaus, 2021), potentially arising from the

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development of Artificial General Intelligence ([AGI], Trammell & Korinek, 2023; Korinek & Suh, 2024; Restrepo, 2025), nor does the chapter cover other important issues related to social media and political risks stemming from AI (Acemoglu et al., 2025).

The central questions are instead:

- What are the consequences of AI adoption for aggregate productivity? What are the implications for economic growth, the labour market, and inequality?
- How is Europe positioned to face the AI revolution? And what challenges does AI pose for its strategic autonomy and competitiveness?

The public debate in the media tends to emphasize the displacement channel: the fear that AI will automate jobs, depress wages, and raise unemployment. This framing, while capturing a key mechanism, overlooks other forces central to determining the aggregate consequences of AI. First, AI can complement workers rather than simply replace them: by augmenting human capabilities, AI can raise productivity and allow firms to expand output and employment (Aghion, et al.,2025). Second, general-equilibrium effects matter: a more productive and richer economy can sustain higher economic activity and create new jobs and tasks that offset displacement.

Europe faces several challenges to harvest the potential gains of AI in terms of strategic autonomy and competitiveness. The continent's demographic trajectory, shrinking working-age populations and rising dependency ratios make successful AI diffusion likely very valuable. Yet Europe faces a series of vulnerabilities regarding large rents paid to foreign companies and strategic autonomy: generative AI models are primarily developed in the US, and even European exceptions rely on US cloud and GPU capacity. Developing the whole AI value chain industry faces challenges due to fragmented capital markets (Venditti et al., this report), higher energy costs than in the US or China (European Commission [EC] 2025b), and the supply of critical materials (International Energy Agency [IEA], 2024).

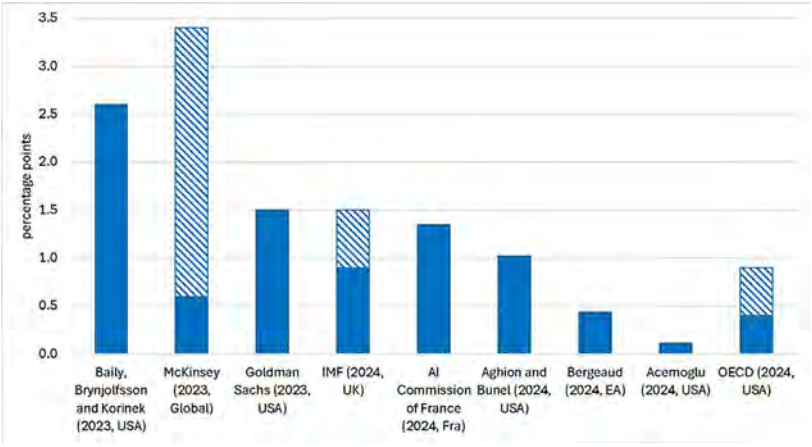
This chapter is organized as follows. Section 2 discusses AI as a general-purpose technology. Section 3 reviews the empirical evidence, beginning with micro-level studies of task-level productivity and then moving to aggregate implications. Section 4 discusses the implications for the labour market and inequality. Section 5 considers the European-specific position and policy implications. Finally, Section 6 concludes.

2. AI as a General-Purpose Technology

Opinions on the extent of AI's revolutionary power are polarized. On the one hand, a diffuse view holds that advances in AI, particularly those potentially related to agentic AI, could constitute a technological revolution discontinuous with past innovations. On the other hand, Narayanan and Kapoor (2025) argue that new AI developments simply constitute a new 'normal' technology. Nevertheless, the prevailing consensus regards AI as the latest general-purpose technology (OECD, 2025a), alongside the steam engine, electricity, and information and communications technology [ICT], with the potential to be transformative for the whole economy and society. In the following, I assume an intermediate scenario where AI is a new 'normal' GPT.

Yet the quantitative implications of AI for productivity span a broad range of estimates across academia, policy institutions, and industry, as depicted in Figure 1.

Figure 1 AI-induced annual growth in labour productivity in the next 10 years



Source: Hartmann and Maver (2025).
Note: Striped bars indicate the upper range of the projections.1

Among the most influential analyses, Acemoglu (2025) estimates that AI could raise US annual total factor productivity (TFP) growth by about 0.07 percentage points over the next decade. Using occupation-level exposure estimates and feasibility assessments, he reports that roughly 20% of US labour tasks are exposed to AI, but that only about 23% of these exposed tasks can be profitably performed

1 Sources: Filippucci et al. (2024); Acemoglu (2024); Aghion and Bunel (2024); Baily et al. (2023); Bergeaud (2024); Cazzaniga et al. (2024); French Artificial Intelligence Commission (2024); Hatziu et al. (2023); Goldman Sachs (2023); McKinsey Report (2023).

by AI in the near term, implying that around 4.6% of labour tasks are affected within the relevant horizon.[2] Acemoglu (2025) argues that even this upper bound may be optimistic because early evidence typically comes from 'easy-to-learn' tasks. More complex tasks might be harder for AI systems to learn because they lack clear categorizations, require tacit knowledge, and involve legal and ethical constraints.

Aghion and Bunel (2024) work within the same framework as Acemoglu but with different parameter assumptions. They argue that Acemoglu's baseline assumptions are overly conservative regarding both task-level cost savings and cost reduction in AI implementation. They estimate, instead, that AI could add 0.68 percentage points to annual TFP growth (with a wide range of possibilities between 0.07 and 1.2). The divergence thus hinges on the calibration diffusion speed, the scope for ongoing cost reductions, and the magnitude of task-level productivity gains.

A further channel not considered in those estimates concerns AI being able to transform not only the production of goods and services but also the production of ideas (Romer, 1990; Aghion & Howitt, 1992; Cockburn et al., 2018; Aghion et al., 2019). A notable example is the development of AlphaFold, an AI model used in chemistry to uncover protein structures, which led to the Nobel Prize for those discoveries. If AI raises research productivity and accelerates innovation, the long-run growth effects could be substantially larger than task-level estimates suggest.

Lessons from past general-purpose-technology revolutions

Past GPTs then offer us disciplined analogies for AI. In past GPT episodes, measured productivity often improved only after a significant delay, because diffusion required complementary intangible investment and organizational change (David, 1990; Oliner & Sichel, 2000; Jorgenson & Stiroh, 2000; Basu et al., 2001; Brynjolfsson et al., 2021). This pattern is consistent with the productivity J-curve and the Solow paradox (Solow, 1987; David, 1990; Oliner & Sichel, 2000; Jorgenson & Stiroh, 2000; Basu et al., 2001; Brynjolfsson et al., 2021).

Within this perspective, Jones and Tonetti (2026) argue that aggregate AI gains are limited by bottlenecks or weak links in the short- to medium-term. In such environments, even large improvements in a single input yield only limited aggregate gains until the bottleneck is relieved, resulting in very gradual growth. They find that AI could raise output by only 5% after 20 years, but by 20% after 40 years.

2 These results build on the 'Hulten theorem' (Hulten, 1978): under standard conditions, small cost reductions in a set of production activities map into aggregate TFP gains approximately proportional to exposure to new technologies. The modelling strategy follows the task-based framework in Zeira (1998).

Using the parallel with past GPT revolutions, Aghion and Bunel (2024) estimate TFP growth gains in the order of 0.8-1.3 p.p. per year over the next decade.

In terms of the labour market, the adoption of GPTs in the past, such as the industrial revolution, electricity, or the personal computer and the internet, did not generate mass unemployment. However, in some cases, workers endured periods of low welfare (e.g., Engels' pause during the industrial revolution; Allen, 2009). Appropriate policies and institutions are thus crucial for mitigating the costs of these transitions.

Certain tasks are nevertheless very likely to be automated; specific jobs are likely to disappear, while new ones are likely to arise. The mechanization of telephone operation in the United States illustrates this pattern: productivity rose and new jobs replaced the automated ones (Feigenbaum and Gross, 2024). Similar patterns characterized the introduction of the personal computer and the displacement of typists. Section 4 will delve into the labour market implications of AI.

3. Empirical Evidence

Micro evidence: productivity gains from AI tools

A growing body of micro evidence documents productivity gains when generative AI is deployed as an assistive technology. The findings are broadly positive but also reveal important heterogeneity across tasks, workers, and deployment contexts.

Field experiments in customer support: Brynjolfsson et al. (2025b) study the rollout of an AI assistant to thousands of customer-service agents at a large US firm. Access to AI raised productivity by 14 percent, measured by issues resolved per hour. Quality also improved: customer sentiment rose and requests to escalate to a manager fell. Gains were largest for less-experienced and initially lower-performing workers, thereby compressing the within-firm performance distribution.

Writing and professional tasks: Noy and Zhang (2023) conduct a pre-registered experiment with college-educated professionals completing incentivized writing tasks. Participants randomly assigned to use ChatGPT completed tasks approximately 40% faster and produced higher-quality work, as rated by evaluators. Again, lower-ability participants gained most, and self-reported job satisfaction increased.

Software development: Peng et al. (2023) find that software developers randomly assigned to use GitHub Copilot completed coding tasks 55 percent faster than a control group. Cui et al. (2024) pool data from three large-scale field experiments at Microsoft, Accenture, and an

anonymous Fortune 100 company, covering nearly 5,000 developers. Across experiments, access to an AI coding assistant raised completed tasks by 26 percent on average. Less-experienced developers had higher adoption rates and greater productivity gains.

Consulting and knowledge work: Dell'Acqua et al. (2023) conducted a pre-registered experiment with 758 consultants at Boston Consulting Group. For a set of 18 realistic consulting tasks *within* AI's capability frontier, consultants using GPT-4 completed 12 percent more tasks, worked 25 percent faster, and produced output rated 40 percent higher in quality. Below-average performers improved by 43 percent relative to their own baseline. However, for a task deliberately designed to fall *outside* the frontier — requiring integration of data that the model could not reliably parse — consultants using AI were 19 percentage points *less* likely to produce correct answers than the control group.

Survey evidence on adoption and time savings: Bick et al. (2025) report that in late 2024 about 26 percent of employed respondents used generative AI for work; around 23 percent used it at least once in the previous week, and about 9 percent used it daily. Among users, reported time savings are concentrated in writing and information-processing tasks. These patterns are consistent with the view that diffusion is underway, but still uneven across occupations and firms.

Although this specific evidence does not necessarily inform us about the aggregate implications of AI because it primarily captures partial equilibrium effects, the micro evidence suggests that AI has genuine potential to raise productivity when appropriately deployed.

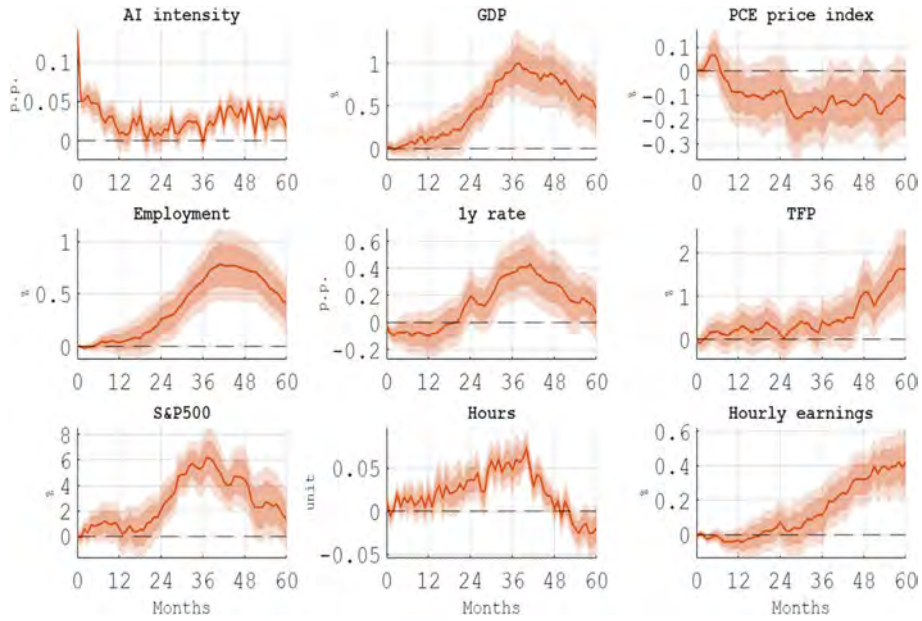
Aggregate evidence based on patent data

Because generative AI has only recently developed, aggregate estimates of its full general equilibrium effects cannot be directly inferred from (time-series) data. Gazzani and Natoli (2024) use a broad definition of AI that predate gen-AI and construct an aggregate measure of AI intensity in US innovation from granular patent-level data from the USPTO. They estimate the dynamic effects of AI technology shocks in the US from 1980 to 2019.

They find that unexpected increases in AI-intensive patents in the US exhibit positive supply effects under technology diffusion lags: TFP and output rise, and consumer prices fall in a delayed and gradual fashion (Figure 2). Crucially, Gazzani, and Natoli (2024) find that employment, hours worked, and wages increase, suggesting that complementary and general equilibrium effects dominate the displacement channel. Nonetheless, AI

technology transforms the tasks required in production, leading to increased openings and layoffs, with the former dominating the latter. The response of employment by educational attainment suggests that lowly educated workers do not benefit from AI technology, contrary to those who hold at least a high-school degree. Conversely, all workers are better off in terms of wages, independently of their education level. At the sectoral level, labour market quantities display homogeneous effects independently of sectoral AI exposure. Conversely, a mild heterogeneity emerges for wages: sectors more (less) exposed to AI experience lower (higher) wage increases.

Figure 2 Aggregate Effects of AI Technology



Note: The figure displays the dynamic effect of an unexpected increase in AI intensity in US patents estimated by local projections. Sample 1980m1-2019m12. The estimates are based on local projections with Newey-West standard errors. The solid lines represent point estimates and shaded areas denote 68%-90% confidence bands.

AI technology leads to a decline in the labour share, contrary to labour-neutral general technology shocks (Miranda-Agrippino et al., 2025), and to an increase in inequality. Interestingly, inequality rises with wealth rather than through a labour channel, consistent with the asset valuation channel of automation proposed by Moll et al. (2022).

Although the potential discontinuity in gen-AI relative to previous AI waves, together with the long lags that typically characterize the full diffusion

of GPTs, warrant caution in interpreting these results, the findings in Gazzani and Natoli (2024) are broadly consistent with the view that general-equilibrium and complementarity effects can dominate displacement, as emphasized in Aghion and Bunel (2024).

4. Labour Market and Inequality

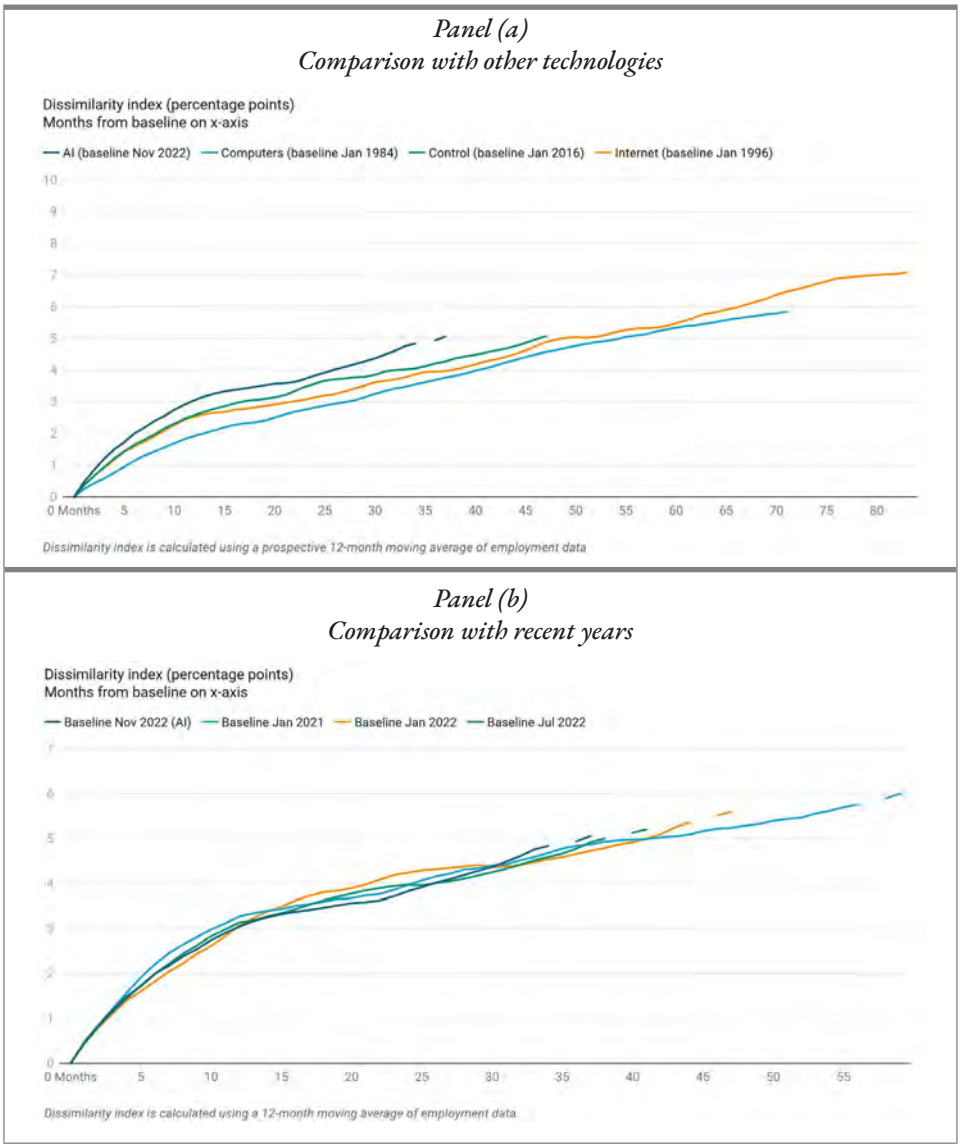
Labour market

Media coverage of AI and employment tends to focus on the displacement channel: the fear that automation will eliminate jobs and produce mass unemployment. This narrative, while capturing a real mechanism, systematically underweights two countervailing forces that are central to the aggregate outcome.

First, AI can be *complementary* to workers. The micro evidence reviewed above shows that AI tools often augment human capabilities — raising productivity, improving quality, and allowing workers to focus on higher-value tasks — rather than simply substituting for labour. With some specific exceptions, AI can automate tasks while complementing workers. Aghion et al. (2025), using French firm-level data, find that firms adopting AI experience *increases* in employment and sales: the productivity gains allow firms to grow, and this growth effect outweighs the displacement channel. Even occupations initially classified as 'substitutable' by AI expand at adopting firms. Some tasks are automated, and employees in specific jobs, such as secretaries, tend to fall.

Second, *general-equilibrium effects* can offset and even reverse local displacement. When AI raises productivity at adopting firms, costs fall, output expands, and demand for labour rises. The findings in Aghion et al. (2025) are consistent with the patterns observed in recent data reported by *The Economist* (2026) and real-time monitoring by the Budget Lab at Yale. Using the US Current Population Survey that tracks labour-market data, Budget Lab finds little evidence of abnormal changes in the labour market since the release of ChatGPT (Gimbel et al., 2025). Figure 3 displays the change in the occupational mix after the release of ChatGPT, which is slightly above that observed after past major digital technological introductions (Panel a), but this heterogeneity appears to mainly reflect the more dynamic labour market of recent years (Panel b). These results may be too early to draw conclusions, given the long delays in the adoption of GPTs.

Figure 3. Transformation in the Labour Market after ChatGPT Release



Source: Gimbel et al., 2025.

On the one hand, these positive implications are also consistent with the broader literature on automation. Mann and Püttmann (2023), using a comprehensive patent-based measure of automation covering 1976–2014, find that automation technology has a *positive* effect on employment in US local labour markets. Manufacturing employment declines, but this is more than offset by service-sector job growth. As Aghion et al. (2022) document in their survey, the empirical

literature on robots and automation generally finds that productivity effects predominate over displacement effects at the firm and industry level. Feigenbaum and Gross (2024) show that the introduction of automatic telephones displaced jobs, but that new jobs were created without employment losses in the long run. Autor and Salomons (2018) and Acemoglu and Restrepo (2019) report similar findings regarding job creation and employment outcomes. The evidence on AI so far appears to follow the same pattern. For a comprehensive review of the literature on automation, see Autor (2015).

On the other hand, some works emphasize a more negative view. Acemoglu (2025) argues that AI's productivity gains are unlikely to translate into significant wage increases for workers, and that even improvements in the productivity of low-skilled workers may paradoxically increase inequality through task displacement and ripple effects. This displacement channel has been empirically linked to lower earnings growth for exposed workers, particularly when the technology is labour-saving (Kogan et al., 2024). International Monetary Fund (IMF) simulations suggest that AI will increase both wage and wealth inequality (Cazzaniga et al., 2024). Bonfiglioli et al. (2025a), using US commuting-zone data, find that AI adoption has heterogeneous effects: negative for low-skill and production workers, but positive for high-skill workers and STEM occupations. Recent evidence from the financial sector suggests even high-skill incumbents may face displacement risks (Grennan & Michaely, 2024). Finally, Brynjolfsson et al. (2025a) provide early evidence that employment among workers aged 22–25 fell disproportionately in the most AI-exposed occupations after late 2022, suggesting displacement effects may already be materializing for younger cohorts.

From a European perspective, the potential of AI may be substantial, as ageing societies face a tighter labour market and rising fiscal pressures. It is also worth considering that, compared to the US, European labour markets feature lower geographic mobility, typically stronger employment protection, different collective-bargaining structures, and a larger weight of small and medium-sized firms. These institutions can buffer short-run employment losses, but they can also slow reallocation and reduce the efficiency of adjustment. Accompanying institutions such as appropriate education, re-skilling and social welfare can be crucial to mitigate the transition costs (Aghion & Bunel, 2024). Regarding the existing empirical evidence based on European data, the short-run signals tend to be positive. Albanesi et al. (2025) provide positive evidence between AI (exposure) and employment growth between 2011 and 2019. On a similar sample, Aldasoro et al. (2026) show that AI adoption increases labour productivity by 4% at the firm level, without adverse effects on employment. Survey evidence points towards

a similar direction, suggesting that firms expect AI to reshape tasks without a significant adverse effect on employment (Bencivelli et al., 2026).

Inequality

AI can affect inequality through both labour income and wealth. On the labour side, it can change the demand for tasks and skills, affecting wages, employment, and career progression. On the wealth side, if AI increases returns to capital and intangible assets, gains may accrue disproportionately to their owners (Moll et al., 2022).

On the labour side, AI is likely to be task-biased: it complements some cognitive and managerial tasks while substituting others (Autor et al., 2003; Acemoglu & Autor, 2011). This creates scope for wage dispersion. Autor (2024) offers a more optimistic framing. He argues that while previous waves of computerization hollowed out middle-skill jobs by automating routine tasks, an appropriate deployment of AI may enable workers from a broader pool to perform tasks currently reserved for professionals (in healthcare, law, education, and technical services). In this way, it could rebuild rather than further erode the role of the middle class in the labour market.

On the wealth side, the 'asset channel' matters because AI can increase the returns to intangible capital, data, and scalable platforms. When equity ownership is concentrated, the gains from higher productivity accrue disproportionately to a narrow set of households (Moll et al., 2022).

5. Implications for Europe

The preceding sections have analysed AI through the lens of general-purpose technology diffusion, reviewed available micro- and macro-level evidence, and assessed its implications for labour markets and inequality. This section analyses the European position specifically. Although there are many potentially important angles, the section focuses on strategic autonomy and potential mitigation measures.

Europe's strategic position and challenges

As discussed in Section 4, Europe's demographic trajectory may make AI adoption more valuable than in other jurisdictions. With working-age populations projected to decline in major European countries, the binding constraint on growth is increasingly labour supply. AI that raises output per worker, whether by augmenting tasks or substituting for labour in low-value activities, can offset the demographic drag and sustain living standards. The macroeconomic return

to successful AI diffusion is therefore higher in Europe than in economies with younger, faster-growing workforces.

Yet Europe faces a series of gaps that could prevent these gains from materializing. Bonfiglioli et al. (2025b) show that countries' comparative advantage in AI-intensive industries is stronger where the STEM graduate base is larger, digital infrastructure (e.g., internet penetration) is deeper, scale is greater, and regulatory barriers to digital trade are lower. The 2024 Draghi report discusses related constraints more broadly, emphasizing skills, market fragmentation, and regulatory burdens, particularly in digital sectors, as key obstacles to European competitiveness.

Turning more specifically to the AI industry, Europe has invested much less in AI than the US and China in the past. Between 2013 and 2023, private investment in Europe totalled approximately $20 billion, compared with $330 billion in the US and $100 billion in China (Panetta, 2024b; Stanford University, 2024). In 2024, US institutions produced the majority of notable AI models, with China scoring 15 and Europe lagging at 3 (Stanford University, 2025).

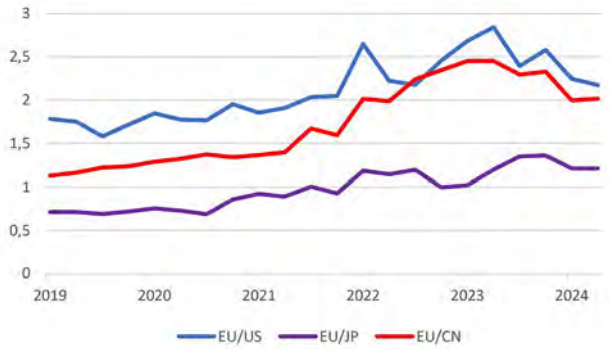
Today, US hyperscalers (e.g., Amazon, Google, Microsoft) account for the majority of the European cloud market, while European providers hold a significantly lower share. According to the Wall Street Journal, European customers spent nearly $25 billion on infrastructure services from the top five US cloud companies in 2024 (or 83% of the total market in Europe, according to research firm IDC). Upstream, Nvidia controls about 80% of the high-end AI chip market, and most of the AI foundation models have been developed in the US. These vulnerabilities are documented extensively in the Draghi Report on European competitiveness, which identifies the digital and AI gap as one of three main drivers of Europe's productivity divergence from the United States (Draghi, 2024).

The dependence on the US AI creates two potential shortcomings. First, European firms and households pay substantial rents to US companies (technological hegemony, see Fornaro & Wolf, 2025). Second, this poses a daunting strategic vulnerability in the current geopolitical context. Because the enabling layers of the AI value chain, cloud infrastructure, foundation models, and GPU supply, are controlled predominantly by US firms and subject to US jurisdiction, Europe faces the risk that access to AI could be restricted or severed. The Wall Street Journal (23 January 2026) also discussed this issue, and European institutions are developing resolutions and legislation to address this dependence. The precedent of semiconductor export controls on China illustrates that access to technology can become a geopolitical instrument. Strategic autonomy in this context means reducing dependence to the point that Europe retains the capacity to adopt and deploy reasonable levels of AI, even under adverse geopolitical scenarios.

Europe could specialize in open-source AI models (French Commission on Artificial Intelligence, 2024), but even the current European champion, Mistral, relies on the US for computing infrastructure and financing. While developing a full AI supply chain domestically faces significant challenges, the feasibility varies across layers, with the upstream segment (e.g., chip manufacturing) more demanding than the downstream one (data centres and AI models).

Several obstacles can impair the development of a European AI industry. First, capital markets are fragmented, offering fewer financing options to European firms, which often relocate to the US (e.g., startups and venture capital; see European Investment Bank [EIB], 2026). Second, electricity prices are higher than in the US and China (Figure 4; EC, 2025b). This factor is likely to be more relevant in the long run for competitiveness, while in the short run the more binding constraint for large-scale AI data centres is securing sufficient electricity supply (finding providers with excess capacity or willing to expand rapidly), rather than the cost per se. The European Commission estimates that investment needs for the electricity grid amount to about €584 billion by 2030 (EC 2024), and AI-related data centre demand is projected to rise sharply over the decade (IEA, 2025). Delays in grid expansion could further increase industrial electricity prices, acting as a supply-side shock for energy-intensive sectors. Additionally, some analysts have raised concerns about the carbon-emission implications of AI models' energy consumption (IEA, 2025; Bonfiglioli et al., 2025c), although the quantitative significance of this channel remains debated. Moreover, AI could, in the medium to long term, support the green transition by enhancing innovation in low-carbon technologies (IEA, 2025). AI may also improve grid management, crucial given the intermittency of renewable generation, and climate-risk assessment (Panetta, 2024a).

Figure 4 Cross-Country Comparison of Energy Costs



Source: European Commission estimates.
Note: Ratios of industrial retail electricity prices in global markets. A ratio of more than 1 means that EU prices are higher than those of the corresponding non-EU country.

Policy implications

The following discussion surveys policy proposals that have emerged in recent institutional reports and academic contributions. The debate on European AI policy is still in its early stages, and the views presented below should be understood as opinions from the cited sources rather than established or endorsed positions. Given the rapid evolution of AI technology and its economic implications, considerable uncertainty surrounds the merits of specific policy prescriptions.

Recent contributions (e.g., French Artificial Intelligence Commission, 2024; Draghi, 2024; Panetta, 2024b, 2025; OECD, 2025b; EC, 2024, 2025a) converge on several broad themes, which align with the following points.

Europe's prospects for AI sovereignty vary across the value chain. Full autonomy in semiconductor manufacturing appears unrealistic in the near term, but sovereignty in AI model development could be potentially achievable with sufficient investment (French AI Commission, 2024). The relevant question is which layers of the AI value chain merit strategic investment, and which should rely on foreign markets with appropriate risk mitigation.

The first strategic choice concerns the AI model archetype. Europe faces a choice between investing in domestically developed proprietary models and supporting open-source alternatives. The French AI Commission (2024) advocates the open-source path, arguing that it aligns with European values, enables scrutiny and customization, and avoids winner-take-all concentration. Regardless of the chosen licensing model, European developers will require access to substantial computing power. Mistral, Europe's most prominent foundation model developer, relies on US cloud computing. A coherent strategy requires either accepting dependence on US infrastructure or investing in sufficient European computing capacity. The latter would likely require a dedicated European facility and sustained public investment. A coordinated European initiative would achieve higher economies of scale and avoid the duplication of individual national programmes.

Second, several recommendations envisage capital markets as central to scaling up the AI industry. Completing the Capital Markets Union (Panetta, 2025; Venditti et al., this report) would mobilize private investment, particularly for venture capital and to finance startups, arguably the most plausible channel for Europe to narrow gaps with the US and China in AI. The current fragmentation means that many promising European startups still relocate to the US when they need to scale funding (EIB, 2026).

Third, the EIB (2025), among others, argues that regulatory coherence is as important for AI adoption as it entails substantial fixed costs in architectures and reorganization. Regulatory instability and uncertainty regarding compliance and

liability can delay investment. Stable and consistent regulation across jurisdictions can incentivize investment by reducing 'wait-and-see' behaviour.

Fourth, the French AI Commission (2024) argues that Europe needs a strategy for skills and mobility in relation to AI. The evidence is consistent with AI raising productivity at adopting firms, but it also implies a need for large-scale training, job redesign, and diffusion mechanisms to ensure that gains extend beyond early adopters.

The policy debate on European AI strategy remains at an early stage, and the recommendations surveyed above should be understood as potential contributions to an evolving discussion.

6. Conclusion

Past GPT and the evidence to date on AI point to potential positive implications for productivity, growth, and employment, as complementarity and general equilibrium effects can dominate the displacement effect.

For Europe, AI constitutes both an opportunity, especially because of its demographic trajectory, and challenges, attributable to its dependence on foreign AI in the new geopolitical context. Narrowing these gaps would likely require large, sustained investment in skills, computing and data-centre infrastructure, and an environment that allows innovative firms to scale. Although the policy debate is still ongoing, recurring cited priorities include deeper capital markets, clearer and more predictable regulation, and faster investment in energy systems and grids.

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Section IV

Financing Collective Action: From European Public Goods to Security

This section explores European Public Goods as the most rational means for EU Member States to strengthen economic competitiveness and secure strategic autonomy in a manner that satisfies Europe's commitment to social solidarity without sacrificing economic efficiency. Contributions consider the political and economic implications of securing public goods at the European level, supported by a historical account of precedent in such shared endeavours. They explore various configurations and means for financing, from the EU budget to novel possibilities for own resources, and evaluate a number of existing collective action programmes for their governance models, collectively demonstrating that effective collective action will require aligning fiscal capacities to Europe's strategic priorities.

The Global Commons and European Public Goods

George Papaconstantinou *

Abstract

This chapter argues that a long-delayed renewed focus on European Public Goods (EPGs) offers a coherent strategy to address a triple challenge: overcoming internal EU fragmentation; strengthening EU external capacity for leadership in a disrupted global order; and contributing to the management of global commons. The chapter reframes EPGs not only as instruments of efficiency and solidarity, but also as tools for market integration, competitiveness, security, and strategic autonomy. It clarifies the policy perimeter of EPGs and examines the conditions required for their effective delivery, with attention to coordination between EU-level and national budgets. It argues that strengthened EPG provision can enhance an EU role in supplying global public goods amid US retrenchment from multilateralism and the rise of coalitions of the willing. These arguments are illustrated by focusing on three policy areas as case studies: climate mitigation, defence technologies, and artificial intelligence, highlighting EPGs as a cornerstone of a pragmatic European response to fragmentation at home and abroad.

Keywords: European Public Goods; Global Commons; Strategic Autonomy; EU Fiscal Governance; Climate, Defense and AI Policy.

1. Introduction: Global Commons Are More Relevant Than Ever

In the age of the extractive superpower, does it even make sense to talk about global commons? After all, managing global commons is a question for collective action, the voluntary corporation of nation states using common rules, norms, and organizational means. This is very much lacking now, with the full-on assault on multilateral governance rules as we have known them, and the transition to a new fragmented global order.

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And yet, the global commons are obviously not going away. Climate change will not stop because of climate deniers or policy reversals; it continues its inexorable progression. The loss of biodiversity will not suddenly reverse. Health pandemics will keep on happening. And digital networks that are now global and permeate all human activity will continue to raise issues around security, privacy and the dominance of tech giants, with implications that impact the economy, societal values and democratic norms.

Hence, the issue of global commons and the role of the European Union (EU), as one of the world's great powers in helping to manage them, remains more relevant than ever. In this context, producing and delivering European public goods (EPGs) is a critical policy tool with several dimensions. One is internal: EPGs help complete the EU internal market. Another is external: EPGs are a strategic tool for Europe in the competition amongst power blocs. To these is added the global dimension: EPGs contribute to managing global commons.

The chapter's core claim is that a renewed and explicit strategy centred on EPGs offers one of the few coherent ways to address all three dimensions simultaneously. EPGs should not be understood merely as instruments of efficiency and solidarity, important though those rationales remain. They are strategic tools for market integration, competitiveness, security, and strategic autonomy, enabling the EU to complete the internal market and act externally with credibility and leverage.

The argument is not that 'more Europe' is intrinsically desirable. Rather, the scale, complexity, and strategic salience of key policy domains have shifted. Sectors such as energy systems, defence technologies, advanced digital infrastructures and AI have high fixed costs, network effects, and first-mover advantages; hence fragmented national approaches tend to deliver underinvestment, duplication, and dependence. By contrast, European provision can internalize spillovers, generate economies of scale, and create credible commitments, benefiting both the integrity of the Single Market and the EU's ability to shape global outcomes.

The chapter is structured as follows. Section 2 conceptually reframes EPGs and clarifies their policy perimeter. Section 3 discusses their delivery, with particular attention to vertical coherence between EU-level and national budgets, while Section 4 focuses on the financing of EPGs. Section 5 connects EPG provision to the EU's ability to supply global public goods in a world of fragmented multilateralism and 'coalitions of the willing'. Section 6 illustrates the argument by focusing on three policy areas as short case studies in EPGs: EU leadership in climate mitigation; a future-oriented European defence-technology architecture; and a European AI stack to support digital sovereignty and competitiveness. Conclusions are drawn in Section 7.

2. Reframing European Public Goods

The classic economic rationale for public goods rests on the ideas of non-rivalry and non-excludability, leading to under-provision by private markets (Samuelson, 1954). In the EU context, EPGs have often been discussed through the lens of cross-border externalities and solidarity among member states (Alesina et. al., 2005). These remain valid foundations, but they understate the strategic function EPGs can play in the current environment. Today, European public goods increasingly operate as instruments of market integration and competitiveness: they reduce fragmentation, lower entry barriers for firms, and create EU-wide infrastructures at scale. They also operate as security and resilience tools: energy security, cyber resilience, defence-related technological capabilities, and control over critical digital infrastructures cannot be credibly ensured through uncoordinated national strategies (Buti & Papaconstantinou, 2022).

This strategic reframing matters politically. 'Public goods' language is sometimes misread as a euphemism for redistribution. A clearer analytical distinction helps: EPGs are not a claim that Europe should centralize all policy functions, but that certain domains generate EU-wide spillovers and scale effects so significant that European provision is the efficient and strategically necessary approach. Where fragmentation undermines the Single Market and creates vulnerabilities, EPGs become a market-completing and risk-reducing instrument.

Not all public spending qualifies as a European public good; conceptual clarity is essential. A useful operational definition is that EPGs are policies, infrastructures, or capabilities that (i) generate significant cross-border spillovers within the EU; (ii) cannot be efficiently provided by individual member states acting alone; and (iii) are closely linked either to the functioning of the Single Market or to the EU's external action.

Under this definition, certain domains clearly fall within the scope: climate mitigation and related energy infrastructures; trans-European networks; large-scale Research and Development (R&D) platforms; security and defence-related technological capabilities; and core digital infrastructures and AI-enabling assets. By contrast, most redistributive social spending, predominantly local public services, and large parts of education and healthcare remain primarily national responsibilities (Fuest & Pisani-Ferry, 2019; Papaconstantinou, 2020). The test is whether EU-level provision improves efficiency, effectiveness, resilience, and strategic credibility compared with decentralized alternatives.

3. Design and Delivery of EPGs

To develop and scale up EPGs we need more than more EU spending. It hinges on institutional design and governance frameworks that align incentives. A central challenge is vertical coherence between EU and national budgets. Without coordination, EU spending can crowd out national efforts or be undermined by inconsistent policies and fragmented implementation. Coherence depends on the interaction between the EU budget and national fiscal frameworks, including co-financing rules, conditionality, and the alignment of investment priorities (D'Apice & Pasimeni, 2020; Buti & Messori, 2021).

In practice, EPGs can be delivered and financed in different ways; Table 1 shows combinations of financing and delivery at the national and at the EU level, with relevant examples. 'Pure' EPGs are those delivered and financed at the EU level. Examples are the common procurement on vaccines and the European Space Programme. The other three combinations involve member states either in the delivery or financing, or both. Where the delivery takes place at national level, we can speak of EPGs 'by aggregation'. A notable example is the projects to foster the double (green and digital) transition in the national Recovery and Resilience Plans (RRPs).

Table 1 Classifying European programmes

Delivered → / Financed ↓	EU	National
EU	R&D / Horizon Vaccine Financing/HERA European Space Programme Connecting Europe Facility European Globalisation Fund	Just Transition Fund Double transition under RRF (37% green and 20% digital) SURE
National	Projects financed by externally assigned revenue	CSRs-recommended projects with large externalities (e.g. resilience of health systems) IPCEI (batteries)

Source: Buti and Papaconstantinou (2022).
Note: Entries in the table are non-exhaustive examples.

The possibility to deliver EPGs at the EU level whilst maintaining the financing at national level is foreseen via so-called 'external assigned revenue'. The projects where both financing and delivery take place at national level can still qualify as EPGs 'by aggregation', provided they are consistent with a clearly defined common European goal. An example is the Important Projects of Common European Interest (IPCEI), which allow state aid support for breakthrough innovations that would not otherwise materialize because of the market risks such projects entail. A notable IPCEI is a pan-European project on a new generation of batteries.

Whilst EPGs 'by aggregation' play an important role given the complexity of the EU system, there are potential shortcomings compared to 'pure' EPGs: projects delivered at EU level but financed via national budgets may be called into question should national priorities change; similarly, EU financed EPGs delivered at national level may lack the cross-country coherence. Finally, EPGs financed and delivered by member states may combine both weaknesses.

This brings to the fore the issue of coordination mechanisms that combine EU direction with national ownership. Subsidiarity remains relevant: European provision should often take the form of joint programming, common standards, co-financing, and pooled procurement, rather than full centralization. In practice, this means stronger ex ante alignment of national strategies with EU objectives, interoperability requirements that are binding rather than optional, and common evaluation frameworks that allow comparative performance assessment.

Another issue in this respect is accountability and legitimacy. EPGs, especially in security and industrial domains, can trigger distributional conflicts. Clear objectives, transparent allocation criteria, and robust evaluation are essential to maintain support and to avoid perceptions of discretionary 'industrial picking'. This also requires a clear narrative: EPGs are a mechanism to protect and deepen the Single Market under new conditions, not a substitute for national responsibility.

4. Financing EPGs: From Ad Hoc to Structural Capacity

A credible EPG strategy requires fiscal capacity commensurate with strategic ambition. The EU budget remains small relative to objectives, while the Union has relied on ad hoc instruments to respond to shocks. NextGenerationEU demonstrated that in crises, common borrowing and targeted spending can overcome political constraints. However, its temporary nature and the predominance of national Recovery and Resilience Plans mean it delivers public goods largely 'by aggregation', rather than through fully Europeanised capabilities.

A more durable architecture should rest on three pillars. First, an EU budget that better reflects strategic priorities (competitiveness, climate, security, external action) and that has sufficient flexibility to reallocate resources in response to strategic shocks. A repeated lesson is that rigid multi-annual allocations can lag behind geopolitical and technological realities. This argues for a larger 'strategic reserve' and for programme design that allows rapid scaling of EPG-relevant instruments when shocks occur, rather than relying on one-off bargains. This is the direction of the new EU Multiannual Financial Framework (MFF) proposal currently on the table, but it is a direction that tends to unravel; it is important that it is not lost in the interinstitutional negotiations (Buti & Papaconstantinou, 2025).

Second, a credible and politically sustainable system of own resources, linked to EU-level objectives, to reduce dependence on national contributions and to provide stable financing for common debt service where borrowing is used. Options that have been discussed include revenues linked to carbon pricing (including border measures), digital activities, and corporate tax-related bases. Some of these were proposed in the next EU MFF, though perhaps not at the requisite level of ambition (Buti & Papaconstantinou, 2025). The key is not any single instrument, but a diversified own-resources package that strengthens the EU's fiscal autonomy and legitimacy. Own resources also matter as a signalling device: they connect EU-level spending to EU-level policy choices, reducing the perception that EPGs are funded primarily through zero-sum bargaining among member states.

Third, strengthened vertical coherence: EU spending should crowd in national investment and align with national fiscal frameworks, rather than substitute for them. This implies clearer co-financing principles, common benchmarks, and integration with reformed EU fiscal governance so that national fiscal rules do not inadvertently penalize co-investment in EU priority public goods (D'Apice & Pasimeni, 2020). In practice, vertical coherence can be strengthened through three mechanisms: (i) joint investment planning for EPG domains, comparable to the logic of joint programming in research; (ii) conditionality that focuses on capability outcomes (for instance interoperability or infrastructure completion) rather than purely on formal milestones; and (iii) an explicit distinction in fiscal surveillance between day-to-day spending and verifiable EPG investment that delivers EU-wide spillovers.

A final design issue concerns permanence versus exceptionalism. Crisis instruments can catalyse innovation in EU fiscal governance, but if they remain exceptional the EU risks returning to a structurally underpowered budget in

normal times. The strategic domains highlighted in this chapter (climate infrastructures, defence technologies, and AI enablers) require continuity. A credible EPG strategy therefore implies moving from episodic borrowing and temporary facilities towards a more stable EU-level investment function, combined with robust governance and democratic accountability.

A further issue that deserves emphasis concerns borrowing and debt service. Common borrowing structured around a credible EU safe asset can be justified where investment delivers EU-wide spillovers and where front-loaded financing reduces long-run costs (notably in climate infrastructures and some security capabilities). However, permanence requires a credible repayment and own-resources strategy. A diversified package of own resources linked to EU policy choices can strengthen legitimacy and reduce the perception that EPGs are funded through zero-sum bargaining. In practice, this pushes towards a mix: revenues linked to carbon pricing and border adjustment; contributions linked to digital activity; and, where politically feasible, corporate tax-related bases. The objective is to ensure that strategic investment capacity is sheltered as much as possible from short-term political bargaining.

5. EPGs and Global Commons in a Fragmented World Order

The provision of global public goods such as climate stability, digital governance, and security has become harder as multilateral institutions face gridlock (Hale et al., 2013) and trust erodes among major powers. Global cooperation is in fact increasingly shaped by a fragmented landscape of competing blocs, diverse preferences, selective engagement, and issue-specific 'clubs'. In such a world, governance outcomes depend less on formal universal agreements than on a 'variable geometry' of softer arrangements; increasingly, they also depend on the capacity of major actors to mobilize financing, set standards or conclude agreements that can then diffuse globally (Papaconstantinou & Pisani-Ferry, 2025).

This shift has two implications for the EU. First, internal delivery capacity becomes a precondition for external influence: actors that cannot implement credible policies at home have limited leverage abroad. Second, coalitions of the willing become central. These coalitions need material backing: investments, standards, and institutions that make cooperation credible and attractive. European public goods are therefore not an inward-looking exercise; they are the internal backbone that enables the EU to contribute to global public goods even when universal multilateralism is blocked.

The EU's distinctive asset is its ability to combine regulatory authority, market size, and public investment. Regulatory power alone is insufficient if it is not matched by capabilities, especially in technology and security domains. Conversely, investment without coherent regulation can produce fragmented markets and limited diffusion. EPG provision can connect the two: by financing infrastructures and capabilities that support the Single Market, the EU can amplify the global influence of its standards and regulations, creating 'demonstration effects' that shape third-country choices. This is particularly important where global value chains respond to market access and standards: cases such as low-carbon industrial goods, critical technologies, and digital services.

Coalitions of the willing can take many forms: climate technology and finance partnerships; defence-industrial cooperation with like-minded allies; and digital governance initiatives around standards and safety. The EU's ability to lead in such coalitions is strongest when it can offer credible commitments and tangible assets: financing, market access, interoperable technologies, and regulatory certainty. EPGs are therefore the enabling condition for a pragmatic external strategy that remains consistent with multilateral values while adapting to a highly contested and environment.

6. Choices and Priorities: Three Policy Areas as Case Studies

From the many possible European public goods that also have a bearing on global commons, three stand out in the current geopolitical setting: climate mitigation; defence-related technologies; and European investments in AI.

EU leadership in climate mitigation: from EPGs to global leverage

Climate mitigation is the paradigmatic global public good, but it is also the area where the EU has come closest to translating internal integration into external influence. The EU has developed an extensive regulatory and market-based architecture for decarbonization, but the credibility and effectiveness of this framework depend increasingly on investment-heavy European public goods: cross-border electricity grids, renewable generation and storage, hydrogen infrastructure, industrial decarbonization platforms, and green finance mechanisms.

Internally, climate action is capital-intensive, front-loaded and country- and sector-sensitive. If the transition is financed and implemented unevenly, differences in fiscal space and economic outcomes risk producing divergent adjustment paths and political backlash. Climate-related EPGs therefore can also serve a

cohesion and market-integration function, helping to ensure decarbonization does not entrench fragmentation in energy costs, industrial competitiveness, and investment capacity. European-level financing and coordination can reduce aggregate costs by exploiting scale economies and by internalizing cross-border spillovers, for example, where interconnections allow renewables deployment to be optimized across regions, or avoiding duplication in grid infrastructure.

Climate EPGs also address a competitiveness challenge. As other major jurisdictions and especially China combine climate policy with industrial policy, Europe's ability to sustain political support for ambitious climate neutrality targets will depend on credible pathways for industrial transformation. European-level financing for low-carbon technologies and infrastructure can reduce the risk of a fragmented 'green transition', in which the speed and costs of decarbonization vary sharply across member states and sectors.

Externally, climate governance is increasingly 'club-based': large markets, preferential agreements, technology diffusion, and finance matter more than universal agreements in an environment characterized by US withdrawal from the Paris agreement. (Papaconstantinou & Pisani-Ferry, 2025). Building coalitions across developed, emerging and developing economies has thus become a central strategy to pursue climate ambitions (Pisani-Ferry et al., 2025). In this setting, the EU's internal EPGs enhance its capacity to shape global outcomes by creating large, predictable markets for clean technologies and by setting standards that influence global value chains. Linking regulation to investment capacity makes the EU a more credible partner and agenda-setter.

This logic underpins proposals for pragmatic EU-China cooperation on green technologies (Pisani-Ferry & Weder di Mauro, 2025). The EU and China possess complementary strengths: Europe in regulation, system integration, and finance; China in manufacturing scale and cost reduction. Cooperation anchored in concrete projects, standards, and financing, particularly in emerging and developing economies, can accelerate global decarbonization across both emerging markets and low-income countries, while reducing costs. Importantly, such cooperation need not weaken strategic autonomy if it is framed around reciprocity, transparency, and third-country deployment rather than dependency.

Defence technology: building a European security public good

Defence is the most politically sensitive yet increasingly unavoidable domain for EPG provision. The return of high-intensity warfare to Europe's neighbourhood, following Russia's war on Ukraine and growing uncertainty about long-term US security guarantees under the Trump administration, have shot European defence to the top of the policy agenda and exposed structural

weaknesses in Europe's defence model. These weaknesses are not only military; they are institutional, technological, and fiscal.

Europe's defence-industrial landscape remains highly fragmented. National budgets are sizeable in aggregate, yet dispersed across multiple platforms and procurement systems, producing duplication, limited interoperability, and underinvestment in critical enabling technologies. The resulting paradox is that Europe spends a substantial share of global defence resources but generates comparatively limited collective capability. The binding constraint is governance: spending is not pooled, procurement is not coordinated, and innovation systems are not scaled.

A future-oriented European defence-technology architecture should therefore be understood as a core European public good. The emphasis should be upstream and capability-based: joint R&D, shared technology platforms, common standards, and coordinated procurement in areas such as cyber defence, space-based assets, advanced sensors, secure communications, air and missile defence, and AI-enabled systems. Many of these are dual-use technologies with significant civilian spillovers; an EU-level approach can therefore strengthen both security and industrial competitiveness.

From a governance perspective, incremental coordination is insufficient. Recent proposals call for a more integrated model combining EU-level funding, joint procurement mechanisms, and common governance structures (Hildebrand et al., 2025). Economically, joint provision reduces unit costs, accelerates innovation, and improves interoperability. Strategically, it reduces dependence on external suppliers and increases Europe's capacity to act when its interests diverge from those of its allies.

Fiscal design is central. Defence EPGs require multi-year commitment to R&D and procurement, which is difficult to sustain through ad hoc national cycles. European-level financing, including common borrowing for clearly defined capability investments, can provide stability and scale. Vertical coherence is again crucial: EU funding should be designed to crowd in national spending and to align procurement choices with common standards, rather than merely adding another layer of fragmented programmes. A practical benchmark is to make EU co-financing conditional on multi-country procurement, shared standards, and demonstrable reductions in duplication.

Externally, a stronger European defence-technology base strengthens transatlantic burden-sharing and makes Europe a more capable and credible partner. Defence EPGs should therefore be framed as enhancing Europe's contribution to collective security rather than decoupling. The goal is strategic autonomy in the sense of capability and resilience.

Digital sovereignty and the European AI stack: bridging regulation and capacity

Artificial intelligence is widely recognized to have pervasive economic, social, and security implications. It is also understood to be characterized by extreme scale effects, concentration dynamics, and systemic risks. These make AI both a competitiveness issue and a governance problem, a prime territory for European public goods.

European policy has so far prioritized regulation, positioning the EU as a global leader in trustworthy and rights-based AI governance, as with the adoption of the AI Act. However, regulatory leadership without corresponding productive and infrastructural capacity risks creating a structural asymmetry: Europe becomes a rule-maker but remains a technology taker (Renda, 2024). Over time, this weakens competitiveness and erodes the credibility of governance, as enforcement becomes dependent on external technology trajectories.

AI is not monolithic; it is composed of different layers. The 'AI stack', or pyramid, should be understood to be based on a bottom foundational layer of energy that provides the massive power required for all AI computation; then include a layer of specialized hardware that provides AI's computing power, the chips; an infrastructure layer with cloud services and physical data centres that serve computing power; the Large Language Models (LLM) layer of the models that are the brain of AI systems; and, last but not least, the applications layer that translates AI into economic value across different sectors of the economy.

Europe is behind on all these layers. Its energy system is underdeveloped and lacks the connectivity for Europe-wide delivery for AI computation; we produce hardly any chips (though we do produce the advanced machines required to manufacture these); we mostly rely on US-based cloud services; European LLMs compete with US and Chinese ones but represent a small fraction of the market; and we are lagging in applications.

A European AI stack should therefore be understood as a strategic EPG. It encompasses a layered ecosystem: access to high-quality data; high-performance and energy-efficient computing infrastructure; foundational models and open platforms; applied research and deployment capabilities; and governance mechanisms that support compliance, safety, and accountability. No single member state can credibly provide this stack on its own. Fixed costs are high, network effects are strong, and first-mover advantages matter. Fragmented national initiatives risk duplication without achieving scale.

EU-level investment can be catalytic in three ways. First, by financing shared compute and cloud capabilities and ensuring interoperability across member states. Second, by supporting federated data spaces and trusted data-sharing

infrastructures that enable innovation while respecting EU legal and ethical standards. Third, by supporting open and competitive ecosystems such as shared research platforms and, where appropriate, open foundational models that lower entry barriers and reduce dependence on a narrow set of external providers.

This capacity complements regulation rather than competing with it. AI governance cannot be effective through ex post rules alone; governance and competitiveness evolve together: the EU should avoid a false sequencing in which regulation is assumed to come first and capacity later. Without capacity, regulation can inadvertently entrench market power elsewhere.

Digital sovereignty in this context does not imply autarky. It refers to the capacity to make choices: to access critical technologies, set and enforce standards, and avoid excessive dependence. A European AI stack strengthens this capacity and enhances the EU's influence in global AI governance, where norms and standards are increasingly contested. It needs not only capital expenditure for computing and cloud storage infrastructure, but also common rules and infrastructures for trusted data sharing, auditability, and evaluation. In other words, the same principle applies across domains: EPG financing should be designed to change incentives and behaviour in member states, not merely add resources on top of fragmented national strategies.

7. Conclusion: EPGs as a Strategic Compass

European public goods provide a unifying strategic compass for the EU at a time of deep fragmentation. They link internal market completion with external influence, competitiveness with security, and regulatory ambition with delivery capacity. In a world of modular cooperation and coalitions of the willing, the EU's ability to contribute to global public goods depends on its capacity to implement policies and mobilize resources internally.

Without stronger fiscal capacity, durable coordination, and sustained investment, EPG ambitions will remain under-delivered. Conversely, a credible strategy centred on European public goods can anchor the EU's response to fragmentation, reinforce its contribution to global commons, and restore its capacity to shape outcomes in an increasingly contested global economy.

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Between Economic Efficiency and Political Bargaining: A Long View on European Public Goods

Emmanuel Mourlon-Druol *

Abstract

To provide a counterpart to the more abstract discussion on European Public Goods, this chapter reflects on the conditions in which public expenditure has been centralized or not in the European Union since the 1950s. It argues that a rational calculation about economic efficiency has rarely been the prime mover in these efforts. The chapter outlines four aspects to support this argument. First, very specific historical contexts, rather than sophisticated economic efficiency calculations, made proposals to centralize expenditure at EU level convincing and successful. Second, the notion of 'fiscal federalism' was and is occasionally invoked but rarely put into practice. Third, progress in discussions on centralizing public expenditure depend on very clearly delineated issues. Fourth, a political agreement on a 'non-market definition of the common interest' (Padoa-Schioppa, 1981) remains crucial to any change. Taken together, these four aspects command realism in the debate about future common EU spending as they highlight that in past discussions political bargaining often prevailed over calculations of economic efficiency.

Keywords: European Public Goods; Common Borrowing; Fiscal Policy; Investment; Euro.

1. Introduction

The aim of this chapter is to resituate current debates on European Public Goods (EPGs) in their longer-term context, in order to better understand the reasons why European policymakers agreed on or rejected a greater centralization of public spending at the European Union (EU) level. EPGs are broadly defined as 'policies and initiatives whose value to the citizens is higher when conducted at EU rather than at national level' (Fuest & Pisani-Ferry, 2019). They cover large policy areas, ranging from foreign policy and peace, to research and defence.

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Their identification and provision imply a set of complex economic assessments (Buti & Papaconstantinou, 2022; Claeys & Steinbach, 2024; Wyplosz, 2024). The multiple challenges the EU has faced since the 2010s have revived interest in the notion, and prompted new reflections on why and how Europeans could decide to spend in common at EU level.

The phrase 'public goods' has not always been common in European policymakers' circles. While the debate in economics has long existed, the term 'public goods' in EU policymaking seems to have first been used in the late 1970s. An early instance was the MacDougall Report on the role of public finance in European integration (Commission of the European Communities [EC], 1977). Under the heading 'supply of public goods and services, and regulatory activities,' the report identified three 'criteria for assessing the case for or against Community level involvement in public sector spending,' including economies of scale, externalities/spillovers, and political homogeneity.

Ten years later, Tommaso Padoa-Schioppa, former head of the Commission's directorate general for economic and financial affairs, used the phrase in his Efficiency, Stability and Equity report (Padoa-Schioppa, 1987). The report is often considered a landmark because it offered the first comprehensive analysis of the European Economic Community's (EEC) strategy after the agreement on the Single European Act, which in the mid-1980s revised the EU's founding treaties. Shortly after, Spanish economist Miguel Boyer also referred to public goods during the debates of the Delors Committee for the Study of Economic and Monetary Union, which drafted one of the major blueprints to create the euro (Mourlon-Druol & Bergamini, 2022). These occasional uses of the phrase were however followed by little concrete action, until the expression reappeared in the public debate through an initiative of the French and German governments in 2018-19 (Lamy & von Weizsäcker, 2018), which reignited interest in the topic.

Many different examples exist of common spending in the EU since the 1950s. The predecessors of the EU, the EEC and even the European Coal and Steel Community (ECSC), developed several schemes to that end. For instance, among the first common expenditures related to European integration were social and regional policies in the field of coal and steel. Created in 1951, the ECSC included several cases of common public spending (Breuer, 2023). The ECSC Treaty developed a social and regional policy in the coal and steel sectors. One flagship scheme was the Fund for the Training and Resettlement of Workers. There was also spending related to social housing (Mechi, 1994).

Several important works have addressed the questions as to why EU Member States should decide to spend in common in the current context, how

they should do it, and in what policy areas. Although the debate about EPGs is often based on the argument that member states should decide on common spending for reasons of economic efficiency, this chapter shows that the track-record of centralization of public expenditure at the EU level instead highlights the importance of political bargaining. In order to support this argument and provide a counterpart to the more abstract analyses on European Public Goods, this chapter makes four points. First, very specific historical contexts, rather than sophisticated economic efficiency calculations, made proposals to centralize expenditure at EU level convincing and successful (or not). Second, the notion of 'fiscal federalism' was and is occasionally invoked but rarely put into practice. Third, progress in discussions on centralizing public expenditure depends on very clearly delineated issues. Fourth, a political agreement on a 'non-market definition of the common interest' (Padoa-Schioppa, 1981) remains crucial to any change.

2. The Specificity of Each Historical Context

It is a truism, especially for an historian, to insist on the specificity of each historical context. Yet in a debate on EPGs that tends to be framed in a-historical terms, it is worth starting with a reminder on the peculiarities of each circumstance when common spending was agreed, or not, in the EEC/EU. There is no hard and fast rule to explain why European policymakers agree on spending in common at the EU level. Three examples illustrate this point particularly well: the agreement to establish a defence budget for a European army through the European Defence Community (EDC), eventually abandoned; the development of the common agricultural policy (CAP); and the decision to grant the EEC a capacity to borrow in common in the 1970s.

A budget for a European army

In the circumstances of 2026, the 1952 decision to provide for a budget for European defence in the EDC Treaty is probably the first to invite reflection (Dwan, 2000; Ruane, 2000). This decision stemmed from the French government's desire to embed German rearmament in a Western European framework in a Cold War world. The invasion of South Korea by North Korea in June 1950 increased the fear of the opening of another front, particularly in Europe. The rearmament of West Germany was thus needed to ensure the security of Western Europe. While the French population did not support that view, the French government realized that West German rearmament was somehow becoming inevitable.

For the French government, the best strategy was thus to take the initiative and Europeanize West German rearmament, instead of having the rearmament imposed in another context. To do that, the French government decided to follow the ECSC model and suggested a supranational framework, that is, the transfer of a competence to a non-national executive. Only such a scheme would be able to place a maximum number of constraints on West Germany. The French government acted under considerable pressure of time, since the US government wanted West German rearmament by the end of 1951. To that end, the EDC Treaty had to include significant public spending at the European level. The concurrent evolution of French domestic politics then prevented ratification of this Treaty. In short, French support for a common budget for European defence was less motivated by the provision of an EPG than by a desire to limit provision of defence at national level in West Germany.

The largest share of EU common expenditure: the common agricultural policy

The largest share of EU expenditure, the CAP, resulted from the development of a Treaty of Rome provision after extended political negotiations in the first half of the 1960s (Ludlow, 2005; Knudsen, 2009). These Treaty provisions were much vaguer than those on the establishment of the customs union. They were much closer in form to those relating to transport and social policy, which later produced only modest results in terms of both policy and common EEC spending (Patel & Schot, 2011; Mechi, 2020).

Against this unfavourable backdrop, a combination of three political circumstances explains the creation of the CAP. First, the Dutch and the French governments, alongside the Commission, formed a strong coalition in favour of activating the Treaty of Rome's clauses, indicating the possibility to create a CAP. The Dutch government wanted to secure its exports, the French government wanted to protect its farmers, and the Commission needed at least one large common policy to support its ambition to lead a process towards a complete European political federation. Second, the opponents of the creation of such a policy, or of some of its aspects — the German, Italian and United States governments — proved ineffective in coordinating their opposition and making their voices heard. Third, the CAP's development was incremental, composed of successive negotiations throughout the 1960s, meaning that the later implications of early decisions were not fully evident from the start.

Borrowing in common: the 1978 New Community Instrument

In 1977, the Commission seized the momentum created by the discussions about the creation of the European Monetary System (EMS) to tackle the question of developing further the EEC's borrowing capacity (Mourlon-Druol, 2026). This resulted in an agreement to create the so-called New Community Instrument (NCI) in 1978, which changed the logic of EEC borrowing. It moved away from the idea of providing a mere balance-of-payments deficits facility — as was the case with the Community Law Mechanism created in 1975 — to investment support in order to stimulate economic growth. Specific sectors were targeted, including energy, infrastructure, and industries in the process of reconversion. The NCI was renewed several times in the 1980s — in 1982 (NCI II), 1983 (NCI III) and 1987 (NCI IV) — and each time member states and EEC institutions agreed on the conditions and overall borrowing ceilings. Member states, the Commission and the European Parliament always failed to agree on making it a permanent scheme, however. The total amounts were very small: the totality of NCI loans from 1978 to 1990 amounted to 1.7% of 1978-1990 EU expenditure, and 0.01% of 1978-1990 EU GNI.

The development of the EEC borrowing capacity also derived from a combination of specific circumstances (Horn et al., 2020). Unlike the ECSC and Euratom treaties, the Treaty of Rome, creating the EEC, did not provide for a borrowing capacity. Discussions about it appeared in the context of: (a) the availability of capital markets to tap into as a consequence of the oil crisis and oil-producing countries selling at higher prices and having more money to lend; (b) the realization that the EEC's triple A rating was underused; and (c) the need to find ways to fight the economic crisis of the 1970s by supporting economic investment. This context, notwithstanding the reluctance of some member states to develop such Community-level borrowing, enabled the creation of the NCI in 1978. Echoing such circumstances, the development of NGEU happened in the extraordinary circumstances of the COVID-19 pandemic (Schelkle, 2021). These very specific conditions made it possible to break several budgetary taboos about common EU borrowing. The management of the COVID-19 pandemic caused an economic crisis across the EU. After weeks of negotiations, the EU agreed in May 2020 on an aid package consisting of grants to member states. The Commission established a Recovery Fund and borrowed money on financial markets, up to €750 billion.

3. The Limits of Fiscal Federalism

Fiscal federalism has often been part of discussions among European policymakers. Most famously, the so-called MacDougall Report on the role of finance in European integration, published in 1977, argued that a significant increase in public expenditure at European level would be required as integration deepens (EC, 1977). The MacDougall Report distinguished between different steps in integration. During the 'pre-federal integration stage,' the report argued that there were only specific budgetary needs, especially in regional and employment policy, and called for the EEC budget to be raised from 0.7% of Community GDP to 2%-2.5%. The report also sketched out more ambitious options and stated that 'it is possible to conceive, presumably at some distant date, a Federation in Europe in which Federal public expenditure is around 20-25% of gross product as in the U.S.A. and the Federal Republic of Germany. An earlier stage would be a federation with a much smaller federal expenditure of the order of 5-7% of gross product, or roughly 7.5-10% if defence were included' (EC, 1977: 14–15).

Of course, the materialization of such a scenario was and still is difficult to imagine, and the MacDougall Report itself mostly set out a theoretical case. An earlier attempt at European federal spending was the EDC Treaty, mentioned above, which did not take effect as it was eventually not ratified. However, the overall institutional structure was federal in inspiration, and the six ECSC founding members did agree, in the first place, to sign a Treaty that included a near-federal budgetary capacity.

However, there is at least one example of supranational public spending at the European level that has been implemented and is widely considered a success. The institutional structure and spending of the European Research Council (ERC) make it, in essence, a federal institution. ERC spending is not subject to strict national quotas and the emergence of the ERC allowed the development of a genuine European-level space for research (Veugelers & Baltensperger, 2019). It is worth recalling that the creation of the ERC benefited from very specific circumstances. Discussions among European scholars and research organizations about the detrimental effect on European research of the absence of a clear European setting were not new. The political realization of this and the momentum built up in 2002 among EU ministers for research and the European Council, based on a political commitment to transform the EU economy into a 'knowledge-based economy,' made it possible to move further. The European Research Council Expert Group's (ERCEG) report, published in 2003, identified the *'economic, social and intellectual reasons'* why an ERC should be set up (ERCEG, 2003). The

report also set out how this could happen, highlighting the need to avoid 'requirements for *"juste retour*"' — that is, the notion that member states receive back a share more or less equal to their financial contributions to the EU — and the need for the independence of the future ERC as key factors for the development of its credibility. This materialized in the creation of a new institution, the ERC, and its accompanying executive arm, the ERC Executive Agency (ERCEA).

Regarding the issue of EU common borrowing mentioned in the previous section, the debates about the further development of the NCI after 1978 illustrate well the challenges associated with fiscal federalism. Once the borrowing ceilings of the first NCI had been reached, European policymakers began discussing what to do next, not least because the scheme proved very successful. Some European policymakers wanted to increase the ceilings and make the NCI permanent; others rejected these ideas and eventually only agreed to ad hoc renewals in 1982, 1983, and 1987. Making the NCI permanent, which amounted to fiscal federalism, was anathema to several member states, including Germany and the Netherlands, and the scheme was eventually discontinued.

4. The Need for Clearly Delineated Stakes

A major difficulty in increasing public spending at EU level stems from the original lack of clarity in the EEC/EU Treaty. Tommaso Padoa-Schioppa, the former head of the Commission's directorate general for economic and financial affairs, made this point in his 1987 report *Efficiency, Stability, Equity* (Padoa-Schioppa, 1987). Taking stock of the evolution of the Community system just as the Single Market and the liberalization of capital movements were underway, the Padoa-Schioppa report noted that:

> the Community's scope for economic action and successful development is, rather paradoxically, limited by the strictly economic nature of the Community itself. This is because the Community, unlike fuller political systems, is not responsible for the provision of essential "public goods" such as defence, justice, and social security, with the important economic consequence that distributive issues become more acute owing to the need to balance costs and benefits for members in more narrow terms than in a complete political system.

The combination of the absence of very detailed provisions and the existence of some vague Treaty-based aims means that any additional public spending needs a very specific target and argument if it is to materialize. In the case of social policy, the creation of a European Social Fund was provided for in the Treaty of Rome, but without details about its resources and actions. In the case of agriculture, the

political effort to create the CAP was made easier by the explicit provision included in the Treaty of Rome, but also relied heavily on the specific coalition of political forces in the early 1960s, as Section 2 has shown. In the case of regional policy, the Treaty of Rome called in principle for the '*harmonious development*' of the Community. However, the Treaty provided only a weak basis for the supporters of regional policy in the early days of the EEC. This weak basis explains regional policy's slow genesis from the first mentions in the early 1960s to the eventual creation of the ERDF in 1975. Attempts at increasing public spending at the EU level therefore worked when it was very well targeted, or after a careful effort to define it more clearly.

Conversely, several issues regarding the definition of key concepts needed in order to agree on additional European level public spending, hampered or delayed technical and political agreements. For more than a decade, regional policy could not develop because of the difficulty in agreeing on how regions should be defined and what criteria could be used to support them. Similarly, the ambition to develop financial support for the development of European infrastructures was held back by the inability to define what 'infrastructures' were. Finally, in the field of social policy, differences in social security systems and their definitions and aims often hampered progress.

In that context, the emergence of the 'EPG' expression seems to have been a symptom of the difficulty in defining and deciding on what to spend in common. The phrase 'public goods' very rarely appeared, if at all, in European policymakers' debates before the 1977 MacDougall Report (EC, 1977), the 1986 Spaventa report on the future of Community finance (Spaventa, 1986), and the 1987 Padoa-Schioppa Report (1987). In the late 2010s, wary that Brexit might impede European integration, the French and German governments launched a debate on EPGs, commissioning a report (Fuest & Pisani-Ferry, 2019). The discussion on EPGs has developed since then and, importantly, again raised the issue of clearly defining what public spending is better carried out at the European rather than the national level (Claeys & Steinbach, 2024).

5. The Difficulty of Establishing a 'Non-Market Definition of the Common Interest' (Padoa-Schioppa)

Examples of agreements to increase public spending at European level always had to confront the issue of the narrow cost-benefit analysis carried out by each member state (Breuer, 2024; Mourlon-Druol, 2026)unlike the budget of a fiscal (federal. This sort of calculation is as old as European integration. Each state looks at how much it pays to 'Europe' and how much it gets back from 'Europe'.

Latent in the early years, it came into the open with the discussion of the British budgetary question from 1979, and became institutionalized with the specific agreements reached from the 1980s on the contributions of the UK, Germany, and the Netherlands, followed later by Austria and Sweden (Darvas, 2019; Ludlow, 2020). Since the 1980s, this debate has been dubbed the *juste retour*.

Such a logic is detrimental to the development of genuine European-level public spending in the spirit of the preamble and principles of the Treaty of Rome (1957). By nature, such public expenditure may benefit some more than others, and some may contribute more than others. In the early 1980s, Padoa-Schioppa illustrated well the inherent problems of the *juste retour* logic. Writing on 4 May 1981 to the commissioner for economic and financial affairs, François-Xavier Ortoli, about the ongoing British budgetary discussion, he warned (Padoa-Schioppa, 1981, 4 May):

> I consider this kind of calculation to be extremely dangerous politically and, in the final analysis, impossible economically. (...) Politically, it simply means the end of the Community based on a non-market notion of the common interest (...) Technically, a complete calculation is impossible because it involves both the quantification of elements which, while being economic, are not quantifiable (stimulation of economic initiative, encouragement of rationalisation, enrichment of industrial culture, etc.) and the translation into economic terms of elements of another nature (increased political weight, stabilisation of the international framework, etc.)

The development of regional policy after the creation of the ERDF provides a good illustration of these problems. Regional policy originally developed as a system of national quotas, with each member state allocated a fixed quota, as opposed to a system of allocation corresponding to regions that would need the most financial support, regardless of whether they belonged to a specific member state. Aware of this issue, some European policymakers — in the European Commission and some member states — aimed to develop a so-called non-quota section (Bonatesta, 2020). This section of the ERDF would be allocated regardless of the member state where the region was located. Developing it proved incredibly complex and of modest scope, totalling under 10 percent of the total ERDF expenditure in the first half of the 1980s. Richer member states, who contributed most to the budget, strongly opposed such developments, driven by the logic of *juste retour*.

A narrow interpretation of the principle of subsidiarity in the 1980s and 1990s reinforced this dynamic. Spanish economist Miguel Boyer explained this during the 1988-1989 debates of the Delors Committee that drafted a report on the creation of the Economic and Monetary Union (EMU), by saying that

'economic union means liberalization of markets and a minimum degree of intervention in order to supply public service. Here we have the principle of subsidiarity again, the level of public goods which each one feels he has to offer is limited as far as the Community is concerned, the decision is left to each one for his own country' (Boyer, 1989, 14 Feb). The assumption (rather than demonstration) was that public spending would be better implemented at the national level rather than the EU level. Political considerations, not just economic ones, decided what public expenditure should be centralized. This materialized in the very modest space attributed to the increase in public expenditure at EU level included in the final Delors Report (Committee for the Study of Economic and Monetary Union, 1989; Maes, 2024). The logic of subsidiarity remained present even after the euro was created, and the concurrent discussion of EPGs reflects an implicit desire to reconsider it.

6. Conclusion

The debate about EPGs offers an opportunity to revisit the logic of past decisions on common spending at the EU level. In doing so, it appears that political agreements reached in specific circumstances, rather than carefully crafted economic reasoning about the efficiency of spending at national or European level, explained most decisions to spend together. Highlighting that economic efficiency was generally not at the heart of decisions to increase common spending at EEC/EU level does not mean that economic concerns were altogether absent from the motivations. Some common spending certainly followed what could be described as an economic argument, including supporting the common market and supporting the EMU. Overall, however, a rational calculation about efficiency has not been the prime mover in these discussions. Instead, the political bargaining that gave birth to what economists see as non-optimal choices has often prevailed. A better realization of these motivations about common spending could allow greater realism in the debate about future common EU spending.

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The Drivers of the Evolution of the EU's Long-Term Budget

Gaetano D'Adamo *

Abstract

The EU's long-term budget's 'hyper-consensual' nature has led to the widespread belief that its evolution is slow and incremental. However, major changes have occurred when critical challenges have affected the Union, and temporary solutions have led to structural shifts. Structural changes occurred along three dimensions: (i) composition of expenditure; (ii) budgetary instruments; (iii) financial architecture. Several factors explain such shifts, including the cost of no agreement; the EU public good nature of certain instruments; large packages involving a broader policy agenda; heterogeneous preferences within groups of member states; the degree of complexity in the adoption process, and considerations of national sovereignty. These transformations expanded the scope of the EU budget as an investment tool, while giving it the additional role of crisis response tool. This has important implications, as it is related to the trade-off between predictability and flexibility in the EU budget.

Keywords: EU Budget; Own Resources; NextGenerationEU; Two-Level Game.

1. Introduction

The European Union's (EU) long-term budget has a 'hyper-consensual' nature, requiring unanimity among member states, consent of the European Parliament and, for Own Resources, national ratification. This has led to the impression that its evolution is slow and incremental, and that the EU's financial architecture is fragmented because of the many *ad hoc* instruments and tools introduced whenever a crisis or new need appeared. However, in this chapter, I show that when critical challenges have affected the Union, temporary solutions have ultimately led to structural shifts. The chapter is structured as follows. Section 2 presents a stylized model of EU budgetary

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negotiations. Section 3 discusses the structural shifts in the EU's long-term budget along three dimensions: (i) composition; (ii) instruments and (iii) architecture. Section 4 outlines the factors that have facilitated structural shifts as opposed to incremental change. Section 5 concludes, in light of the Commission's proposal for the 2028–2034 Multiannual Financial Framework (MFF).

2. A Stylized Model of Budgetary Negotiations

Discussions on the EU's long-term budget are often characterized by so-called *juste retour* considerations, based on a simple assessment of the difference between member states' contributions and the direct cash receipts coming from EU programmes, and ignoring the substantive benefits ('EU value added') of joint action (see Mourlon-Druol, this report). In particular, the introduction of the Gross National Income (GNI)-based contribution in 1988, while it strengthened the revenue side of the budget and contributed to improved predictability of national contributions, reinforced such *juste retour* considerations (European Commission [EC], 2021a). This became even stronger as the weight of the GNI-based contribution in total revenues increased over the decades and in the absence of a reform of the own resources system.

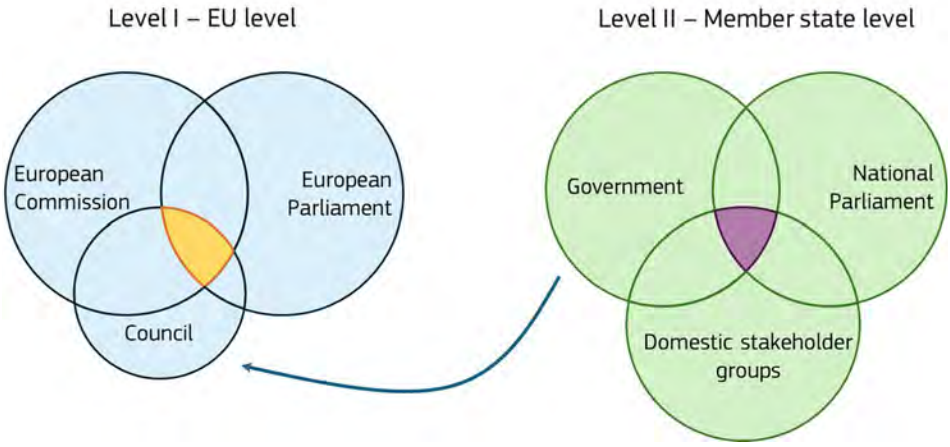
The EU's political system is similar to that of a consensus democracy. As a result, the EU performs well in accommodating divergent interests but may find it difficult to shift political and financial priorities swiftly. According to Schild (2008), in long-term EU budget negotiations, because of the high number of veto players (each member state, the Commission, and the European Parliament), there is limited room for agreement, which might favour a *status quo* bias.

The legislative procedure for the EU's long-term budget has a hyper-consensual nature and thus is a particularly stringent example of such consensus democracy. On the expenditure side, the MFF is adopted under special legislative procedure, it requires unanimity of member states and the consent of the Parliament. On the revenue side, the main legislative act is the Own Resources decision (ORD). The ORD is adopted with unanimity among member states and, depending on member states' constitutional arrangements, national ratification. More precisely, in 20 member states, the national parliament has a binding vote on the own resources decision. Out of these, in two member states (Finland and Romania), require a qualified majority of two thirds.

Against this background, EU long-term budget discussions can be seen

as the outcome of the interaction between three groups: EU institutions, member state institutions, and stakeholders in member states (Figure 1). This interaction can be represented by a two-level game (EC, 2022a). The two levels are the EU level (level 1) and the member-state level (level 2).

Figure 1 Interactions in a two-level game



Note: The size of the circles represents the set of options acceptable to the negotiating partner. A smaller circle would indicate that the corresponding subject has a smaller set of acceptable agreements. The overlapping area represents the set of options leading to agreement among all actors at each level.

At the EU level, the Commission, the member states, and the European Parliament negotiate the long-term budget in line with their respective prerogatives, as per the provisions enshrined in the EU Treaties. The Council's position on level 1 is itself the result of an equilibrium between the member states' positions.

At the member state level, governments interact with national parliaments and national constituencies (trade unions, employers' organizations, etc.) when preparing their position in the Council. The shaded areas in levels I and II in Figure 1 represent agreements that would be acceptable to all parties involved in each level: the position of Member state *i* in the Council negotiations at EU level will therefore likely reflect the 'negotiation boundaries' defined by their interaction with their national counterparts at member state level.

In a stylized form, we can expect that, in line with legal requirements (e.g., when the deadline for a new MFF proposal approaches), or reacting to new, unexpected needs (e.g., in the case of an MFF revision) the European Commission makes a proposal and presents it to the Council and the European Parliament. At the member state level, national governments then

interact with their constituencies to form or strengthen their position, or to finalize the ratification, in the case of the ORD. Expectations of what will happen at the member state level will affect negotiations at the EU level, leading each member state to adopt a more or less rigid position.

In this stylized model, what happens at the member state level cannot amend the outcome at EU level once agreement is reached there: this means that EU-level agreements can only be voted 'up' or 'down', and the alternative is no agreement. In the framework of budgetary negotiations, this means that, until an agreement at level II is reached in every member state after the political agreement in the Council, the ORD is not adopted.

How easy is it to achieve agreement? Putnam's (1988) model introduced the concept of *win sets.* The win set is the set of all possible agreements (e.g., on the overall size of the EU budget, the level of national contribution, the financing of different policies, the distribution among member states of pre-allocated funds, the types of own resources...) that would garner the necessary support from each negotiating partner. In Figure 1, the win set is represented by the size of the circles around each player. The areas where two or more circles overlap represent the sets of agreements that are acceptable for those players. Since the position of the member states (Council) is already a mediation, and unanimity is necessary, the win set of the Council in Figure 1 is smaller than that of the Commission and the European Parliament. An agreement in each level is possible as long as there is a shaded area. Other things being equal, the bigger the winning set of each player, the more likely an agreement is to be reached.

The complexity of this two-level negotiation has led to the perception that the EU budget follows an incremental pattern, i.e. a very slow evolution and substantial path dependence. However, previous research (Citi, 2013) has shown that the EU budget rather evolves following a punctuated equilibrium dynamic: overall stability with some significant, discontinuous policy changes. The next section confirms the finding that the pattern of the EU budget is that of a punctuated equilibrium, and discusses how such discontinuities have become more important, in particular since 2020.

3. Three Dimensions of Structural Change in the EU Budget

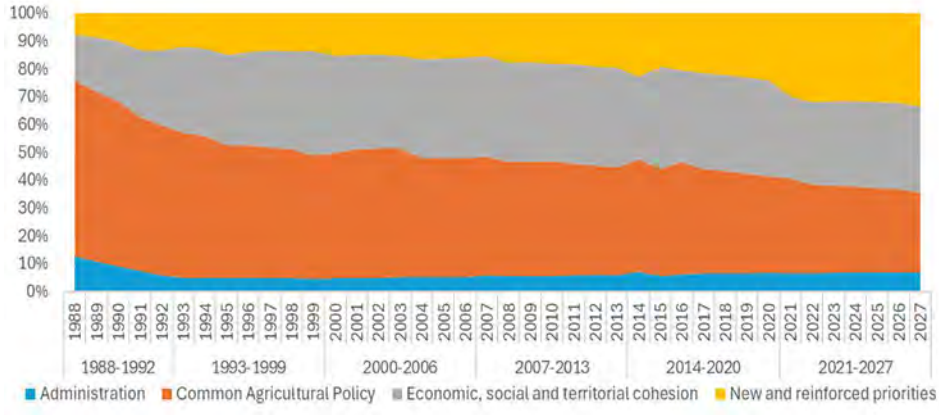
The following analysis demonstrates how a punctuated equilibrium dynamic describes the evolution of the EU budget along three dimensions: (i) composition of expenditure, (ii) budgetary instruments and (iii) financial architecture.

Composition of expenditure

The Common Agricultural Policy was by far the main spending area of the EU budget in the first decades of European integration. However, as major changes have affected the Union, the distribution of expenditure has evolved as well. This started first and foremost with the 1986 enlargement and the Single European Act, as the scope of EU competences broadened and a policy of cohesion started to gain ground. The first European research framework programme (1984) and the Erasmus programme (1987) were launched in the same period. The 2004-2007 enlargements further strengthened the role of cohesion policy, in combination with successive EU strategies to support jobs and growth. The Lisbon Treaty (2009) brought new policy priorities more prominently to the forefront, including climate, migration, research, and innovation. The relevance of such 'new and emerging priorities' focusing on European public goods increased further in the 2021–2027 MFF, as a result of the response to the COVID-19 pandemic and of new and unexpected needs (e.g., in the area of defence, energy, and the green transition) (EC, 2021a).

Figure 2 shows how the share of 'new and emerging priorities' in total expenditure has been slowly increasing, with an acceleration first in the early 1990s (i.e. after the Single European Act and the Delors Package), and, more importantly, the 2021–2027 MFF. The Commission's proposal for the 2028–2034 MFF confirms this trend (EC, 2025a), but it is still too early to predict the outcome of the ongoing negotiations.

Figure 2 Evolution of the composition of expenditure of the EU budget (1988-2027)



Source: European Commission and author's calculations.
Note: Commitment appropriations.

Budgetary instruments

While the size of the EU budget has hovered around 1–1.2% of EU GNI over the last 30 years (EC, 2025b), its leverage capacity has increased substantially, especially since 2015, through increased use of budgetary guarantees and financial instruments and, later, borrowing.

While the EU budget had already been backing budgetary guarantees and financial instruments, the Investment Plan for Europe launched in 2015 was the first large-scale programme in this sense, with an EU budget guarantee of €26 billion, able to mobilize up to €500 billion (Regulation (EU) 2015/1017). The Investment Plan for Europe was designed as a temporary programme, aimed at addressing the persistent weakness in investment and difficulties in access to finance, especially for small and medium-sized enterprises, in the aftermath of the global economic and financial crisis. However, because of its success, the 2021–2027 MFF anchored the architecture of the Investment Plan in the EU budget with InvestEU (Regulation (EU) 2021/523). Moreover, InvestEU brought together under one roof 13 different EU financial instruments previously available to support investment in the EU. A similar approach was followed with the use of financial instruments and budgetary guarantees in external action under the European Fund for Sustainable Development Plus (EFSD+).

The 2028–2034 MFF proposal adopted by the European Commission in July 2025 further enhances the role of budgetary guarantees and financial instruments in the EU's funding toolbox and streamlines rules, with one guarantee for internal policies (for a maximum €70 billion), established in the basic act of the European Competitiveness Fund, and one for external policies (for a maximum €95 billion, plus an additional guarantee of up to €48 billion for investments in Ukraine), in the basic act of Global Europe.

A more important change has occurred over the use of joint borrowing at EU level. Whereas the EU has been present on financial markets for decades, EU bond issuances were very limited until 2019. Financial assistance in the form of loans was provided to member states and third countries with back-to-back borrowing, i.e. the EU borrowed on financial markets and on-lent to beneficiaries under the same conditions.

The policy shift occurred during the COVID-19 pandemic, first in May 2020 with the adoption of the Support for Unemployment Risks in an Emergency instrument (SURE; Council Regulation (EU) 2020/672), which, with a capacity of €100 billion, was already by far the largest common borrowing programme for the EU. However, SURE still relied on the same

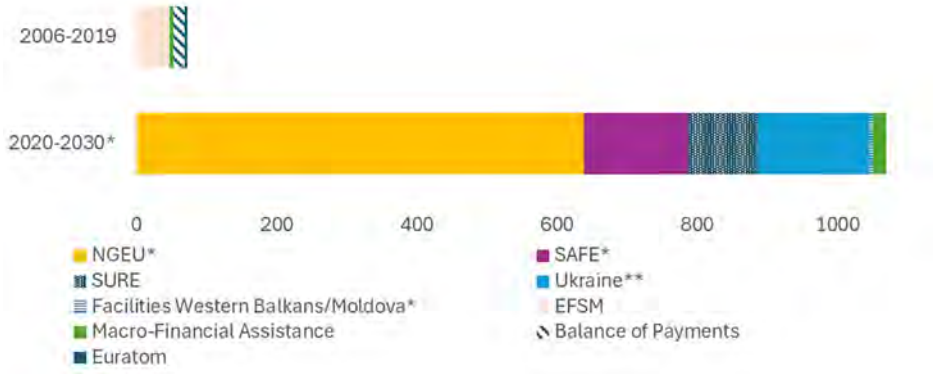
back-to-back borrowing architecture. With NextGenerationEU, for the first time, the EU borrowed on capital markets to finance expenditure. Despite its temporary and exceptional nature, NextGenerationEU has significantly expanded the EU's borrowing capacity. Given its size (up to €807 billion), it required a funding strategy that (i) enabled significantly scaling up issuances in a short time and (ii) allowed managing issuances in a way that met complex disbursements of loans and grants to member states. For this reason, a diversified funding strategy was introduced. This was accompanied by structured and transparent relations with banks to support the programme through the execution of transactions and related support for secondary market liquidity, as well as regular and transparent communication on the expected funding volumes and operations (EC, 2022b).

In December 2022, the diversified funding strategy was extended to all EU borrowing programmes with the 'unified funding approach'. This change was achieved with an amendment of the EU's Financial Regulation (EC, 2022c). The Commission now issues single branded EU-Bonds and Bills and allocates the proceeds to different policy programmes (e.g. NextGenerationEU, Macro-Financial Assistance (MFA) programmes, loans to Ukraine, etc).

The introduction of the unified funding approach is a milestone in the financial assistance capacity of the EU budget, as it increased the liquidity of EU-issued bonds, thus ultimately providing beneficiary countries with better borrowing conditions.

Since the adoption of the unified funding approach as a standard method for borrowing, further borrowing-for-lending programmes have been adopted, confirming the central role now played by joint EU borrowing in the financial toolbox of the EU budget. These programmes are in particular for support to Ukraine (MFA+, Ukraine Facility, Ukraine Loan Cooperation Mechanism and the just-adopted Ukraine Support Loan, with a total of up to €159 billion), as well as the €150 billion Security Action for Europe (SAFE), the Reform and Growth Facility for the Western Balkans (€4 billion loans), and the Facility for Moldova (€1.5 billion), and new Macro-Financial Assistance programmes (e.g. to Egypt). Figure 3 shows that total EU borrowing programmes backed by the EU budget went from about €72 billion over 2006–2019 to about €1,100 billion between 2020 and 2030, assuming full implementation of NextGenerationEU, SAFE and Ukraine loan support, and without counting bond rollovers and bills issuance (i.e. only net bond issuances).

Figure 3 EU borrowing programmes



Note: (*) Assuming full implementation. (**) Support to Ukraine since 2023: MFA+, Ukraine Loan Cooperation Mechanism, Ukraine Facility, Ukraine Support Loan; assuming full implementation.

More importantly, EU joint borrowing has proved its relevance as a European public good. With SURE, beneficiary member states are expected to save over €9 billion in interest costs, while the cost to set up the programme was negligible (EC, 2025c). With SAFE, total interest savings for beneficiary member states may even be higher overall.

In the 2028–2034 MFF proposal, the Commission has confirmed the relevance of borrowing-for-lending as a leverage tool for the EU budget, envisioning (i) policy loans for member states ('Catalyst Europe', up to €150 billion) and to third countries (within Global Europe), (ii) financial assistance (to Ukraine and traditional MFA), and (iii) a possible crisis mechanism to be activated in the case of a large crisis or threat thereof.

A one-off and temporary instrument like NextGenerationEU has thus paved the way for the establishment of a solid architecture that has substantially expanded the EU budget's capacity to support policy action.

The EU's financial and budgetary architecture

The EU budget is one of the pieces of a more complex EU financial architecture, which has developed over the decades to respond to new policy needs and in line with requirements imposed by the Treaties. The EU's financial architecture includes off-budget and on-budget instruments.

Off-budget instruments include those outside the MFF, but channelled through the EU budget (e.g. the Innovation Fund) and instruments that are fully outside the EU budget (e.g. the Modernisation Fund, the European Peace Facility, until 2021 the European Development Fund). The European Court

of Auditors (2023) provides a comprehensive overview. The rules governing the financing, spending, and monitoring of off-budget instruments may be different from those applicable to the EU budget, despite efforts to align them as much as possible. The European Parliament also has a more limited role in the functioning of these instruments than in those financed by the EU budget. There are, therefore, arguments for including these instruments in the framework of the EU's long-term budget ('budgetization') to achieve simplification, higher accountability, and, possibly, better protection of EU finances. At the same time, in the case of the European Facility (EPF), the off-budget nature makes its reinforcement easier, as seen since 2023, as it does not require a revision of the MFF: indeed, the EPF was gradually increased from €5.7 billion for the period 2021–2027, agreed in 2020, to the current €17 billion with three top-ups agreed in March 2023, June 2023, and June 2024.

The European Development Fund was budgetized with the 2021–2027 MFF, ending a very long debate over the issue (D'Alfonso, 2014). The Fund was one of the first steps in European cooperation in external action. The European Commission put forward several proposals to that end, but unanimity among member states was never achieved until the 2021–2027 MFF. The integration of the Fund within the EU budget also mattered quantitatively, as it was estimated at around €30 billion over 7 years. Moreover, it made it easier to monitor progress on the EU commitment to devote 0.7% of the EU's gross national income to official development assistance.

Budgetization is politically more complex when there are limitations imposed by the Treaties or a different source of financing. For instance, the EPF provides military and defence support under the Common Foreign and Security Policy. Article 41.2 of the Treaty on European Union (TEU) excludes the possibility to charge expenditure for operations with military or defence implications to the Union Budget:

> Operating expenditure [on Common Foreign and Security Policy] shall (...) be charged to the Union budget, except for such expenditure arising from operations having military or defence implications and cases where the Council acting unanimously decides otherwise. (...) As for expenditure arising from operations having military or defence implications, member states whose representatives in the Council have made a formal declaration [of abstention] shall not be obliged to contribute to the financing thereof.

Budgetization of the EPF would thus require Treaty revision. At the same time, the EPF itself is a proof of consolidation and simplification in EU financial architecture, as it replaced and enlarged former spending instruments, namely the Athena Mechanism and the African Peace Facility.

The case of the Modernisation Fund (MF), the Innovation Fund (IF), and the forthcoming Social Climate Fund (SCF) is different, as they are funded by the EU's Emissions Trading System and not by member state contributions. The Commission has proposed to substantially strengthen its alignment with the implementation and objectives of the main spending programmes in the 2028–2034 MFF. In particular, for the SCF, the Social Climate Plans prepared by member states should be integrated as separate chapters of the future National and Regional Partnership Plans from 2028 onwards. For the MF, member states benefiting from support under the Fund should aim to ensure consistency with the investments financed within their National and Regional Partnership Plans. As far as the IF is concerned, the future European Competitiveness Fund, and specifically the Clean Transition and Industrial Decarbonisation window, shall ensure coherence with actions planned under the IF.

4. Key Factors Facilitating Discontinuity in the EU Budget

Based on the discussion in Section 3, this section assesses the factors that have proved to affect the probability of reaching agreement in the EU long-term budget (EC, 2022a).

First, the cost of no agreement: The higher the economic, social, and political cost of failing to agree, due to a perceived or real threat, the bigger the win set for all or most member states and thus the probability of an agreement. The urgency of a solution during COVID-19 pushed towards the largest financial package ever agreed under the EU budgetary framework. Global tensions and a change in international defence system paradigms have helped increase defence spending in the EU budget and quickly agree on SAFE and on successive packages of support to Ukraine.

Second, EU added value and European public goods: The higher the sunk costs and the economies of scale involved in investing in a specific area, the higher the gain in common action via the EU budget. This concerns, in particular, large common infrastructure projects (Space Programme, cross-border infrastructure) where member states individually would face too high costs, or have a limited interest in being first movers in financing them.

Third, the package approach: Large packages linking novelties in the budget to a broader policy agenda or an integration project have contributed to achieving budgetary reforms in the past. This was the case of the Delors I and II packages, which also led to the last significant reform of the revenue side of the EU budget.

Fourth, the preferences of member states: Changes in the preferences of (pivotal) member states, and in the configuration of member states' interests (i.e. changing the north/south or east/west divide), can tip the balance. As the perceived benefits of certain items may be different across member states and policy areas, changing configurations in member states' preferences might also make agreement possible across several issues as a package.

Fifth, the adoption process: Agreements that require a more complex adoption process and a substantial change to the underlying polity (e.g. changes to Treaties, but also significant changes in the own resources decision) are more difficult to achieve, so *ad hoc* and temporary solutions are more likely.

Sixth, the balance between considerations of national and European sovereignty. Issues on which national sovereignty is perceived as more important will have smaller win sets. In other words, when national sovereignty is attached to a specific symbol (e.g. the army), member states might oppose fully-fledged EU integration. This might also apply, for instance, to discussions on a possible taxation power for the EU. When external factors limit national sovereignty (e.g. energy autonomy), however, the win sets will be bigger, supporting joint EU action.

5. Conclusion

This chapter has discussed how, contrary to the common perception of an incremental nature in the evolution of the EU budget, a punctuated equilibrium characterized by gradual change, interrupted by structural breaks driven by other important events, rather describes its evolution, especially since 2020. These structural changes significantly reinforced the EU budget's ability to deliver common EU objectives and EU public goods. The changes described include financing a broader range of policy areas, in line with the EU Treaties; increasing its leverage and guarantee capacity; and streamlining its financial architecture. The Commission proposal for the next MFF goes in the same direction.

Three conclusions can be drawn from the analysis.

First, change generally did not occur in a single instance. It was rather part of a process that involved a first innovation, followed by consolidation, and ultimately simplification. Innovations in the EU budget have been introduced thanks to unexpected needs or other structural shifts that created the right momentum. These innovations were generally of a temporary nature but, as they proved their effectiveness on the ground, they were consolidated within the budgetary architecture and ultimately simplified to guarantee more efficient delivery.

Second, the transformation that the EU budget has undergone has implications for its objectives. It expanded the scope of the EU budget as an investment tool, in particular in the area of competitiveness and resilience. And it gave a new role to the EU budget as a crisis response tool. This has important implications, as it is strictly related to another trade-off that characterizes the EU budget: the one between predictability and flexibility. For the EU budget to properly perform its additional function as a crisis response tool, it needs more flexibility.

Third, the most consequential innovations concerning the EU budget have been introduced in recent years, since 2020, and mostly due to exogenous factors: increasing global tensions and changing equilibria among the main global powers, the COVID-19 pandemic, and Russia's war of aggression against Ukraine and the ensuing energy crisis. Such external pressures have largely increased the cost of not reaching an agreement and, to some extent, affected member states' positions on key issues related to the EU budget.

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Own Resources: A Transatlantic Perspective

Ricardo García Antón and Tomasz P. Woźniakowski *

Abstract

Geopolitical threats force the European Union (EU) to step forward in defence matters, but the problem of stable financing remains unresolved. This chapter revisits the early fiscal history of the United States (US) to demonstrate how a union of states can finance common defence without immediate recourse to direct income taxation. During the 19th century, US federal authorities relied chiefly on customs and excise duties. These 'invisible,' indirect taxes provided predictable income, eased tensions between levels of government, and supported federal borrowing during wartime. The argument maintains that long-term defence policy cannot rest on national transfers and temporary borrowing, and advocates instead for explicit recognition of a Union tax power in Article 311 TFEU, and the acknowledgement that EU taxes must serve to finance common defence. A VAT-based surcharge or harmonized excise, such as the US examples, could serve as the first EU taxes. In the longer term, a genuine income-based resource may prove unavoidable.

Keywords: EU Own Resources; Indirect Taxation; Defence Finance; Article 311 TFEU; American Fiscal Federalism.

1. Introduction

Increasing European Union (EU) competences and policies in areas like industrial policy, trade, climate change, energy, health, external security and defence, etc is a recurring theme in the latest reports, published in the aftermath of the COVID-19 pandemic and stemming from the current political turmoil (i.e., the Ukrainian war and the troubled transatlantic relationship with the US): (i) the European Parliament Report on the amendment of the treaties

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(European Parliament [EP], 2023) (ii) the Franco-German Expert Group Report on the enlargement of the EU ([FGEGR], 2023) (iii) the Letta Report on empowering the Single Market to deliver a sustainable future and prosperity for all EU Citizens (2024) and, (iv) finally the Draghi Report on EU competitiveness (2024). There is a need to strengthen the Union's capacity to act by increasing the number of areas where the Union has competence to legislate, either by establishing the exclusive Union competence or by developing a shared competence with the member states.

Strikingly, the reports cited above do not devote much attention to the need for EU taxes, or especially to the EU Treaty basis for approving the EU's own resources: Article 311 of the Treaty on the Functioning of the European Union (TFEU). The Draghi Report (2024: 64-5) makes a few references to the Union's limited fiscal resources, while it clearly supports increasing common debt. Letta's Report (2024) emphasizes the need to finance the EU by integrating public and private resources, thereby creating new facilities, such as the Enlargement Solidarity Facility. The European Parliament proposal (2023) and the Franco-German Report (FGEGR, 2023: 29) focus on the procedure for approval of own resources.

Assuming the need for EU common public goods ([EPGs], e.g., external security and defence, health, trade, and industrial policy), there are more reasons to increase EU spending and thus the EU budget size. The question arises, *who is going to pay for this?* The current system of the EU's own resources relies primarily on member states' contributions, also known as gross national income (GNI), and accounts for more than 70% of EU revenue (European Commission [EC], 2026a; see also d'Adamo, this report). In addition, EU borrowing has appeared to be a solution in cases of emergency, such as the NextGenerationEU (NGEU) and the Russian invasion of Ukraine (Darvas et al., 2025: 15). However, we argue that EU common public goods should be financed through a major autonomous EU fiscal capacity relying on EU taxes.

Dependency on GNI-based contributions is not sustainable in the current political and economic context in which EU common public goods are needed. First, there is a need to repay the massive debt incurred from the NGEU.[1] Second, the Commission's proposal for the new Multiannual Financial Framework (MFF) 2028-2034 foresees new EU policies in need of funding, i.e., the creation

1 A threat now hangs over the EU. The repayment of EU borrowing under the NextGenerationEU (NGEU) programme is to start in 2028 and account for €30 billion per year (Draghi, 2024: 64). Unless a decision on new own resources is approved, the 'effective spending power at the EU level would be mechanically reduced by interest and principal repayments' (Draghi, 2024: 64).

of a new European Competitiveness Fund in line with the recommendations in the Letta and Draghi Reports, the European Defence Union, etc. Third, the EU should move towards EU taxes to overcome the 'just retour obsession' (Aksoy, 2010; Heinemann, et al., 2020) with some member states contributing more to the EU budget than they receive back (net contributors), while others receiving more than they contribute (net recipients). The EU budget's dependency on member states' contributions not only provokes significant political frictions between net contributors and net recipients, it does so based on an erroneous indicator of the economic benefits of EU membership, such as are net budgetary balances (Heinemann, et.al., 2020).

Many scholars and policymakers argue in favour of EU-level taxes and reform of the EU revenue system (Monti et al., 2016; Editorial Board of EU law live, 2020; Vanistendael et al., 2020; Woźniakowski & Poiares Maduro, 2020). In 2021 and 2023, the European Commission put forward proposals to introduce new own resources, which have not been adopted (EC, 2021, 2023). Most recently, the Commission proposed five new sources for own resources: the Emissions Trading System (ETS), the carbon border adjustment mechanism (CBAM), the non-collected e-waste, a Tobacco Excise Duty Own Resource (TEDOR), and the Corporate Resource for Europe (CORE) (EC, 2025).

Does this institutional initiative signal it is the right moment for the introduction of EU tax? William Riker (1964, 1975) argued that federalism requires either external or internal threats as a catalyst for further federalization. The second Trump administration has created such a context with significant challenges for the EU. First, by imposing high tariffs on EU imports; second, by undermining confidence in US security commitments within NATO; and third, by questioning the territorial sovereignty of an EU Member State, notably Denmark in relation to Greenland. It is our view, such threats may serve as a driver of fiscal integration, particularly the enactment of EU taxes.

In this chapter, in Section 2, we depart from the US historical experience in the 19th century to show that the development of the federal common defence was done through a system of indirect taxation. In Section 3, we argue that the proposed EU Defence Union, in the context of reduced US engagement in European security through NATO under the Trump administration, could serve as a catalyst for strengthening the EU's autonomous revenue capacity beyond GNI-based contributions. Although indirect taxation may be the most politically feasible starting point for establishing autonomous EU fiscal capacity, US historical experience suggests that, in the long term, the Union will likely need to develop an autonomous direct EU tax.

2. Defence Financing in the US: The Role of Indirect Taxation

US constitutional foundations: The federal power to tax

The US Constitution, in Article I, Section 8, Clause 1, gives Congress explicit power to 'lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States; to borrow Money on the credit of the United States'. To understand why the United States mainly relied on indirect taxes in the 19th century, we need to examine how federal taxing powers were established in the first place. The US Constitution was drafted in response to a fiscal and political crisis. In the mid-1780s, individual states imposed heavy direct taxes to pay off debts incurred during the Revolutionary War. This triggered serious unrest in many states, most notably Shays's Rebellion in Massachusetts, amounting to an existential threat to the nascent Union. Rather than concluding that taxation, the main cause of the unrest, should be weakened, political leaders decided that it needed to be centralized and stabilized. The unrest exposed the political limits of direct taxation by the states, which had been the main trigger of popular resistance. In response, leaders moved to strengthen federal fiscal authority, which could rely more effectively on indirect taxation, particularly tariffs. Hence, the solution that emerged was not to weaken taxation overall, but to shift fiscal capacity to the federal level, where revenue could rely more on indirect taxes, which were both politically easier to sustain and could provide more revenues. This marked the beginning of a process known as 'fiscalization': the consolidation of taxing authority at the federal level (Woźniakowski, 2022: 10).

Although the Constitution granted the federal government extensive taxing powers, the first US administrations exercised them with great caution (Edling, 2014). The federal fiscal system was built on indirect taxation (primarily customs duties on imports and excises on alcohol and tobacco), which was relatively invisible because taxes were embedded in the price of goods, whereas direct income taxes were avoided. This was a political decision intended to minimize opposition from the states. Import tariffs were familiar from the colonial period and broadly accepted, which reduced political resistance. Tariffs did not interfere with core state revenue sources and therefore reduced vertical fiscal tensions. Indirect taxation likewise lowered the risk of redistributional conflict. A direct property tax, for example, would have revealed significant regional disparities in wealth and land ownership, which could exacerbate sectional tensions within a fragile United States (Woźniakowski, 2025). The result was a fiscally empowered centre that deliberately opted for low-conflict revenue instruments, an approach with clear relevance for today's EU.

Financing common defence as a public good

A structural analogy exists between the nascent United States and the contemporary EU. Both emerged in environments where security was initially outsourced. Before gaining independence, the American colonies were under the military protection of the British Empire. After 1945, Western Europe functioned within a US-led security framework centred on NATO. In both cases, this external protection reduced the immediate pressure to develop robust defence capabilities. Independence forced the United States to confront a hard reality, namely that security requires sustainable financing. However, attempts to strengthen federal fiscal capacity were politically contentious. The new United States was fiscally fragmented, and suspicion of central authority ran deep. Direct taxation by the centre risked provoking the resistance of individual states and reopening sectional divides. These constraints are not alien to the EU. Debates on defence spending, joint borrowing and 'own resources' reveal similar tensions between the need for collective security and the sensitivities of member states.

Rather than centralizing aggressively, the US calibrated fiscal tools carefully. The federal government primarily relied on indirect taxation, especially customs duties, and long-term borrowing. Indirect taxes were politically less visible and more efficient to administer. As Wozniakowski (2025) has argued, 'invisible' taxes underpinned the 'visible' defence of the US in the 19th century. Constitutionally secured taxing authority also strengthened the credibility of federal borrowing. Investors were willing to lend because repayment was backed by predictable revenue streams. The US federal government predominantly turned to borrowing when confronted with major conflicts, from the War of 1812 to the Civil War (1861-5). Although debt levels rose sharply during wartime, repayment was spread over several decades. This avoided sudden tax increases and limited political backlash. Over time, this combination of autonomous tax power and related access to capital markets enabled the development of a federal fiscal-military state (Edling, 2022).

For the EU, the lesson lies not in institutional imitation, but in strategic sequencing. Joint borrowing without stable EU-level taxation remains fragile. While markets may accept temporary instruments in a crisis (Georgiou, 2025), long-term defence commitments require predictable revenue streams that are clearly assigned to the Union level. Otherwise, debt servicing would revert to national budgets (Woźniakowski, 2023).

Indirect taxes first, income taxes later: sequencing fiscal capacity

In the 19th century, federal authority in the United States did not rely on widespread direct taxation, but, as outlined, it was based on indirect taxes

embedded in trade and consumption. Before the Civil War, customs duties collected at the border dominated the federal revenue system. Tariffs accounted for nearly nine out of every ten dollars received by the federal Treasury (excluding borrowing). In practical terms, defence and debt servicing were largely financed through trade flows rather than direct property or income taxes. The Civil War altered the composition of revenue, but not the fundamental approach. Although their share gradually declined, tariffs remained central. In the period up to the Sixteenth Amendment in 1913, customs duties still provided slightly more than half of federal revenues. After the Civil War, the revenue base widened and excise duties on alcohol and tobacco emerged as a second key source of income. Between 1863 and 1913, tariffs accounted for just under half of federal tax receipts, while domestic excise taxes contributed a little over two-fifths. Other sources, including land sales, were marginal by comparison. This pattern remained consistent throughout the 19th century. The federal government financed its core responsibilities — above all defence — primarily through indirect, 'invisible' taxation. While the balance between tariffs and excise taxes shifted over time, reliance on these less visible revenue instruments remained the foundation of federal fiscal capacity until 1913. After this date, income and corporate taxes gradually replaced tariffs and excise duties as the main source of federal revenue, financing the scale of military mobilization that accompanied America's rise to global prominence (all calculations based on Woźniakowski, 2025).

3. Designing the EU Revenue Side in Light of the US Experience: Foundations for EU Constitutional Reform

Based upon the US historical experience, this section first discusses the need for Treaty reform of Article 311 TFEU to recognize the democratic legitimacy of the EU's power to tax. Second, it argues that levying EU taxes should be explicitly destined to provide EU public goods (EPGs) to European citizens, such as common defence. Third, it proposes that indirect taxation could be an optimal solution to build up an autonomous EU power to tax.

Explicit recognition of a democratic EU power to tax in Article 311 TFEU

As stated in the previous Section, the US Constitution gives Congress an explicit power to tax (Article I, Section VII, Clause 1). Such explicit recognition of the power to tax engages with the democratic grounding of taxes, under the phrase 'no taxation without representation' which originated during the American

Revolution. In the EU, we are still far from a democratic legitimacy for EU taxes. The reading of Article 311, paragraph 1, TFEU, 'The Union shall provide itself with the means necessary to attain its objectives and carry through its policies,' has triggered controversies on whether the Union is legally capable of levying its own taxes. The wording deviates from the emergence of the power to tax in the US Constitution. Placing the word 'tax' under Article 311 TFEU is controversial. The Commission also attempts to avoid such language, recently emphasizing that the Corporate Resource for Europe (CORE) proposal is not a tax, but rather an own resource under Article 311 TFEU (Petitjean, 2026). The fact that CORE would be levied by national tax administrations and transferred to the Union, as is the traditional manner for EU own resources, only strengthens the Commission's reluctance to call it a tax.

In this sub-section, we briefly summarize the arguments put forward in the legal literature on whether the EU can levy taxes. On the one hand, several authors (Waldhoff, 2016; Traversa, 2021) deny the EU the power to tax under Article 311 TFEU. On the other hand, some authors defend Article 311 TFEU as a sound legal basis for EU taxation (Meickmann, 2024; Caziero, 2024; García Antón, 2023; Bizioli, 2022). The legal debate shows the need for a constitutional amendment to the EU Treaties that explicitly attributes the Union the power to tax.

For scholars opposed to granting the EU the power to tax with Article 311 TFEU, there are two arguments. First, in established jurisprudence, the German Federal Constitutional Court ([FCC], 1993, 2009) determined that Article 311 TFEU does not grant the EU the *kompetenz-kompetenz*, or the right to define its own competences. In the literal reading of Article 311 TFEU, it is the member states who must provide the Union with sufficient means; they are the addressees of the mandate. Means, also, cannot be treated as equivalent to taxes. There is no competence in the Treaties (Articles 3-6 TFEU) that grants the EU an explicit power to levy taxes, unlike the US Constitution. The second correlated argument concerns the democratic legitimacy of taxation under the slogan 'no taxation without representation.' Collecting taxes conveys a democratic expression of how we divide the bill for the goods and services that we collectively deliver to ourselves. This democratic relationship between the level of expenditure and revenue is absent in the procedure laid down in Article 311 TFEU, which foresees the Council acting unanimously with a mere consultation of the European Parliament, and the subsequent approval of the national parliaments.

Conversely, some authors defend Article 311 TFEU as a sound legal basis for EU taxation (Meickmann, 2024; Caziero, 2024; García Antón, 2023; Bizioli, 2022). Historically, the concept of own resources is broad, while some resources are linked to financial contributions, others are related to

levies directly imposed on individuals and companies (customs duties). The term 'tax' acquires a broad non-formalistic meaning in EU law, which can be interchangeable with 'measures' or 'resources', and shies away from important distinctions found in domestic law between taxes, levies/fees, and special contributions. Under this non-formalistic view, article 311(3) TFEU assigns a specific source of own resources to the joint competence of the Council and the national parliaments, provided that the resources finance the EU budget. Caziero (2024: 1533-1534) labelled Article 311 TFEU an 'empowering norm,' giving the Union the competence to govern the revenue side of the budget.

Regardless of this theoretical debate on the recognition of the EU's power to tax, there is an important procedural obstacle regarding the approval of EU taxes. On the one hand, Article 311 TFEU requires unanimity in the Council, followed by the approval of member state parliaments. On the other hand, the enactment of the EU tax, describing its core elements (taxpayer, taxable facts, taxable base, tax rate, etc.) would require a directive or regulation approved by unanimity under the legal basis of either Article 113 TFEU (indirect taxation), 115 TFEU (direct taxation), or 192(2) TFEU (environmental taxation). This is traditionally referred to as the 'double unanimity filter'.

The doubts regarding the recognition of the power to tax in the wording of Article 311 TFEU, coupled with the 'double unanimity filter', demonstrate the need for constitutional reform. Article 311 TFEU must recognize explicitly a democratic power to tax, jointly attributed to the EU Parliament and the Council, as is the case with constitutions in federal/decentralized countries (García Antón, 2023: 23). Such constitutional reform, in line with the federal tax power in the US Constitution, should abandon the 'double unanimity filter' and embrace qualified majority voting (QMV) as the most legitimate means of enacting EU taxes.

EU taxes for EU public goods

Taxes finance public goods and redistribute wealth. The EU, however, does not yet directly provide public goods to its citizens. Revenue is raised primarily at the national level with governments remaining responsible for delivering most public goods. Although taxing and spending powers rest with the member states, gradual efforts have sought to promote intra-solidarity within the Union and improve living conditions across Europe.

> Intra-EU solidarity has been channelled through various cohesion instruments, all of which are distributed to EU citizens through their governments - the direct recipients of the funding (Strumia, 2011: 736). For example, the policies of the European Regional Development Fund (Article 176 TFEU) aim to remedy social and economic inequalities by targeting job creation,

business competitiveness, economic growth, sustainable development, and improvements to citizens' quality of life (EC, 2026b; Strumia, 2011; Douglas & Spaventa, 2005). The Common Agricultural Policy (CAP) supports farmers with an aim to improving agricultural productivity (EC, 2026c). Another good example of EU solidarity is the NGEU, which has softened the widespread idea that what member states contribute should match what they receive back, i.e. the principle of *juste retour*, because NGEU funding distribution is not GNI-based.

Nevertheless, the previous examples of intra-EU solidarity cannot be labelled as 'proper' EPGs, i.e., public health, common security, infrastructure, etc., because the addressees of the actions are the member states, not European citizens.

As argued above, the Treaty reform allowing the EU the power to tax pursuant to Article 311 TFEU should be linked to the creation of EPGs. A good candidate for a genuine EPG that could become a catalyst for EU-level taxation (Garcia Antón, 2024) is the matter of European defence, because of the pressing geopolitical circumstances, the historical precedent of Europeans thinking about defence collectively, and the useful example of the US. It is becoming increasingly obvious that the EU needs to assume greater responsibility for its own defence, in the context of growing uncertainty surrounding NATO's long-term role. Moreover, the idea for the creation of an EU's Defence Union is not new, as the six founding member states of the EU agreed in the early 1950s to create a common army, funded by a common budget, and governed by a supranational institution such as the European Defence Community (see Mourlon-Druol, this report; Fabbrini, 2025; Blockmans, 2025; Rutigliano, 2025). Lastly, Europe may already have a template of how to finance this endeavour, if it were to borrow from the US historical experience with custom taxes and excises for defence (see Section 2 above).

Future Treaty reform must acknowledge an explicit link between levying EU taxes and EPGs in order to lower political opposition to EU taxation. In other words, provided the EU guarantees EPGs to European citizens, the Eurosceptic narrative opposing an autonomous EU fiscal capacity would have fewer arguments to gain traction.

Indirect taxation as EU taxes

Studies of fiscal federalism shows that in multilevel governance systems, autonomous fiscal capacity is based on indirect taxes (Value Added Tax 'VAT', excises, customs) and income taxes (García Antón, 2024: 688-691; Woźniakowski et al., 2023: 3).

The US experience (1789-1913) demonstrates a deliberate choice to rely on indirect taxes, primarily customs duties, to strengthen federal fiscal capacity. As stated above, in Section 2, in the early American Republic, indirect taxes were sufficient to finance common defence. Direct federal taxes were enacted later, after the case of *Pollock v. Farmers' Loan & Trust Company* (US Supreme Court, 1895), in which the US Supreme Court struck down the US income tax as unconstitutional. Upon ratification of the Sixteenth Amendment (1913), Congress adopted a corporate income tax in conjunction with the individual income tax (Revenue Act of 1913).

In the EU, customs duties form traditional own resources (EC, 2026d). Member states retain 25% of the collected customs duties to cover collection costs and to incentivize a diligent collection of the amounts due. Since the EU needs to increase its fiscal capacity by levying EU taxes, one may wonder whether value-added tax (VAT) could be an additional source for EU own resources. The current VAT-based own resource works as a contribution from member states, based on a percentage levied on countries' VAT bases. There is still a long road ahead to transform the current VAT-own resource into a truly EU VAT tax.

Both the European Commission (2011) and the Monti Report (2016) have suggested a reformed VAT own resource based on two options: (i) a fixed rate (surcharge) in all member states on the net value of supplies of goods and services, on EU intra-EU acquisitions of goods, and on imports of goods to which a standard VAT rate is applied in every member state; and (ii) a fixed rate on a broader VAT harmonized tax base. The fixed call rate could be lower as the base would be broader, since it would include all goods, services, and transactions, independent of their VAT national rate (Monti et al., 2016: 53-54; EC, 2011). Although the VAT taxable base is heavily harmonized, there remain open issues with the VAT Directive (EU) 2018/1910: (i) replacement of transitional arrangements (exempt supply in the country of departure of the goods and an intra-community acquisition taxed in the country of residence) for the definitive system based on the principle of taxation in the country of destination; (ii) multiple exemptions and exceptions; (iii) the VAT rates are not uniform (Traversa & Maseglia, 2023).

Given the level of harmonization in VAT and the US experience, we agree that VAT is the best candidate to become an EU tax. García Antón has strongly supported the need to create an EU VAT own resource based on a fixed rate (surcharge) on the harmonized taxable base, in line with the first alternative of the Monti report (García Antón & Lejour, 2023). Since other indirect taxes (excises) have been harmonized at the EU level (i.e., tobacco and alcohol), authors have also supported an EU surcharge on the harmonized taxable base

(Martín Jiménez, 2022: 58). The Commission is currently considering a soda tax as a potential new EU own resource, although there is no harmonized taxable base yet (Petitjean, 2025).

Indirect taxation (VAT and excises) seems to be the most efficient, uncontroversial, and rapid way to build EU fiscal power, in clear parallel with the US historical experience. The US example also provides hope that EU policymakers' concerns about the political feasibility of levying new taxes on EU corporations or individual citizens in the current moment of uncertainty and political turmoil, e.g., the rise of far-right anti-EU political parties, may be overexaggerated. Even the US Anti-Federalists accepted the introduction of a new federal taxing power in the form of a tariff.

Yet, defending indirect taxes, such as the EU's own resources, has a critical drawback. Unlike direct taxes, indirect taxes are based on turnover, not on profit (net income). Direct income taxes, like personal income tax, follow a progressive structure. That means richer individuals pay relatively more taxes than poorer individuals. In VAT — again, a turnover tax based on the sale price of goods and services — lower-income individuals pay a higher share of their income than higher-income individuals, because everyone is subject to the same VAT rate regardless of wealth. Therein lie the regressive effects and the potential breach of the ability-to-pay principle that turnover taxes have. In the long term, as occurred in the US in 1913, a move to direct taxation based on net income should play a decisive role in fostering the EU's fiscal capacity.

It is useful in this context to re-examine CORE, the 2025 Commission proposal for a new EU own resource (EC, 2025). CORE cannot be considered a direct tax on net income. First, it would be levied indirectly, by national tax administrations, and only subsequently transferred to the Union, as is the case with previous own resources. Second, CORE is designed as a lump-sum contribution to the EU budget depending on the net turnover per annum of operators active in the internal market.[2] Moreover, since the design of the CORE is based on turnover rather than profit, it would apply in a regressive way (Avi-Yonah & Imparato, 2025; van der Vlugt, 2025). Firms operating at a loss, or with a low profit margin, would also be subject to the levy. The proxy of net turnover instead of having a proxy in profit/net income moves CORE away from a direct tax and, indeed, should not be considered as such.

2 For instance, for a net turnover of €100-250 million, the CORE contribution would be €100,000. For a net turnover of €250-500 million, the CORE contribution would be €250,000. For a net turnover of €500-700 million, the CORE contribution would be €500,000 for a net turnover above €750 million, the CORE contribution would be €750,000.

4. Conclusion: Financing Defence through Union Revenue

Europe does not need to become a US-style federal state. What the EU needs instead is a fiscal model in which taxation underpins borrowing, and together they finance common defence. US historical experience shows that federal indirect taxes — especially customs tariffs and excises — played a key role in supporting expenditures on common defence. Given the current momentum, the growing uncertainty in the transatlantic relationship only strengthens the case for building stronger EU common defence. Providing security to European citizens constitutes a core EU EPG and could act as a catalyst for expanding EU fiscal capacity.

This contribution has outlined what such fiscal capacity could look like, drawing on lessons from US fiscal history. First, the EU's power to tax should be explicitly recognized through a Treaty reform of Article 311 TFEU. The Union's ability to levy taxes should rest both on democratic legitimacy and on the need to finance EPGs for European citizens. As a practical starting point, we support the use of relatively less visible forms of taxation, such as an EU VAT or EU-level excise duties. In the current political context — marked by rising Euroscepticism and the growth of far-right parties — such indirect taxes may represent the most politically feasible path to expanding EU fiscal capacity. Over the longer term, however, the experience of the United States suggests that some form of direct EU taxation on profit/net income may ultimately become unavoidable.

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European Defence Markets: Overcoming National Preference and External Dependence

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Abstract

Reflecting past reliance on United States- and nationally-based defence, Europe's defence industrial market is fragmented and characterized by a high home bias in procurement, low scale of production and technological gaps. In consequence, ongoing European rearmament risks being both wasteful and a missed opportunity to reduce dependence on the US, as we illustrate with some striking examples from Germany. To avoid this, EU and non-EU European democracies (including Ukraine) should: (1) create a single defence industrial market by prohibiting discrimination against suppliers inside the market, restricting state aid, and creating a common export control regime; (2) promote standardization, interoperability and joint procurement; and (3) create a framework for the common ownership and financing of European 'strategic enablers'. We discuss legal and institutional options to achieve these objectives. Common to all is an intergovernmental agreement that commits its signatories to respecting Single Market rules and procuring jointly in pre-specified areas.

Keywords: Defence; Rearmament; Procurement; Strategic Autonomy; Debt.

1. Introduction

European defence markets suffer from a structural tension between the European Union's commitment to market integration and the enduring primacy of national sovereignty in security and defence. Efforts to encourage procurement coordination and cross-border competition are decades old. They include the

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European Defence Agency (since 2004, Council Decision (CFSP) 2015/1835), Directive 2009/81/EC creating a framework for common procurement, and the Permanent Structured Cooperation (PESCO) framework for defence planning (since 2017, Council Decision (CFSP) 2017/2315).

More recently, the European Union (EU) has sought to create financial incentives for common procurement, through subsidies (Regulation (EU) 2023/2418 on European Defence Industry Reinforcement through Common Procurement Act [EDIRPA]) or through loans (Regulation (EU) 2025/1106 on Security Action for Europe [SAFE]).[1] Yet, defence acquisition in Europe continues to be shaped by national preference, fragmented demand, and the use of non-competitive procedures (Wolff et al., 2025).

In consequence, the ongoing European rearmament effort — led by Germany, which is more than doubling its defence spending from about 1.6% in 2023 to 3.5% in 2029, with €83 billion in defence orders in 2025 alone — risks being both wasteful and a missed opportunity. In the face of limited supply dominated by a small number of national defence champions, sharply higher demand will drive up prices. Insufficient entry and competition will stifle the desired innovation boost. As a result, Europe will continue to depend on US defence contractors for frontier technologies.

The purpose of this chapter it threefold. First, we provide recent examples that illustrate the problem. Second, we define solutions in the abstract: the market structure and governance functions that would need to be in place to create an integrated European defence market and gain greater autonomy from the United States. Third, we outline alternative institutional approaches to implement these solutions.

The proposed solutions include the creation of a single market for defence through intergovernmental treaty, as well as a treaty-based commitment to jointly procure defence products that would be jointly owned or where scale economies are particularly relevant. Creating European 'strategic enablers' to reduce Europe's dependency on the US — such as common satellite, intelligence, air defence, and strategic lift systems — would require an extra step: an institutional mechanism to collectively own, control, and fund such enablers. We discuss three ways of doing so: through a new intergovernmental institution that can issue its own debt; through a repurposing of the ESM; and through ownership and debt issuance by the EU.

1 For more details, see the European Commission designated website for SAFE | Security Action for Europe at https://defence-industry-space.ec.europa.eu/eu-defence-industry/safe-security-action-europe_en.

2. National Preference, Lack of Competition, and US Dependence: Recent Examples

Two recent cases illustrate avoidance of competition and economically inefficient procurement practices in Germany: a German Federal Court of Auditors' December 2025 report (Bundesrechnungshof, 2025) on the procurement of clothing and personal equipment for the Bundeswehr, and a recent Bundestag Budget Committee's refusal to fund a mobile reconnaissance and electronic warfare system (Linnemann, 2026). At the same time, European imports of US defence technology, particularly through the US Foreign Military Sales (FMS) programme[2] have substantially increased and contribute to asymmetric dependence.

National preference and the Bundesrechnungshof Report

The December 2025 report by the German court of auditors (Bundesrechnungshof) constitutes one of the most comprehensive recent critiques of German defence procurement practice. The report assesses the Federal Ministry of Defence's (Bundesministerium der Verteidigung [BMVg]) plan to conclude an eighth amendment to the framework contract with Bw Bekleidungsmanagement GmbH (BwBM), an in-house Bundeswehr service provider, covering the period 2026–2034 and amounting to approximately €21 billion. According to the auditors, this would represent one of the largest individual procurement commitments ever submitted to the Bundestag Budget Committee (Bundesrechnungshof, 2025).

The numbers revealed in the report are staggering. According to the plan, Germany would buy the total order of 662 thousand sets of clothing and full equipment at the price of 21 billion, which would amount to more than €30 thousand per set. In this order would be 739 thousand protective vests for some €7.1 billion (i.e., at an individual price of €9607). It is hard to believe that such high prices for relatively simple equipment could not be procured significantly cheaper in the integrated single market.

At the core of the report lies a striking imbalance between procurement volume and force planning. While the amendment contract implies an increase in the overall contract value of roughly 196% compared with the previous arrangement, the personnel growth assumptions underlying the contract

2 The Foreign Military Sales (FMS) program is a form of security assistance authorized by the Arms Export Control Act (AECA), as amended [Arms Export Control Act of 1976, 22 U.S.C. §§ 2751 et seq.] and a fundamental tool of U.S. foreign policy. For more details, see the Defence Security Cooperation Agency designated webpage for Defense Trade and Arms Transfers Foreign Military Sales at https://www.dsca.mil/Programs/Defense-Trade-and-Arms-Transfers/Foreign-Military-Sales.

amount to an increase of only around 8% over the same period. Crucially, at the time of the audit, the BMVg had not yet adopted a binding and politically approved force expansion plan. The Bundesrechnungshof therefore concludes that large-scale procurement commitments were being undertaken in advance of any definitive decision on force structure, creating a substantial risk of over-procurement and long-term inefficiencies. This approach, the auditors argue, violates the German budgetary principle of necessity (*Grundsatz der Notwendigkeit*), which requires that public expenditure be clearly linked to concrete and approved needs (Bundesrechnungshof, 2025).

Beyond questions of planning and proportionality, the report is particularly critical of the procurement procedures employed. It documents that the BMVg explicitly instructed BwBM to avoid new competitive tenders and instead to rely on direct awards or contract extensions with existing suppliers, despite the legal risks raised. The Ministry justified this approach primarily on grounds of urgency and the need to secure production capacity, but the Bundesrechnungshof found these arguments unconvincing, especially given the long time horizons involved and the availability of market alternatives (Bundesrechnungshof, 2025).

Most notably, the report shows that the Ministry sought to apply this non-competitive approach not only to specialized military equipment but also to clearly market-available, civilian-type products such as towels, bathing footwear, and swimwear. The auditors highlight internal efforts to classify even such items as 'military equipment' in order to exploit procurement exceptions and avoid competition. In the Bundesrechnungshof's assessment, this practice systematically undermines competition, reduces cost discipline, and contributes to what it explicitly terms 'Rüstungsinflation', i.e., inflation of defence products (Bundesrechnungshof, 2025).

The 'MAUS' decision of the Bundestag's budget committee

In early 2026, the Bundestag Budget Committee declined to approve funding for the 'Mobiles Aufklärungs- und Unterstützungssystem' (MAUS), a planned mobile reconnaissance and electronic warfare system proposed through a non-competitive procurement procedure. Parliamentary objections focused not on the strategic relevance of the capability as such, but on the lack of competition, insufficient cost transparency, and concerns over long-term value for money (Linnemann, 2026).

The decision is notable for two reasons. First, it is a further example of continued non-competitive procurement from established national suppliers in Germany's ongoing rearmament effort. Second, it shows the willingness of parliamentarians to challenge executive procurement decisions even in a security

environment characterized by heightened threat perceptions. Increasing defence budgets do not automatically translate into reduced scrutiny. Instead, as spending volumes grow, parliamentary actors may become more attentive to procurement design, legal compliance, and economic efficiency.

Dependence on US defence technology

National preference within European defence procurement coexists with and arguably reinforces a second structural feature of European defence markets: extensive dependence on high-tech US defence technology. Recent analysis by Mejino-Lopez and Wolff (2026) demonstrates that European countries have increasingly relied on US Foreign Military Sales (FMS) for high-technology defence capabilities, particularly in areas such as combat aircraft, missile defence, and remotely piloted aircraft systems (Mejino-Lopez & Wolff, 2025). This reliance has intensified since 2022, as member states have sought rapid capability enhancement in response to a deteriorating security environment.

Germany's decision to procure eight MQ-9B SeaGuardian remotely piloted aircraft through the NATO Support and Procurement Agency illustrates this trend. The acquisition of eight drones for the price of more than 200 million apiece (Defence Express, 2026), ultimately ties Germany's maritime surveillance and reconnaissance capabilities to a US-designed and US-controlled system produced by General Atomics. The platform's lifecycle, software updates, and integration pathways are all shaped by US technological and regulatory frameworks, embedding long-term dependencies that extend well beyond the initial procurement decision, (Bahtić, 2026).

The broader implications of this pattern are significant. Mejino-Lopez and Wolff (2025) estimate that a substantial share of European defence investment now flows to US suppliers, strengthening the US defence industrial base while limiting the scale effects necessary for competitive European alternatives to emerge. This dynamic exposes a paradox at the heart of European defence policy: while member states resist European competition by favouring national procedures and suppliers, they simultaneously accept deep technological dependence on non-European actors for critical capabilities.

3. The European Defence Market: Problems and Functional Solutions

The European defence market is characterized by lack of competition, low production scale, and missing technologies. A fourth problem — fiscal

fragmentation — stands in the way of the development and procurement of expensive common defence assets.

Lack of competition

European defence procurement suffers from lack of competition on two levels: first, within country, as established suppliers receive preference over new entrants (Kapstein et al., 2026); second, home bias, particularly in the two largest EU member countries, France and Germany (Wolff et al., 2025). Lack of competition drives up prices and stifles the entry of innovative companies.

At the country level, lack of competition can partly be addressed through national scrutiny — such as through courts of auditors or parliamentary committees, as the German examples show — which induce changes in practices, legal frameworks, and procurement institutions.

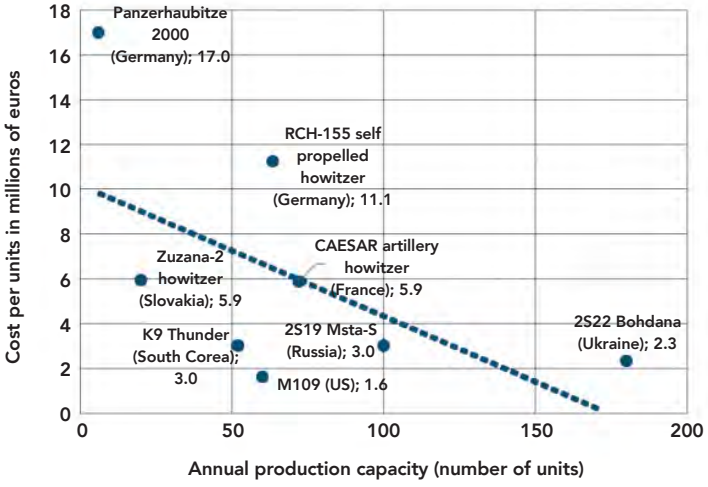
These changes could not, however, address market dominance by national defence champions. The latter requires cross-border competition. Cross-border competition, in turn, requires a common European defence market. This does not currently exist, because the Treaty on the Functioning of the European Union (TFEU) contains a blanket exemption for matter of national security, which has been interpreted as allowing national preferences for defence industrial goods (Randazzo, 2014).

Creating a single market in European defence industrial goods would require three main ingredients. First, non-discrimination in defence procurement from suppliers inside the single markets; German companies should be able to compete with French companies for French defence contracts, and vice versa for German procurement. Second, state aid prohibition, subject to narrowly crafted exceptions. Third, a common export control regime; much easier access to extra-European export markets by companies in one European country compared to companies in another constitutes a form of state aid.

Lack of scale

Lack of scale is an additional factor driving up procurement costs. Higher production scale is associated with lower unit costs (Figure 1). While competition can raise scale — as the best companies would capture a larger share of the market — raising scale requires additional instruments. One is standardization, so similar defence needs can be satisfied by one product supplied in higher quantities. Another is to pool procurement across European countries.

Figure 1 Self-propelled howitzers: cost per unit and production scale



Source: Wolff et al (2025).

Missing technology

Europe depends on US foreign military sales for cutting edge weapons technology, including fifth-generation fighter jets (F-35), long-range rocket artillery (Multiple Launch Rocket System [MLRS]), some long-range missiles and advanced combat software (Mejino-Lopez & Wolff, 2025). While this can be efficient, it also creates a dependence that an unfriendly US government could use for coercive purposes. Europe also lacks the capability to cheaply mass produce autonomous weapon systems, including drones, which have become pivotal in Russia's war against Ukraine, and could be pivotal if Russia were to attack the EU.

Some of these gaps can be overcome by integrating the Ukrainian defence industrial sector into the EU defence market (Kirkegaard, 2025). Others will require a slow increase in technological capacity, involving a combination of European purchase preference with a dynamic defence market that encourages exit, entry, and scale. The most important drivers for the development of such a market is the combination of predictable, large-scale, demand with competition on the supply side. These can be supplemented by EU-level programmes that help small and medium companies access funding for research and product development and prepare for tenders (Kapstein et al., 2026).

Fiscal fragmentation

The problems described so far do not require new funding instruments (other than, possibly, extending European Investment Bank funding beyond the

perimeter of defence companies that are currently allowed). Suppose, however, that European countries decided to develop and procure expensive weapons systems that have benefits for all Europe, and hence should be under common ownership and control. These could include some of the 'strategic enablers' that are currently provided by the US, including strategic transport capacity, satellite, intelligence, and airspace defence systems, and potentially a European nuclear deterrent.

In principle, these systems could be funded by asking the beneficiaries of such systems to borrow in national debt markets and pool these funds. However, this approach runs into a problem that is both political and fiscal. Collective ownership also requires the common shouldering of the financial burden, roughly in proportion of country size. But some large countries — including France, Italy, and the United Kingdom — may not have enough borrowing space to fulfil that financial obligation by borrowing nationally.

The answer is to also borrow collectively, while committing the users of the strategic enablers to pay a charge that would cover the interest cost. Importantly, this form of common borrowing would not be a source of moral hazard so long as the defence assets financed through such borrowing remain in common ownership and under common control, and countries that do not contribute can be excluded from the services provided by the assets.

4. Institutional Implementation

Implementing the functional improvements to the European procurement market described above involves four institutional and/or legal building blocks. If the objective is to raise competition, increase scale, and create a more dynamic and innovative market, only the first of these two are necessary (see first two subsections below). The development, joint ownership and joint financing of common defence assets would require the two additional building blocks (last two subsections below).

An intergovernmental agreement creating a single market for defence production and designating common procurement areas

Overcoming home bias in procurement involves leaning against national traditions, switching costs, and potentially the capture of procurement agencies by national contractors. But under Article 346 TFEU — the national security exception from the Single Market — commitments to non-discrimination of suppliers from other countries and joint procurement are not legally

enforceable.[3] Hence, creating such commitments would require a separate treaty, an intergovernmental agreement (IGA). Signatories to such an IGA would include both EU members and European democracies outside the EU, including Ukraine, that see the benefits to joining such an agreement and are willing to abide by its commitments. Precedents for such intergovernmental agreements in Europe include the Treaty Establishing the European Stability Mechanism (ESM) and the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (the so-called Fiscal Compact), both signed in 2012.[4]

As indicated above, the agreement would codify commitments in three areas essential to the creation of a single market: not to discriminate in procurement, refraining from state aid unless authorized using a specified decision process, and adopting a consistent standard for imposing export and import controls (including, of course, free trade in defence goods among the signatories of the IGA).

In addition, the agreement would contain a commitment not to undertake national procurement in areas identified for common procurement, which could be listed in an annex, and periodically revised subject to a qualified majority voting (QMV) mechanism. At a minimum these should contain areas involving new technologies with high development costs, as well as areas in which products have been standardized (e.g., shells that fit many weapons systems). In these areas, the main legitimate argument for continued national procurement — the need to ensure interoperability between new weapons and existing ones — does not apply.

Enforcement could occur either through a dedicated, treaty-based arbitration mechanism, or (as in the case of the Fiscal Compact) through existing EU institutions (notably the European Commission and the Court of Justice of the European Union), which could enforce the 'Defence Single Market Compact.' Signatories to the IGA that are found to be non-compliant

3 Article 346(b) TFEU states that 'any Member State may take such measures as it considers necessary for the protection of the essential interests of its security which are connected with the production of or trade in arms, munitions and war material; such measures shall not adversely affect the conditions of competition in the internal market regarding products which are not intended for specifically military purposes.'

4 The European Stability Mechanism (ESM) was set up as an international financial institution by the euro area member states to help euro area countries in severe financial distress. For details, see ESM Treaty – Consolidated version at https://www.esm.europa.eu/about-us/transparency/esm-treaty. The Fiscal Compact aimed to reinforce the budget discipline of euro area (and other EU signatory) governments following the EU sovereign debt crisis by imposing stricter requirements on national budgetary policies. The majority of its substance has since then been incorporated into the EU economic governance framework. For details, see Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (also known as the fiscal compact) at https://eur-lex.europa.eu/EN/legal-content/summary/treaty-on-stability-coordination-and-governance-in-the-economic-and-monetary-union-also-known-as-the-fiscal-compact.html.

would be subject to exclusion from the single defence market, in the sense that joint procurement purchases could discriminate to the detriment of the defence industry of the country concerned. To the extent that the IGA is accompanied by a lending facility (see below), such member states might also lose access to that facility.

An agency or secretariat to carry out joint procurement

To undertake joint procurement, signatories of the IGA would require a secretariat or agency that coordinates the procurement needs of members and issues requests for proposals, and negotiates with suppliers. This could be a new agency (see below) or — more likely — a modified and expanded version of the existing European Defence Agency (EDA). The statute of the EDA could be modified, by a qualified majority in the Council, to stipulate that beneficiaries of centralized procurement can only be industry/companies incorporated in countries that are signatories to the IGA. Current EDA members that prefer to retain the flexibility to discriminate in favour of domestic defence companies by insisting on their wide scope under Article 346 TFEU can refuse to sign the IGA, but would then also fail to benefit from joint procurement through the EDA.

A framework to undertake and coordinate capability planning

Joint capability planning by the members of the IGA could be important for two reasons. First, to identify areas/technologies of joint procurement. Second, more ambitiously, to develop and plan joint 'strategic enablers' that could complement — and if the US turns away from Europe, substitute for — the strategic enablers currently provided by the US.

Capability planning is in line with the Treaty-based mandate of EDA, which already includes 'harmonization of operational needs', and 'identifying the Member States' military capability objectives' among the roles of the agency. PESCO — the Permanent Structured Cooperation framework for EU defence cooperation which can include non-EU countries, and is anchored in the EU Treaties — could also play a role.

An entity that can both own and fund common defence assets[5]

Over the past 18 months or so, many authors have called for new financial instruments to accelerate European rearmament, including by funding such

5 This section follows Steinbach et al. (2025).

rearmament through common debt issuance.[6] The EU took a step in this direction last year with the Security Action for Europe (SAFE) initiative, a €150 billion conditional lending programme which is by now fully subscribed.

Instruments of this type are nice to have, in the sense that they might supply defence-related credit to governments or companies at a lower cost than would be available through the markets. This said, the most important measures that would transform European defence markets and procurement practices, outlined in the previous three subsections, do not require new financial instruments. However, common borrowing could be justified by an important additional objective: the financing of European strategic enablers and/or strategic stockpiles serving Europe as a whole.

In principle, there are three ways in which collective owning and funding of common defence assets could be organized:

- through a new international organization, such as the 'European Defence Mechanism' proposed by Wolff et al (2025);
- through the repurposing of an existing international organization such as the European Stability Mechanism (ESM);
- through the European Union, requiring non-EU members that benefit from the defence assets purchased with this debt to contribute to the debt servicing costs.

In the third possibility, strategic enablers would be owned by the EU, either directly or through the EDA, which is a legal person endowed with ownership rights. There are already precedents for EU ownership of assets related to European defence, such as all assets created under the Galileo Europe's Global Navigation Satellite System (GNSS), as well as of assets linked to the Copernicus programme. As in the case of the SAFE lending programme, the legal basis for the acquisition and ownership of strategic enablers by the EU would be Article 122 TFEU.

To develop and procure strategic enablers, a funding strategy built on the NextGenerationEU (NGEU) experience could be designed as follows. A revised Own Resources Decision (ORD) (which requires unanimity of the EU27) would give the EU authority to borrow funds to buy and own common military assets. The legal constraint for this borrowing capacity, as in the case of

6 These include proposals to create a European Rearmament Bank (Lucas et al., 2025), a Defence, Security and Resilience Bank (Murray 2024; see also Defence, Security & Resilience Bank at https://www.dsrb.org/what-is-the-dsrb) focused on lending to either defence companies or to both defence companies and governments. Scazzieri and Tordoir (2024) propose issuing defence bonds either through the EU or the ESM to fund a wider range of defence-related uses, including lending to governments and companies, but also to fund large projects benefiting several countries, such as 'improving air defences for the continent at large'. Wolff et al. (2025) and Hildebrand et al. (2025) focus on common funding of such strategic enablers, which would remain in common ownership.

the NGEU, is such that the borrowing capacity in the ORD would have to be ex-ante determined in purpose, limited in size, and a repayment schedule must be specified (Grund & Steinbach, 2023).

The debt service for these funds (as well as the costs for maintenance and operation of common defence assets) would be based on service charges of the users of these assets. Given the public good character of strategic enablers, the payment obligation could be designed on the Gross National Income (GNI) logic underpinning the EU budget (see D'Adamo, this report). Alternatively, they could be designed based on service benefits. Non-EU members that wish to benefit from the common defence asset could contribute to the service charges in the same way as benefitting EU members. For this to work, it is essential that non-contributing countries can be excluded from benefits provided by the common defence assets.

Strategic enablers owned by the EU could be operated either by EU agencies or by EU member states or groups of member states on behalf of the EU. One example of the former is the European Union Satellite Centre (SatCen), the EU's geospatial intelligence agency, which provides specialized analysis services in space, security, and defence.

5. Conclusion: The Steps Ahead

In our view, the first two steps described in the previous section are essential: creating a single market for defence goods together with a commitment to common procurement, backed by an effective institution undertaking such procurement. Beyond that, Europe must answer two questions.

The first is whether it wishes to develop and own its own strategic enablers. In our view, it should. If it does, it will likely also need a structure to finance these common enablers using common borrowing and agree on a governance that ensures their effective management, a topic we do not discuss further here.

The second is whether to create the governance required for a single defence market, common procurement in areas where market power and/or scale economies are particularly relevant, capability planning and possibly common funding through new institutions or by repurposing existing ones.

The answer to the second question in part depends on the answer to the first. If Europe wants to continue relying on US strategic enablers, it does not need common funding. It should then focus on the creation of a defence industry single market and on common procurement processes. As argued in the last section, this can be done through the combination of a new intergovernmental treaty and by repurposing the EDA. No new institutions are required.

If, on the other hand, Europe wishes the additional creation of a permanent defence funding capacity that would be powerful enough to finance strategic enablers, then it faces several options. They include:

- Folding all required institutional functions described in the previous section into one, new, intergovernmental institution, like the 'European Defence Mechanism' (EDM) proposed by Wolff et al. (2025) and elaborated by Zettelmeyer et al. (2025). The treaty establishing that institution would encapsulate the IGA establishing the European single defence industry market and define areas of common procurement. The EDM would serve as a procurement and capacity planning agency. It would be capitalized and borrow in the market to fund common defence assets that would remain in the ownership of the EDM, and possibly to finance procurement of national defence assets. The governance structure of the EDM would be analogous to that of other international financial institutions, where voting shares and capital shares are aligned, and both are correlated with the size of the member country. The EDM treaty would commit members to servicing the debt issued, and lay out a mechanism for enforcing treaty obligations, backed by sanctions (loss of access to funding, and *in extremis* exclusion from the single market and loss of access to the services of common defence assets).
- Modifying the ESM Treaty to enable the ESM, perhaps renamed the 'European Security Mechanism', to perform the functions of the EDM (that is, all four functions described in Section 4) while also preserving the current ESM functions. To replicate the role of the EDM, membership of the repurposed ESM would need to be opened not just to non-Euro area members, but even to non-EU members, such as the UK and Ukraine.
- Combining an IGA with a reformed EDA and PESCO, while common defence assets would be owned by the EU and funded through EU debt issuance, which is serviced through charges paid by all benefitting countries, both EU and non-EU.

The main advantage of option 2 (repurposing of the ESM) over option 1 (creating an EDM) is that option 2 could take advantage of the current capital and funding capacity of the ESM, and newly issued defence-related bonds would add to the existing pool of outstanding ESM bonds, avoiding fragmentation of the euro bond market. The main disadvantage is that modifying the ESM Treaty in the way proposed might be nearly impossible, as not all existing members of the ESM might be interested in joining a new coalition of the willing dedicated to a wholly different purpose than the original ESM, as well

as letting in new members such as the UK. Furthermore, these new members might not be interested in joining an institution whose function continues to include crisis lending to euro area countries. Finally, re-purposing the ESM would also mean that its function as a backstop to governments and to the bank resolution mechanism might be put in jeopardy.

Option 3 shares the main advantage of option 2: new defence-related bonds would add to the nearly €750 billion of outstanding EU bonds, avoiding fragmentation of the supply of euro denominated common debt. The main advantage of option 3 relative to both option 2 and option 1 is that it requires neither creating a new institution from scratch nor a radical (and politically implausible) expansion of both the mandate and the membership of the ESM. Compared to the latter, the proposed expansion of the role of the EDA appears to be manageable. However, option 3 has one significant disadvantage, which is that the UK and other non-EU member countries could not participate on an equal footing. They could not become co-owners of common defence assets even if they share the financial burden of their financing, and they could not become EDA members. This said, EDA has cooperations with Norway, Switzerland, Ukraine, and the United States, and the EDA could and should seek the involvement of the UK in capability planning and joint procurement.

Any of the proposed approaches would constitute an ambitious undertaking. But compared to the current rearmament regime with its enormous inefficiencies, the costs of setting up such structures would rapidly pay for themselves in the form of far lower fiscal costs and far greater European defence autonomy.

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The Segmentation of the European Union's Defence: Comparing the SAFE Instrument and the Ukraine Facility

Andrea Capati and Sergio Fabbrini *

Abstract

This chapter argues that US retrenchment from guaranteeing European security has triggered a segmentation of European Union (EU) defence, industrial, and financial policies. In the context of the Russian aggression on Ukraine, the chapter compares two financial assistance instruments, the Security Action for Europe (SAFE) and the Ukraine Facility, and their institutional implications. While both rely on EU-level borrowing backed by the EU budget, they favour distinct institutional outcomes for reducing EU dependence on US security guarantees. SAFE extends EU borrowing to support the defence industrial policies of the member states, leaving procurement choices and industrial priorities largely in the hands of national governments. By contrast, the Ukraine Facility centralizes the activation of financial assistance to Ukraine in the hands of the European Commission through a conditionality-based 'Ukraine Plan'. The chapter shows how US retrenchment has driven differentiated responses in the EU, resulting in a segmented, rather than coherently connected, EU security system.

Keywords: Russian War; Trump II; SAFE; Ukraine Facility; EU Defence Segmentation.

1. Introduction

Following the return of Donald J. Trump to the White House on 20 January 2025, the United States (US) decided to cease guaranteeing the security of Europe, a decision that has affected the European Union (EU) in particular. With Trump II, the US has been left as an unwilling provider of European security through its leadership of the North Atlantic Treaty Organization (NATO), the successful security alliance built in 1949 by the US to protect Europe from external threats.

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NATO has safeguarded the security of Europe since the Cold War. It was NATO that helped contain the Russian aggression of Ukraine, which started on 22 February 2022, by supporting Ukraine militarily through the transfer of lethal and non-lethal weapons. Meanwhile, the EU and its member states supported Ukraine economically (through national-level bilateral agreements with Ukraine, and intergovernmental programmes like the European Peace Facility), as well as through multiple sanction packages against Russia and its oligarchs. US control of hard and soft powers has substantiated its leadership role within NATO. Defence, in its industrial and military components, has been mainly based in the US, which has also provided the financial resources for the functioning of the organization (Apps, 2024). This defence paradigm has been challenged by the radical redefinition of US policy towards European security brought about by Trump II. It has been Trump II more than the Russian aggression of Ukraine that has called that paradigm into question.

In fact, for the first three years of the war on Ukraine, between 24 February 2022 and 20 January 2025, the EU took no single legislative measure to strengthen its security or to guarantee that of Ukraine. With Trump II, American support for Ukrainian resistance has been questioned, along with US commitment for NATO obligations, including even the mutual defence principle of Article 5 of the organization's Charter. Europeans (i.e., European governments inside and outside the EU) have thus been left alone in guaranteeing not only Ukrainian security — as Trump II opposed the latter's entry into NATO — but also their own.

The dramatic change in US foreign policy has obliged the EU to move towards setting up a new security system. However, the material and strategic differences among member states regarding security have led to a segmented system rather than a coherent organization of EU defence. The Union has introduced unprecedented measures (in terms of regulations and soft law) in the field of defence, formalizing relations between national and supranational institutions, both vertically and horizontally (Capati, 2025). These measures have distributed final authority over security resources in a manner close to a quasi-federal system (making it plausible to talk about a 'federalization' of European defence). Yet this has not led to the complete transfer of competence over military and industrial resources to the supranational level.

In reacting to the US political and strategic withdrawal from Europe, the EU has not taken decisions conducive to its transformation into a political entity, one able to fill the void left by the US inside and outside NATO. The political fragmentation of the EU, an expression of the differences between its member states in material conditions and strategic views, has prevented the development of a Riker-type logic of federalization. According to Riker (1964,

1975), it is rational for the elites of distinct states to move towards federal aggregation and centralization to deal with external threats, which none of them can face individually, as is the case of security.

Ever since the failure of the European Defence Community in 1954, EU member states have re-established and consolidated their sovereignty over 'core state powers' (Genschel & Jachtenfuchs, 2014), including military, industrial, and fiscal policies. Although these policies were 'centralized' and brought to Brussels after the end of Cold War with the 1992 Maastricht Treaty (Treaty on European Union, 1992), they remain managed by member states who play a crucial decision-making role in intergovernmental coordination. Within the framework of the Common Foreign and Security Policy (CFSP) and Common Security and Defence Policy (CSDP), and the intergovernmental Eurogroup in charge of fiscal policy, governments can impose their national red lines thanks to the unanimity rule that presides over the deliberation of these intergovernmental fora.

Although Trump's efforts to withdraw the US from guaranteeing the security of the continent might have been expected to produce a centralizing logic at the EU level (Kelemen & NcNamara, 2022), the measures introduced in reaction to the 'Trump effect' (Fabbrini & Fabbrini, 2026) have indeed confirmed the decentralized logic of EU defence policy. Through Readiness 2030 and the Security Action for Europe (SAFE), EU member states have preserved their national control of defence, in industrial and military terms. At the same time, however, those governments have had to recognize that they do not dispose of the necessary financial resources for keeping up the support of Ukraine following Trump's decision to suspend Biden's programme, which previously helped Ukraine financially. The Ukraine Facility and the following Loan to Ukraine of €90 billion centralize the activation of financial assistance to Ukraine. The legal measures introduced in 2025 by the EU have thus institutionalized this segmentation of security policy, allocating the final authority over military and industrial resources to member states, while the final authority over the activation of financial help to Ukraine has been allocated to the European Commission. The literature (Batora & Fossum, 2020) defines segmentation as the incoherent institutionalization of policies that, although addressing the same problem, are unconnected, organized at different levels, managed by different configurations of actors, pursuing different policy logics. In this context, we consider two programmes, the Security Action for Europe ([SAFE], EC 2025; Regulation (EU) 2025/1106), inaugurated in the Spring of 2025, and the Ukraine Facility, adopted in early 2024 (Regulation (EU) 2024/792), forerunner of the programme approved at the end of 2025 to give Ukraine an additional €90 billion for its military and administrative needs (European Council, 2025c). Both

programmes, SAFE and the Ukraine Facility, are based on financial resources the European Commission is allowed to borrow from the financial markets, issuing bonds guaranteed by the EU multi-annual financial budget. However, SAFE funds are finalized to support transnational projects of industrial security policy (between EU member states, also in cooperation with Ukraine), while Ukraine Facility funds are managed directly by the European Commission to help Ukraine under detailed conditionality terms.

SAFE is a programme aiming to support the industrial policy of EU member states in the defence field, with a decentralized logic preventing the production of common European security goods. A European public good in this field would require capabilities planned and governed according to a distinctly European logic, that is, with common objectives defined at EU level and with benefits intended for the EU as a whole rather than for individual states or coalitions of states. SAFE does not reflect such a logic. It allows governments to mobilize EU-backed resources while pursuing nationally determined preferences, which are shaped by different strategic cultures, threat perceptions, procurement traditions and industrial interests. Rather, SAFE is supporting the production of national and transnational public goods, with national governments in charge of defining objectives and the means for reaching them. Rivalries between national industries and jealousies between national security establishments have favoured idiosyncratic solutions to the need to increase EU industrial capabilities in defence production. Rooted differences on security views, and deep competition among national industrial actors, have fed a predisposition of member states to think primarily in national terms, regarding the strengthening of their defence systems.

The legal structure of SAFE has confirmed that national governments should continue to have the primary competence on defence. Combined with Readiness 2030 (European Commission & High Representative, 2025), which allows member states to spend on defence beyond the constraints of the reformed Stability and Growth Pact (SGP) for a period of four years, SAFE is aimed at building stronger industrial defence capabilities by member states. This approach would likely generate asymmetries in defence industrial policy between member states or between clusters of them based on the different fiscal space at their disposal. In practice, countries like Germany could spend much more than countries like Italy or France as they could mobilize significantly larger national resources for defence investment.

This decentralized approach to defence stands in stark contrast to the policy on financial assistance for Ukraine. The resources borrowed from financial markets under the Ukraine Facility are managed exclusively by the European Commission, which operates as the core executive authority responsible for the

implementation of the instrument. In this framework, the Commission maintains a direct institutional relationship with the Ukrainian government, overseeing the negotiation, assessment and monitoring of the Ukraine Plan that sets out the reforms and investments to be supported through EU funding. This governance structure reflects a markedly different logic from that underpinning SAFE. Rather than relying on decentralized implementation by member states, the Ukraine Facility establishes a highly centralized system in which the Commission evaluates the Ukrainian authorities' commitments and proposes disbursements linked to the fulfilment of predefined conditions. These assessments are subsequently formalized through Council implementing decisions, but the operational management of the instrument remains firmly anchored at the supranational level. In this sense, the Ukraine Facility embodies a collective European approach to financial assistance, where borrowing, policy coordination, and oversight are exercised through EU institutions rather than through national governments.

In terms of allocation of final authority over industrial and financial resources connected to security, one might argue that the two programmes display a different federalizing logic. By federalization, we mean the institutionalization of formal relations between national and supranational institutions regarding the security field. SAFE confirms the role of the member states as the exclusive actors of industrial defence policy. The Ukraine Facility brings the European Commission to the security field, assigning it the final authority over the management of the economic resources necessary for the security of Ukraine. The first programme enforces national governments, and the second the supranational Commission.

Thus, the US withdrawal from the security of Europe (a withdrawal that European leaders should have anticipated) has not generated a process of centralizing federalization at the EU level, with industrial, financial, and military resources managed coherently by a unitary actor. Rather, it has favoured policy choices that have segmented the control of industrial, financial, and military resources. The following section compares SAFE and the Ukraine Facility to show their different logic, at the vertical and horizontal levels.

2. SAFE and the Transnational Industrial Policy

Firmly embedded in the EU legal order, SAFE is based on Article 122 Treaty and Functioning of the European Union (TFEU), which allows the Union to adopt measures appropriate to the economic situation, in exceptional circumstances, in a spirit of solidarity. In fact, the instrument marks the beginning of EU-level borrowing earmarked for internal security-related purposes. Its adoption reflects

the EU's broader governance and political fragmentation; namely, a tension between supranational delegation and intergovernmental coordination on the one hand, and persistent divisions among member states over the trajectory of EU industrial policy on the other (Capati, 2026).

SAFE thus became the instrument for promoting transnational industrial policies in the field of security within the EU (and between EU and non-EU member states, precisely identified). Its governance model allows the European Commission to borrow resources from financial markets, which are then transferred to member states whose projects are approved by the Council following a proposal from the European Commission. It is an approach that resembles the governance model of the Recovery and Resilience Facility (RRF) within NextGenerationEU (NGEU), whereby financial resources are raised by the European Commission and subsequently allocated to the member states. National governments then deploy these resources according to their own priorities and policy strategies, while complying with the eligibility criteria established in the founding regulation, including objectives related to the green and digital transitions, research and education, social cohesion and youth employment (Buti & Fabbrini, 2023; Capati, 2024; Fabbrini & Capati, 2023).

Despite the strong role of the European Commission, SAFE does not incentivize the production of European public goods in that it leaves the definition of priorities, the selection of projects and the organization of industrial production largely in the hands of the member states. In other words, the Commission plays an important enabling and coordinating role, but it does not exercise the kind of hierarchical authority that would be necessary to steer resources towards genuinely common European capabilities. The instrument provides financial support for defence investment, yet the underlying decisions on what to produce, with whom and for which strategic purpose remain primarily national. As a result, SAFE is more likely to support the strengthening of national defence-industrial bases, or at most cooperative arrangements among limited groups of states, than the development of European public goods in the strict sense.

SAFE's legal design is exclusively nationally oriented. This is the result of asymmetries in member state preferences, reflecting divergent threat perceptions, fiscal positions, and industrial interests. Large member states with significant defence industries — notably France, Germany, and Italy — played a decisive role in this matter. France is considered a driving force behind the initiative, with French authorities actively leading efforts to shape the European defence landscape under this new framework. For France, SAFE aligns with long-standing ambitions to strengthen the European defence industrial base through

transnational projects, but only insofar as it does not constrain national strategic autonomy. Paris consistently favoured an instrument that could support joint procurement and industrial scaling without transferring authority over defence planning to Brussels. To this effect, France is among 18 EU Member States that applied for SAFE funding, with a tentative allocation of €16.2 billion in low-interest, long-maturity loans to support national defence procurement.

Similarly, Southern member states — including Italy and Spain — saw SAFE as an opportunity to access favourable financing conditions at a time of renewed fiscal pressure. For these states, EU-level borrowing reduced the immediate budgetary cost of defence investments while avoiding politically contentious debates over permanent fiscal integration. While the Italian government initially fought to ensure defence spending would not 'forcibly' divert funds from existing cohesion programmes (Meloni, 2025), support solidified once the government realized that SAFE's long-term, low-interest loans (repayable over 45 years with a 10-year grace period) provided a way to modernize the military and meet NATO's targets (to bring national defence spending to 5% of national GDP), without an immediate strain on the national budget. Italy has so far secured approximately €14.9 billion in low-interest, long-term loans under SAFE.

Germany has taken a critical and hesitant position regarding the SAFE instrument (Zgaga, 2025). Despite being a key proponent of strengthening European defence through national and transnational programmes, Germany has raised concerns about the legal and economic foundations of the plan. For one thing, the German Ministry of Defence highlighted that the initiative does not solve underlying, deep-seated issues in national procurement systems, noting severe delays in existing major projects like the A400M transport aircraft and the Eurofighter. For another, a confidential report from the German Bundestag questioned the legality of the plan, suggesting it might violate EU Treaties (Lunday, 2025). In this context, Germany — along with the so-called Frugal Four (Austria, Denmark, the Netherlands, and Sweden) — supported higher defence spending and welcomed the expected boost to Europe's defence industrial base yet drew clear red lines against replicating the RRF's grant component in the defence domain. Berlin resisted 'defence Eurobonds' — common debt with shared liability — arguing that joint borrowing combined with grant financing could generate moral hazard and facilitate misspending. Germany therefore backed SAFE politically and accepted governance practices inspired by the RRF, but only insofar as assistance took the form of nationally repayable loans or, alternatively, was channelled through the ordinary EU budget rather than through a new, permanent, mutualized grant-based defence instrument (Eunews, 2025).

Germany's position is behind one of the key differences between the RRF and SAFE. The RRF combined non-repayable grants with repayable loans financed through common EU borrowing under NGEU, thereby partially mutualizing the costs of recovery. SAFE, by contrast, is exclusively loans-based. Because member states with a larger fiscal space may ask for more financial resources, contrary to those with a limited fiscal space, the net outcome of SAFE will further fragment the defence industry in Europe.

3. The Ukraine Facility and the Supranational Logic of Financial Assistance

Following the escalation of the Russo-Ukrainian war and the prospect of a protracted conflict, even before the arrival of Trump, the EU recognized the need for a comprehensive, multiannual instrument capable of providing predictable and sustained financial support to Ukraine during both wartime and recovery. This led to the establishment of the Ukraine Facility, a financial support framework designed to channel EU assistance to Ukraine from 2024 to 2027. By consolidating the EU financial engagement with Ukraine within a single legal and institutional framework, the Ukraine Facility institutionalized the EU's long-term commitment to Ukraine and strengthened the link between macro-financial support, post-war reconstruction, and the country's path towards EU membership (Capati, 2026). By the end of 2025, faced with unceasing Russian aggression and an increasingly detached US, the European Council decided to introduce an additional €90 billion 'Ukraine support loan package', based on a model that is in continuity with the one adopted for the Ukraine Facility.[1] Moreover, it made recourse to an enhanced cooperation framework to guarantee interest repayment on the collected debt (thus circumventing the opposition of Hungary, Slovakia, and Czechia, which opted out of financial liability on the EU debt). Because the 'Ukraine support loan package' is still in the making at the time of writing, here we focus on the Ukraine Facility to show how the EU's approach to the activation of external financial assistance (for Ukraine) differed from the one adopted for internal financial support (for EU Member States) through SAFE.

Proposed by the European Commission in June 2023 and adopted in early 2024, the Ukraine Facility is legally grounded in Article 212 TFEU, which governs economic, financial, and technical cooperation with third countries.

1 At the time of writing, the political process is stuck because of Hungary's veto threat (Schumann & Paternoster, 2026).

The Facility provided €50 billion in financial assistance over a four-year period. This envelope comprises €33 billion in loans and €17 billion in non-repayable support (i.e. grants). The European Commission is empowered to borrow on behalf of the EU on financial markets to finance the loan component of the Facility, with borrowing backed by guarantees from the EU budget that ensure favourable financing conditions. The non-repayable component is financed through a combination of reallocated EU budgetary resources and additional contributions from member states. The March 2025 White Paper for European Defence (European Commission & High Representative, 2025) actually incorporates and projects the Ukraine Facility into the long-term EU security strategy, using it as a foundation to transition Ukraine from a recipient of aid to a 'structural pillar' of the European defence industry.

At the core of the Ukraine Facility lies the Ukraine Plan, a comprehensive reform and investment roadmap prepared by the Ukrainian authorities and assessed by the European Commission. Much like the national recovery and resilience plans under the RRF, the Ukraine Plan identifies priority reforms and investment areas consistent with EU values and policy objectives, including strengthening the rule of law, combating corruption, reforming the judiciary, and enhancing energy resilience (Ukraine Facility Regulation, 2024). The European Commission plays the main role in approving and supervising the distribution and utilization of funds by the Ukrainian government. Political oversight is ensured through the Council, which adopts implementing decisions confirming the fulfilment of conditions or, where appropriate, endorsing the suspension or reduction of payments, acting by qualified majority voting (QMV). In parallel, the European Parliament is granted enhanced oversight rights, including regular reporting obligations and the possibility to trigger a suspension mechanism in cases of serious backsliding with respect to democratic principles, the rule of law or macroeconomic stability (Ukraine Facility Regulation, 2024).

This governance arrangement is entirely Brussels-based, with the European Commission at its centre. It follows the EU financial assistance model inaugurated with the Covid-19 pandemic (Fabbrini & Capati, 2023), but in this case the European Commission has an indisputable influence over the use of funds by the Ukrainian authorities. This has helped dilute division among national governments regarding financial support for Ukraine. While the Russian invasion initially generated a high degree of rhetorical unity, the move from short-term emergency assistance to a multiannual, EU-level financial instrument exposed divergent national views on the Russian threat and divergent national preferences over fiscal risk-sharing.

Let us consider the divergent views and preferences of national governments. A first group of member states (including Poland, the Baltic states, the Nordic countries, but also France and Germany), advocated for robust, predictable and long-term EU support for Ukraine. For them, assistance to Ukraine must be framed as a core security policy aim directly linked to European territorial security, more than as development or reconstruction aid. Fragmented bilateral assistance or ad hoc macro-financial packages were seen as insufficient, both in scale and credibility. Therefore, these governments favoured the promotion of an EU-level instrument capable of signalling an irreversible political commitment to Ukraine's economic survival and post-war reconstruction.

At the same time, the governments of several Western and Southern European member states (including Belgium, Italy, Portugal and Spain), approached the question of long-term support with greater caution. Belgium has strongly opposed using frozen Russian assets held in its Euroclear depository to back Ukraine loans. It feared legal retaliation from Moscow, thus demanding 'ironclad guarantees' in case of use (the European Council has for now decided to freeze them). While generally supporting the Ukraine Facility, Italy, Portugal, and Spain voiced opposition to a €20 billion military aid package in early 2025. They argued for alternative financing methods, such as special Eurobonds, or requested that defence spending be excluded when calculating their national budget deficits. Bulgaria and Malta have also joined calls for alternative ways to be considered for financing Ukraine, expressing scepticism about current debt-based or asset-linked tools.

Opposition to the Ukraine Facility has been most consistent from a small group of member states (such as Hungary, Slovakia, and Czech Republic, the same three countries that would opt out of the 'Ukraine support loan package' in December 2025), officially for fear of 'war escalation', and unofficially for their support of Russia's Putin. Under Prime Minister Viktor Orbán, Hungary has been the most persistent opponent of the decision to help Ukraine financially. Hungary initially blocked the adoption of the Ukraine Facility at the December 2023 European Council, demanding concessions on unrelated rule of law issues and national funding allocations. The deadlock was resolved in early 2024 through a political compromise that included assurances regarding the future review of the EU budget and potential flexibility mechanisms for member state governments (Müller & Slominski, 2025). Hungary's resistance had far-reaching implications for the Ukraine Facility. In institutional terms, it exposed the vulnerability of EU external action that relies on unanimity, thus leading to the decision, in December 2025, to use the instrument of enhanced cooperation to escape from the unanimity trap.

Overall, however, the strong role assigned to the European Commission in assessing Ukraine's plans and authorizing disbursements has reduced opportunities for individual member states to intervene directly in the implementation process. Faced with the dysfunctionality of a consensus-based decision-making process in conditions of inter-state divisions, the EU has thus decided to move in the direction of greater centralization, especially on the matter of financial support to Ukraine, an approach confirmed by the European Council's decision of December 2025. A comparative summary between SAFE and the Ukraine Facility is provided in Table 1.

Table 1 A comparative summary between SAFE and the Ukraine Facility.

	SAFE Instrument	Ukraine Facility
Origin	Created via the 2025 White Paper	Created in 2024 as a separate financial framework
Primary Goal	EU Member State rearmament and joint procurement	Macro-financial stability and recovery for Ukraine
Recipients	EU Member States	Ukraine
Financing mode	Repayable loans	Repayable loans and non-repayable grants
Implications	Decentralization of industrial defence policy	Centralization of financial assistance policy

Source: Authors' own elaboration.

Conclusion

If we locate SAFE and the Ukraine Facility in the larger context of EU measures to fill the void created by the US withdrawal from guaranteeing the security of the continent, then the outcome is the formation of a new segmented system of security in Europe. On 19 March 2025, the European Commission published the European Readiness 2030 White Paper detailing a rearmament plan for the Union. In conjunction with this, the Commission released a communication on accommodating increased defence expenditure within the SGP, through the activation of the national escape clause for four years. The activation of the national escape clause allows member states to deviate from the net expenditure path, which would have required them to lower their deficit in the medium-term. This means that member states will be legally authorized to indebt themselves to a much greater degree to meet their defence needs. In terms of size, the flexibility under the national escape clause should be capped at 1.5% of the GDP of each member state; it is expected to mobilize €650 billion. At the same time, on 19

March 2025, the Commission proposed establishing a special €150bn fund, SAFE, to support, in the form of loans, transnational joint projects of defence industrial production. The Commission was thus allowed to borrow funds on financial markets that, following the legal technology of NGEU (Fabbrini, 2025), are managed directly, together with the Foreign Affairs Council and under the supervision of the European Council. Readiness 2030 and SAFE epitomize a process of security federalization that will formally increase the power of national-level industrial and military defence to the detriment of the supranational one.

At the same time, the European Council, at its meeting of 18–19 December 2025 (European Council, 2025c), decided to commit €90 billion to aid Ukraine, 2/3 of which is to be used by the Ukrainian government to buy military material or to support the production of domestic military industries, the remaining 1/3 to be devoted to support the Ukrainian administration. The European Council asked the Commission to issue EU bonds on the financial market to reach the required €90 billion. On 14 January 2026, the Commission presented a financial package consisting of a set of legislative proposals to secure continuous support to Ukraine in 2026 and 2027 (EC, 2026). The package consisted of a revision of the Multiannual Financial Framework (MFF) Regulation (based on art. 312 TFEU), and a revision of the 2024 regulation establishing the Ukraine Facility (based on art. 212 TFEU) to implement budgetary assistance for Ukraine. In the same package, the Commission also introduced a new regulation proposal to give effect to a reinforced cooperation instrument (based on art. 329 TFEU and involving 24 out of the 27 member states) to guarantee the payment of interest on the EU debt of €90 billion. Hungary, the Czech Republic and Slovakia have not participated in the reinforced cooperation and have the right not to be considered liable for guaranteeing the debt made by the EU. Thus, regarding financial aid to Ukraine, the final authority has been allocated to the Commission. This follows a pattern already established with the 2024 Ukraine Facility, a programme embedded within the MFF, originally endowed with a total budget of €50 billion for the period 2024-2027, derived from issuing EU bonds in the financial markets.

Thus, the process of security federalization started in the EU, in reaction to the policy of Trump II and in the context of the Russian aggression of Ukraine, has not followed the centralizing thrust conceptualized by Riker. In the EU, long-established and self-confident member states have prioritized national rather than European public goods in the field of security. Industrial and military policies have been considered the prerogative of member states, although those prerogatives should be managed within the institutionalized framework of intergovernmental coordination, the CFSP and the CSDP (Fabbrini, 2015).

In reacting to Trump II's foreign policy, the EU has defined policy measures that confirm the role of national governments in the field of military and industrial security. At the same time, because of the lack of national budgetary resources, the EU has pursued an opposite approach in the field of financial aid to Ukraine, an approach already adopted with the 2024 Ukraine Facility and thus strengthened with the 2025 Ukrainian Loan.

The outcome has been the segmentation of the European security system. Policy segmentation is not new to the EU (Batora & Fossum, 2020), creating clusters of shared interests, institutions, and identities mobilized by correlated political actors. Segments are reciprocally unrelated because of the lack of governance connecting links to make their action coherent. Moreover, policy segmentation raises both efficiency and legitimacy problems (Fabbrini, 2025). Regarding efficiency, the unequal distribution of military resources among EU Member States may create the conditions for the hegemony of stronger over the weaker member states, thereby incentivizing the latter to play a free-riding role. Regarding legitimacy, security segmentation raises novel challenges regarding the accountability of its segmented actors. When different security programmes are designed, managed and implemented at distinct governance levels, each involving a different configuration of decision-making actors, the attribution of responsibility becomes blurred. In such a fragmented system, decisions on priorities, resource allocation and operational implementation may be dispersed across national governments, EU institutions, and specialized agencies, each subject to different accountability mechanisms. This dispersion complicates the ability of parliaments, courts, and citizens to identify who is responsible for specific security outcomes or failures. The EU emerging from the revolution introduced by Trump II in transatlantic relations is more institutionalized, yet it remains fragmented. In the contemporary fractured world, the EU has not yet found a way to become a political entity. As David Marsh (2025: 19) has written, 'there remain too many factors fostering furthering fissures rather than solidarity among Europeans'.

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Common Procurement in Defence and the Strategic Autonomy of the Union: A First Appraisal

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Abstract

This contribution examines common procurement clauses in recent EU funding instruments, the European Defence Industry Reinforcement through Common Procurement Act (EDIRPA) and Security Action for Europe (SAFE), as tools for leveraging 'integration through funding'. The procurement mechanisms set up by these clauses are then compared with other instruments tested in different crises contexts, such as Aggregate EU in the energy sector and the common purchases of vaccines during the Covid-19 pandemic, and evaluated with specific reference to the goal of reinforcing the Union's strategic autonomy, an increasingly challenging matter for the EU. The analysis demonstrates that the Union has designed and tested a variety of tools and instruments in reflection of the market sector considered and the economic and strategic interests vested. A core conclusion emerges about the potential of common procurement clauses to achieve forms of pragmatic federalism and to enhance the fading competitiveness of the European market.

Keywords: Defence; EDIRPA Regulation; SAFE Regulation; Common Procurement; Strategic Autonomy; Pragmatic Federalism.

1. Introduction

Donald Trump's second United States (US) presidency represents a radical shift for the European Union (EU) and for the world, with consequences spanning across many policy areas. His political choices mark a clear departure from the trajectory of US foreign policy since the post-war period, especially with the introduction of tariffs on European goods. Both his rhetoric and action towards the EU are confrontational and aimed at dismantling European integration. This shift radically changes the EU's

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security context, already confronted with the Russian invasion of Ukraine. Multiple sources of uncertainty and risk compel the Union to rethink its geopolitical role in an already complex and challenging environment, long theorized as either *polycrisis* or *permacrisis* (Morin & Kern, 1999; Brown et al., 2023). More precisely, the paradigm shift represented by Trump's second term thrusts the Union on a path towards greater self-sufficiency in the field of defence, since reliance on the United States as the guarantor of global security is no longer viable.

This new scenario prompted the European Council to instruct the European Commission (EC) to increase the Union's efforts to become responsible for its own defence, with renewed impetus following the Versailles Declaration of 11 March 2022 (European Council, 2022) and the initiatives adopted following Russia's invasion of Ukraine (European Council, 2025).

Through the White Paper on European Defence, *Readiness 2030* (European Commission & High Representative, 2025), which is the rebranding of ReArm Europe, the Commission outlined its plan for action along three main axes:

- closing capability gaps and supporting the European defence industry, including through regulatory simplification and the rationalization of industrial programmes;
- strengthening the single market for defence and accelerating defence transformation through disruptive innovations such as AI and quantum technologies;
- improving Europe's preparedness for worst-case scenarios by enhancing military mobility, stockpiling, and promoting operational cooperation across the EU.

Since 2022, the European Union has been slowly scaling up its own military deterrence capabilities through various joint funding instruments. This paper analyses a particular legal feature increasingly employed by these funding instruments – the common, or joint, procurement. These are neither a novelty nor specific to the military funding effort. Joint procurement and, more broadly, instruments ranging from joint purchase to joint pooling of demand, have also been implemented in the various EU crisis-response mechanisms, including the Covid-19 pandemic for vaccine procurement and the Russian gas energy crisis to mitigate price volatility (Marin, 2024).

Since the pandemic, the EU has enacted further innovative crisis-response policies, which have been framed in legal scholarship as 'integration through funding' (de Witte, 2023). This formulation captures the emergence of a new economic policy paradigm while echoing, in name, the traditional take on 'integration through law' (Cappelletti, 1985).

This 'integration through funding' framework consists of instruments like the temporary Support to mitigate Unemployment Risks in an Emergency (SURE) and NextGenerationEU (NGEU). The core traits of these instruments are the use of EU public finances as a tool to foster policies and an increased reliance on conditionality techniques. From a macroeconomic perspective, the EU budget, be it the multi-annual financial framework ([MFF]; see D'Adamo, this report) or an off-budget operation like NGEU, has become the focal point of the reenergized debate on the necessity for central fiscal capacity for the EU (Buti & Messori, 2022; Juncker, 2015; Van Rompuy, 2012). These instruments, together with those adopted to support Ukraine in its defence against Russia, and the measures on defence discussed in this paper, do indeed represent the emergence and consolidation of a central fiscal capacity of the Union (Fabbrini, 2022; Fabbrini & Petit, 2024; Genini, 2025). In this context of crisis-mitigation measures supported by funding instruments, various clauses of joint or common procurement have gained ground.

The analysis that follows adopts a comparative approach to assess common procurement clauses across various (funding) instruments, to identify broader trends in their evolution, and to offer some reflections on the role of these tools for strengthening the Union's strategic autonomy, defined here as 'the capacity of the EU to act autonomously — that is, without being dependent on other countries — in strategically important policy areas' (European Parliament [EP], 2022; Beaucillon, 2023). To this end, the paper first examines the provisions on common procurement in defence, next, it turns to energy, and last, to vaccines. It then offers concluding observations, highlighting the variety of these clauses and their effects, depending on specific configurations. Lastly, the analysis examines the potential of these clauses to contribute to the achievement of pragmatic federalism in the EU and 'protect' integration in times of geo-political turmoil, both of fundamental significance for the strategic autonomy of Europe.

2. Common Procurement in the Defence Sector

The first instruments after the invasion of Ukraine: EDIRPA and ASAP

It has become a priority for Europe to acquire the autonomous capacity to protect its security, independently of the United States, which has become an unreliable partner. In recent years, the Union has implemented a series of measures aimed at creating military deterrence through two main avenues: first, the modernization of national defence systems; second, greater interoperability among European

armed forces, facilitated by opening supply chains to crossborder cooperation. A first instrument worth highlighting in this context is the European Defence Industry Reinforcement through Common Procurement Act ([EDIRPA] Regulation (EU) 2023/2418), establishing a tool to strengthen the European defence industry through common procurement. It represents one of the commitments made in the Versailles Declaration of March 2022 and forms part of a broader strategy aimed at reinforcing the Union's strategic autonomy. EDIRPA is designed to facilitate common — by at least three member states — procurement of defence products, with relatively small Union financing of €300 million (October 2023–December 2025).

EDIRPA grants are implemented under direct management and aim to incentivize cooperation among member states to promote the competitiveness and efficiency of the European Defence Technological and Industrial Base (EDTIB), foster cooperation in procurement procedures, contribute to solidarity and prevent crowdingout effects, and increase the effectiveness of public spending, with a view to standardizing defence systems and enhancing interoperability among member states' capabilities (Art 3 EDIRPA).

The Union's financial contribution, however, cannot exceed 15% of the value of the common procurement, rising to a maximum of 20% where Ukraine and Moldova are involved or where 15% of the estimated value of the common procurement contract is allocated to small and mediumsized enterprises (Art 7 EDIRPA). The instrument can be activated only if participants in the procurement are established in the EU or an associated country, are not controlled by non-associated third countries, and ensure that at least 65% of the components of the final products originate in the EU or associated countries. This is the so-called European preference clause, which aims to reduce the EU's dependence on external providers and stimulate strategic industries within the internal market.

Before the EDIRPA Regulation, Regulation (EU) 2023/1525 on supporting ammunition production (ASAP)—in force until end of 2025—aimed to support ammunition production, with another relatively small funding amount of €500 million. In contrast to EDIRPA, ASAP was not a procurement instrument but rather a production-boosting regulation, providing a temporary set of financial incentives to reinforce and ramp up European production capacities, including Important Projects of Common European Interest (see Agnolucci, this report), and facilitating industrial partnerships along the supply chain. As such, ASAP did not regulate common procurement, even if it included provisions that indirectly relate to coordinated acquisition.

These early common funding defence instruments, EDIRPA and ASAP, designed in the search for short-term solutions, have paved the way for more long-term initiatives, such as SAFE and EDIP, to which the next section is devoted.

The SAFE and EDIP instruments and the virtual creation of fiscal room for defence

The Security Action for Europe (SAFE) Regulation

The Security Action for Europe (SAFE) Regulation (EU) 2025/1106 establishes a mechanism for financial assistance in the form of loans worth up to €150 billion, to support EU member states in making rapid and significant increases in their defence investments through common procurement. Paradoxically, the push for a truly common European defence deterrence happens indirectly - through Union financing of member states. SAFE is yet another instrument adopted on the legal basis of Article 122 of the Treaty on the Functioning of the European Union (TFEU), the non-legislative legal basis providing for a non-emergency economic policy competence of the Union (Chamon, 2023, 2024).[1]

SAFE provides for loans to be granted by the Union to the member state concerned, according to the criteria specified in the Regulation. This replicates the model of SURE loans, adopted during the pandemic and guaranteed by member states' budgets (Marin, 2024; Ruccia, 2023). SAFE is guaranteed by the 1.4% EU Gross National Income (GNI) own resources ceiling. The funding is raised by issuing single EU bonds and EU bills. The EU budget, therefore, becomes a vector of solidarity, in the sense that the reputation of the EU is used to leverage better financial conditions, thanks to its credit strength and better market access. The loans will have a maximum duration of 45 years and a 10-year grace period for principal repayments. Replicating the model of borrowing for lending, SAFE allows (some) states to save on interest rates, thanks to the relatively high financial reputation of the EU.

SAFE loans are meant to support the common procurement of defence products and services. Priority areas of investment have been identified at the EU level and in line with NATO priorities, which are: air and missile

1 It is increasingly evident that Treaty legal bases are employed in a flexible manner: this choice has been criticized since Article 122 TFEU seems like a shortcut to by-pass the constraints of the Treaty framework prohibiting the financing of expenditure arising from operations having military or defence implications (Article 41(2) TEU). Again, we observe also with the SAFE Regulation another instance of increased resort to Article 122 TFEU as a legal basis. In similar terms, see Dermine (2025) and Rodrigues (2024).

defence, artillery systems, missiles and ammunition, drones and anti-drone systems, strategic enablers and critical infrastructure protection, including in relation to space, military mobility, cyber, artificial intelligence and electronic warfare (Art 1, recitals 12, 15 SAFE). The common procurement in the SAFE framework should foster interoperability for member states' armed forces within the EU – a considerable weakness of European defence, improve efficiency, strengthen the strategic autonomy of the EU, and cope with the fragmentation embedded in the differentiated markets of defence industries at the domestic level.

The SAFE Regulation also sets clear conditions for when member states receive EU financial support for *common or joint defence procurement*. Article 5 establishes the mandatory requirement of the participation of at least two member states (or associated countries) for financing under SAFE, with strong incentives to purchase European-made equipment. This is another European preference clause, meaning that at least 65% of the value must come from EU/associated country industry, and that up to 35% may come from non-EU suppliers; associated third countries, including Ukraine, can participate. This rule aims to strengthen the European Defence Technological and Industrial Base (EDTIB) and echoes a similar provision of the EDIRPA Regulation. Along with the European Preference clause, common procurement should foster EU's strategic autonomy in the global defence market and interoperability between national armies.

The conditionality model established in SURE and NextGenerationEU is replicated in SAFE. Funding is allocated on national plans, only for projects that meet the common procurement criteria (Art 7 SAFE). In addition, a flexibility clause allows procurement from outside the EU when necessary to respond to urgent geopolitical needs (e.g., support to Ukraine), as an exception to the European preference clause. Another core provision of SAFE concerns requirements on interoperability and standardisation, in that investments should be geared towards reducing fragmentation, increasing standardisation, and strengthening EU-wide defence readiness.

At the time of writing, the Commission has already disbursed the second tranche of SAFE loans. The first tranche of loans was given to eight member states for approximately €38 billion, after the proposed loan agreements were signed. Table 1 below elaborates.

Table 1 Safe Loans

Country	Maximum loan amount	Pre-financing payment - first wave of SAFE	Pre-financing payment - second wave of SAFE
BE	€ 8.340.027.698,00	€ 1.251.004.154,70	
BG	€ 3.261.700.000,00	€ 489.255.000,00	
CY	€ 1.181.503.924,00	€ 177.225.588,60	
DK	€ 46.796.822,00	€ 7.019.523,30	
EE	€ 2.343.897.000,00		€ 351.584.550,00
EL	€ 787.669.283,00		€ 118.150.392,45
ES	€ 1.000.000.000,00		
FI	€ 1.000.000.000,00		
HR	€ 1.700.000.000,00	€ 255.000.000,00	
IT	€ 14.900.000.000,00		
LT	€ 6.375.487.000,00		€ 956.323.050,00
LV	€ 3.497.870.000,00		€ 524.680.500,00
PL	€ 43.734.100.805,00		€ 6.560.115.120,75
PT	€ 5.841.179.332,00	€ 876.176.899,80	
RO	€ 16.680.055.394,00	€ 2.502.008.309,10	
SK	€ 2.316.674.361,00		€ 347.501.154,15

Source: Author's elaboration, European Commission data 2026.[2]
Note: Countries listed in alphabetical order. For three countries (CZ, FR, HU), the national plans are currently under evaluation.

Readiness 2030 and the SGP derogation clause

In the context of the Readiness 2030 programme, and in addition to the SAFE instrument, the European Commission proposed a derogation to the national escape clause of the Stability and Growth Pact (SGP), meant to incentivise defence spending by allowing more fiscal room for member states before they run afoul of the SGP debt and deficit criteria. The policy foresees that governments are allowed to increase defence spending up to 1.5% of domestic GDP (European Commission & High Representative, 2025; European Commission [EC], 2025a). According to the Commission, this amount should reach €650 billion in fiscal capacity from 2026 to 2030. This sum spent at the domestic level, together with the assistance mechanism of

2 An overview on the distribution of the loans is available from the European Commission at the designated SAFE website at https://defence-industry-space.ec.europa.eu/eu-defence-industry/safe-security-action-europe_en.

the SAFE instrument, reaches €800 billion, about the same as NextGenerationEU. However, Readiness 2030 relies significantly on domestic expenditure: it is therefore questionable whether this increase in domestic expenditure can really achieve a common defence deterrence capability, which should be framed as a European Public Good (Beetsma et al., 2025; Buti & Messori, 2023).

Indeed, when it comes to national financing of defence expenditure, member states do not approach financial markets with the same credentials, not can they be expected to achieve EU-set defence targets in the same manner or timeframe, owing to their varied domestic political circumstances. National defence financing is inherently prone to catering to domestic political agendas, thus much more likely to result in widening cross-European divergences than in increasing defence interoperability.

Furthermore, the Commission's 'pressure' to increase defence spending only a year after the latest reform of the SGP (2024), the result of long negotiations after the pandemic (see Pench, this report), means that states are allowed, or even encouraged, to depart from the fiscal discipline aimed at with the SGP. This strategy questions the vitality of a core pillar of the European economic constitution, while simultaneously calling for an 'activist' common EU economic policy focused on the provision of EPGs, all through a central fiscal capacity.

Table 2 The SGP national escape clause, with or without SAFE

National escape clause WITH or WITHOUT SAFE?		National Escape Clause	
		Yes	**No**
SAFE	**Yes**	**Belgium**, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, Greece, **Hungary**, Latvia, Lithuania, **Poland**, Portugal, **Slovakia**	Cyprus, **France**, **Italy**, **Romania**, Spain
	No	Germany, Slovenia	**Austria**, Ireland, Luxembourg, **Malta**, Netherlands, Sweden

Source: Author's elaboration from official EU data available.3
Note: countries in Excessive Deficit Procedure (EDP) in bold.

3 The information is publicly available from the European Council, see: National escape clause for defence expenditure at https://www.consilium.europa.eu/en/policies/national-escape-clause-for-defence-expenditure-nec/, and Security Action for Europe (SAFE) at https://www.consilium.europa.eu/en/policies/safe/.

European Defence Industry Programme (EDIP)

After a longer gestation period, the European Defence Industry Programme (EDIP) Regulation (EU) 2025/2643 was approved in December 2025.[4] EDIP consolidates the legacy of the short-term emergency instruments EDIRPA and ASAP for the development of military capabilities, as the first long-term instrument with a significant €1.5 billion budget for joint defence procurement.[5] EDIP tightens the European preference principle through further requirements on establishment, infrastructure location, control, and design authority and has a custom-built joint procurement and financing mechanism, the Structure for European Armament Programme (SEAP), meant to address the challenges indicated above. A SEAP is to be established by international agreement between at least three states (at least two member states, plus one associated country or Ukraine) to facilitate cooperation in the procurement of defence equipment. Countries participating in a SEAP may issue joint debt to finance their procurement. As international organizations, SEAPs are not required to comply with Directive 2009/81/EC on military procurement, but must adopt their own rules, respecting the principles of the Union and this regulation.[6]

3. Broadening the Outlook to Gas and Vaccines

AggregateEU: a platform to match supply and demand in the gas market

The Russian invasion of Ukraine caused severe volatility in the European energy sector, which developed into a proper crisis for the EU. To mitigate the negative consequences, the EU experimented, among others, with a form of demand aggregation system known as AggregateEU, set up with Regulation (EU) 2022/2576. Tested as one of the initiatives of REPowerEU, it is now part and parcel of the new legislative framework regulating internal markets for renewable gas, natural gas, and hydrogen, adopted in 2024 (Regulation (EU) 2024/1789). This 2024 reform modernized the European gas and electricity market to contribute to stabilising prices, to protect consumers, and to smooth the transition to renewable energy sources.

4 The proposal was initially introduced in March 2024.

5 While a detailed examination falls outside the scope of this work, EDIP represents a consolidation of the initiatives already taken to reach the Readiness2030 target. Along these lines, the Commission has proposed in 2025 the Omnibus Defence Package to simplify rules and enhance competitiveness in defence (EC, 2025b).

6 While a detailed examination of this legal construction falls outside the scope of this contribution, this instrument has been designed precisely to overcome the shortcoming indicated in the previous section. This framework has been recently approved, and, in due time, it will be interesting to study if and to what extent this instrument has delivered on its promises.

AggregateEU, aimed at enhancing solidarity through better coordination of gas purchases, reliable price benchmarks and exchanges of gas across borders, was adopted at a moment when the EU was grappling with the most severe energy crisis in its history. The sudden collapse of Russian gas imports exposed the structural weaknesses of a system built on fragmented national markets and (uneven levels of) dependency on an external actor. Against this backdrop, the EU sought to operationalize solidarity not as a rhetorical ideal but as a practical tool for crisis management. AggregateEU, the mechanism for demand aggregation and joint gas purchasing, became the flagship expression of this ambition.

With the 2024 energy sector reforms, Regulation (EU) 2024/1789 subsequently integrated AggregateEU as a voluntary, market-based mechanism into the long-term governance of the EU gas market.

Regulation (EU) 2024/1789 creates a standing EU-level mechanism with which to aggregate gas demand from EU companies and Energy Community participants, organize tendering rounds to collect offers from international suppliers, and match aggregated demand with supply through a centralized platform (Art 42). The mechanism is characterized by the voluntary participation of buyers (Art 43), and there is no mandatory minimum demand aggregation, as existed formerly in 2022 Regulation with the 15% storage-related obligation.

The strongest element of centralization rests in the platform employed for AggregateEU, called PRISMA, which collects demand from participating buyers, publishes tendering rounds, and receives supply offers from international sellers. This platform mostly performs non-binding matching between buyers and sellers but does not negotiate contracts and does not intervene in pricing (Art 44). The process goes ahead if buyers and sellers, after direct bilateral negotiation, subscribe to a contract (Art 45). EU institutions are not involved in the process, which protects the commercial autonomy of operators and avoids competition-law concerns. The openness of this mechanism is also guaranteed, as the participation is open to Energy Community Contracting Parties, to their gas undertakings, and to international suppliers (Art 46). This contributes to supporting energy security at the regional level, and potentially to broadening EU market weight, but the overall functioning of this mechanism is left to the economic and strategic considerations of the operators.

Other provisions pursue the objective of energy security through price stability for the sector. For example, transparency and market monitoring are ensured by the publication of aggregated demand volumes, the visibility of tendering rounds, the monitoring by the EU Agency for the Cooperation of Energy Regulators Regulation (ACER) and the European Network of Transmission System Operators for Gas (ENTSOG), together with reporting obligations to the Commission (Arts 26, 27, 64 Regulation (EU) 2024/1789). This should ensure that AggregateEU

plays a role in the reduction of price volatility and should discourage and prevent member states or companies from outbidding each other.

The respect for the European competition law framework requires that demand aggregation and joint purchasing must not distort competition, so buyers may coordinate only within the limits of EU competition rules. The Commission can issue guidance or intervene if risks arise, in conformity with its role of antitrust monitor (Art 49). This is why the Regulation avoids mandatory joint purchasing or Commission-led negotiation.

Initially, the Commission portrayed AggregateEU as a success (EC, 2023b). Early rounds of demand aggregation exceeded mandatory levels, suggesting that market actors valued the opportunity to coordinate purchases, especially on a voluntary basis. Over time, enthusiasm waned (EC, 2023a). As gas prices stabilized in 2023–2024, the volumes aggregated and matched through the platform declined. The Commission even abandoned the idea of forming purchasing consortia (groups of companies that would negotiate collectively) because of resistance from member states, concerns about competition law, and the broader political unease surrounding supranational procurement. This change in approach is telling: it reveals how far the EU still is from a fully integrated energy market and how cautious both governments and companies remain about pooling sovereignty in this domain.

Despite these limitations, AggregateEU might have indeed contributed to stabilizing prices during the crisis. It helped match supply and demand more efficiently and supported smaller companies in accessing international energy markets, but the mechanism did not amount to a major policy reform. It functioned more as a pragmatic crisis tool than as a step towards genuine strategic autonomy. Regulation (EU) 2024/1789 transformed AggregateEU from a crisis tool into a permanent, voluntary, market-based mechanism for aggregating gas demand, matching buyers and sellers. It is a facilitative instrument, not a supranational procurement authority.

Ultimately, AggregateEU embodies the EU's broader struggle to reconcile ambition with political reality, illustrating the limits of what can be achieved without deeper structural integration. The platform remains a useful instrument, but it falls short of transforming the EU's energy governance. AggregateEU is thus less a leap towards strategic autonomy than a facilitation instrument, constrained by the enduring fragmentation of the Union's energy landscape.

Common purchase of vaccines during the COVID-19 pandemic

The case of vaccines represents another case worthy of analysis for the purpose of understanding the varieties of common procurement and

common purchase clauses and their effects in relation to the EU's strategic autonomy. During the pandemic, the Union managed to act as a single pooler of demand and single purchaser of vaccinations, to ensure that member states had equitable access and stronger negotiating power. This is the strongest form of integration in the context of procurement ever experienced at the Union level. Its foundation was set in the centralized Vaccines Strategy of June 2020 (EC, 2020a). This initiative went beyond individual purchasing, organising a common purchasing approach with a 'Team Europe', to ensure equal access and avoid a 'vaccine scramble' among member states. In this context, the Commission negotiated with vaccine manufacturers on behalf of the member states.

Using Advance Purchase Agreements (APAs), the EU signed 11 contracts with 8 manufacturers, securing up to 4.6 billion doses at a total cost of roughly €71 billion. The APAs worked at an intermediate level, as a risk-sharing mechanism, where the EU provided upfront funding (down payments) to support development and manufacturing in exchange for the right to buy doses. In this context, the Commission acted as a bridge between companies and governments for contract implementation: the Commission negotiated authorization and purchase and bought doses on behalf of the member states through the contracts. The member states acted as the manufacturers' counterparties for the fulfilment of the contracts, being supported by the Commission, in the implementation of the same.

Initially set up in 2013, as an innovative instrument in preparation for a pandemic, joint procurement procedures aimed to secure equitable and cost-effective access to medical supplies for participating EU Member States during serious health crises (Decision 1082/2013/EU). With the outbreak of the pandemic, indeed, the Commission issued a Guidance on how to use existing tools to satisfy increased demand for similar goods and services while certain supply chains were disrupted, and foremost, how to tackle the limited purchasing power of individual member states (EC, 2020b; Baratta, 2020). In the case of vaccines, this led to a successful example of European solidarity (McEvoy & Ferri, 2020).[7]

7 From a different perspective, beyond the scope of this chapter, some of the negotiations regarding one vaccine, conducted personally by President von der Leyen, attracted criticism on grounds of transparency, leading to the 'Pfizergate' (Alemanno, 2025). Furthermore, the limitations of this process have been dissected (from the viewpoint of financial accountability) by the Court of Auditors, in a report showing that the Commission had limited leverage to overcome supply challenges. Additionally, the size of its impact on the ramp-up of vaccine production was unclear (European Court of Auditors, 2022).

4. Conclusion: Is the Union Reaching the Goal of Strategic Autonomy and the Pursuit of European Public Goods?

This chapter has assessed examples of common or joint procurement tested by the Union in recent crises, namely defence instruments, but also gas and vaccines procurement rules. As the analysis has shown, the cases reveal different extents of 'centralization' depending on the cases considered. AggregateEU and the common purchase of vaccines represent the two opposite ends of a spectrum of common procurement models, going from a non-binding cross-matching platform, with the platform itself being the most centralized instrument (i.e. gas), to a mechanism of common pooling of demand and facilitated purchase through a single negotiator, the Commission (i.e. vaccines).

The most recent examples of EU common procurement are found with defence policy, with instruments like SAFE, a scheme for the financing of expenditure of products and services, where joint procurement requires the participation of at least two member states, and entails a European preference of at least 65% in the sourcing rule. This 'buy European' clause is a tool to counter a consolidated situation of dependence from external providers, a fact undermining the strategic autonomy of the EU. As to governance, the SAFE Regulation was built on the legacy of the crisis measures adopted since the pandemic, e.g. loans are disbursed through national plans, strengthening the role of the Commission and of national executives. Overall, SAFE aims to strengthen the European Defence Technological and Industrial Base (EDTIB) and interoperability. However, a significant part of this increase in defence expenditure is planned to take place at the domestic level, leaving the question of financing defence as a genuine European Public Good unresolved.

Some observations can be made on these attempts to enhance strategic autonomy at the EU level. First, during crises, new instruments are tested, and, in some cases, these models can become standard if they are perceived to be successful, this was the case happened with gas and vaccines. Second, the instruments vary significantly, from maximum centralization (vaccines) to mere coordination and correction of price instability (gas). In the case of defence procurement, current rules represent the effort towards interoperability of traditionally discrete national defence systems. Third, the differences between instruments can be explained by the diversity of the market sectors considered, as well as from both a constitutional, i.e. Treaty, and a regulatory perspective. Indeed, both Treaty provisions and the 'common' institutional and regulatory frameworks differ significantly across the concerned policy areas. A fourth point to be made about these different examples, varying from coordination to common procurement

and pooled demand, concerns the different salience or sensitivity of the 'goods' considered (defence, energy, or vaccines) in relation to core government powers. This also explains the changing attitudes of member states towards a different role of supranational institutions and agencies, in the contexts considered. For example, when the Commission was negotiating a Covid-19 vaccine for member states, there was no preexisting vaccine available on the market. In contrast, defence is a domain expressing a core state function and prerogative, where state strategic interests find entrenchment (Caranta, 2023).

To conclude, this chapter has analysed the variety of EU funding instruments designed under the heading of common or joint procurement, which show promise in the ever-important sector of defence. More precisely, common procurement provisions and their interconnection with funding mechanisms represent one of the avenues in which the European Union could experiment with forms of 'pragmatic federalism', as advocated recently by Mario Draghi (2026), creating new forms of cooperation across European companies, leading to strategic interdependencies; all in all, this is a right step in supporting the Union's strategic autonomy. The same applies to the 'buy European' clause, which features prominently with these joint procurement instruments. What is clear is that the European Union's evolving geopolitical context creates tangible risks to European integration, economic competitiveness, and even the continent's physical security. These are not threats which can wait for a reform of the Treaties. It is therefore of paramount importance that the Union can find new solutions from the existing toolbox, which can be interpreted to meet both contemporary and future challenges.

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Section V

Financing Growth Through Savings, Investment, and Capital Markets

This section examines how Europe can mobilize capital to support growth and innovation in a changing global environment. The Savings and Investment Union (SIU) is presented as a central strategy to redirect Europe's abundant savings towards productive domestic investment, while mapping how to how to overcome structural fragmentation in Europe's financial system by removing persistent inefficiencies and creating regulatory oversight of financial infrastructures.

Unlocking Capital for Europe's Future

Daniel Kapp and Laura Parisi *

Abstract

This chapter examines the development of European capital markets and assesses the policy priorities for advancing the Capital Markets Union as an integral part of the Savings and Investment Union agenda. It identifies three structural bottlenecks along the investment lifecycle with significant potential to strengthen market depth and integration: mobilizing household savings, expanding cross-border investment, and enabling effective exit opportunities for innovative firms. Drawing on recent data and policy initiatives, the chapter examines how progress in these areas can enhance risk sharing, support investment and improve the allocation of capital across the European Union. It argues that, while no single reform can deliver a fully integrated market, coordinated action (particularly on savings mobilization, supervisory integration and innovation financing) can generate substantial progress, strengthening Europe's growth, resilience and competitiveness.

Keywords: Savings and Investment Union; Capital Markets Union; Financial Integration; Supervision.

1. Introduction

A well-functioning Capital Markets Union (CMU) is central to mobilizing Europe's high level of savings, supporting investment, and strengthening growth, innovation and economic resilience. By facilitating the efficient allocation of capital across borders and sectors, deeper and more integrated capital markets can complement bank-based financing, improve private risk sharing, and enhance firms' access to long-term funding (Arampatzi et al., 2025; Bats et al, 2020). They also expand households' investment opportunities, contribute to more sustainable retirement income, and strengthen the economy's capacity to absorb shocks (Cimadono et al., 2022). Against rising financing needs linked to the green and digital transitions, demographic change and geopolitical uncertainty, a

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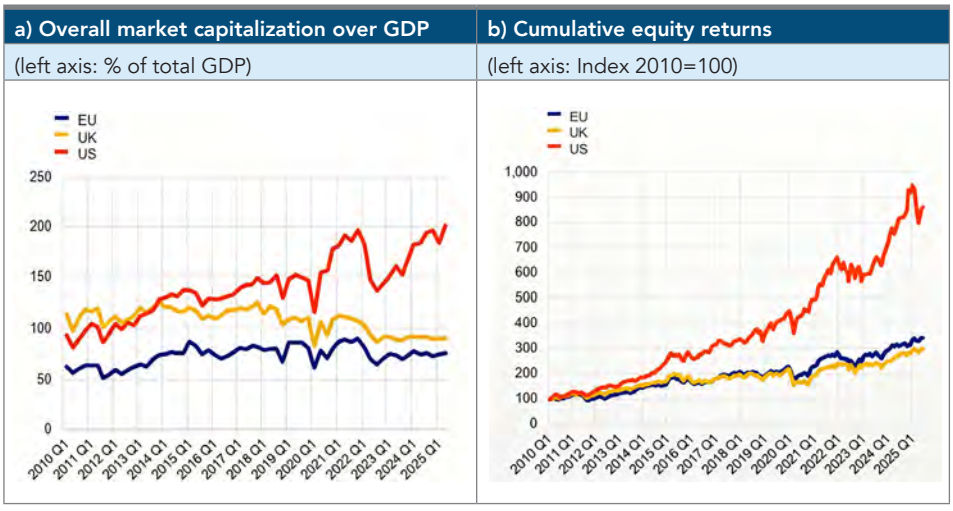
genuine Single Market for capital has become a strategic priority for the European Union (Nerlich et al., 2025). This assessment is echoed in the Letta and Draghi reports, which provide a convergent diagnosis of Europe's capital markets and stress the need to deepen CMU as a prerequisite for financing strategic priorities, strengthening competitiveness and enhancing economic resilience.

2. Setting the Scene: Europe's Capital Markets and Their Potential

Despite high aggregate savings and a diversified financial system, European capital markets remain relatively smaller, less deep and less integrated compared with other advanced economies, especially the US. Total market capitalization in the EU amounts to less than 80% of GDP, compared with around 200% in the United States as of the second quarter of 2025, with the divergence having widened markedly over the past decade (Figure 1a). This gap 'partly' reflects differences in equity market performance, as returns in the United States have consistently outpaced those in Europe and the United Kingdom (Figure 1b). Additional indicators point to limited cross-border integration within EU capital markets (European Central Bank [ECB], 2024). Together, these observations suggest that Europe's strong savings base is not yet fully translated into deep, integrated, and dynamic capital markets.

Figure 1 Capital market depth in the EU, US, and UK



Source: Datastream, SDW, and authors' calculations.
Note: Figure a) The figure illustrates the evolution of market capitalization as a percentage of GDP across the sample period 2010 Q1 – 2025 Q2. Figure b) The figure reports the cumulative performance of the regional indices over the sample period 2010 Q1 – 2025 Q2. The series are indexed to January 2010 to facilitate comparability across variables with different units and scales.

This chapter argues that the remaining fragmentation of European capital markets reflects a set of structural frictions that operate along the investment lifecycle; when capital enters, expands and exits capital markets. Three interrelated levers are particularly important. The first bottleneck lies in the limited participation of household savings in capital markets, with portfolios remaining heavily tilted towards cash and deposits and relatively low exposure to equity and risk capital, constraining the supply of long-term funding. Second, persistent barriers continue to constrain the cross-border expansion and scaling of market activity. Third, weak and fragmented exit channels limit necessary equity financing, reduce expected returns for investors and dampen opportunities to scale-up businesses in Europe. Together, these frictions reinforce low market depth and limit the capacity of EU capital markets to support innovation, growth and risk sharing at scale.

The European Commission's Savings and Investments Union (SIU) action plan sets out a comprehensive roadmap to better channel savings into productive investment and strengthen EU competitiveness. The SIU strategy brings together the Capital Markets Union and Banking Union agendas and proposes a broad set of legislative and non-legislative measures at both EU and national level, structured around five pillars: citizens and savings, investments and financing, integration and scale, efficient supervision in the Single Market, and the competitiveness and integration of the banking sector (European Commission [EC], 2025a). Key initiatives include a European blueprint for savings and investment accounts, measures to boost supplementary pensions and financial literacy, targeted actions to deepen equity and venture capital markets, reforms to support securitization, and steps to remove barriers in trading, post-trading and fund distribution. The strategy also foresees progress towards more integrated supervision of capital markets. Importantly, it explicitly links SIU to Europe's strategic priorities, including defence, the green and digital transitions, and open strategic autonomy.

By reframing the objectives of Capital Markets Union and Banking Union under the broader Savings and Investments Union towards current European priorities, the strategy has led to renewed political impetus and strengthened the link between financial integration and Europe's current priorities. The strategy also effectively links financial integration to the EU's current priorities on competitiveness, security, innovation, and the green and digital transitions. This integrated narrative strengthens political ownership and clarifies the role of financial markets in mobilizing private capital to support Europe's strategic objectives. It also marks a shift away from earlier action plans characterized by extensive and fragmented lists of initiatives towards a more focused and outcome-oriented approach, thereby enhancing credibility and implementation prospects. The SIU

action plan also aligns closely with the 2024 statements of the Governing Council on CMU and of the Eurogroup, which similarly called for renewed momentum, clearer prioritization, and concrete progress on capital market integration (ECB Governing Council, 2024; Eurogroup, 2024; Eurogroup President, 2024).

Figure 2 SIU Action Plan

Category	Action	Publication
Citizens and savings	1. Retail investment strategy	May 2023
	2. EU savings and investment accounts	Sept 2025
	3. Financial literacy strategy	Sept 2025
	4. IORPs and PEPP review	Nov 2025
	5. Auto-enrolment, pension tracking systems and dashboard	Nov 2025
Investments and financing	1. Remove taxation barriers to cross-border investments	Ongoing
	2. Minimise burden when implementing listing act	Ongoing
	3. Securitisation review	June 2025
	4. EU VECA Regulation review	Q3 2026
	5. Support and facilitate VC exit	Q3 2026
	6. Support EIB initiatives (TechEU)	2026
Integration and scale	1. Report barriers in Single Market	April 2025
	2. Market integration package	Dec 2025
	3. Cross-border provision of funds	Dec 2025
	4. Review of shareholders rights directive	Q4 2026
Supervision	1. More integrated and efficient supervision	Dec 2025
Banking sector	1. CMDI	Legal text in 2026
	2. EDIS	Unclear
	3. Report on competitiveness of banking system in Single Market	Q3-4 2026

Source: Authors' elaboration on the Commission's communication (2025).
Note: The green dots represent actions for which a proposal has been published; the yellow dots represent actions for which a proposal is expected within the legislative cycle; the red dots represent actions for which it's unclear if and when a proposal will be tabled.

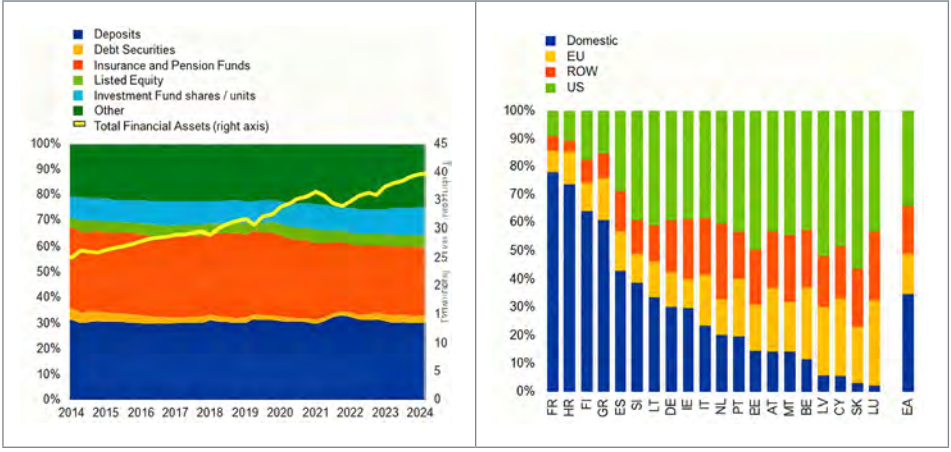
3. Entering Capital Markets: How to Unlock Citizens' Savings

A central lever for strengthening European capital markets is the more effective mobilization of household savings into market-based investment. Almost 40% of EU households' financial assets are held in cash and deposits,

compared with around 10% in the United States, reflecting the much lower participation of European savers in capital markets (Figure 3a). Exposure to risk capital — defined as the sum of direct holdings of listed shares and investment fund shares — has also only marginally increased over the past decade, with its share of total financial assets rising from 12% in 2014 to just 16% in 2024. Furthermore, when savings do reach capital markets, EA households largely finance non-EU companies. Looking at euro area households' direct and indirect (through investment funds) equity exposure, half of their holdings were issued outside of the EU (Figure 3b). While there's marked heterogeneity across EU countries, on aggregate, US capital markets capture 34% of EA equity holdings, comparable to the share of domestic equities (35%). This data highlights the considerable scope to strengthen capital market depth by better connecting Europe's savings base with long-term investment opportunities.

Figure 3 Households' financial assets

a) Households' financial assets (2024 Q4)	b) Households' equity holdings by issuer region (2024 Q4)
(left axis: % of total, right axis: EUR tn)	(left axis: % of total holdings)



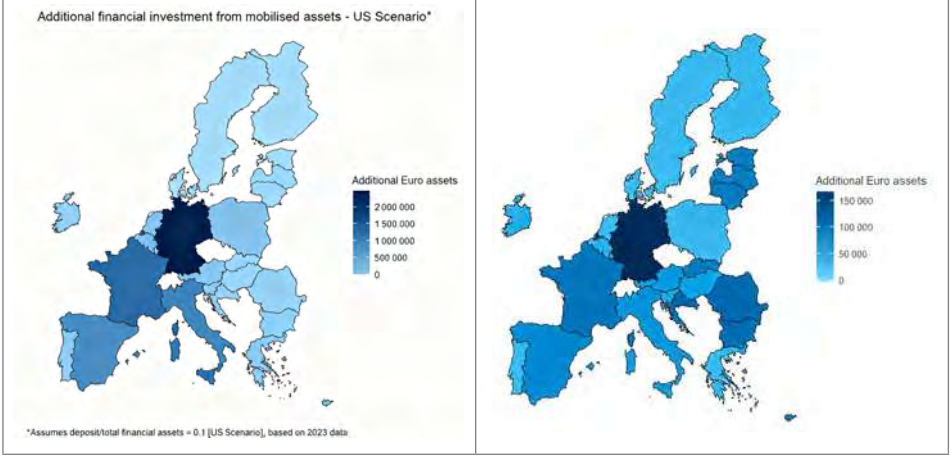
Source: Figure a) SDW. Figure b) SHS-S and authors' calculations.
Note: Figure a) Other includes in order of magnitude other equity, unlisted equity and loans. The last observation was taken in 2024 Q4. Figure b) The figure illustrates the distribution of listed shares (F.51) held by EA households (S.14, S.15, and S.1MU) by issuer region for the 20 Euro area countries at the end of Q4 2024. The dataset includes only listed shares issued by non-financial corporations (S.11), and deposit-taking corporations excluding the central bank (S.122) attained by households directly, by purchasing shares in the secondary market, or indirectly via the purchase of investment fund shares.

Unlocking even a fraction of household savings for market-based investment could materially strengthen capital markets, ultimately supporting economic growth. Counterfactual analysis shows that if EU households were to align their deposit holdings with those observed in more market-oriented systems, such as the United States or Sweden, between EUR 6–8 trillion of existing savings could be redirected into long-term investments (Figure 4a). Looking at annual flows, reallocating household savings in line with US patterns could mobilize up to EUR 150–350 billion per year for capital markets (Figure 4b). Such amounts are economically meaningful, as they could significantly contribute to fill the estimated annual investment needs for the green and digital transitions (estimated between EUR 800bn and 1tn). Beyond macroeconomic benefits, greater participation in capital markets would allow households to build wealth more effectively over the life cycle, ease pressure on public pension systems, and reduce long-term fiscal strains.

National experiences demonstrate that well-designed savings and pension products can play a decisive role in channelling household savings into capital markets, offering valuable lessons for broader EU initiatives. National experiences in countries such as Sweden, Denmark, and the Netherlands show that targeted savings and pension products, supported by appropriate tax incentives, low fees, simple design and life-cycle investment strategies, can significantly increase retail participation in capital markets. These products often combine ease of access, flexibility, and automatic portfolio rebalancing, while maintaining a clear long-term investment horizon. By contrast, initiatives characterized by complex rules, limited investment choice or an excessive focus on capital guarantees have delivered weaker outcomes. Building on these lessons, EU-level action could support convergence towards effective national models, whether through common design principles, product labels or coordinated incentives, while preserving sufficient flexibility to reflect national pension and tax systems.

Figure 4 Mobilizable deposits in a counterfactual exercise

a) Households' financial assets, stocks (2024 Q4)	b) Households' annual savings (2024 Q4)
(EUR mln)	(EUR mln)



Source: SDW and authors' calculations.
Note: Figure a) The figure displays the additional investments that could be obtained if EU households allocated their financial assets similarly to the US ones (with the same deposit-to-financial asset ratio). In this hypothetical scenario, up to EUR 8 trillion could be redirected into long-term, market-based investments. Figure 4a also shows that the concentration of mobilizable deposits is heavily skewed towards a few key countries: Germany, which represents 31% of the total mobilizable financial assets in the EU, followed by France at 17.5% and Italy at 12.9%. Figure b) The figure displays the additional investments that could be mobilized every year if EU households start allocating their annual savings following the same deposit-financial asset ratio of US households. In this case, the concentration of mobilizable annual savings across countries is even stronger: almost 50% of the shifted assets could come from Germany, followed by France with 18%, in light of their relatively higher levels of annual savings.

Recent initiatives on savings accounts represent an important and welcome step to mobilize household savings and facilitate their entry into capital markets. The Commission's Recommendation on Savings and Investment Accounts (SIAs) provides a common EU framework encouraging Member States to introduce simple, accessible and low-cost savings wrappers, building on successful national models (EC, 2025b). The initiative rightly emphasizes ease of access, simplified tax compliance, portability across borders and flexibility in national design, while recognizing taxation as a key driver of participation. By promoting a standardized set of core features and monitoring uptake across Member States, the SIA initiative has the potential to lower frictions for retail investors, foster cross-border investment and support deeper capital markets, while respecting national prerogatives in taxation and pension systems.

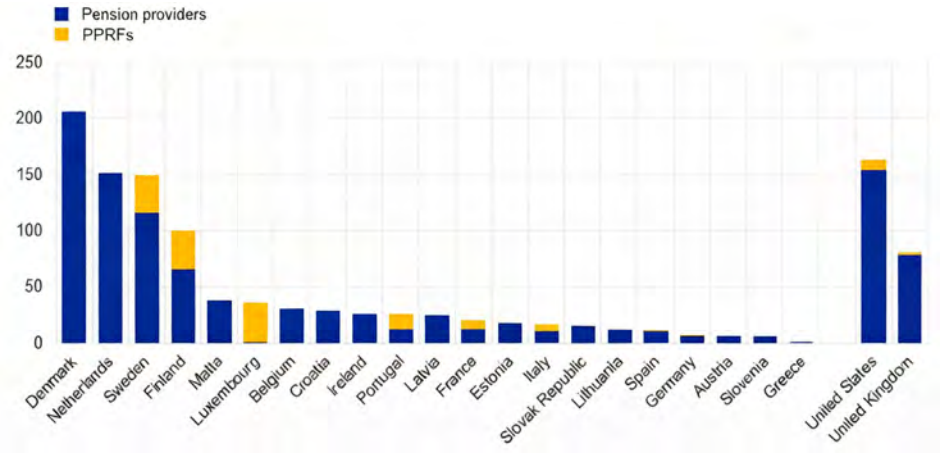
In parallel, the Competitiveness Lab initiative on a 'Finance Europe' label

highlights a complementary approach focused on steering savings towards European firms and strategic priorities. The proposal put forward under the Spanish-led Competitiveness Lab envisages an EU label for financial products that invest a substantial share of assets in European companies, potentially benefiting from favourable tax treatment at national level (Finance Europe, 2025). By explicitly linking retail savings to investment in the European economy, the initiative addresses concerns that increased retail participation may otherwise continue to finance non-EU markets. Compared with the Commission's more flexible SIA blueprint, the Finance Europe label adopts a more targeted approach, including criteria on asset allocation and a strong emphasis on supporting EU firms.

Taken together, the SIA framework and the Finance Europe label are complementary initiatives, but their success will hinge on consistency in implementation and a strong focus on simplicity and low costs for retail investors. The SIA Recommendation provides a broad, flexible blueprint aimed at lowering entry barriers and attracting new savers, while the Finance Europe label adds political visibility and a clearer link between household savings and investment in the European economy. At the same time, differences in design (such as more constraining asset allocation requirements or lock-in features under the label) risk creating complexity and limiting take-up if not carefully aligned. Experience from successful national schemes and recent ECB analysis underline that simplicity, low costs, and intuitive design are decisive in attracting new retail investors, while overly complex or restrictive features can deter participation.

Pension systems constitute a second key channel for mobilizing long-term savings, but their contribution varies widely across member states. European retirement systems typically rely on a three-pillar model: a first pillar of public, pay-as-you-go pensions; a second pillar of occupational pensions; and a third pillar of voluntary individual savings. While public pensions remain the dominant source of retirement income in many countries, demographic trends are placing increasing pressure on their sustainability. At the same time, participation in funded occupational and personal pension schemes remains uneven. Only a limited number of member states display levels of pension fund assets relative to GDP comparable to those in more market-oriented systems (such as the US), while in most countries assets earmarked for retirement remain modest and public pension reserve funds (PPRF) are limited.

Figure 5 Assets earmarked for retirement (2024 Q4)



(left axis: % of GDP)

Source: Author's elaboration on OECD data.
Note: Data refer to the end of 2023 for public pension reserve funds in Germany and Italy. Data refer to the end of 2024 in all the other cases. Reserve funds in Italy are private entities with legal personality having the primary task of running mandatory, first-pillar pension schemes, each for a certain category of self-employed workers. Despite their private status, these funds are included among public pension reserve funds in this figure as they share some similarities with them.

The Commission's recent pension package aims to strengthen supplementary pensions and enhance their contribution to long-term investment, complementing initiatives to mobilize retail savings (EC, 2025c, 2025d). The package combines legislative revisions of the Pan-European Personal Pension Product (PEPP) and the IORP II framework on the activities and supervision of institutions for occupational retirement provision with a Recommendation on pension tracking systems, dashboards and a clarification of the prudent person principle to remove undue barriers to equity investment. Two key elements in this package include facilitating auto-enrolment in supplementary pensions and enhancing portability and cross-border access. Together, these measures are intended to increase participation in funded pensions, improve retirement outcomes, and channel more long-term savings into capital markets, in a manner complementary to savings and investment accounts.

Overall, the pension initiatives provide a timely and coherent complement to broader efforts to unlock household savings, while respecting national prerogatives in pension design. The package addresses key frictions that have historically limited the role of supplementary pensions in Europe. Its largely enabling and recommendation-based approach reflects the national competence over pensions, while promoting

convergence towards effective practices observed in member states with strong funded systems. If implemented consistently and in coordination with savings and investment accounts, these measures can reinforce each other and strengthen the contribution of long-term institutional investors to capital market depth.

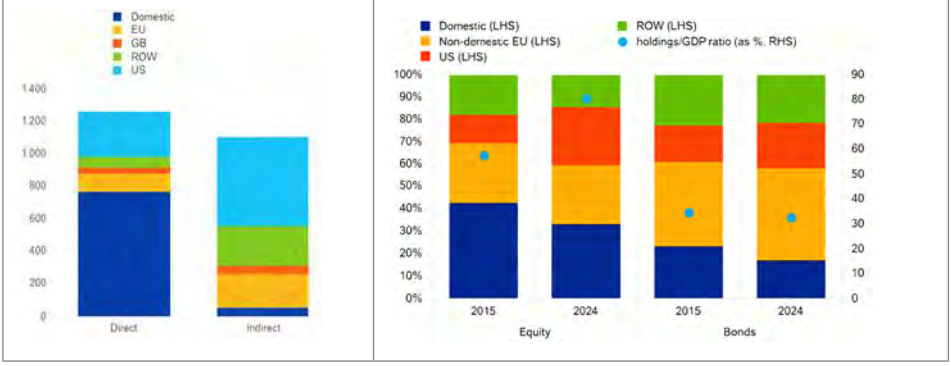
4. Expanding Capital Markets: How to Make Capital Flow Seamlessly in Europe

The ability of capital to flow seamlessly across borders — a defining feature of deep and resilient capital markets — is limited in Europe by persistent cross-border frictions, resulting in relatively low levels of intra-EU investment. When households invest directly in securities, they display a strong home bias, with portfolios strongly tilted towards domestic assets and limited intra-EU diversification. By contrast, when households invest indirectly through investment funds, a significant share of capital is channelled outside the EU, particularly towards the United States, as fund portfolios increasingly reflect global allocation strategies rather than intra-EU diversification (Figure 6a).

This pattern is also reflected in the balance sheets of non-bank financial institutions (NBFIs), whose role in financial intermediation has expanded markedly over the past decade. Between 2015 and 2024, the size of the EU NBFI sector increased from around 92% to more than 110% of GDP. Over the same period, however, the share of intra-EU cross-border exposures remained broadly stable at around 30%, while extra-EU exposures increased significantly (Figure 6b). This dual development suggests that, while European savings are increasingly intermediated through capital markets, structural barriers continue to discourage intra-EU diversification and the emergence of truly pan-European investment strategies.

Figure 6 Cross-border holdings

a) EA Households' equity exposure (2025 Q2)	b) EU NBFIs holdings by issuer location
(left axis: EUR bn)	(left axis: % of total, right axis: holdings / GDP, in %)



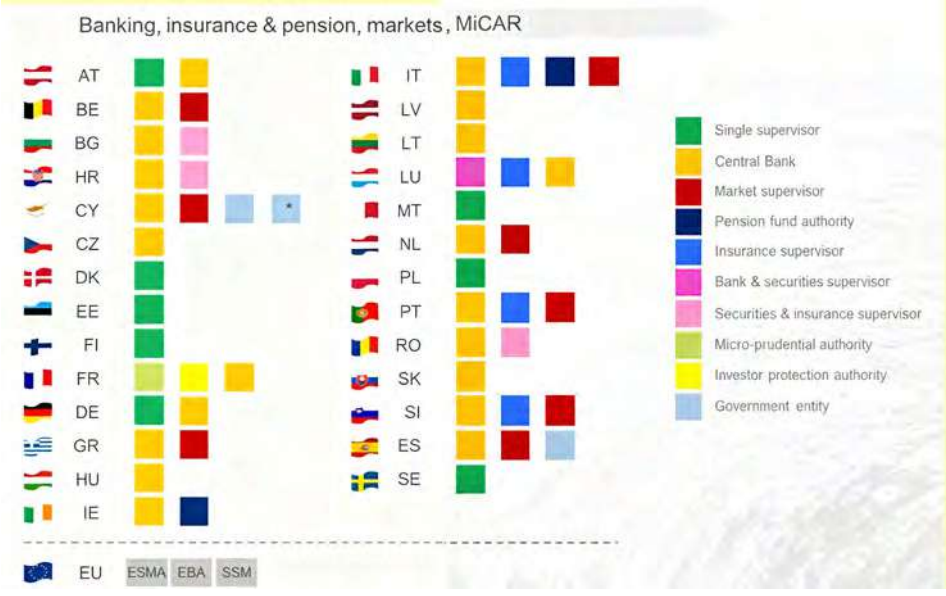
Source: Author's elaboration on SHS-S data.
Note: Figure a) The figure illustrates the distribution of listed shares (F.51) held by EA households (S.14, S.15, and S.1MU) by issuer region for the 20 Euro area countries at the end of Q4 2024. The data is further split into the means of attaining the equity: directly by purchasing shares in the secondary market, or indirectly via the purchase of investment fund shares. The dataset includes only listed shares issued by non-financial corporations (S.11), and deposit-taking corporations excluding the central bank (S.122). Figure b) The figure displays the equity and bond holdings of EU non-bank financial intermediaries, broken down by asset class (equity vs bonds), location of the issuing entity (domestic, non-domestic within the EU, US, rest of the world). The figure also shows the overall holdings of EU NBFIs over EU GDP. The NBFI sector is defined as money-market funds, investment funds, insurance companies, pension funds and other financial intermediaries.

Strengthening cross-border integration is essential to unlock scale, deepen liquidity and improve the allocation of capital within the Single Market. Greater cross-border integration would allow firms to access a broader investor base, support the development of deeper and more liquid markets, and strengthen private risk sharing across member states. Achieving this requires addressing a range of structural barriers that continue to fragment markets, including differences in market infrastructures, legal and operational frameworks, investor access and disclosure practices, as well as persistent home bias in investment behaviour (Letta, 2024; Draghi, 2024). Where full harmonization is not feasible, the introduction of a voluntary '28th regime' could provide a pragmatic way to foster greater convergence by offering a single, EU-wide framework alongside national regimes, thereby facilitating cross-border activity. A welldesigned 28th regime could offer firms an optional, fully harmonized EU-level framework, thereby deepening capitalmarket integration and strengthening the Single Market. By creating a trusted European 'brand' with standardized procedures and investorfriendly rules, it would lower compliance costs, enhance access to finance, and allow

companies of all sizes to scale more easily across the EU.

A source of fragmentation lies in the organization of capital market supervision in Europe, which is highly fragmented along national lines. Capital market supervision in Europe is exercised by 52 authorities operating under a wide range of institutional models, mandates, and supervisory practices (Carmassi et al., 2026; Véron, 2025). While a Single Rulebook exists, its application and enforcement vary significantly across jurisdictions, reflecting national discretions, heterogeneous supervisory cultures and differing enforcement tools. This fragmentation can be problematic for large and cross-border market participants, which operate on a pan-European basis but remain subject to multiple national supervisors. Such a decentralized framework weakens the oversight of cross-border risks, raises compliance costs for firms active in several member states, and acts as a deterrent to cross-border activity and consolidation, thereby constraining the expansion and integration of EU capital markets.

Figure 7 National and European supervisors for banks, insurance companies and pension funds, capital market players and entities regulated under the Markets in Crypto-Assets Regulation (MiCAR)

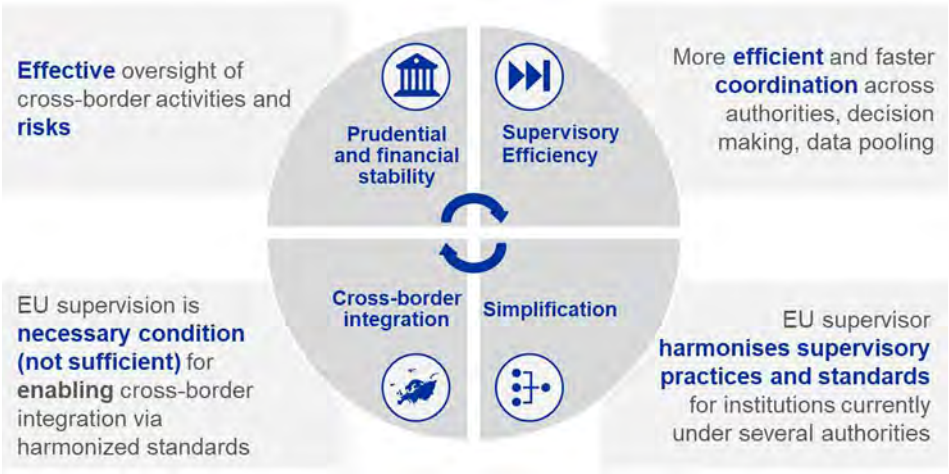


Source: Carmassi et al. (2026, forthcoming).

More integrated supervision would improve supervisory effectiveness, efficiency, and simplification, while acting as a key enabler of market integration (Figure 8). By aligning supervisory responsibilities with the

cross-border footprint of capital market players, integrated supervision would strengthen supervisory effectiveness, allowing risks to be identified and addressed from a system-wide perspective rather than through nationally fragmented lenses. At the same time, pooling scarce expertise and reducing duplication across authorities would enhance supervisory efficiency, particularly in highly technical and fast-evolving market segments. Integrated supervision would also contribute to simplification by reducing the number of supervisory interlocutors, limiting overlapping requirements and increasing predictability for firms operating across borders. Finally, and critically, it would represent a necessary — though not sufficient — condition for deeper capital market integration, by ensuring consistent application of the Single Rulebook, reinforcing the level playing field, and lowering supervisory barriers to cross-border activity and consolidation.

Figure 8 Benefits of integrated supervision of capital markets



Source: Carmassi et al (2026, forthcoming).

Integrated supervision should not be seen as a silver bullet for capital market integration, but as a pragmatic and effective way to remove unnecessary barriers within the current institutional framework. While deeper harmonization of legal frameworks, such as insolvency, company or tax law, would further support market integration, such reforms remain politically complex and difficult to advance in the near term. By contrast, strengthening EU-level supervision offers a feasible and impactful avenue to make tangible progress, ensuring more consistent application of existing rules, reducing

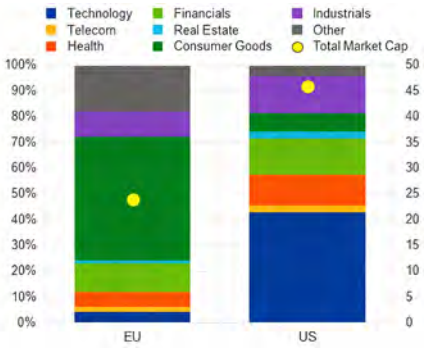
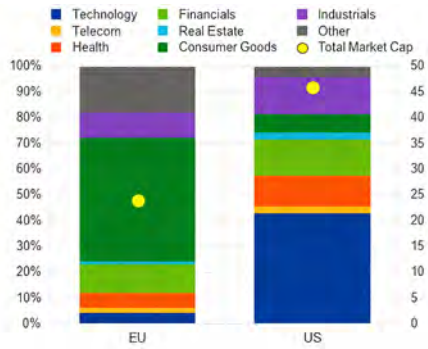
fragmentation and lowering supervisory frictions.

Complementary initiatives are though necessary to integrate the trading and post-trading landscape. These include the ECB's Projects Pontes and Appia, which aim to improve cross-border settlement efficiency and modernize EU post-trading and payments infrastructures, thus further supporting the expansion of capital markets across borders by reducing operational and technical frictions. Furthermore, the Commission's proposals aim to remove remaining barriers to cross-border integration, including in trading and post-trading activities as well as in the asset management and funds sector (EC, 2025e; 2025f). The proposals also seek to facilitate the adoption of new technologies in financial markets, notably distributed ledger technology in post-trade processes, alongside an adaptation of the regulatory framework (EC, 2025g). Taken together, these measures should help prevent market fragmentation, ensure sound and proportionate risk management, and promote a level playing field among market participants, ultimately enabling a more efficient cross-border allocation of capital.

5. Exiting Capital Markets: How to Channel Capital to Innovative Firms

Well-functioning start-up and scale up financing is a critical component of dynamic capital markets and a precondition for sustained innovation financing. The technology sector accounts for less than 5% of total equity market capitalization in the EU, compared with around 22% in the United States, reflecting a much smaller pool of listed high-growth firms and thinner exit markets for innovation financing (Figure 9a). This structural gap is mirrored in household portfolio composition: EU households' equity holdings are heavily concentrated in financial institutions and other traditional sectors, while exposure to technology is disproportionately achieved through investments in US markets (Figure 9b). Higher and more persistent returns in US technology equities further reinforce this pattern, encouraging savings to flow abroad rather than supporting the scale-up and exit of innovative firms within Europe.

Figure 9 Market capitalization and EA household holdings

a) Market capitalization by sector (2024 Q4)	b) EA household equity holdings by jurisdiction and sector (2024 Q4)
(left axis: % of total, right-axis: EUR tn)	(left axis: % of total, right axis: EUR bn)
	

Source: Datastream, SHS-S, CSDB and authors' calculations.
Note: Figure a) The two bar figures split market capitalization of the EU (27 country composition) and US using the Datastream sector classification in 2024 Q4. The sector 'Other' includes: basic materials, energy, utilities. Figure b) The figure illustrates the distribution of listed shares (F.51) held by EA households (S.14, S.15, and S.1MU) by issuer region for the 20 Euro area countries at the end of Q4 2024. The dataset includes only listed shares issued by non-financial corporations (S.11), and deposit-taking corporations excluding the central bank (S.122) attained by households directly, by purchasing shares in the secondary market, or indirectly via the purchase of investment fund shares. The sector classification was done by mapping NACE codes to the Datastream sectors in order to match the mapping in Figure a. The sector 'Other' includes all that do not fit the criteria of the seven shown sectors.

Taken together, the limited domestic supply of technology equities and weak exit opportunities reduce the attractiveness of EU capital markets for both issuers and investors, reinforcing structural gaps along the entire firm life cycle. These weaknesses are also linked to Europe's relatively small and stagnant venture capital ecosystem, which contrasts sharply with the deep, dynamic and well-funded venture capital (VC) environment in the United States. Limited availability of early-stage and scale-up financing constrains firms' growth from the outset, while shallow initial public offering (IPO) and mergers and acquisitions (M&A) markets weaken expected exit prospects for investors. This combination reduces risk-taking and dampens incentives to provide venture and growth capital, creating a self-reinforcing cycle in which firms struggle to scale domestically, and investors look abroad for innovation-driven returns. As a result, the financing gap emerges at the early stages of firm development and persists through maturity, ultimately undermining Europe's ability to retain high-growth companies and build globally competitive technology sectors, also

in terms of market capitalization and returns' attractiveness.

Addressing Europe's innovation financing gap requires simultaneously strengthening both the supply of and demand for growth capital, as progress on one side alone is unlikely to be effective. On the supply side, the limited availability of venture and growth capital, especially by institutional investors, constrains firms' ability to scale. On the demand side, firms' need for growth capital is constrained by weak scale-up incentives and limited exit prospects, which reduce the pipeline of investment-ready, high-growth companies. When IPO and M&A exit opportunities are shallow or uncertain, founders and investors adjust behaviour: in particular, firms may choose early exits, foreign listings or relocation to jurisdictions with deeper markets. Evidence from the International monetary Fund (IMF) and European Investment Bank (EIB) highlights how constrained European exit options and fragmented markets weaken the scale-up pathway and reinforce the 'scale-up gap' relative to the United States (Arnold et al., 2024; Fratto et al., 2024).

Beyond exit constraints, lower business dynamism and persistent structural frictions further weaken firms' growth ambitions and their demand for risk capital in Europe. A less vibrant entrepreneurial ecosystem naturally reduces the demand for venture and growth capital and weakens the feedback loop between innovation and finance (OECD, 2024; Biondi et al., 2024). These effects are reinforced by structural and policy frictions that lower the expected returns to scaling, including fragmented markets, higher compliance costs across jurisdictions, law fragmentation and limited opportunities to expand seamlessly within a truly integrated Single Market.

These factors interact in a self-reinforcing cycle that further constrains the development of Europe's innovation financing ecosystem. Weak exit opportunities curb firms' growth ambitions, a limited number of scale-ups reduces demand for growth capital, and subdued demand in turn hinders the development of deep venture and growth capital markets. Shallow exit markets depress expected returns, dampening the supply of risk capital and further restricting firms' ability to scale. Breaking this cycle requires coordinated action to broaden the investor base, strengthen exit channels and improve the risk-return profile of investing in European innovation, enabling both firms and investors to engage at scale across the full growth cycle.

Public financial institutions, notably the EIB Group, play a critical catalytic role in strengthening the supply of growth capital and crowding in private investment. By providing cornerstone investments, risk-sharing instruments and guarantees, the EIB can help de-risk early-stage and scale-up financing,

attract private investors, and support the development of new market segments. Such public-private partnerships are particularly important in areas where market failures are most acute, including deep tech, green innovation, and strategic technologies. Reinforcing the EIB's role alongside private capital can improve market depth, foster the emergence of larger venture and growth funds, and support a more robust financing continuum from early-stage investment to successful exit.

Recent EU initiatives signal progress in addressing innovation financing, but a substantial gap remains if Europe is to compete with global peers. Measures under the Savings and Investments Union, initiatives to strengthen venture capital and equity markets, and efforts to mobilize public funding instruments in support of strategic priorities all move in the right direction. However, the scale, depth and dynamism of Europe's innovation financing ecosystem continue to lag behind those of the United States, where abundant private capital, strong exit markets and integrated financial infrastructures reinforce each other. Closing this gap will require sustained and coordinated action to mobilize private savings, deepen capital markets and strengthen the full financing ecosystem for innovative firms, from start-up to global scale. A comprehensive approach to venture capital and innovation financing would be beneficial to simultaneously strengthen demand and supply, including by addressing late-stage funding gaps and improving firms' access to public equity markets through more attractive and less fragmented listing opportunities. The complementary role of public and private financing should also be explored, with public instruments — notably at EU level — acting as catalysts to crowd in private capital, scale up funds, and support innovative firms throughout their growth cycle.

6. Conclusion

European capital markets possess substantial untapped potential to support investment, innovation, and long-term growth. The analysis in this chapter shows that obstacles to entering, expanding, and exiting capital markets remain deeply interconnected: household savings are insufficiently channelled into market-based instruments; cross-border investment and scaling are hampered by fragmentation; and weak exit opportunities limit the financing and growth of innovative firms. These frictions reinforce one another, resulting in shallow markets, subdued returns for households and persistent capital outflows towards more integrated and dynamic financial systems, notably the United States. Addressing these challenges is therefore not only a financial sector objective, but

a broader economic imperative linked to Europe's competitiveness, resilience, and long-term prosperity.

The Savings and Investments Union provides a coherent and pragmatic framework to make tangible progress within existing institutional constraints, but delivery will be key. By combining initiatives to mobilize savings, strengthen long-term institutional investors, reduce cross-border barriers and integrate supervision, the SIU agenda addresses the main bottlenecks in a mutually reinforcing manner. Importantly, sustained progress will ultimately hinge on effective implementation and coordination across policy domains, with reforms to savings products, pensions, supervision, and innovation financing delivering their full impact only if pursued as part of a coherent, integrated strategy supported by a strong commitment at both EU and national levels. While deeper legal harmonization would further support integration, meaningful gains can already be achieved by consistently applying existing rules, simplifying market access, and aligning supervision with market realities. Complementary efforts to modernize market infrastructures and deepen innovation financing can further amplify these effects. If implemented decisively and coherently, these measures can help transform Europe's savings into productive investment, deepen capital markets, and support innovation at scale.

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Breaking the High-Saving, Low-Growth Trap: Europe's Savings and Investment Union

Giancarlo Corsetti, Atanas Pekanov, Giulia Sestieri *

Abstract

Europe is awakening to a hard truth: persistent underinvestment in innovation and productive capital is constraining growth, depressing returns on its abundant savings, and increasing geopolitical and financial vulnerabilities. The Savings and Investment Union (SIU) aims to reverse this trajectory by mobilizing and directing Europe's abundant savings towards productive domestic investment through deeper and more integrated capital markets. Investment needs linked to innovation, digitalization, defence, and the climate transition are rising, while productivity stagnates and demographics worsen. This chapter examines how a successful SIU can raise risk-adjusted returns for savers, reduce firms' cost of capital, and enhance cross-border risk sharing, delivering concrete benefits for European citizens. It also highlights how persistent global imbalances and geopolitical fragmentation amplify Europe's exposure to external shocks, as a significant share of its excess savings flows abroad, particularly to the United States.

Keywords: Savings And Investment Union; Capital Market Integration; Productive Investment; Global Imbalances; European Competitiveness.

1. Introduction

Looking at themselves in the mirror of the Draghi (2024a) and the Letta (2024) reports, and the numerous analyses that provide their economic and logical foundations, Europeans may have finally come to realize that they invest too little in innovation and productive capital. The result is that their economies grow less than they could do if moved to the technological frontier of the most dynamic sectors; that their high levels of savings bring them low returns,

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making them much less wealthy than they could have been; and that, given the recent geopolitical developments, by taking no action they are gambling with their future. This has clear costs for both the international role of the EU and the income and welfare of EU citizens.

Savings that flow out of Europe channel abundant financial resources to the rest of the world. A large part are specifically directed to the United States (US), sustaining its large government budget deficits and high level of private debt, and pouring money into US innovative investment and technology. From the vantage point of savers, what has long made investing in the US attractive are the deeper and more efficient capital markets, providing opportunities for high returns on investment and good diversification of risks, in addition to a large supply of global safe assets.

Reducing the imbalance between savings and investment in the EU and improving their allocation are central to the current European reform agenda, in particular completing the Savings and Investment Union (SIU). The SIU has both an internal and an external driver — together defining a state of urgency and need to act — discussed respectively in this chapter and the next.

The rapidly evolving international order is changing many of the pillars on which the European model rested: it undermines the institutions, policies, and rules fostering international cooperation and international law at regional and global levels. To maintain current social and economic standards requires innovation and investment in Europe. There may be many reasons not to want to replicate certain features of the US economic model, such as excessive wealth concentration or a reduced role for the welfare state. Nonetheless there is much to learn from a careful comparison, in particular regarding the sources of the persistent and large productivity gap between the two regions and the policies that could help bring Europe closer to the technological frontier.

With this premise in mind, this chapter focuses on a key cause of Europe's productivity gap: capital market fragmentation and its by-products, being low returns on investment, a high cost of capital, and limited risk diversification. We refer to this set of constraints as the 'internal driver' of the Savings and Investment Union (SIU). We synthetically reconsider the key benefits, at the aggregate as well as at the individual level, of reducing such fragmentation. A successful SIU must be assessed in terms of: i) improved income and living standard prospects, stemming from higher productivity; ii) reduced income risks, stemming from improved risk sharing for households and macroeconomic and regulation policies that insure firms against a self-inflicted downturn of the type experienced by Europe in 2010–2015; iii) geopolitical resilience of the Union, stemming from an efficient integration of private

and public resources in financing European public goods and providing social insurance. There is no SIU without these eye-level, daily benefits for European Citizens. The chapter touches upon the required financial texture, combining intermediaries and markets, that can connect Savings with Productivity Enhancing Investment. It also discusses the idea that Europe may currently be in a high saving - low investment - low growth doom loop – driven by widespread pessimistic beliefs on its future performance that may discourage capital accumulation and provide arguments for the inward-looking policies that generate further fragmentation.

In this respect, it is sometimes argued that there is a European Single Market for goods, less so for services, and not really for capital markets. While the ranking is seemingly correct, it fails to recognize that there can be no true single market for goods without integration in the other two dimensions. To operate at a European scale, firms need to be able to count on an integrated market for services — e.g., human capital with professional qualifications must be able to operate *sans frontier* — and have access to liquidity and financial support under similar conditions anywhere in the EU. Giving up on progress in services and financial market integration is bound also to undermine the single market in goods, at best freezing it at the status-quo level.

The SIU agenda is strongly interconnected with the current debates on global current account imbalances (see next chapter, this report). In its essence, the SIU is itself a project motivated by the need to correct the twin imbalances of Europe, of inefficiently low domestic investment and capital allocation, and excessive external surplus. There are obvious two-way feedback effects between global and EU level adjustments in financial portfolios, trade flows and, most crucially, relative prices, as well as asset and currency valuation.

2. Frustrating Status Quo: Abundant Savings, Low Returns

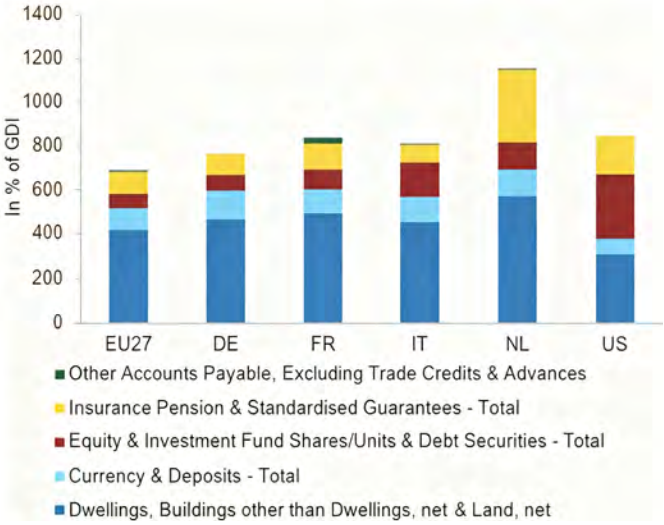
Why do Europeans earn so little from their savings? At the personal level, a large share of savings go into low-yield financial instruments (Figure 1). In 2023 EU households saved 14.79% of their disposable income (Eurostat, 2026), more than three times higher compared to 4.7% in the United States (Federal Reserve, 2025). Out of about €33 trillion in financial assets, 31% (€11.63 trillion) is in currency and deposits with limited returns, and 27% (€10.06 trillion) in insurance, pensions, and standardized guarantees; the corresponding shares in US households portfolios are, respectively, 12.1%

and 27.5% (European Parliament [EP] 2025). Equity and investment fund shares account for 36% of EU portfolios (€13.42 trillion), against 49.1% in the US. But these averages mask considerable differences across EU Member States. The share of deposits in household financial wealth is less than 30% in Germany, Sweden, and the Netherlands, but exceeds 70% in new member states from CESEE (EFAMA, 2024). This sizeable gap is to a large degree explained by differences in the level of per capita income, financial literacy, tax incentives, the size of funded pensions in national social security systems and, relatedly, the extent to which households expect large state pensions. Several measures included in the European Commission 2025 SIU package (European Commission [EC], 2025b) proposal could help reallocate household savings towards higher-performing financial instruments: expanding financial education, improving the transparency and accessibility of investment products, and creating attractive, pan-European investment vehicles, such as savings and investment accounts and European pension savings plans.

Despite higher savings, low yields in their portfolio allocation mean that Europeans are considerably less wealthy than they could have been, especially in comparison with the US. Since 2009, on average households' wealth has grown about three times faster in the US than in the EU (Draghi, 2024). It is well documented that wealthier households are typically able to earn higher returns, so that cross country comparisons are likely to be distorted if one ignores differences in the concentration of income and wealth (Fagereng et al., 2019; Fagereng et al., 2020).[1] That said, for most Europeans the earning prospects are not great. As recently stressed by Lagarde (2023), a key reason behind this is that retail investment is fragmented, and difficult and costly to access. Things may however change rapidly, should retail investment become more accessible, transparent and affordable, a point we touch upon next.

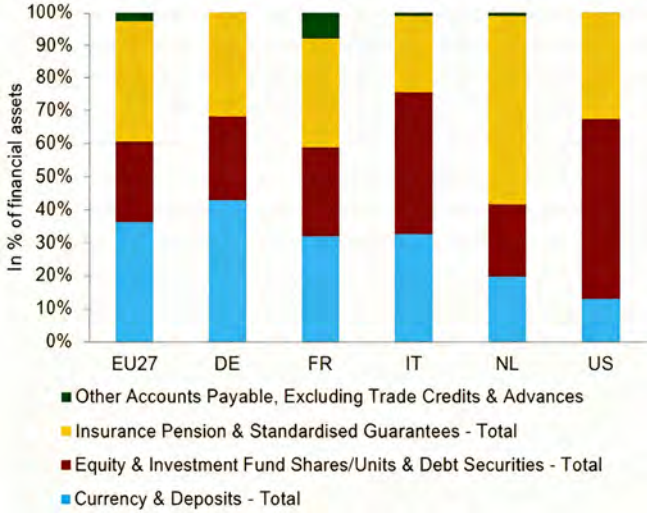
1 Since profits and equity prices are procyclical in the data (Guvenen, 2009), they tend to increase wealth inequality during economic expansions and also lead to much stronger total returns at the top of the income distribution, where also participation is much higher. This means that average total returns become even less representative during economic expansions.

Figure 1 Europeans save more of their income – Yet their financial assets are Lower



Source: Macrobond - OECD, AMECO.
Note: Non-consolidated data. Incomplete series have been filled in with the latest available data - EU27 with the year 2020 and 2022, US with the years 2022 and 2023, and IT with the year 2023. Buildings and Dwellings, for EU27, Cyprus and Malta missing.

Figure 2 Portfolio Composition of households – European households keep high stocks of currency and deposits



Source: Macrobond - OECD.
Note: Non-consolidated data. Incomplete series have been filled in with the latest available data, EU27 with the year 2020.

3. Not (Yet) a Common Market – Investment Should be Sans Frontiers

Europe's capital markets remain fragmented. As an example, in Europe there are 34 stock exchanges, compared to three in the US (Pekanov, 2024; Murphy, this report). The 34 European markets are disconnected and bloated, their structure based more on tradition, history, and, arguably, vested interests, rather than on current necessities and efficiency, and they are far more fragmented than what would be economically efficient. The Capital Markets Union (CMU) should at least provide an interconnected platform on which to trade financial securities across the EU, at a minimum guaranteeing that the same asset is bought and sold at the same price (i.e., that the law of one price holds), even if traded across different 'markets'. In practice, this minimal requirement rests on a complex pre-condition, including: common information on the securities traded and their prices, available to all (potentially) trading parties, common rules and supervision, the same treatment in terms of post-trading settlement infrastructure, and the harmonization of taxation of trading activities. On the positive side, there is a string of well-pronounced initiatives by EU Institutions. We can count 55 regulatory proposals and 50 non-legislative initiatives since 2015. On the negative side, despite these initiatives, progress on the CMU has remained both disappointing and demure (Pekanov, 2024).

Capital in Europe, with few opportunities to seek diversification and returns across the Union's national borders, leaves for the US. If we look again at the equity markets, more than 60% of households' investment in Europe targets national firms, i.e., it remains within the own country (Lagarde, 2024). Home bias in portfolio allocation is not uncommon and is a feature also in the US and elsewhere. What is damaging in the EU is that EU institutional investors not only invest too much within their national borders, but also much more outside the EU (in US markets) than they do in the rest of the EU. A particularly high and inefficient level of home bias is a byproduct of fragmentation, which creates high transaction costs for within EU cross-border trading, in turn leading to lower liquidity for investors, issuers, and stock exchanges.

4. Individual and Aggregate Benefits from Eliminating Fragmentation

Fragmentation hinders more than high returns, by limiting effective cross-border risk-sharing it has individual and macroeconomic costs. The EU has been and will likely be increasingly subject to large shocks that, even when global in origin, will have profoundly asymmetric effects across borders. A key lesson from the past crises is that a reasonable degree of risk sharing is not only a key

requisite to contain the economic and social costs of these shocks for the most exposed regions. It is also key to reducing their aggregate macroeconomic effects at the EU level, essentially containing disruptive hikes in precautionary saving, widespread bankruptcy, and drops in investment. In this respect, deepening the SIU would not be merely a financial reform, it would also serve as an additional macroeconomic stabilizer (Gossé et al., 2025).

It may indeed be argued that containing these problems has been one of the desirable effects of initiatives like NextGenerationEU, envisioned as a common EU instrument to enhance risk sharing and support recovery from the COVID19 pandemic. Risk sharing has both a public and a private leg, the latter resting on financial diversification. The NGEU has arguably strengthened, if only temporarily, the public leg, showing that EU governments can find the will and the way to respond to large common shocks. Against this, the private leg of risk-sharing is still vastly underdeveloped (Cimadomo et al., 2022) and thus requires urgent attention. Risk sharing is indeed an argument often used to motivate CMU-related proposals focused on equity markets, which are better able to provide shock absorption relative to debt markets. Equity investments have a higher risk, but developing a truly European equity market would allow investors to benefit from risk diversification, i.e. from dividends and capital gains originating in different regions and countries, ensuring income and consumption smoothing when idiosyncratic shocks hit a specific economy.

The history of the US capital market offers crucial lessons concerning the tangible macroeconomic benefits of capital market integration, and the costs of fragmentation**.** A recent contribution by D'Amico and Alekseev (2024) shows that, in the US, the deregulation of interstate banking combined with capitalmarket integration explains up to a fifth of the higher observed growth in GDP and population of American states in the South and the West. The implication for the EU is striking. Given abundant savings locked in national silos, lowyield deposits, and fragmented capital markets, the growth-enhancing potential of CMU integration might be significant. In light of the US experience, integrated capital markets across the EU, enabling savings to flow smoothly to investment opportunities in underinvested regions and sectors, can be expected to have non-negligible effects on productivity and growth. These effects would materialize through higher rates of capital accumulation, incentivizing innovation and the integration of new technologies in existing processes at a much faster pace. There is a tangible, concrete dimension in which the success of the SIU should be assessed, a point repeatedly stressed by research from the Bank of Italy (see Panetta, 2025). Not completing the SIU has an economic cost, ultimately weighing on incomes, employment, and the standards of living of EU citizens.

5. Connecting Savings with Productivity Enhancing Investment

Efficient intermediation is the not-so-dark matter that is essential to redirect S and raise I in the SIU. To start with, pensions systems and venture capital (VC) funds do too little to fund innovative European companies in a global context in which investment needs linked to innovation, digitalization, defence, and the climate transition are mounting. Most studies stress these two classes of intermediaries as the most important elements in the inner plumbing of a growth-enhancing financial system. The majority of pension systems in the EU are structured as pay-as-you-go systems, which, given demographic and productivity trends, find it increasingly difficult to grant reasonable benefits to workers. In 2022, on average, pension assets were only 32% of EU GDP, while in the US and UK this ratio is above 100% (Draghi, 2024). Again, the low average compared to the US masks cross-country heterogeneity, where a small number of European countries have a significant accumulation of pension wealth: the Netherlands, Denmark, and Sweden make up 62% of all EU pension assets (Draghi, 2024). The amount of resources that can potentially be mobilized to raise investment in innovation and productive capital through these intermediaries is currently quite contained. So is the domestic asset base EU pension funds can rely on: the stock market capitalization in the EU is only 30% of GDP, against 140% in the US. Compared to the social security giants, the size of venture capital is clearly much smaller. Their role is nonetheless comparable for the type of investment they facilitate. The insufficient presence of VC in the EU can be summarized in two statistics: first, between 2013 and 2023, annual venture capital investment in the EU averaged 0.2% of GDP, compared with a US average of 0.7% of GDP (Lagarde, 2024); second, around a half of the late-stage investment in EU tech companies is from outside of the EU (European Investment Fund [EIF], 2023; Fratto et al., 2024).

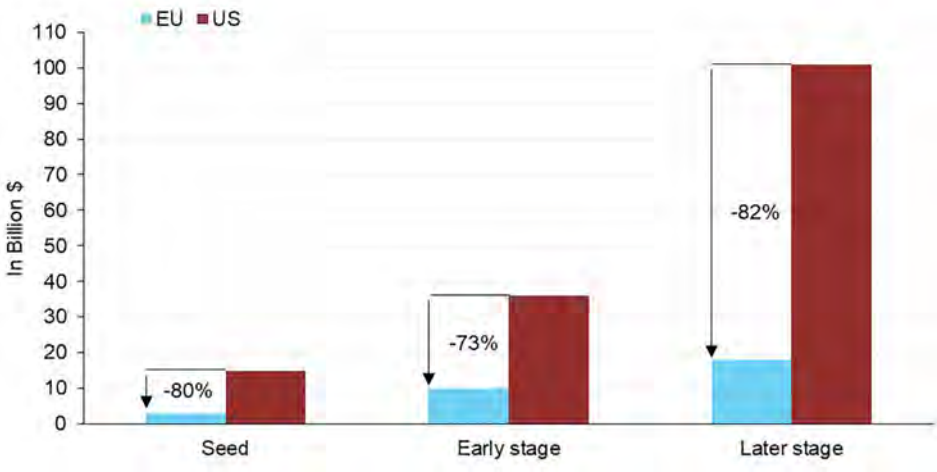
Some of latest European Commission initiatives related to the SIU try to boost pension and venture capital funds markets, recognizing their importance in financing innovative and high-growth companies. In particular, the 2025 pension package (EC, 2025c) proposes a set of measures to strengthen supplementary pensions to help citizens secure adequate retirement income while mobilizing longterm savings for investment. Simultaneously, the Commission is reviewing and planning reforms to the venture and growth capital fund framework. In early 2026 it launched consultations, seeking stakeholder input to address regulatory barriers and to prepare a review of the European Venture Capital Fund (EuVECA) Regulation.

The EU financial system is bank-centred, but the role of banks in corporate finance has been trending down (Beck et al., 2024; Gossé et al., 2025). Firms appear

to rely more on their own savings and cash holdings, and on corporate bonds. This is true both in the EU as in the US, but the EU financial market fragmentation creates an additional problem attributable to possible differences in the conditions and costs of credit across borders. Corporate borrowing rates are historically correlated with spreads in the sovereign bond market of the country where a firm is headquartered. Somewhat surprisingly, recent evidence (Chitu et al., 2025) suggests that this border effect is not detectable in corporate bond markets. In other words, corporate bond spreads are explained exclusively by firms' characteristics (e.g. sector, size) and the European corporate bond market appears to be as integrated as the US one. While requiring further scrutiny, this piece of evidence points to an evolution in financing that should be secured and promoted in the larger scheme of the SIU, if anything strengthening the complementarity between markets and intermediaries.

Because of specific EU regulations, EU banks also rely less on securitization than their US counterparts. Annual EU issuance of securitizations was at a mere 0.3% of GDP in 2022, while for the US it was at 4% (Draghi, 2024). Without overblowing the role of securitization in addressing the key SIU problems, it remains true that securitization can help banks to be more flexible, free up some capital, and take an additional position in risky projects. The securitization reform is among the first concrete legislative measures of the 2025 SIU package to have been presented and negotiated, with the Council of the EU reaching an agreed negotiating position in December.

Figure 3 Venture capital investment by development stage (2023)



Source: Draghi Report (2024).

Table 1 A Tale of two financial markets

Dimension of capital markets	EU	US
Equity market size	68%	170%
Bank assets to GDP	300%	85%
Households participating in the stock market	Around 20%	More than 50%
Non-financial corporations funding through financial securities	30%	More than 66%
Assets held in private pension funds and insurance companies	EUR 10.7 trillion	EUR 38.1 trillion
Venture capital market - total funds raised 2013-2023	EUR 130 billion	EUR 924 billion
Number listing exchange	34	3

Source: Pekanov (2024).

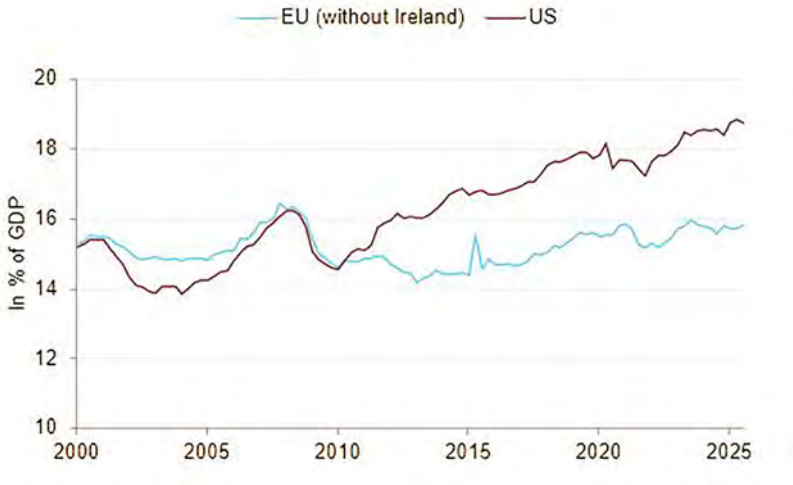
Claims that EU households are less prone to take risks than their US counterparts are not a constructive and reliable premise for the SIU. A more useful premise is that they do need to face the right conditions to enhance their portfolio diversification. Creating these conditions is the main goal of the mix of policy reforms and market developments, which are at the core of the SIU design, and indeed part of the list of recent proposals by the European Commission. There could be different intermediation and market structures joining the S and the I in the Union, shaping the risk-return profile of the set of available assets faced by households on the one hand, and the menu of borrowing opportunities for firms on the other. As this structure evolves, it may well be that the SIU will tend to reduce European savings, since improved risk diversification may weaken the precautionary motive for building up financial buffers. Even so, a successful SIU will raise investment, as more financial resources will remain inside the Union, and, most crucially, will be channelled to more productive and innovative firms more efficiently.

6. Breaking the High Saving - Low Investment - Low Growth Doom Loop

The disappointing mix of high saving and low returns at households' level maps into a highly inefficient misallocation of capital, with significant macroeconomic costs. At the aggregate level, since the Global Financial Crisis, EU aggregate productive investment has fallen well below its US counterpart. As shown by Figure 4, the gap was actually in favour of the EU before the GFC, then widened

at the time of the euro area sovereign debt crisis in favour of the US, and has remained large since (Draghi, 2024). Low investment is clearly a drag on Europe's competitiveness and innovation capacity.

Figure 4 Productive investment in the US and EU



Source: Own calculations, Macrobond, Eurostat, OECD.

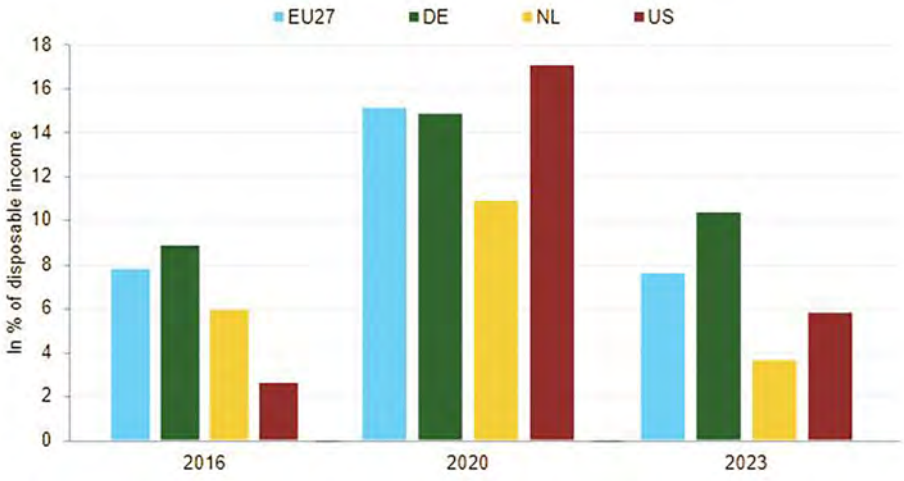
The doom loop may weight disproportionally on the innovation gap via R&D investment. In 2022, the US outperformed all major economies in total annual R&D expenditures, with €877 billion, or 3.1% of GDP. The EU only spent €355 billion (Draghi, 2024), or 2.1% of GDP. China's R&D expenditure was higher at 2.4% of GDP. The R&D spending gap vis-à-vis the US is not there in public spending, rather it is entirely driven by lower private spending in the EU. Market fragmentation, inefficient finance, and lack of scale are plausible candidate to explain the poor state of innovative productive investment in the EU. It is not far-fetched, however, to think that this state may also reflect a regime of pessimistic beliefs, giving rise to a stagnation trap: as argued by Benigno and Fornaro (2018), low current investment that creates expectations of low future productivity, can endogenously result in low current investment at firm level, self-validating the anticipation of a low growth environment that (arbitrarily) motivated low investment. In other words, the inefficient allocation of financial assets away from EU investment and pessimism about Union productivity and innovation prospects may well be rooted in beliefs than in hard fundamentals. Breaking this type of doom loop is a goal the SIU can achieve.

7. SIU as an Instrument for External Rebalancing

In total, aggregate EU savings account for around €1,200 billion per year (EC, 2025a). A considerable share of these leaves the EU economy every year, on average around 25% (around €300 billion) since 2015. In 2024 the outflow reached €437 billion (EC, 2025a). The lion's share of these savings consists of households' savings, which financial intermediaries redirect into foreign direct investments, bonds, and equities. The European current account surplus therefore provides ample capital to other countries, predominantly the United States, helping US companies achieve higher productivity and invest in innovation.

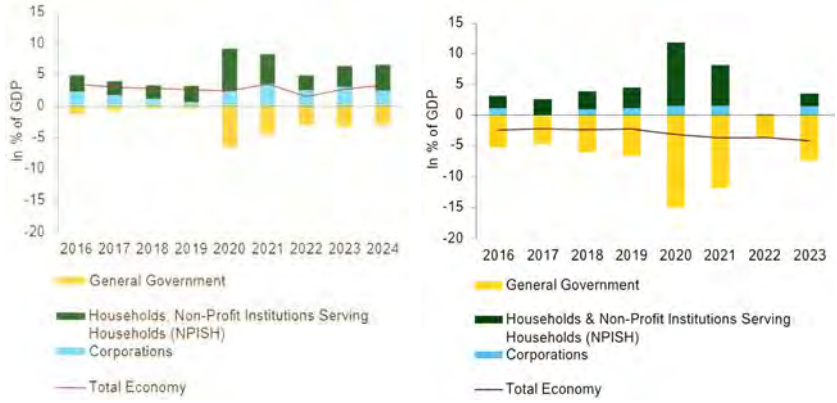
Starting from an already high level, the EU savings rate increased markedly during the pandemic and has remained at high levels since then (Figure 5). Wealth concentration matters. Much of the gross outflows of resources originates from the portfolio choice of high income groups, which also disproportionately contribute to the savings rate. This effect was strong during the pandemic, as the goods and services affected by lockdown measures made up a larger share of the consumption of the rich, who at the same time did not suffer a significant contraction of their income.

Figure 5 Savings rates in the EU and the US



Source: Macrobond - OECD, Eurostat.
Note: Note: DE, NL, and US shown as percentage of household net disposable Income, while EU27 is shown as financial asset transactions in percentage of gross disposable income.

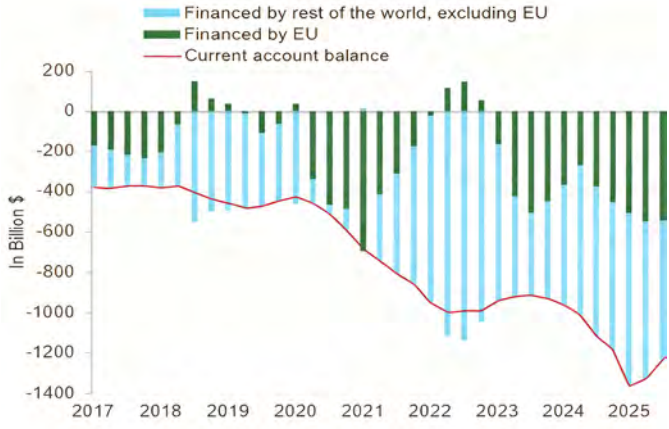
Figure 6 Net lending/borrowing by sector in the EU (panel A) and the US (panel B)



Source: Eurostat, Macrobond – OECD.
Note: US data available until 2023. Corporations = Sum of Non-financial and Financial Corporations.

After the pandemic, high savings by the private sector (predominantly households) have contributed to the net lending position of the EU, despite the considerable rise in EU governments' net borrowing (Figure 6A). This stands in contrast to US developments, where the higher US government borrowing has not been compensated by private sector savings. The deterioration of the US net lending position (Figure 6B) coincides with a rise in EU net financing accruing to the US, as shown in Figure 7.

Figure 7 European savings financing around 50% of US deficits



Source: Own Calculations, four-quarter-sum, Marcobond - BEA.
Note: This figure is approximated using four-quarter sums of US portfolio and other investment flows vis-à-vis the EU, excluding direct investment. The resulting series captures episodic net financial inflows from the EU to the US.

To gain insight into these dynamics, it is instructive to decompose the aggregate EU net lending by country of origin in the EU. Germany and France dominate the total aggregate net lending of the EU, constituting around 75% of the net lending in most years. Other countries lending above their share of EU GDP are Austria and Sweden, accounting for, respectively, 4.1% and 5.7% of the net lending (their GDP accounts for, respectively, 2.8% and 3.1% of EU GDP).

8. Conclusion

Against this backdrop, the SIU offers a rare alignment between Europe's internal structural objectives, as described in the previous sections, and the requirement of global rebalancing. Europe's persistent excess of savings over investment has translated into large and recurrent current account surpluses, reflecting both insufficient domestic investment opportunities and fragmented financial intermediation. By improving the allocation of savings and deepening capital market integration, the SIU aims precisely at relaxing these internal bottlenecks.

A structural shift towards higher and more productive domestic investment would strengthen potential growth while simultaneously narrowing the savings–investment gap. In macroeconomic terms, this would reduce Europe's structural reliance on external demand and capital exports. Such an adjustment would not be contractionary: rather than lowering savings mechanically, it would operate through a more efficient intermediation of existing savings towards productive uses within the Union.

From a global perspective, this rebalancing would contribute to a gradual and orderly reduction of the EU's current account surplus, facilitating a more symmetric adjustment of global imbalances (see following chapter, this report).

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Rebalancing at Home to Adjust Abroad: Europe's Savings and Investment Union in a New Global Order

Giancarlo Corsetti, Atanas Pekanov, Giulia Sestieri *

Abstract

Europe's steps towards the Savings and Investment Union (SIU) take place against the backdrop of a profound shift in the United States' approach to global economic relations. Rising US intolerance towards persistent global imbalances — centred on its large external deficit — is reshaping the geopolitical and financial landscape. Reviewing competing explanations for the buildup of these imbalances over recent decades, including the global saving glut, safe-asset scarcity, precautionary saving, and rising long-run US risk, we derive lessons for the SIU. A scenario analysis of potential disorderly financial adjustments highlights the vulnerabilities faced by euro area savers given their large cross-border assets and exchange rate exposure. These findings underscore the need to deepen and integrate capital markets, expand high-quality euro-denominated assets, and improve the risk-adjusted returns of European investments. In this respect, a successful SIU can strengthen Europe's resilience while contributing to more balanced and orderly global adjustments.

Keywords: Savings and Investment Union; Global Imbalances; External Adjustment; European Strategic Autonomy.

1. Introduction

Europeans are taking initial steps towards the Savings and Investment Union (SIU) in the context of a radical change in the approach to and management of international relations by the US. A key driver of this change is the sharp rise in United States (US) intolerance of an international, globally imbalanced, 'equilibrium' where: (a) the US systematically absorbs the large surpluses run by the rest of the world, in their view granting foreign countries the market space to

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pursue export-led growth and opportunities to appropriate much of the global manufacturing production, without much in return for the US; (b) other countries appropriate intellectual property, benefitting from the large US investment in innovation; (c) the (US) own national security is progressively eroded while other countries keep free-riding the US (costly) military commitment. While the current US 'grievance narrative' has many dimensions, the US external deficit plays a key role in it. We structure our analysis around it.

In this chapter, we offer a fresh perspective on the evolution of the US external and global imbalances, and their implications for the European Saving and Investment Union (SIU), contrasting two phases: the widening of global imbalances prior to the Global Financial Crisis (GFC), through the hyper-globalization period; and the post-GFC stabilization, without correction, of the large US deficit positions, in the context of a rapid shift in economic weight and risks across geopolitical regions. Through a synthetic critical overview of different explanations of the underlying causes (stressing the global 'saving glut', the scarcity of safe assets, hikes in precautionary saving driven by risk, rising US long run risk and so on), we will put forward specific lessons for the design and implementation of the SIU.

We also carry out a dissection and a scenario analysis of the risks that global imbalances and their possible unwinding might create in the foreseeable future, capitalizing on evidence from the experience of the Trump administration's 2025 Liberation Day tariffs package (see, for a summary, The White House, 2025). In this rapid new geopolitical context, the SIU appears to be all the more urgent. The paradoxically good news is that the external driver for SIU is now so strong that many political and national hurdles may become surmountable. As has been often the case, Europe may ultimately find the resolve to take the necessary steps to complete the Savings and Investment Union, under the pressure of ongoing geopolitical hurdles and the risk of further external shocks.

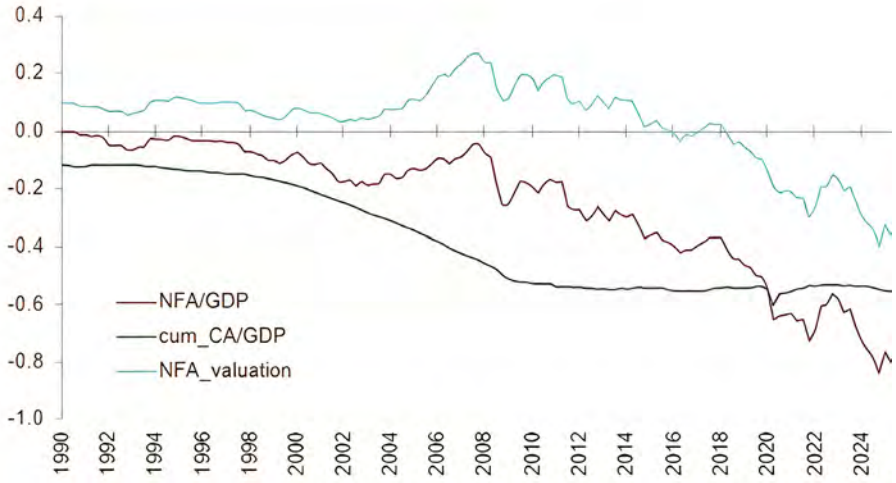
2. Global Imbalance: a Tale of Two Phases

The evolution of the US external imbalance is synthesized in Figure 1. In this figure, the green line is the cumulated current account deficits of the US from 1990 to 2025. This line adds up the continuing stream of deficits that the US has financed over time by selling assets (debt and equity) to foreign countries. Each point is the sum of past and current deficits. The figure illustrates vividly that the US has long consumed and invested more than it has produced, for the green line is negative over the entire period shown. Nonetheless, it illustrates a

pattern with two distinct phases. The first is the phase of rising deficits running between the mid 1990s and the GFC when the line falls sharply; the second phase starts after the GFC, when US deficits remain large but stable, i.e., they no longer exhibit a sharp trend and the green line flattens out.

Behind the scenes, the net sale of assets by the US results from bi-directional gross flows of financial trades several time larger. Looking at these trades, a persistent current account deficit means that, each year, the sale of debt and equities by US to non-US residents is larger than the sale of non-US assets to US residents. At the same time, the value of the accumulated portfolio positions fluctuates with asset prices and the exchange rate.

Figure 1 US Cumulative account deficits and valuation effect



Source: Corsetti (2026).

So, given the long string of deficits (cumulated by the green line), how much do US residents owe to foreigners? In Figure 1, the answer is provided by the red line, which shows, for each year, the sum of the current deficit and the current value of the outstanding net foreign assets. This value is calculated based on estimates of the capital gains and losses in dollars (thus including the valuation effect of currency movements) on each component of the US assets and liabilities in the country's foreign portfolio: short and long-term debt, private and public, equity positions, foreign direct investments, and other assets. The net effect of capital gains and losses, referred to synthetically as valuation, are also plotted, on their own in the figure, by the blue line. The red line is therefore the sum of the green and the blue lines.

These three lines together illustrate vividly a key difference between the period pre- and post-GFC. Valuation effects go increasingly in US favour in the period of rising deficits pre GFC: US residents could buy more of the goods and services they produced without running up the value of their debt, financing most of their purchases with capital gains and issuing debt at very 'convenient' rates. Things changed around 2008 when valuation gains peaked and started to decline, turning into losses by the end of 2010s. Losses have grown larger, with some fluctuations, in recent years, causing the value of the US net foreign liabilities to widen, even if US deficits are no longer increasing. While US residents keep consuming and investing more than they produce at a constant rate, they now face rising net losses on their external portfolios. As a caveat, there are severe measurement problems suggesting that the quantitative evidence should be taken with a grain of salt. That said, as shown by the figure, the red line crosses the green line around the time of the Covid-19 pandemic. Since then, the value of the US net debt has grown much larger than the cumulative sum of deficits.

To sum up: from the 1990s to the GFC the US could spend on credit from the rest of the world without facing a rising debt service bill, borrowing without running up the value of their debt. Valuation on their external portfolios more than compensated for the payments they had to do on their liabilities, in particular US Treasuries issued at particularly favourable interest rates. The GFC marked a clear turning point in this state of affairs.

3. Lessons from the Emergence of Global Imbalances Prior to the Global Financial Crisis

The best-known interpretation of the rising US deficits in the 1990s and 2000s is the saving glut hypothesis by Bernanke (2005). In his view, rising US deficits were essentially driven by the rising supply of savings in the global markets, originating especially from emerging market economies. At the root of the imbalance was the global level progress in financial and real integration during the capital liberalization years, which unleashed a repressed demand for reliable assets (essentially those issued by the US) in regions of the world until then operating in a regime of financial repression. An important reason why this view has long been popular is that it simultaneously explains the growth of external imbalances and the global fall in real interest rates: as a new mass of savings came onto the world markets, falling borrowing rates pushed the US into borrowing more.

Yet the economics of the story is nuanced. Many contributions offer a close up analysis of the root causes of the savings glut, i.e., the great imbalance in the world between saving and investment. A first strand of contributions refocuses

on how insufficient development of domestic financial markets in emerging market economies gave rise to a flight to safety. Caballero et al. (2016), for instance, elaborate on the low protection of financial investors' rights and especially the lack of a safe asset in sufficient supply in most regions of the world, as the key reasons for foreign households and firms to move their savings into the US. A key insight from this analysis is that falling real interest rates specifically reflect a relative scarcity of the safe asset. Indeed, globally, returns to capital did not fall in line with real rates, as you would expect if imbalances were driven by an overall excess supply of saving.

From the vantage point of the SIU, the lesson is straightforward, although still (and surprisingly) controversial. An adequate supply of reliable (safe) assets coupled with effective supervision and regulation of capital markets at the European Union (EU) level would be fundamental to ensuring international investors trust European markets and intermediaries.

A complementary interpretation is offered by the literature focusing on the effect of risk (either macro, or institutional) on the spending-saving decision by households and firms. As a leading example, Mendoza et al. (2009) suggest that at the root of imbalances lie high precautionary savings, due to lack of opportunities to insure risk via financial markets or (welfare state) institutions in countries vulnerable to financial crises (akin to the ones in Mexico, or East Asia in the 1990s) and/or large fluctuations in economic activity. According to this view, the relevant asymmetry between the US and the rest of the world concerns the risk, at both aggregate and individual level, that cannot be diversified via financial markets and public policies. Uncertainty and risk, however, also weigh on investment, a point stressed by Angeletos and Calvet (2006) among others, who argue that high precautionary saving is typically mirrored by inefficiently low private investment.

The risk driving high precautionary saving and weak investment is both macroeconomic and idiosyncratic, reflecting fundamental vulnerabilities — including policy mismanagement — as well as market- and belief-driven dynamics. In emerging markets, this is illustrated by the post-1990s accumulation of large international reserves, financing US deficits, to smooth shocks and deter speculative attacks after the Mexican, East Asian, and Russian crises (Bianchi & Sosa-Padilla, 2024; Corsetti & Maeng, 2023), while in advanced economies similar precautionary behaviour depends on the credibility of monetary, fiscal, and regulatory regimes.

Here is another useful lesson for the SIU. Essentially theory suggests that the level of saving is generally decreasing in the public and private opportunities to share risk, ranging from the coverage of the welfare state and the development/

integration of financial markets. In light of this consideration, a contraction in overall saving may well be a desirable consequence of setting up an efficient capital market union in the EU, increasing the supply of assets with improved risk-return profile (including a class of safe assets) and opportunities of (cross border) risk diversification. A successful SIU, feeding EU investment, can thus be expected to simultaneously lower savings, and hence (as discussed below) result in a lower external surplus.

The initial versions of the saving glut hypothesis downplayed the role of US policies. A more balanced view of the period pre-GFC is offered by Obstfeld (2025), who carries out a careful forensic analysis of the evolution of US deficits, suggesting a much larger role for US fiscal and monetary mix. In our own words, Obstfeld suggests that at times these policies ended up 'running the US economy hot.' Perhaps most fundamentally, one could argue that the policy mix in the US reassured US corporates and households about their government's willingness to act decisively when the economy was hit by large negative shocks, de facto offering insurance against disaster risk. In this dimension, the asymmetry between the US and the Euro area is apparent. The lesson is that the SIU can hardly be successful without a fundamental change in gear, concerning the macroeconomic management of the euro area (see Draghi, 2024).

4. The Changing Nature of Imbalances After the Global Financial Crisis

What happened at the end of the 2010s? As a working hypothesis, it is useful to elaborate on the idea that, for many a reason, long-run US risk has been rising relative to the rest of the world (see Corsetti et al., 2025). Through the lens of this hypothesis, many pieces of evidence come together in a coherent picture.

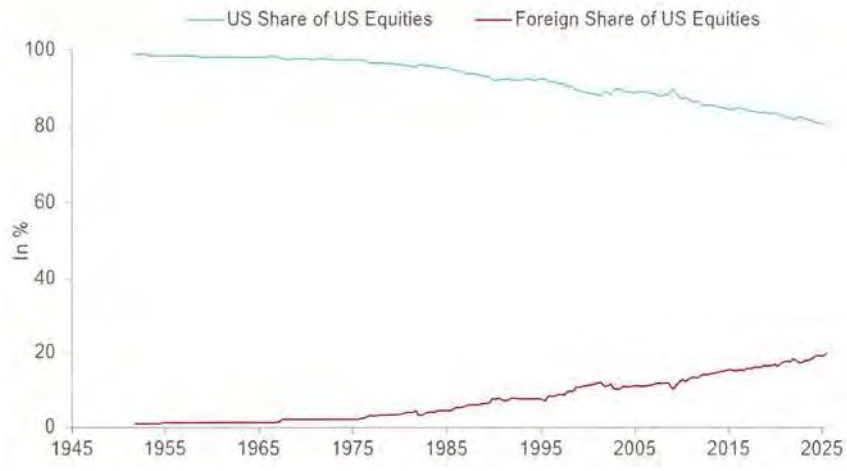
To begin with, US-dollar-denominated assets have progressively become less special in the global financial system. For a long time, investors were willing to give up part of their pecuniary returns because they valued the 'convenience yield' carried by these assets. This allowed the US' to borrow at lower rates than the rest of the world. While convenience yields on US Treasuries remained positive through much of the 2010s, they have been steadily eroding over the last 20 years and have now disappeared across asset maturities, with the possible exception of very short-term instruments. This is one reason why US borrowing is no longer cheap.

At the same time, over the last decades US equities have vastly outperformed foreign equities. Part of this performance undoubtedly

reflected strong corporate achievements in terms of innovation, scale, and market power. Yet there is evidence that a significant component of the US equity premium was systematically anticipated, that is, it corresponded to a classical compensation for risk.

Indirectly, this weighs on US borrowing costs. Because of their comparatively high risk premia, US equities became more attractive to non-US residents, increasingly investing in US stock markets and companies. The foreign share of US equities has indeed steadily risen and now reaches about 20% of the market (Figure 2). Since equity returns now weigh more on the overall valuation of US net foreign liabilities, the US net foreign asset position deteriorates sharply when US stocks perform exceptionally well, generating capital gains for non-US residents.

Figure 2 Foreign and Domestic Ownership of US Equities



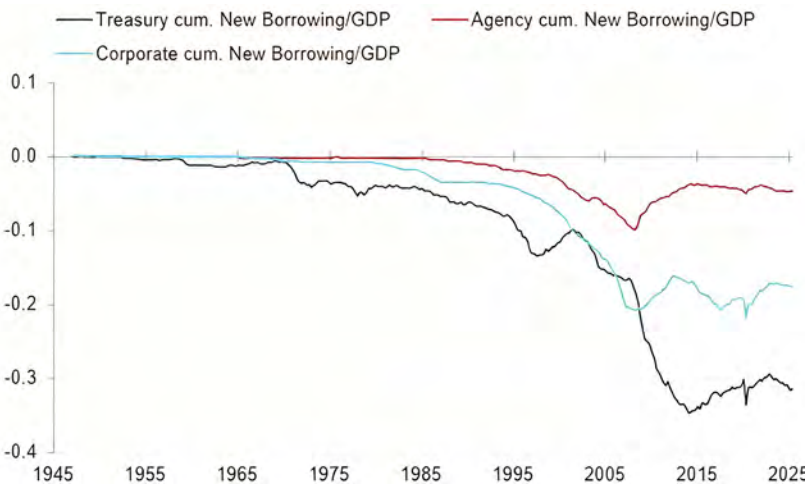
Source: Corsetti (2026).

Finally, rising US risk is also reflected in bond portfolios. The increase in equity positions held by non-US private investors corresponds, especially in recent years, to a reduction in foreign holdings of US bonds. As shown in Figure 3, around the GFC, demand for US agency and corporate bonds first declined and then flattened. Demand for US Treasuries remained high somewhat longer but began to contract around the mid-2010s.

Last but not least, since Liberation Day, US risk has been priced differently in the currency market. Investors seem no longer confident that the dollar would appreciate in a global crisis. International portfolios are still vastly exposed to the dollar (where else could investors go for liquidity?), but

their positions are increasingly hedged in the derivative market. This change in investor assessment is sometimes referred to as a reserve currency shock (see Jiang et al., 2025), possibly marking the beginning of a phase where the dollar becomes more sensitive to the ongoing trends in the country's fiscal and policy mix, and the disruption in international economic and political relations.[1]

Figure 3 US Foreign Debt Liabilities by Type



Source: Corsetti (2026).

The relative risk hypothesis has two strong implications for the European SIU. On the one hand, all else equal, investing in the US with the prospect of earning a significant equity premium remains attractive. In Europe, an aging population and uncertainty about its competitive edge relative to both the US and China still motivate a sustained flow of risky portfolio investment across the Atlantic. In the US, an explicit objective of reindustrialization — aimed at reducing dependence on global production networks for security reasons — supports policies that favour foreign direct investment, which in turn favour foreign participation in the ownership of US corporations.

1 Different but interdependent factors underlying the rise in US risk, with recent political developments adding uncertainty about both domestic policies and institutional resilience. Yet, looking deeper, one can see the root of the problem in the relative decline in the economic weight of the US in the global economy. According to Hassan (2021), this decline itself may explain a shift in global risk assessment against the US. It may also explain the increasing frustration experienced by US in managing the global economies through the multilateral institutions initially created to serve the interests of the country. The dominant position of the US had progressively lost its economic footing.

Progress in integrating the Single Market and setting up the SIU must be substantial to moderate, let alone reverse, these incentives. The problem is not uniquely European, other regions will also struggle to restructure their economic systems by substituting internal for external demand. Indeed, China continues to face elevated household savings and weak domestic consumption, alongside deflationary pressures, following the burst of its housing bubble and in the context of an underdeveloped social safety net.

On the other hand, against these 'pull factors' stands the US aggressive stance on trade policy, their explicit strategy to replace multilateralism with 'transactionalism' (leading to a web of bilateral deals), their strong industrial policy, increasingly melting into national security policy, as well as their willingness to sustain persistently high public debt. High borrowing costs may prompt US intervention to control and stem payment outflows. Risks of future taxation and administrative restrictions on capital flows may unsettle international investors, potentially triggering a sudden reversal.

In this case, the challenge for the EU would be to set up the SIU in reaction to a global portfolio reshuffling. Records suggest that the EU can take giant steps forward under pressure. But, given the scale and scope of the reforms required to develop institutions and rules consistent with the ultimate goals of the Union, a convincing reactive development may not be feasible.

5. How Will the SIU Fit? Scenarios of Global Adjustment

We have argued above that, while raising investment in the EU, a successful Savings and Investment Union could also result in a contraction of EU savings, from the high levels reflecting aggregate and idiosyncratic risks faced by EU households and firms. An SIU will therefore reduce the Union's current account surplus, currently hovering around 2.5% of EU GDP (European Commission, 2025). It is instructive to reconsider the economics of this effect with the help of simple national account identities.

The first identity is the balance of trade in goods and services, denoted by TB, relating the difference in value between exports and imports to the excess of internal saving over internal investment

$$TB \equiv exp - \tau IMP = S - I$$

Where EXP and IMP denote export and import quantities, τ denotes the price of imports in terms of exports, commonly referred to as the terms

of trade. By the above identity, higher I and lower S cannot but reduce the trade surplus. However, a contraction of the trade balance does not necessarily imply a fall in the level of exports (EXP). With the SIU, exports may well rise in volume and value, reflecting an improvement in EU productivity. The trade balance nonetheless deteriorates as higher investment and activity simultaneously drive up the level of imports (IMP) more than proportionally. In short: a smaller trade balance is not necessarily associated with less trade. This is in principle good news: there is a virtuous path to reduce imbalances, that does not necessarily require a collapse in global trade. This virtuous path however intensifies, rather than reduces, global interdependence.

Moreover, the adjustment to the SIU is unlikely to leave international prices as they are today. A rebalancing of EU demand towards domestic goods is likely to lead to an appreciation of the euro in real terms. This effect is especially likely during the initial phase of the SIU, when this is expected to spur domestic investment, however the pressure to euro appreciation may fade out over time with a higher productive capital. Yet it is important to keep in mind that overall real appreciation of the euro may not translate one-to-one into movements of the EU terms of trade. The two are calculated combining the nominal exchange rates with different price indexes — the terms of trade only consider the relative market price of the EU exports vs imports — and capture different economic fundamentals. Richer countries tend to have a stronger currency, yet they remain competitive because of their superior productivity, the Swiss example comes to mind. Relative to the overall price index, indeed, the price of goods and services traded across borders reflects specific trends in productivity, the market power of firms, and innovation in products. In short, is likely to rise, at least in the medium run, but not in the same proportion of the currency.

Finally, the trade balance in the above accounting identity is multilateral. Bilaterally, the surpluses/deficits with the US as opposed to, say, China may go in different directions, reflecting national and multilateral policies, including of course global trade policies, as well as technology and demographic developments. This is where the consequences of SIU become more difficult to envision at this stage, with possibly sharp differences in the dynamic evolution of EU trade in the short and the long run.

The effects on the current account and the exchange rate are more complex. As discussed in the previous section, the CA, correctly measured, traces the change in value of net foreign assets of a country. On top of the trade balance, it also includes net incomes from real and financial assets, net

flows of labour income, and capital gains and losses (including valuation effects from the exchange rate) on outstanding assets and liabilities:

$$CA = NFA_{t+1} - NFA_t$$

In a globalized world, asset prices and the exchange rate are the main drivers of the CA. Adjustment is mainly financial. If the SIU is successful in fostering portfolio rebalancing away from the US into the EU and spurring productivity growth in the EU, other things equal we may expect a rise in the value of EU assets relative to the US and/or an appreciation of the euro vis-à-vis US dollars.

One key implication is that the value in euros of the outstanding EU savings abroad will be endogenous to the rebalancing, and it may fall in the process, especially if this becomes disorderly and/or will be accompanied by a prolonged slide in the dollar. The stage rehearsal of these developments occurred in the wake of Liberation Day, when the US announcement threatening high tariffs resulted in dollar depreciation, seemingly contradicting economic models predicting that tariffs should lead to appreciation. While the dollar reaction is not necessarily out of line with economics in view of the widespread retaliation (see Ostry et al., 2025),[2] it is clearly the symptom that the US currency is paying a toll to the global uncertainty its policies are creating (Kalemli-Özcan et al., 2025).[3] As demonstrated in the following section, the potential consequences for European investors are dire.

Mar-a-Lago looms over a fragmented European capital market

All of the above describe a situation where, in addition to not using its abundant savings to boost own productive investment, Europe is self-indulging in a portfolio position that bears significant risks. The slowly accumulated but now considerable net lending position of the euro area vis-à-vis the US overexposes European wealth to exchange rate risk. As shown in Figure 4, currency movements often move in the opposite direction to

2 Ostry et al.(2025) construct a new tariff-shock database, which captures tariff-related announcements, threats and implementations by the US, China, the Euro Area and Canada between 2018 and 2020, and in 2025. Over the 2018-2020 period, exchange rates reacted to US tariff shocks in systematically different ways depending on retaliation: the US dollar (USD) appreciated if the tariff was imposed unilaterally, but depreciated if other countries threatened to retaliate. In 2025, when nearly all US tariff actions were met with retaliatory threats, the USD again depreciated. In contrast to 2018-2020, however, long-maturity US Treasury yields rose in 2025, consistent with an interpretation of 'Liberation Day' as a reserve-currency shock.

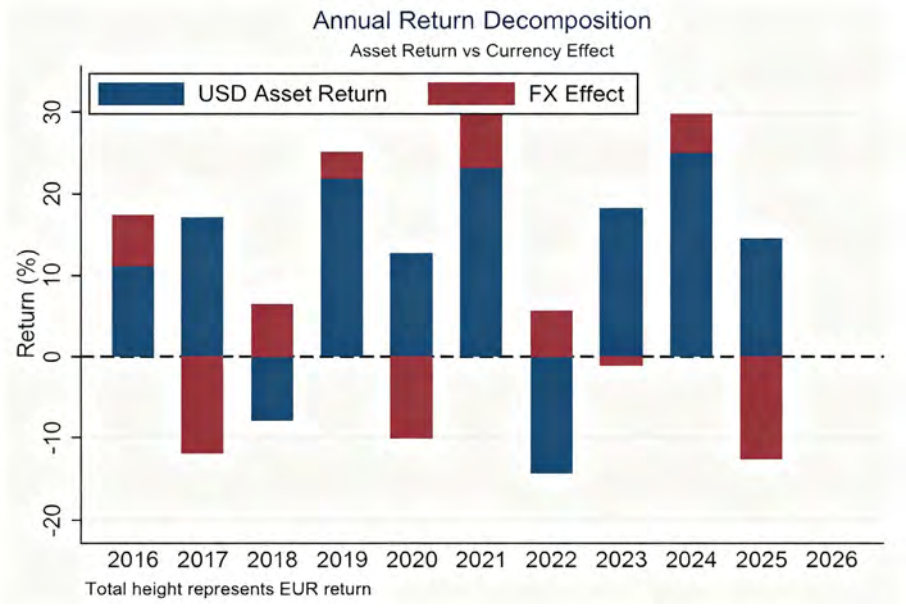
3 Kalemli-Özcan et al. (2026) argues that the exchange rate volatility following liberation day mainly reflects trade policy uncertainty. Uncertainty created by tariff uncertainty results in currency depreciation via its effects on precautionary savings and risk premia.

stocks' returns in dollars, sometimes offsetting losses (2018 and 2022), sometimes offsetting gains (2017 and 2020).

In 2025, in particular, the US depreciation after Liberation Day cost euro area holders of US stocks close to €500 billion. The exchange rate effect has almost wiped out any valuation gains that they have accumulated in 2025 on their US stock holdings (Figure 4, last bar).

Figure 4 Valuation gains and exchange rate changes due to EUR/USD movements for Euro Area holders of US stocks

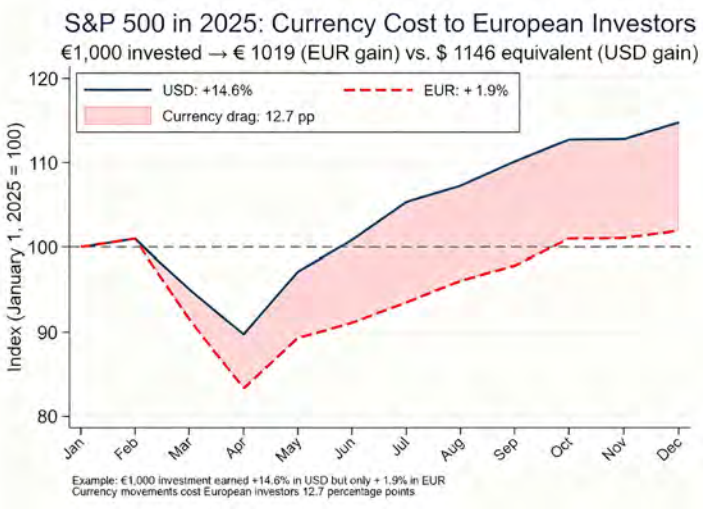
(approximated by the S&P500)



Source: Federal Reserve Board, Ameco, Eurostat, own calculation.

Figure 5 zooms in on 2025 and shows that, from the perspective of a euro area investor, the 14.6% rise in the dollar value of the S&P500 in 2025 has been virtually offset by the dollar depreciation against the euro. To be even clearer: investing €1,000 in the S&P500 on the 1st January 2025, resulted in 1,146 USD to spend in the US at the end of the year. But euro area investors would only receive €1,019. This illustrates quite vividly the potential risks for European citizens to be exposed to external shocks via the financial account in times of the increasing weaponization of geopolitical imbalances.

Figure 5 Evolution of S&P 500 in 2025 in USD and EUR



Source: Federal Reserve Board, Ameco, Eurostat, own calculation.

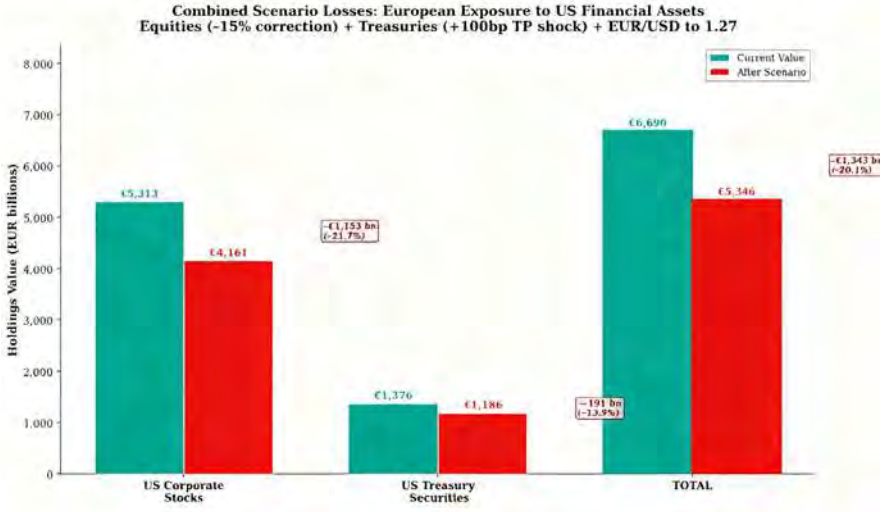
Financial risks are mounting. A concrete warning comes from a possible future Mar-a-Lago accord with a concrete goal to erode the central position of the dollar in the global financial system (Miran, 2024). If implemented in any form, the plan drafted in this small town in Florida will profoundly dent European wealth. But even independently of this bleak scenario, further losses attributable to a deeper depreciation of the dollar are quite plausible, given the preferences of the US administration for a competitive currency and its attitude to fiscal deficit. Furthermore, as recently discussed by Gita Gopinath (2025) the US stock market may experience a correction of recent optimistic trends.

As an illustration, Figure 6 shows the potential losses on the current euro area portfolio of US stocks and US Treasury holdings under a scenario combining: (i) a significant, but still moderate compared with past crashes, correction in equity prices of 15 pp; (ii) an increase in the term premia on US Treasuries of 100 bps; and (iii) a further appreciation of the euro against the dollar to an EUR/USD exchange rate to 1.27.4 The valuation and exchange rate losses for stocks can be directly calculated for such a scenario, while for bonds the losses can be approximated as mark-to-market losses under the assumption of a 6.5 years average maturity, the realized losses would still be lower if the bonds are held to maturity though. Under this

4 This would represent another appreciation of the same magnitude as observed between March 2025 (1.09) to February 2026 (1.18).

adverse scenario, total losses could amount to a maximum of €1,376 billion, predominantly from the stock market valuation losses, corresponding to around 20% of the holdings of US equities and Treasuries by the euro area as of September 2025.5

Figure 6 Adverse scenario
(equity, Treasuries and EUR/USD)



Source: Federal Reserve Board, Ameco, Eurostat, own calculations. Last observation: Sept. 2025.
Note: Equity scenario = -15% for the S&P 500 + EUR/USD to 1.27. Treasuries scenario = +100bp term premium (avg. duration 6.5y) + EUR/USD to 1.27. Total combined loss: €1,343 bn (- 20%).

6. Conclusion

Looking forward, there is a clear tension between the goals and implications of the SIU and the US effort to reindustrialize, while at the same time attempting to narrow the trade imbalance.

On the one hand, the aggressive US position on goods trade is functional to a variety of economic and political objectives, both domestic and foreign, such as consolidating and expanding the US dominance in the global supply of services and digital finance, and eliciting foreign companies to invest and produce in the US. Indeed, as pointed out by some observers (e.g., Baldwin 2025), the 2025 trade

5 The Federal Reserve Board data on International Portfolio Investment Holdings of Long-term Securities by Country provides us with the total holdings of residents of the Euro area of US financial assets. The authors use only the holdings of US corporate equities and US Treasuries for the above calculations.

war may eventually lead to a web of more or less reasonable bilateral deals, leaving the world not too far from the pre-liberation day situation, at least for Europe.

On the other hand, risks are most apparent in asset and currency markets, where portfolio rebalancing faces strong market incentives operating in the opposite direction. Depending on how it unfolds, such rebalancing could be particularly penalizing for European investors. This strong exposure of EU savings to US assets and dollar volatility underscores once again the urgency of completing the SIU in order to reduce the Union's sensitivity to external, primarily geopolitical, shocks transmitted through the financial account. By improving the risk-return profile of investment opportunities within the Union, the reforms leading to an effective SIU described in the previous chapter — notably those aimed at improving the risk-return of European investment opportunities — would strengthen the EU's economic sovereignty also in this dimension.

The arguments and analyses in our two chapters can be synthetically summarized by a simple statement. The external and internal drivers motivating the necessity and stressing the urgency of an SIU have never been so strong. With a bit of 'rhyme and reason', internal political and national hurdles that appeared to be insurmountable until now, could melt way in the design of a reasonable plan forward.

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Addressing Fragmentation in EU Post-Trade Infrastructure – A Proportional Approach

David Murphy *

Abstract

The infrastructure used to settle securities transactions across the European Union (EU) is fragmented, creating higher costs for cross-border trading and reducing market efficiency. Fragmentation has multiple causes including differing legal frameworks, lack of operational standardization, and the defence of national 'silos'. There are various proposals to address it, such as large scale legal reform and changes to technology. However, these projects often fail to address the need for proportionality, as required under Article 5 of the Treaty on European Union (TEU). This chapter proposes a strategy for addressing post-trade infrastructure fragmentation, reflecting the need to apply the least onerous means necessary to achieve a given policy goal. The model suggested is a supervisory one, which would separate issuer infrastructure, operating under existing national laws, from cross border investor infrastructures, supervised at the EU level and operating harmonized processes. The benefits of such an approach could be delivered quickly; it would support future market development without placing a disproportionate burden on existing entities.

Keywords: Central Counterparty; Central Securities Depository; Post-Trade Infrastructure; Proportionality; Savings and Investments Union.

1. Introduction: Fragmentation and its Effects

In 2025 the European Union (EU) announced the Savings and Investments Union (SIU) as 'a strategy to foster citizens' wealth and economic competitiveness.' (European Commission [EC], 2025a). Noting that 'persistent fragmentation [currently] limits the benefits to be gained

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from the EU's Single Market', the relevant Commission Communication proposes that 'sources of fragmentation in EU capital markets, whether regulatory, supervisory or political, should be removed to allow for the possibility of market-driven consolidation' (EC, 2025a). This view is shared by recent reports from Christian Noyer and Mario Draghi on EU capital markets and EU competitiveness more broadly (Noyer, 2024; Draghi, 2025). Both reports note the fragmentation of Europe's capital markets and their relatively small size compared to similar ones in the United States.

The entities, processes, and systems used to settle securities transactions ('post trade infrastructure'), have received particular attention in this context. As the Noyer Report (2024) states:

> The landscape of post-trade infrastructures in the European Union is, unlike the United States, particularly fragmented... [and, as a result,] European users pay cross-border settlement costs that are probably far higher than in the United States.[1]

There are two key types of post-trade infrastructure: central counterparties (CCPs) and central securities depositories (CSDs) (Murphy, 2026). CCPs step in between buyers and sellers in securities markets, validating trades, preparing them for settlement, and decreasing the risk of non-performance on cleared trades, thereby reducing counterparty credit risk. CSDs validate the initial issuance of securities, hold them,[2] provide safekeeping, and record beneficial ownership of them. CSDs also facilitate the secure, efficient transfer of beneficial ownership, settling securities transactions versus cash, and providing ongoing services for securities owners dealing with corporate actions such as redemptions, dividend or interest payments, and stock splits.

The fragmentation the reports discuss is evident for both CCPs and CSDs. Fourteen CCPs are authorized under the relevant EU framework, the European Market Infrastructure Regulation (Regulation (EU) 648/2012 [EMIR]; see ESMA, 2025a for details). In contrast, the United States has one major group, the Depository Trust Clearing Corporation (DTCC), containing two CCPs. CSDs are even more diverse: at the time of writing in January 2026, there were more than twenty authorized under the relevant framework, the Central Securities Depository Regulation

1 A recent trade association report supports this view: see Association for Financial Markets in Europe (AFME, 2025).

2 Securities are often issued in the form of global certificates where a single certificate represents the entire issue. They may be 'dematerialised', so the security exists only as a database entry (for more detail, see Association of Financial Markets in Europe [AFME], 2015).

(Regulation (EU) 909/2014 [CSDR]). Indeed, the CSD Register of the European Securities and Markets Authority (ESMA, 2025b) lists 27 entities with initial authorizations under Article 16 of the CSDR while there is just one CSD in the United States, again in the DTCC group.

Broadly, EU post-trade infrastructures fall into one of two classes. The first class comprises a small number of groups providing *cross-border* listing, trading, clearing, and settlement services. These groups process the largest volume of EU securities transactions. However, the second class, comprising entities in individual national silos, each with a trading venue, CCP and CSD, is also significant. This latter group is particularly diverse in its processes, operations, and formats of data exchange.

The post-trade infrastructure fragmentation noted above is not just costly; it also gives rise to less efficient markets. The failure rates in EU securities settlement are roughly three times the level of the United States: the European Commission (European Commission [EC], 2022) claims a settlement failure rate of 6% in the EU versus 2% in the US, although matters seem to be improving somewhat, according to the Association of Financial Markets in Europe (AFME, 2024). It is therefore reasonable to conclude that the fragmentation of post-trade infrastructure hampers the development of a single EU market in investments and hence the goals of the SIU necessitate reform in this area.

2. Barriers to Integration

The European Central Bank's Advisory Group on Market Infrastructures for Securities and Collateral, or 'AMI SeCo', recently identified fifteen 'high impact' barriers to post-trade infrastructure integration in the EU (Advisory Group on Market Infrastructures for Securities and Collateral, 2025). Examining these reveals three principal categories of barrier, with one overlap, as summarized in Table 1.[3]

3 The barrier numbers used by AMI SeCo are provided for reference. A total of 43 barriers were identified, many of which are low or medium impact: these are not discussed.

Table 1 A broad categorization of AMI SeCo 'High Impact' Barriers to EU Post-trade Integration

Category	No.	AMI SeCo Barrier Number and Summary Description
Legal & Tax	1	Differences in ownership rights
	2	Differences in national insolvency frameworks
	4	Legal barriers to free choice of location of issuance
	1 4	Differences in withholding tax reporting/information exchange
	15	Other withholding tax barriers
Overlap between legal and processing categories	3	Corporate law barriers to harmonized processing
	9	Differences in announcements and information exchange on corporate actions
	10	Differences in dates and sequences for corporate actions
Securities processing and data	6	Absence of a common data model
	7	Lack of a standardized ('golden') source of information
	34	Lack of common, consistent, machine-readable data
	41	Collateral management barriers
Regulatory	5	Fragmented registration, CSD legal entity requirements and passporting
	42	Complex and non-harmonized regulatory reporting
	43	Fragmented know your customer requirements

Source: Reproduced from Murphy (2026).

Legal and tax barriers arise because of the differences in corporate securities and bankruptcy laws, and taxation frameworks across the Union. For instance, these concern the notion of what it means to own a security, how custody is construed legally, and what level of taxes are paid on income from securities, by whom, and when, differ markedly. Insolvency frameworks differ too, as do methods of and requirements for securities issuance and listing. Part of the reasons for the large number of CSDs in the EU noted in the last section is that a CSD must operate within a particular legal framework, so different national laws beget CSD multiplicity (for more details, see Nougayrède, 2018).

There are operational barriers to integration too. For instance, there is no universally agreed format for communicating EU securities and transactions data, no single (or 'golden') record of securities, and no

agreed standard for CSD or CCP operations such as hours of operation or cut-off times for processing. Certain barriers to integration occur in the overlap between the legal and processing categories, including issues arising from divergences in the sequence of announcements and the handling of corporate actions such as stock splits or mergers.

Finally, there are regulatory barriers arising from the national regulation of post-trade infrastructures, including a lack of harmonization in regulatory reporting and divergences in requirements for customer due diligence.

Many of these barriers arise from the different inheritances of EU Member States. National laws, national securities markets, and national regulatory frameworks all developed separately. The cost of legal integration is high[4] and the type of crisis to motivate it has not yet occurred (e.g., Ferrara and Kriesi (2022) discuss crisis-driven integration in the EU). Other challenges are implicated in processing and data issues too. There is a large number of private actors involved, and little external pressure for harmonization. Indeed, local processes, conventions, and data formats form part of the economic moat that protects national infrastructure silos from competition.

At the same time, post-trade infrastructure regulation is currently led by national competent authorities (NCAs). NCAs authorize CCPs and CSDs, monitor compliance with EU regulations such as EMIR and the CSDR, and take enforcement action where necessary. At the EU level, the European Securities and Markets Authority (ESMA) promotes supervisory convergence, organizes 'colleges' to coordinate and share information between themselves, NCAs and central banks,[5] provides opinions on various aspects of post-trade regulation, and prepares regulatory technical standards implementing EU regulations and directives. But it is not, in itself, a regulator of EU infrastructure. Moreover, despite ESMA's coordinating role, divergences between the approaches taken by and the requirements of NCAs persist. Furthermore, the college process is burdensome for regulated entities and for regulators, colleges meet frequently and their work reflects the diverse preoccupations of college members.

4 Benjamin (2018) comments on the difficulty of harmonizing the law of intermediated securities. As this work notes, despite intensive efforts, the International Institute for the Unification of Private Law (UNIDROIT) Geneva Convention proposals for a uniform securities law have stalled, creating scepticism about the possibility of progress. This is echoed in a global context by Karmel (2023).

5 This description simplifies the role of supervisory colleges; for more details, refer to Arts 15, 17, 18, 49, 51, 54 EMIR.

3. Policy Goals

One of the issues that can be problematic in regulatory design is the failure to clearly articulate the desired end state, such as Murphy and Paterson (2026) discuss in the context of CSDR. If an important aim of the SIU is 'to create a financial environment where capital flows freely across Member States' (Hallak, 2025), the question naturally arises as to which organization of post-trade infrastructure would best support that.

Clearly, more efficient, more reliable, and lower cost post-trade infrastructures operating cross-border and able to clear and settle the vast majority of EU securities transactions are needed. In order to provide strategic autonomy and to allow effective risk monitoring, these infrastructures should be located in the EU and supervised by EU authorities. However, the EU regulatory environment should only pose burdens on them that are proportionate to the risks they pose, and it should encourage innovation, given the potential for transformative new developments in clearing and settlement (as discussed by Priem, 2020).

This analysis suggests that the goal should be to foster the development of a small number of systemically important post-trade infrastructure groups supervised at the European level and within a legal and regulatory framework that supports their development, as well as managing the risks they pose. The reference to a 'small number' rather than one being intentional because competition helps to keep costs down and encourages innovation (see Oxera Consulting, 2025).

The stakes here are large. Without action, the EU could face the risk that a significant fraction of its financial market is conducted outside the bloc without supervision by or reporting to EU authorities.[6] Even if this does not happen, without effective action, EU financial markets will remain relatively small, costly to access, inefficient, and siloed. On the other hand, action cannot be taken without deep analysis, given the importance of the groups involved. Just one of them, Euroclear, processed 331 million transactions with a value of €1,162 trillion in 2024 (Euroclear, 2024). Clearly, it, and entities of a similar scale, are systemically important, and reforms that affect them should proceed cautiously.

4. European Context

We now turn to two important principles of European policymaking: proportionality and subsidiarity.

6 For instance, a market in tokenised EU securities might develop, with low costs and near instantaneous settlement in US Dollar stablecoins. See Chuan et al. (2024) for a discussion of the mechanics and risks of tokenisation.

Proportionality

The proportionality principle derives from Article 5(4) of the Treaty on the European Union (TEU). As the Court of Justice of the European Union (CJEU) (which interprets its application) states, this requires that 'measures adopted by European Union institutions do not exceed the limits of what is appropriate and necessary in order to attain the objectives legitimately pursued'. There is then a test of whether the measures proposed by the agency are the least onerous ones necessary to achieve the goal, and of whether the disadvantages of the proposed action are disproportionate given the aims pursued (e.g., Hofmann, 2023).

Subsidiarity, flexibility, and maximum harmonization

The principle of subsidiarity was introduced in the European Union in the late 1980s in response to fears of centralized power, by placing the burden of argument with integrationists. It holds that 'the Community shall take action... only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can, therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community'. There is no doctrine of enumerated powers in the EU, which is what made this necessary, and rather than enjoying competences for specific fields of legislation, Union institutions enjoy whatever competences they need for specified ends (see Føllesdal [2002] for a historical account and analysis). The principle of subsidiarity constrains their actions to those that are better conducted at the EU, rather than the national level.

A related issue arises in the consideration of the flexibility of policy implementation. There are, broadly, two styles of EU rule-making reflecting different trade-offs between, as Zeitlin and Rangoni (2024) put it, 'uniform regulation – needed to manage interdependencies and externalities in integrated markets – and accommodation of legitimate diversity'. In secondary law making, regulations are used to achieve maximum harmonization, as they are directly and uniformly applicable to all EU Member States as soon as they enter into force, without needing to be transposed into national law.

In contrast, directives set objectives but leave member states free to choose how to achieve them, and thus offer more flexibility. Flexibility is two-handed: it can accommodate the desires and preferences of local constituencies and allow for appropriate interaction with differing national legal frameworks, even where subsidiarity considerations do not rule out EU level policymaking; but it can also create an uneven playing field, protect national entities from competition, and exacerbate fragmentation. Gerner-Beuerle (2012) provides for a further discussion of flexibility in the context of financial regulation.

5. Policy Proposals

With the necessary prerequisites — the aims of post-trade policy within the SIU and the principles which guide European policymaking — in place, we can now turn to specific measures which we propose to address post-trade infrastructure fragmentation.

The centralization of the supervision of systemic infrastructures

As the SIU communication states, 'harmonised supervision is an objective of the Savings and Investments Union. It entails that all financial market operators receive the same supervisory treatment irrespective of their location across the Union' (EC, 2025a). The obvious model here is the Single Supervisory Mechanism ([SSM]; defined in Council Regulation (EU) 1024/2013) for banks. Here, the European Central Bank (ECB) leads on supervision of larger and more systemically important banks, in cooperation with other EU and national authorities, while supervision of other, smaller banks is led by NCAs.

In an 'SSM for post-trade', a similar split is recommended (see Véron, 2025, for a related proposal). A new category of Systemically Important Financial Market Infrastructures (SIFMIs) should be created. Entities would be permitted to apply for supervision as a SIFMI if they met certain criteria, including the volume of trades processed and the risk posed by the entity to financial stability in the EU.

SIFMI supervision should be led by ESMA, in cooperation with other interested parties such as the ECB, the European Systemic Risk Board, and the European Banking Authority. ESMA would set out and administer registration requirements for SIFMIs, harmonize regulatory reporting for them, define the required client due diligence processes such know-your-customer provisions, and coordinate information sharing with affected NCAs and other EU level bodies. It would directly supervise these entities. The existing college mechanism would be reformed to account for ESMA's new role leading the process of SIFMI supervision.

Mandating interoperability

Many national trading, clearing, and settlement silos in the EU are classic vertically integrated monopolies. It is likely in the interest of the silo operators to make clearing and settlement outside the silo more difficult and expensive than conducting the same activity within it, especially where national laws and/or regulation provide protection from competition.

There is a natural split in CSD functions between, on one hand, initial registration, immobilization and securities maintenance, and on the other, recording changes in ownership arising from secondary market trades, collateral

posting, and so on. The term 'Issuer CSD' is used to refer to entities that carry out the former activities, although these entities typically also settle secondary market trades too, while 'Investor CSD' refers to CSDs that have accounts at issuer CSDs and primarily provide settlement and transfer services.

One remedy to the problems created by national silos would be to mandate functional separation, so that exchange, CCP, and Issuer CSD functions are in different entities, and to require that each entity deals with SIFMIs on the same basis as other entities in the group if requested to do so by their members. EMIR already has requirements for the fair, reasonable, non-discriminatory and transparent provision of client clearing services (ESMA, 2020; Poilvet-Clédière & Jardelot, 2023). These rules could be strengthened, extended to custody, member clearing and settlement services, and policed at the pan-EU level by ESMA. In particular, Issuer CSDs would be required to provide accounts for SIFMI Investor CSDs when requested to do so. Efforts should also be made to reduce the cost of cross-CSD transfers. This could, for instance, involve operational efficiencies in the EU securities transfer system T2S as Noyer (2024: 81) further discusses.

Process and data harmonization

Seven of the fifteen barriers in Table 1 relate wholly or partly to securities processing and data. Clearly, then, private sector efforts have not been sufficient to harmonize methods and formats, standardize messaging between parties, or centralize data storage. Therefore, there is a role for an EU level authority to coordinate efforts here.

It is recommended that ESMA is instructed to set harmonized minimum standards for post-trade processes, data and operations, and that entry to the SIFMI regime is contingent on entities meeting (or perhaps committing to meet) these standards. This would strike a fair bargain for post-trade infrastructures. In exchange for a reduced regulatory burden and guaranteed access to the whole EU securities market, SIFMIs would be required to follow standard processes, use standardized data formats, and support EU-wide golden databases.

A 28th country regime for European Depository Receipts

The SIU provides a very rare opportunity to re-design the architecture of European securities markets. This is needed: the SIU can reasonably be said to address an 'urgent call' for European integration.[7] It is therefore vital not just to address current concerns but also to provide the best possible foundation for

7 In his report on the Single Market, commissioned by the European Council, Enrico Letta uses the word 'urgent' fifteen times (Letta, 2024). Geopolitical events since Letta wrote his report have confirmed this urgency.

future European capital markets. The SIFMI regime, with its identification of a relatively small number of cross-border post-trade service providers, provisions for their access to every Issuer CSD, and the requirement for them to operate under common standards, is designed to furnish a collection of entities providing that. However, one more step is needed to prepare for the future. This is a single regime for EU securities holding, trading, clearing, and settlement.

The idea of an optional second regime, which would be available in each EU Member State, in addition to national law, has a long history (e.g., Liz, 2011). Letta (2024) suggested that such a '28th country' regime is the necessary transformative step towards a more unified Single Market. However, the history of such approaches is mixed, with ambition often out-pacing feasibility, as discussed in a recent report for the European Parliament (Thomadakis & Marcus, 2025). A particular issue is how to coordinate adoption. When faced with the choice between a novel optional regime whose interaction with national law is unknown, and the certainties of national law, parties often prefer the latter. Therefore, while 28th country regimes can provide a harmonized EU framework that cuts through differences in national law, it is critical to target their scope to the actors with the most to gain from them.

SIFMIs are the right group here. A 28th country regime for securities trading, clearing, and settlement would reduce their costs and increase their addressable market substantially. Therefore, it is recommended that a framework is developed for these entities (only) to process a new class of instrument, which we dub 'European Depository Receipts' (EDRs).

This would work as follows. Securities would be immobilized at Issuer CSDs under national law, as before. Issuer CSDs would be obliged to provide accounts to SIFMI Investor CSDs under the provisions discussed above. These SIFMI CSDs would then issue EDRs backed one-for-one[8] by these underlying securities under the new 28th country regime. SIFMI CCPs would clear the EDRs, again under the 28th country regime. Because EDR clearing and settlement would only be conducted by SIFMIs, it would be under uniform standards, again given the previously recommended provisions. The regime would address some of the legal barriers discussed in the first section of Table 1 and define the treatment of EDRs in insolvency. In due course, once a significant amount of market liquidity had migrated to EDRs, SIFMI CSDs would be permitted to offer an EDR native regime. Here, issuers could issue

8 The risk here is that there is not a one-for-one backing of EDRs and hence that the CSD is either taking market risk, because it has more underlying securities than it needs, or issuing unbacked liabilities, because it has too few securities to back the EDRs it has issued. While the risks to the CSD from such mismatches can be mitigated by private law arrangements, the systemic risks involved are significant.

EDRs directly to SIFMIs without the need to issue a national law security, addressing the problems of the free choice of location of issuance.

This structure would also support the development of approaches to settlement, such as distributed ledger technology, by providing a set of entities supervised at the European level, having access to the full range of EU securities, and interoperating efficiently: the SIFMIs. Without harmonization, new technologies will only exacerbate the existing fragmentation.

Other targeted legal and regulatory interventions

Three other interventions are recommended. First, as Ferran (2022) notes, due to differences in the legal construction of security ownership, the existing EU directives concerning shareholder rights do not provide beneficial owners with the intended rights in all EU Member States. A new regulation is required to address this issue.

Second, SIFMI CSDs will undoubtedly be systemically important. Currently, CSD failure could occur due to operational risk. In the envisaged future where SIFMI issues EDRs and, eventually, tokenised EDRs, these risks multiply. Therefore, we need a pan-European SIFMI CSD resolution regime. Reflecting the fact that SIFMI CSDs provide services across the Union, this should be funded at the European level and crafted to reflect the particularities of SIFMI resolution.[9]

Finally, to address barriers to integration arising from the diversity of approaches to corporate actions and withholding tax, a project should be launched to investigate the potential for harmonization in these areas.

6. The Commission's Market Infrastructure Package

In late 2025, the European Commission proposed a wide range of measures designed to address the issues with post-trade infrastructures and support the aims of the SIU (EC, 2025b). As usual, the proposals will now be subject to inter-institutional negotiations with the European Parliament and Council, so there is an opportunity to improve them.

The following subsections consider the key elements of this Market Infrastructure Package (MIP), largely from the perspective of post-trade.

9 As Braithwaite and Murphy (2019) discuss, with reference to the outcome of national bankruptcy regimes in resolution, through the 'no creditor worse off' safeguard, is unhelpful for financial market infrastructures. This should be replaced by EU-level administrative law safeguards in CCP and CSD resolution regimes.

Strengthening the EU Supervisory Framework

Under the MIP proposals, ESMA would gain expanded supervisory powers over, and enhanced tools for enforcement, and to promote convergence of supervision for various entities. These include certain trading venues; 'significant'[10] CCPs; 'significant' CSDs;[11] and Crypto Asset Service Providers. The MIP would, in addition, create a new category of 'Pan-European Market Operator', allowing exchanges to operate under a single licence EU-wide and enhance ESMA's coordination role for the asset management sector.

The package is intended to make supervision more effective and conducive to cross-border activities and to remove regulatory barriers arising from divergences in national regulation. In particular, there are proposals to enhance passporting opportunities for CSDs and, implicitly, reduce the burden of regulatory reporting and of supervisory colleges by centralizing authority in ESMA.

Settlement finality

A key strategy in the proposal is the conversion of directives into regulations, and thus to reduce the potential for variability in national interpretation due to the maximum harmonization nature of EU Regulations. Targeted changes to the CSDR, EMIR, and various other regulations and directives[12] are proposed to reduce variability in policy implementation across national states.

Currently, the Settlement Finality Directive (Directive 1998/26/EC [SFD]) provides legal certainty of payments, securities settlements and securities transfers carried out in a recognized settlement system despite potential participant insolvency. Without settlement finality, these transactions could potentially be unpicked after bankruptcy, creating uncertainty, and increasing systemic risk.

One key example of the maximum harmonization strategy in the MIP is the proposal to replace the SFD with a regulation. This would, it is claimed, harmonize legal definitions and give a uniform level of legal certainty in affected

10 For CCPs, there are various thresholds for size of securities transactions cleared, OTC derivatives cleared, and member resources held. CCPs are deemed significant if they exceed any of them, or if they are members of the same group as an ESMA-supervised entity or a CCP deemed to be systemically important, or they designated by their home member state for supervision by ESMA. See Article 22(a) of the proposed changes to EMIR.

11 A CSD is deemed significant if it operates a settlement system that settles more than 5 % of the settlement instructions by a value settled annually in the Union or is of substantial importance for the functioning of the three member states' securities markets, or (as with CCPs) it is a member of a group with other ESMA-supervised entities. See Article 11(a) of the proposed changes to the CSDR.

12 The affected rules include the ESMA Regulation; the Markets in Financial Instruments Regulation and its associated Directive, MiFiD; the Distributed Ledger technology Pilot Regulation; the Markets in Crypto-Assets Regulation; and various fund-management related rules.

transactions, including those made via DLT, across the Union. The MIP also proposes amendments the Financial Collateral Directive (Directive 2002/47/EC [FCD]) to maintain coherence with the new finality regime.

DLT and digital assets

The package also suggests more flexible rules for Distributed Ledger Technology-based (DLT) markets to encourage wider adoption of tokenised securities. In particular, it proposes changes to the EU regime for DLT, the DLT Pilot Regulation (Regulation (EU) No 2022/858 [DLTPR]) by expanding eligibility, increasing thresholds, and simplifying requirements to support broader adoption of tokenisation and DLT-based services.

7. Proposal Analysis

In this section, our proposals are considered under the criteria of effectiveness, proportionality, and respect for subsidiarity, comparing and contrasting them with the MIP.

Effectiveness

The proposals we have made in Section 5 address all the AIM SeCo high impact barriers to capital markets integration, albeit on differing timescales. There is much to applaud in the Commission's proposals too, notably the move of supervisory authority of the largest infrastructures to ESMA and the changes to the SFD to provide a technology-neutral approach. But they do not address the key issues of post-trade process and data harmonization, nor do they provide a uniform regime for DLT and token issuance, so they leave key problems unresolved. Critically, they offer no vision of the desired end state of post-trade infrastructure: in the author's view, it is critical to provide a blueprint of a successful post-reform EU capital market and the role of infrastructures within it. How many cross-border CCPs and CSDs should the EU have? What roles should they take? How should they interoperate?

Maximum harmonization raises effectiveness questions, too, because it imposes a single regime which may be difficult to implement in national legal frameworks. The MIP proposal to replace the SFD with a regulation is a good example.[13] As noted above, the SFD necessarily interacts with national

13 Another example, as Jens-Hinrich Binder has noted (personal communication, 2025), comes with MiFiD in Germany. German law, specifically the Börsengesetz, gives different legal personalities to the concepts of Börse, roughly, 'exchange', and Börsenträger, exchange operators. The German implementation of MiFiD (the Finanzmarktnovellierungsgesetz) neatly allocates responsibilities to each party given their role: but no such allocation is possible under maximum harmonization.

contract, property, and insolvency law in order to achieve its goals. Given this, it is far from clear that a maximum harmonization approach offers the necessary flexibility to achieve the desired objective.

Proportionality

Notwithstanding the Commission's assessment that the MIP 'remains proportionate as it ensures the balance between EU and national competence, with respect to entities and activities with material cross-border relevance and those of primarily domestic importance' (EC 2025c), the proportionality of the package is questionable. The proposed notion of significance captures too many post-trade infrastructures: the Commission estimates that ESMA would supervise up to 8 out of 14 EU CCPs and 10 EU CSDs out of 25 (EC, 2025c: 4.2.1.1 and 4.2.1.2). It stretches credulity to suggest that the EU has that many cross-border champions. Moreover, the MIP approach is not just too broadly targeted, it also misses an opportunity to require that entities commit to process and data harmonization before being admitted to the new regime. The SIFMI approach provides a stronger incentive for the market-driven consolidation that Draghi (2024) and Noyer (2024) call for while being significantly less onerous.

Another issue with maximum harmonization is that, even where it is effective, it may be disproportionate if it is not appropriately targeted. The Commission's impact analysis of the MIP (EC, 2025c) examines only the options of no change and the proposal (together with an even more wide-ranging intervention), not a more targeted regime, and thus misses the opportunity to identify a more proportionate response.

Subsidiarity and flexibility

Similar issues are implicated in a consideration of subsidiarity. The MIP requires nation states to accept entities being passported into their markets that have little claim to providing cross-border services, and whose processes do not necessarily meet local standards of efficiency or effectiveness. Further, NCAs are being required to give up supervision of entities that operate largely at the national level. It is far from clear for these entities that the required goals 'cannot be sufficiently achieved ... by the Member States,' as would be required to justify the proposed intervention.

8. Conclusion

The SIU project can transform European capital markets. In the area of post-trade infrastructure, efficiency can increase, costs can be reduced, strategic autonomy can be safe-guarded, and a stable basis for future developments

can be put in place. But doing this requires the use of a range of policy tools, including steps to coordinate private actors. Regulation alone is not enough. The need to respect the principles of subsidiarity and proportionality also rightly restricts policy action. The proposals we have recommended were designed with all these goals and constraints in mind. In particular, the SIFMI regime we have proposed is targeted to create and sustain entities that might plausibly serve EU-wide capital markets effectively while creating incentives for consolidation.

The SIFMI regime has large and increasing potential benefits for qualifying entities as well as for the EU, but it also requires them to accept significant costs. As such, it offers a fair bargain to private sector actors in return for providing more integrated, efficient, and cheaper post-trade services.

Given the need for quick results and potentially huge project risks, post-trade policy requires a phased approach. Thus, ESMA reform, the introduction of the SIFMI regime, and the harmonization of operational practices and data centralization should come first. Once the new system of interoperating SIFMIs supervised by ESMA is working well, a 28th country regime can be introduced that supports EDRs. Then, both tokenisation of and the primary issuance of EDRs to SIFMIs, without the need for underlying national law securities can be considered. This approach has the additional benefit of avoiding the need for time-consuming and controversial law reform. It would allow all the high impact barriers to post-trade infrastructure integration to be mitigated or eliminated in a proportionate manner and on a reasonable timescale.

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Policy Priorities for the Savings and Investments Union

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Abstract

Ageing populations, slow productivity growth, and heightened geopolitical uncertainty all reinforce the need to deepen market-based finance and broaden Europe's traditionally bank-centric model of financial intermediation. This chapter outlines two key policy priorities for advancing the savings and investments union (SIU) and strengthening Europe's capacity for long-term capital formation. The first is pension reform. Shifting the burden from state-operated pay-as-you-go (PAYG) schemes to funded pensions can mobilize larger pools of long-term capital while easing future fiscal strains. Experience from the Netherlands and the Nordic countries shows how well-designed reforms can stabilize pension systems and channel savings into productive investment, supporting capital market depth and higher productivity growth. The second priority is the development of a European securitization platform for small and medium-sized enterprise (SME) loans, supported by public guarantees. A pan-European framework would overcome persistent market fragmentation, diversify funding sources for banks, and create scalable channels for cross-border investment. Proven national schemes demonstrate the effectiveness of guarantee-backed SME risk transfer in broadening investor participation. Together, these reforms would enhance Europe's financial resilience, reorient the transformation of savings into more growth-enhancing investments, and promote a more integrated and competitive Europe.

Keywords: Productivity; Investments; Pension Reform; Securitisation Platform; SME Loans.

1. Introduction

The Savings and Investment Union (SIU) stands at a pivotal moment in European financial policymaking. As the continent faces evolving demographic,

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economic, and geopolitical challenges, the need for a strategic approach to long-term capital formation and resilient credit markets is essential and more urgent than ever. In particular, the euro area is confronted with the challenge of financing major transitions — such as the military ramp-up and the green and digital transitions — while also supporting sustainable growth and competitiveness in a rapidly changing global environment. These transitions require unprecedented levels of investment, both public and private, to modernize infrastructure, foster innovation, and ensure the resilience of European economies.

However, mobilizing the necessary resources is complicated by structural factors in financial markets: persistent fragmentation and the legacy of a bank-centric financial system that hampers the transformation of savings into productive investments. The SIU agenda aims to address these obstacles by unlocking new sources of long-term capital and strengthening the mechanisms for risk-sharing and investment across borders.

Our analysis focuses on two core areas: unleashing the supply of long-term capital through pension system reform and advancing European securitization — with a special focus on the SME loan segment — by building on recent policy momentum and practical innovations. These priorities are chosen for their potential to transform financial intermediation and resource allocation, foster productivity, and strengthen Europe's financial architecture for decades to come.

The first section explores how funded pension schemes, guided by recent European Commission initiatives, can drive capital market development and help mitigate the fiscal pressures of ageing populations, drawing on successful examples from Scandinavia and the Netherlands, but also providing lessons from similar reforms in the Baltic countries. The second section turns to the opportunity for securitization reform, highlighting the role of a European platform in supporting small and medium-sized enterprise (SME) lending and cross-border investment. SMEs are the backbone of the European economy. SME lending could therefore be backed by public guarantees to support this sector. By focusing on these actionable policy levers, we aim to provide clear guidance for European Union (EU) Member States and stakeholders seeking to advance the SIU agenda.

This chapter draws on a recent ESM discussion paper, 'Capital markets union redux: towards a deeper and more accessible savings and investments union' (Kaskarelis et al., 2025), an ESM Brief 'Capital markets in the Baltic region: a deep dive' (Skrutkowski, 2025) and the op-ed 'Scaling up SME finance through securitisation' (Kaskarelis, 2025), distilling the most impactful policy priorities for lasting progress.

2. Unleashing Supply of Long-Term Capital Through Pension System Reform

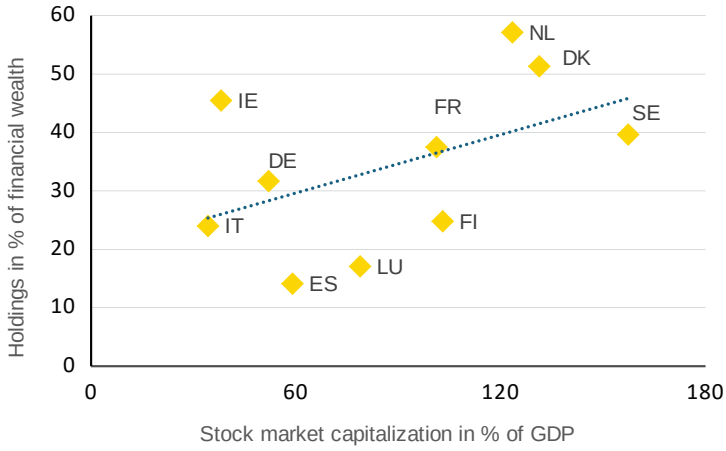
How pension funds can support capital market development...

Supplementary funded pension schemes feature as a prominent item in the European Commission's agenda for an SIU. Following its 19 March 2025 communication on the topic (European Commission [EC], 2025a), the European Commission launched a targeted stakeholder consultation on supplementary pensions on 13 June 2025 (EC, 2025b), aiming to identify best practices and useful ideas in this area.[1] On 20 November the same year, the Commission adopted a package of measures to enhance supplementary pensions (EC, 2025c). The focus of the supplementary pensions package is on articulating guidance to EU Member States on the topics of autoenrolment, pension tracking systems, pension dashboards, and the implementation of the prudent person principle by pension funds.[2]

As argued in a recently published ESM discussion paper (Kaskarelis et al., 2025), the prominence of funded pensions on the SIU agenda is supported by the positive correlation between stock market capitalization and the share of household savings allocated to pension, life insurance, and annuity entitlements. In other words, EU Member States that have promoted funded pensions — either occupational or private — have also fostered the development of their capital markets (see Figure 1). This is further testified by the US experience. The growth of US venture capital funds over the last few decades has been attributed to a change in the regulation of pension funds in 1979, allowing them to take more investment risk (Gompers & Lerner, 1999). Increasing the volume of funded retirement savings across Europe could thus bring substantial benefits for European capital markets, helping to improve resource allocation and foster stronger productivity growth. Funded retirement savings would help to familiarize households with the idea of investing in capital markets and could promote a general increase in financial literacy, driving a behavioural shift towards allocating more household savings to equities.

1 The consultation closed on 29 August 2025.
2 The package also includes changes to the pan-European Personal Pension Product directive, to make the product more attractive, as well as changes to the institutions for occupational retirement provision directive, to increase transparency and supervisory focus on returns and costs/fees.

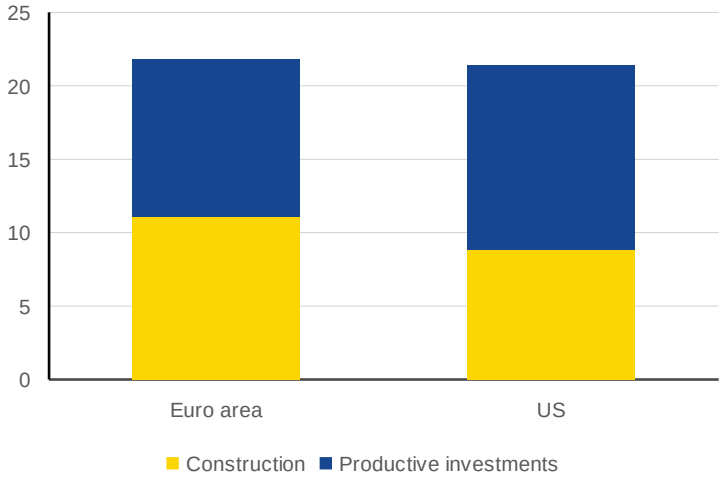
Figure 1 Stock market capitalization and household holdings of pension, life insurance, and annuity entitlements



Source: World Bank, CEIC, Eurostat.
Note: Stock market capitalization in percentage of GDP, values are the 2014–2022 average; household holdings of pension, life insurance, and annuity entitlements in percentage of households' financial wealth refer to Q4 2023.

The long-term nature of their liabilities makes pension funds well equipped to support capital markets' development. This grants them a longer horizon to support new firm creation by providing capital through the financing lifecycle of firms, from seed capital in the startup phase to taking cornerstone positions in initial public offerings. Investing equity in startup companies requires a long-term perspective and the ability to adhere to buy-and-hold investment strategies, something that banks are not able to do as part of their core business. Moreover, banks prefer lending secured by collateral; as such they are less willing to finance firms' investments in research and development, key to raising long-term productivity. There are signs that Europe's traditionally bank-centric model of financial intermediation is partly to blame for the productivity gap with the US that has widened in recent years. While the share of gross fixed capital formation to gross domestic product (GDP) in the euro area is similar to that of the US, a higher share goes into construction, leaving a lower share for productive investments in machinery and intangibles (see Figure 2). Focusing on the share of intangible investments, the discrepancy is even larger (Bontadini et al., 2023). As argued by Venditti et al. (this report), an increase in research and development investment could significantly raise Europe's growth trajectory, and pension fund capital fits this purpose.

Figure 1 Stock market capitalization and household holdings of pension, life insurance, and annuity entitlements



Source: Organisation for Economic Co-operation and Development (OECD).
Note: Construction refers to the sum of gross fixed capital formation in dwellings and other buildings and structures. Productive investments refers to the residual share of gross fixed capital formation.

Pension fund investments may also contribute to increasing productivity more directly by promoting firm-level investments in longer-term productivity enhancement. Research on Danish pension funds has shown that equity investments by pension funds raise firm productivity on average between 3% and 5%, with a higher impact for small and unlisted firms, compared to a control group of similar firms that receive capital from other sources. Some of the reasons cited for this are that pension funds may lower frictions related to access to capital, but also their longer investment horizon, which allows firms to invest more in projects that favour long-term objectives, such as productivity enhancement, over short-term dividend pay-outs (Beetsma et al., 2024). In other words, capital provided by pension funds allows firms to select investment opportunities with higher long-term productivity gains, potentially leading to better macroeconomic outcomes, i.e. in terms of higher long-term impact on growth and productivity.

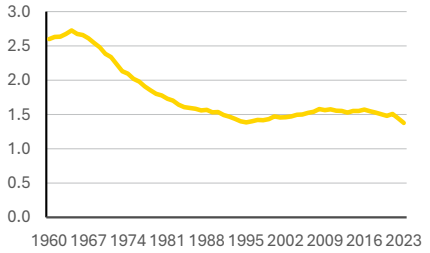
…and mitigate the fiscal impact of ageing populations

As argued in Kaskarelis et al. (2025), EU Member States with the highest share of retirement savings to GDP have undertaken reforms that lowered the maximum pension entitlement from state pay-as-you-go (PAYG) schemes, an important incentive for households to actively engage in a funded pension scheme. This is politically very sensitive, but cannot be ignored if member states want to boost

the funded share of the pension system. Auto-enrolment schemes and pension dashboards remain equally important factors. The fiscal affordability of pensions will in any case require adjustments to pension eligibility in terms of retirement age and entitlement level. Effectively, the management of the future fiscal burden is likely to result in less pension income from unfunded PAYG schemes.

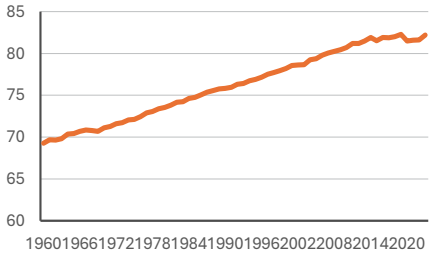
The fertility rates in the euro area have declined since the 1960s and broadly stabilized from the mid-1990s onwards (see Figure 3a). Meanwhile, life expectancy has continued to increase (see Figure 3b). Over the coming decades, the combination of these factors will increase the old-age dependency ratio, from just over 30% in 2020 to around 55% in 2050 (Strauch, 2024). This means that the costs imposed on the working-age population to pay for the PAYG pension benefits of those in retirement will nearly double. A study by Heer et al (2023) shows that most EU Member States have limited space to increase taxation as a means of financing the projected increase in the cost of PAYG pensions. In their study they also find evidence that reforms which reduce the replacement rate make the pension system more resilient to ageing, compared to those that delay the retirement age or require additional financing.

Figure 3a Euro area fertility rates over time



Source: World bank.

Figure 3b Life expectancy at birth, euro area total (years)



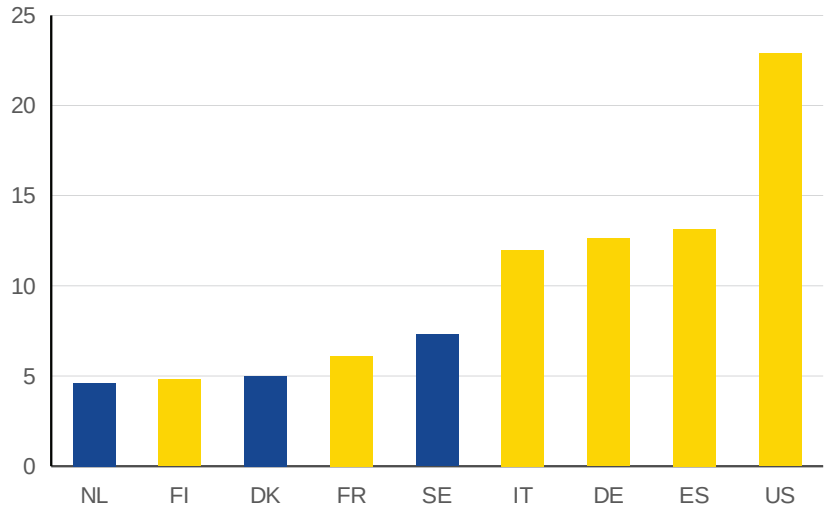
Source: World Bank.

By contrast, funded pay-as-you-earn (PAYE) pension schemes are less vulnerable to ageing populations, since individuals (or their employers) save for their retirement by setting aside a share of their working life salaries as pension premiums; hence they don't rely on future generations to pay for their retirement income. Taken together, these factors provide a strong case for EU Member States to pursue pension system reforms that lower the fiscal burden of state PAYG schemes, shifting it to funded pension schemes. Inspiration for such reforms may be found in examples from the Netherlands and the Scandinavian countries.

In the Netherlands, Sweden, and Denmark, the state pension entitlement is capped at a level that provides a basic retirement income, above the subsistence wage but below the minimum wage. For individuals with higher working life incomes, occupational pension schemes contribute the majority of their post-retirement income (see Figure 5). Employer contributions to occupational pension plans are either mandatory by law or contractually enforced through labour market agreements. As a result of these features of their pension systems, these three countries have the highest rates of retirement savings to GDP in the EU (OECD, 2025).

Figure 4 Poverty in old age

(% of population over 65 with income below 50% of median, as of 2022)

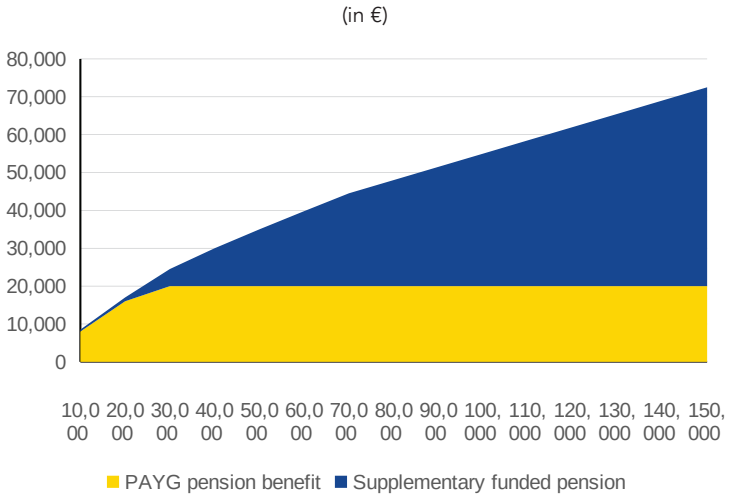


Source: Organisation for Economic Co-operation and Development (OECD).

Moreover, the Dutch example shows how such reforms may be combined with basic provisions for the poor and unemployed. Dutch residents accrue a 2% entitlement towards the full pension per year and don't require working status to earn it. As a result, the Netherlands has the lowest rate of poverty in old age among EU peers (at 4,6%, as of 2022), around one fifth of the rate in the US (Figure 4). In Denmark and Sweden, the minimum guaranteed pension benefit, although less generous, is similarly not linked directly to employment or earnings, leading to comparably low rates of poverty in old age. These examples show that pension systems can be designed to rely more on funded schemes, while ensuring provisions against poverty in old age.

There are a variety of PAYG systems across EU Member States, operating according to different principles. Figure 5 illustrates how a capped benefit can be introduced in a defined benefit, a notional defined contribution as well as point system scheme, in combination with a supplementary layer of funded pensions. Up to a threshold level of pre-retirement income (displayed on the x-axis), the PAYG pension benefits constitute the largest share of an individual's total retirement benefit. But above this threshold, corresponding to an annual income of €20,000 in the example shown, the supplementary funded pension accounts for an increasingly larger share.

Figure 5 Schematic illustration of capped PAYG benefit, combined with a supplementary funded pension



While the benefits to pension system reform are substantial, it entails transitional costs, as certain cohorts will have to shoulder both fees to finance the pensions of those currently in retirement and contributions towards their own (funded) future pensions (*cf.* Barr and Diamond (2008) for a discussion). As argued in Kaskarelis et al. (2025), the impact needs to be mitigated through higher investment activity, increasing productivity, and firm profitability to avoid undue economic costs. This boosts asset prices, leading households to adjust their expectations about future income and growth.

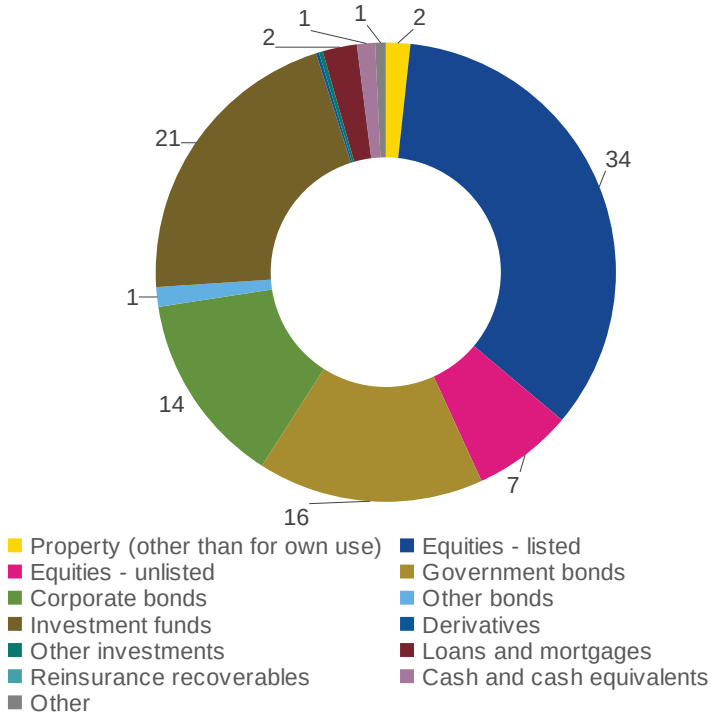
The importance of a balanced investment mandate

To support capital market development and firm creation, the investment mandate granted to pension funds must be sufficiently flexible to allow for early-stage investments in firms in the startup and growth phases. Here, examples from

the Scandinavian countries can also provide important lessons. Swedish pension funds have a mandate to allocate a significant share of their investments to unlisted equities and alternative assets (see Figure 6). As pointed out before, the mandate for unlisted equities allows them to provide early-stage capital to firms in the startup and growth phases, and they also tend to take a cornerstone position in the subsequent initial public offering, if and when the firms eventually go public. As such, they provide financing to firms through their financing lifecycle, supporting new firm creation, and employment and productivity growth in the economies they operate in.

Figure 6 Asset allocation of occupational pension funds in Sweden

(% of total assets)



Source: European Insurance and Occupational Pensions Authority, Q4 2024.

By contrast, the experience of the Baltic countries shows how a narrow investment mandate can undermine the credibility of the system. Baltic countries made early reforms aimed at increasing the role of funded pension schemes. But their stock markets have the lowest ratio of capitalization to GDP in the euro area. Among the reasons for this pattern is the conservative asset allocation of Baltic pension

funds in the past, and more specifically their low allocation to shares in regional firms. This may be seen as prudent given the limited scale and liquidity of the Baltic stock market, but it also creates a form of deadlock whereby capital markets are held back from developing due to the reluctance of institutional investors to invest in them. And the conservative investment mandate contributed to the low return on pension contributions. A recently published ESM Brief (Skrutkowski, 2025) presents the argument that there is room for Baltic pension funds to increase their mandate for investments in regional capital markets, without compromising the interests of retirement savers in holding a liquid and well-diversified portfolio. This should include an explicit mandate for unlisted equities, enabling pension funds to contribute more to early-stage equity financing for Baltic companies in the startup and growth phases.

The experience of the Baltic countries also highlights the importance of a competitive fund selection process that ensures cost-efficient asset management and scheme administration. Baltic pension funds have among the highest operational costs and fee levels, as a proportion of managed assets, among their global peers. The combination of low past returns on households' pension savings and high costs has caused a popular backlash against funded pension schemes. Following a reform in 2021, Estonian citizens may suspend contributions to the second pillar of the pension system, which were previously mandatory, and even withdraw altogether the funds that have been accumulated. Lithuania has recently followed suit, with its parliament approving a reform that allows its citizens to suspend contributions to second pillar pension schemes and/or make a one-time withdrawal of 25% of their accumulated funds in June 2025.

Funded pension schemes could play a key role in supporting SIU objectives, unleashing a higher supply of long-term capital matched to Europe's investment needs. The experience of the Netherlands and the Scandinavian countries suggest the importance of reforms that cap the pension entitlement in the state PAYG scheme, auto-enrolment, pension dashboards, and tracking systems. This would also reduce the vulnerability of public pension systems to ageing demographics. Equally important is the implementation of the prudent person principle, as well as a competitive fund selection process, to ensure a sufficiently flexible investment mandate and cost-efficient asset management and scheme administration.

3. Focusing Securitization Reform on the SME Loan Segment

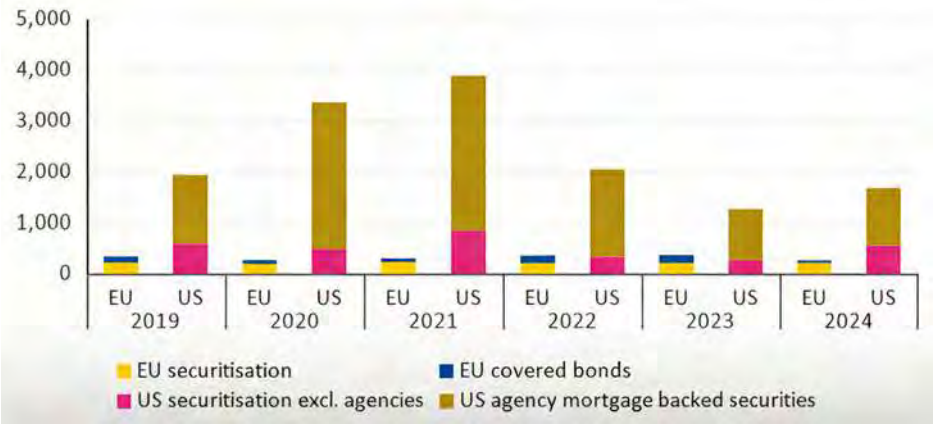
The second major SIU agenda item we address is reviving European securitization, specifically for loans to SMEs. SMEs are the backbone of Europe's economy,

accounting for about two-thirds of private sector employment and a significant share of value-added in the EU economy. However, unlike large corporates, SMEs have little access to bond or equity markets and remain heavily dependent on bank financing. Europe's bank-centric model leaves SMEs vulnerable: when economic downturns or bank stresses occur, SME lending is often the first to retrench, exacerbating recessions. As highlighted in both the ESM discussion paper, 'Capital markets union redux: towards a deeper and more accessible savings and investments union' (Kaskarelis et al., 2025), and in greater detail in the op-ed 'Scaling up SME finance through securitisation' (Kaskarelis, 2025), a well-functioning securitization market for SME loans can help break this cycle by enabling banks to transfer risk and raise funding from capital markets, thereby freeing capital to maintain or expand SME lending. In addition, a robust securitization market enhances overall financial stability by diversifying funding sources and distributing credit risk more broadly across the financial system. It reduces the concentration of risk within the banking sector and helps insulate the real economy from shocks.

Despite its potential, SME loan securitization is the most underdeveloped segment of Europe's securitization market. Securitization issuance in Europe has been subdued since the global financial crisis, with total volumes of only a few hundred billion euros annually (see Figure 7). Within that, SME-backed deals are only a tiny fraction due to fragmented and illiquid markets as issuers and investors are mostly confined to their home country. A recent 145% year-on-year increase in 2024 is reflective of this low base.

Figure 7 Securitizations for Europe and the US including covered bonds and agency mortgage-backed securities

(in € billion)



Source: Association for Financial Markets in Europe.

Political consensus supports the idea of a European securitization platform. Over the course of 2024 and 2025, policymakers increasingly coalesced around the concept of establishing an EU-wide platform for securitizing loans, possibly with some form of public backing. For example, a French Treasury report by former European Central Bank (ECB) Vice-President Christian Noyer in April 2024 recommended an EU securitization platform with public guarantees to promote cross-border issuance ([Noyer Report], Noyer 2024). The ECB has likewise highlighted the need for further standardization and even use of public guarantees to support securitization markets and free up bank lending. In October 2025, finance ministers from 20 EU countries agreed to 'explore a joint proposal to create an EU-wide securitisation platform' as part of efforts to advance the SIU. According to the official statement, such a platform would 'facilitate the standardization of processes across jurisdictions, and allow the pooling of assets, making securitisation economically viable and increasing financing options for European businesses' (Government of the Grand Duchy of Luxembourg, 2025). In short, there is political momentum behind creating a practical tool to aggregate and channel investor capital into European SME loan pools.

The envisioned European SME securitization platform would address the market failures holding back SME securitization. The general concept involves an EU-level mechanism to support banks in packaging SME loan portfolios into securities and connecting them with investors. The key features of such a platform could be as follows.

Standardized pooling: The platform would develop common documentation, data templates, and screening criteria allowing banks within each participating EU Member State to pool SME loans into a common securitization structure. The important nuance is that loans would not be combined across countries; an Italian SME pool stays Italian, a German pool stays German, etc. The aim is to achieve economies of scale and comparability *within each country's SME loans*, rather than a pan-European mutual pool, which would raise political issues over risk-sharing and technical complexities due to the fragmented nature of European insolvency frameworks. By standardizing processes and aggregating assets, the platform makes securitization economically viable even for smaller banks or smaller countries, which on their own could not attract investor interest. Uniform transparency and reporting, which make it easier to evaluate risk across different deals, would enhance investor confidence. Importantly, the combination of standardized structures and the opportunity for investors to build diversified portfolios across multiple geographies will broaden the appeal of these securities, as investors are often drawn to instruments that offer both clarity and the potential

to balance exposures across different markets. In essence, this tackles fragmentation by creating a single 'marketplace' for SME loans, even though the underlying exposures remain country specific.

Tranching with a public guarantee: To entice a wide investor base, a highly-rated EU public entity could provide a guarantee on (part of) select tranches, depending on the final structure. This echoes successful national securitization schemes for non-performing loans, notably Italy's Garanzia sulle Cartolarizzazioni delle Sofferenze (GACS) and Greece's Hellenic Asset Protection Scheme (HAPS), which provided state guarantees on their senior tranches. Importantly, in those specific schemes the state guarantee was only on the lesast risky senior portion. Private investors took all mezzanine and junior risk, and banks paid a market-based fee for the guarantee. This structure kept the taxpayer insulated from first losses while still leveraging public support to catalyse private investment. The results to date are impressive: in Italy and Greece, tens of billions of euros of non-performing loans were securitized, allowing banks to repair their balance sheets, regain investment-grade credit ratings, and facilitate new lending (see Figures 8a and 8b). Crucially, these schemes did not just broaden the investor base, they effectively created a market for institutional investors who previously had no viable entry points into these asset classes, demonstrating how targeted public guarantees can unlock new sources of capital and stimulate demand where it was previously absent.

Figure 8a Italian non-performing exposures and ratio
(in billion € and %, respectively)

Source: ECB.

Figure 8b Greek non-performing exposures and ratio
(in billion € and %, respectively)

Source: ECB.

All this was achieved while keeping taxpayers insulated from first-loss risk. The guarantee provides a credit enhancement to the specific tranche it is applied to with the goal of boosting its credit ratings to attract new institutional investors

(insurance companies, pension funds, etc.) who otherwise might not or could not buy SME-linked paper. Similarly to the two nationally-based schemes, the structure would pay a commercially priced fee for the guarantee. Meanwhile, the riskier portion of the notes would be sold to market investors without a public backstop, thus retaining market discipline and risk pricing. By crowding-in private investors through targeted credit enhancement, this setup can significantly broaden the investor base for SME securitizations.

National second-loss support to avoid mutualization: One likely condition to make the guarantee mechanism fiscally prudent is that each EU Member State bears the SME loan portfolio's losses that exceed the collected guaranteed fees of the tranche to which it is applied. Contractually, it ensures there is no cross-subsidization between countries and therefore no 'hidden mutualization' of credit risk. This does not imply national market segmentation, as transactions would be originated under common EU-level standards and be distributed and placed via a shared marketplace to a pan-European investor base. For example, an Italian SME securitization's extreme loss would be backstopped by Italy — in practice by the fees paid by the scheme and a state commitment beyond that if needed — and a Greek deal by Greece, etc. This feature should help to achieve political acceptability and comply with EU state aid rules: each national guarantee scheme would need European Commission approval (as GACS/HAPS had) and would be designed not to distort competition or confer undue subsidy. The EU-level coordination comes in setting the standards, providing the first-loss guarantee up to a point, and operating the marketplace, but ultimate credit losses remain largely national.

Targeted support prevents moral hazard: In economic downturns, SME credit is often the first segment affected, as banks become more risk-averse and retrench lending to preserve capital. As a result, SMEs are unable to attract fresh capital, compounding the downturn and accelerating the emergence of non-performing loans. To stem these dynamics, EU Member States often intervene with broad-based support measures. While necessary in crisis moments, they can carry substantial fiscal consequences and risk distorting market discipline, specifically by misallocating funds to structurally weak or non-viable firms. These firms hinder productivity growth by siphoning credit away from high-potential firms, ultimately entrenching inefficiencies in the SME sector. Against this background, a second-loss guarantee by the member state would allow for more fiscally prudent targeted support without moral hazard concerns.

A single European marketplace for SME loan securities: The platform would serve as a central issuance and trading venue for these securitization tranches. Banks from any participating country could bring standardized

portfolios to market through the platform, which would then issue the tranches to investors. Investors, in turn, could come to this marketplace to find SME-backed securities from across Europe. Crucially, investors would retain choice over their exposure. While the platform would not homogenize or mutualize the credit risk, it would allow, for example, an investor in France to diversify their exposures by investing in a senior tranche of Greek SME loans and a mezzanine tranche of German SME loans. By creating a larger, more transparent and standardized market, the platform would improve liquidity and price discovery while reducing fragmentation. Moreover, by centralizing issuance and applying uniform standards, the platform would implicitly provide a quality stamp on these transactions, further enhancing investors' trust and making the securities more attractive to a wider range of market participants. Over time, a more diversified investor base — banks, asset managers, insurers, perhaps even retail funds — would develop for European SME securitizations, much as exists for other asset classes.

If successfully implemented, a European SME securitization platform would yield numerous benefits, including:

- Freeing bank capital for new lending: By securitizing and selling part of their SME loan exposure, banks can obtain regulatory capital relief (subject to significant risk transfer approval) and balance sheet liquidity (from investors' funds). This enables banks to extend new SME loans, supporting growth and competitiveness. In effect, securitization increases the balance sheet velocity of banks. Europe's banks currently hold most loans to maturity (typically around five years on average), which ties up capital and limits lending capacity. This is especially important during economic recoveries or transition periods (e.g. digital, green) when investment needs are high. It also makes the economy more resilient as banks would be less likely to retrench lending sharply during downturns. At the same time, banks would benefit from diversifying their revenues towards fees from the transactions, compared to only earning interest.
- Strengthening cross-border risk-sharing and investment: The platform fosters a genuine single market for SME credit risk. Investors can finance SMEs in any European country through these securitized tranches, spreading risk widely. This cross-border capital flow is a core goal of the SIU, allowing the system to better absorb local shocks and allocate savings to where returns are highest.
- Enhanced monetary policy transmission: As the market develops, the senior tranches (being very safe and liquid) could become eligible collateral for the Eurosystem or even be purchased in future asset purchase

programmes. It would increase the attractiveness and liquidity of those securities further if the ECB accepts a guaranteed SME tranche as collateral in refinancing operations. More broadly, a deeper securitization market implies that credit conditions respond more evenly to monetary policy; banks that are capital-constrained can still lend if they know they can securitize and refinance loans easily. It lessens the sovereign-bank nexus and improves credit flow uniformity across the euro area. A thriving SME securitization market would give the ECB an additional lever to support SME credit in downturns (e.g. buying mezzanine tranches with fiscal backstop as a stimulus measure).

Setting up such a platform is not without challenges, but past national schemes show that it is worth the effort. It will require careful governance ensuring the guarantee pricing is truly market-based, enforcing strict loan quality criteria to prevent banks from offloading only troubled loans, and robust supervision to maintain high standards (similar to the Simple, Transparent, and Standardised framework). Transparency will be paramount as investors will only participate if they trust the data and structure. However, none of these challenges are insurmountable. The existence of successful national schemes (like GACS and HAPS) shows that with the right design securitization can be scaled up without igniting a moral hazard or a fiscal concern. Those programmes managed to dramatically reduce non-performing loan ratios — e.g. Greece's non-performing loan ratio fell from about 45% to under 4% over a few years of HAPS (see Figure 8 for the declining non-performing loan stocks in Italy and Greece during the schemes) — and did so by attracting private investors to an entirely new market to take the bulk of the risk. An EU SME platform would apply a similar 'market-led, state-supported' approach to performing loans, which should be even more straightforward given that the underlying assets are performing.

4. Conclusion

Europe's financial future depends on its ability to adapt to demographic and economic shifts. This chapter has identified two critical levers for advancing the SIU agenda: reforming pension systems to unlock long-term capital and enhancing SME loan securitization through a European platform supported by public guarantees.

Pension system reform, drawing on successful models from the Netherlands and Scandinavia, can reduce fiscal pressures from ageing populations while channelling household savings into productive investments. By reducing

the fiscal burden of state PAYG systems and expanding funded pension schemes, EU Member States can foster capital market development, enhance productivity, and build greater financial resilience.

Equally, the development of a European SME securitization platform represents a constructive opportunity to address persistent fragmentation in SME credit markets. Through standardized pooling, targeted public guarantees, and robust governance, such a platform can unlock new sources of funding for SMEs, strengthen cross-border investment and finance growth. Rather than responding to crisis, this approach builds on existing momentum and proven national schemes, offering a practical path to catalyse private investment and create a new market for investors who previously lacked access to these asset classes while maintaining fiscal prudence.

By focusing on these actionable priorities, European policymakers and stakeholders can deliver a visible and lasting impact, transforming resource allocation, supporting sustainable growth, and reinforcing the continent's financial architecture for decades to come.

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The Economic Impact of European Capital Market Integration

Fabrizio Venditti, Michele Caivano, Pietro Cova, Kevin Pallara and Massimiliano Pisani *

Abstract

Enhancing innovation and productivity is the key challenge for the European economy. To achieve this goal, raising investment in innovative projects is essential. Advancing the integration of capital markets, a key aim of the Savings and Investment Union, can play a pivotal role in this effort by reducing financing costs and strengthening the investment ecosystem. We argue that full integration of European capital markets, including the introduction of a common European safe asset, could raise investment levels by approximately 1% of GDP. In a ten-year horizon this would raise GDP by 1.5%. Should additional investment be focused on R&D spending the impact would be three times as large.

Keywords: Capital Market Union; Savings and Investment Union; Capital Market Integration; Safe Asset; Investment; R&D.

1. Introduction

Growth in Europe lags behind that of the United States, mainly due to slower productivity growth. A key factor behind this gap is Europe's comparatively weak investment in sectors with high innovation potential, such as Information and Communication Technology (ICT). For instance, in 2023, industrial research and development (R&D) spending in the ICT software sector was under €20 billion in the European Union (EU), compared to over €180bn in the US (Nindl et al., 2024).

While enhancing innovation and productivity in Europe is essential to jumpstart growth, funding needs are daunting. Around €800bn per year in 2025-2030 is required just to finance the dual (digital and green) transition and strengthen European defence. Panetta (2022), for example, places the

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need at about €500bn per year for climate and energy security, €75bn for the digital transition, €42bn for education, upskilling and reskilling of the labour force, and €70bn in defence spending, for a total of around €700bn per year. Bouabdallah et al. (2024) reach a similar conclusion calling for €5.4trn investment in seven years (€770bn per year) for the energy and digital transition, as well as for defence spending. Estimates in Draghi (2024) are in the same ballpark.

Given limited fiscal space at both national and EU levels, substantial financing should be provided by the private sector, in a ratio of the order of 5:1 according to some studies (Darvas & Wolff, 2021).

Not only does private capital need to be mobilized, it also needs to be directed towards more innovative projects. In the EU, the saving rate is high (around 14.5% of disposable income), but about a third of households' financial assets are held in cash and bank deposits. Out of the €34.5 trillion held by households as financial assets in the EU at the end of 2023, one-third (around €11.5 trillion) were held in cash and deposits (see Arampatzi et al., 2025). Banks, in turn, have limited risk bearing capacity and tend to finance more conservative investment projects of companies that already have tangible capital that can be used as collateral. Channelling savings to venture capital funds, for instance, via institutional investors such as insurance and pension funds, could unlock resources for innovative firms.

A major hurdle to productivity-enhancing investment in Europe is insufficient capital market integration. In fact, completing the Banking Union and Capital Markets Union is considered an essential step towards a fully integrated Economic and Monetary Union (Rossi, 2015; Visco, 2015; Constancio, 2018). Yet, since the launch in 2015 of the Capital Market Union (CMU) initiative, progress has been slow and the European financial market remains fragmented. The latest developments were instigated a decade on by the European Commission's Competitiveness Compass (European Commission [EC], 2025a), a strategic framework that aims at strengthening the European economy by pursuing three goals: closing the innovation gap, decarbonizing the economy and increasing security by reducing dependency in strategic sectors. To achieve these goals, the Compass recognizes that a boost to productive investment is needed and that the lack of sufficient market integration contributes (among other factors) to stifling investment opportunities. In particular, the Compass states that '[t]he EU's financial sector does not channel [savings] efficiently to productive investment or allocate sufficient capital to innovation in the EU economy. As a result, citizens do not get adequate returns on their savings.' It concludes that '[t]he EU must integrate and have deeper and more liquid capital markets as a necessary step

to mobilize private sector resources and direct them towards future oriented growth sectors.'

In order to give new impetus to the process of capital market integration, on the 19th of March the European Commission formally launched through a Communication (EC, 2025b) a new initiative, the Savings and Investment Union (SIU). Building on the Letta report (Letta, 2024) the SIU embodies the EU's ambition to connect savings with investment opportunities, encompassing the whole financial system, i.e. including capital markets and the banking sector.

The analysis in the European Commission on the relationship between capital market integration and investment opportunities echoes the conclusions in Panetta (2024c) and Letta (2024). Concretely, the steps highlighted by the Commission to achieve an integrated European capital market blend initiatives contained in the Draghi (2024), Letta (2024), and Noyer (Noyer et al., 2024) reports, such as granting the European Investment Bank (EIB) a central role in crowding in private investment, simplifying and promoting securitization, integrating market infrastructure and developing European savings products to increase flows into European capital markets. A subset of these steps should be implemented by 2026.[1]

Capital market integration would also greatly benefit from the availability of a common European safe asset for several reasons.[2] First, such an asset would provide a clear reference for the pricing of financial instruments across Europe. Second, it would ease transactions in repo and derivatives markets by serving as high-quality collateral. Third, it would foster an ecosystem of specialized financial intermediaries and lay the groundwork for a deep and liquid European bond market. Finally, it would contribute to the stability of the whole financial system by mitigating the home bias in banks' sovereign bond holdings, hence weakening the feedback loop between national banks and public finances.

While the benefits of higher integration for the functioning of the financial markets are clear, a quantification of its macroeconomic impact is lacking. Equally important, the channels through which these effects would unfold have not been clearly spelt out. This paper is a first step towards filling this gap.

We identify two distinct channels. The first (a price effect) is a fall in the cost of capital for European companies, due to lower risk and liquidity premia

1 See the Commission's communication on the SIU (EC, 2025b). Similar policy proposals have been recently put forward by the Kaskarelis et al. (2025) and Arampatzi et al. (2025).

2 For the relationship between a safe asset and market integration, see Constancio (2018) and Panetta (2024). In March 2025, the European Parliament's Economic and Monetary Affairs Committee published a draft report on facilitating the financing of investments and reforms to boost European competitiveness and creating a Capital Markets Union that 'highlights the importance of issuing a common safe asset at the EU level to facilitate the achievement of capital market integration' (European Parliament [EP], 2025). See, also Panetta (2023, 2024a, 2024b).

and, should a European safe asset become available, to a reduction of the risk-free rates. We argue that the cost of capital could fall by around 50 basis points, half of which due to the availability of a safe asset. Using a general equilibrium model calibrated for the euro area, we find that this translates into a yearly stimulus to investment of about 1% of gross domestic product (GDP) and a boost to economic activity that ranges from 1.5% to 4.5% of GDP, depending on whether investment is in physical capital or R&D expenditure.

Second, higher integration could increase the appetite for investing in the EU of both domestic and foreign investors with higher risk propensity (a quality effect). Insofar as these investors are more skilled at finding investment opportunities, their entrance would shift the investment demand curve much like a positive productivity shock. A back-of-the-envelope calculation suggests that, under reasonable assumptions, this could generate additional investments for 0.35% of GDP per year, boosting GDP by a further 1.6%.

In all scenarios, growth would be partly funded by capital inflows into Europe.

The rest of the paper is organized as follows. Section 2 discusses the channels more formally. Section 3 describes the model and the results. Section 4 concludes.

2. The Channels

Capital market integration is expected to influence the portfolio choices of households and financial intermediaries, reshape market infrastructure, and broaden the investor base available to finance productive investment. While these transmission channels are conceptually clear, their actual impact on economic growth is less straightforward.

Consider a simple partial equilibrium example: a household reallocates €1 from a bank deposit to an investment fund, taking advantage of deeper market integration. The expectation is that the fund channels this capital towards more productive uses. However, if the original bank deposit was backing a loan to a firm undertaking an investment, the net economic gain depends on the relative productivity, or 'multiplier', of the old and new investments. In other words, growth depends not just on reallocating capital, but on improving its allocation.

Moreover, such a reallocation is often incentivized through fiscal measures like tax incentives. If these incentives are budget-neutral, they imply a reallocation of resources from other parts of the economy.

Despite these nuances, economic theory suggests that the overall impact should be positive. Banks tend to lend to established firms with sufficient collateral, often overlooking younger, more innovative companies, which

turn out to receive less financing than needed. Because of its reliance on standardized and easily-scalable activities, such as mortgage issuance, an overreaching banking sector could also tilt the economy towards relatively unproductive types of investment like residential real estate (Pagano et al., 2014). Developed capital markets can relieve this financial constraint by supporting firms with higher growth potential, thus leading to more efficient outcomes.

Quantifying the net effects is, however, a complex task, requiring some simplifying assumptions. Our approach begins by distinguishing between two broad channels: price effects and quality effects. The former includes the effects on the cost of capital, while the latter captures the benefits from the additional investment opportunities. We first draw on findings from the economic literature to estimate the impact of capital market integration via price effects, which we interpret as a conservative, lower-bound estimate of its potential benefits. As for the quality effects, the literature offers less guidance. However, by considering a range of plausible scenarios, we argue that substantially greater economic gains than those suggested by price effects alone could materialize.

The price effect

The price effect arises from higher risk diversification opportunities, higher market liquidity and the availability of a safe asset, which would lower the cost of capital and stimulate the economy much like a favourable credit supply shock would do.

Just to clarify how we approach the issue, take a company that issues a corporate bond in an environment of extreme case of market segmentation, such that this bond is only bought by domestic investors. The bond pays an interest R that can be split into three components:

$$R = risk\ premium + liquidity\ premium + riskless\ rate$$

Now, suppose that markets become more integrated, so that a foreign investor can also purchase this bond, and also that a safe asset becomes available. All the three components of R are expected to fall.

Risk premium

Integration increases risk diversification opportunities: the default risk of the bond is likely to be less correlated with the foreign business cycle than with the domestic one. This reduces the risk premium required by foreign investors. A similar effect could arise from the change in the pool of investors. For instance, the increased presence of less risk averse investors (foreign venture capitalists)

would also reduce the risk premium[3]. Risk compensation required by investors would fall, and funds would be directed towards riskier projects.

Liquidity premium

Integration increases market liquidity. The harmonization of rules regarding issuance, disclosure, and taxation would facilitate cross-border access to instruments, increasing investor participation (Pekanov, 2024). Also, better integration of market infrastructures would make transactions easier and strengthen the functioning of secondary markets. Greater informational transparency and product standardization would also encourage innovation and the diversification of portfolio strategies. These effects would be particularly significant for the corporate bond market, which is currently hindered by regulatory and operational fragmentation. The facilitation of securitization would help too, as explained in the proposals in the Letta, Draghi, and Noyer reports (Chen et al., 2007).[4] By improving market liquidity, capital market integration would lower the liquidity premium that investors require to lock their funds in more sophisticated financial instruments than bank deposits.

Risk-free rate

A European safe asset would enhance the liquidity of sovereign bond markets and serve as a benchmark risk-free rate for the pricing of financial instruments throughout the Union. It could also play a stabilizing role, reducing the fragmentation of funding conditions and mitigating the feedback loop between sovereigns and banks. A safe asset would improve the liquidity of the secondary market for government bonds and could benefit from a convenience yield currently exploited by the Bund at the euro area level, therefore reducing the risk-free rate against which other financial instruments are priced. Indirectly, a safe asset would contribute to improving the liquidity of private financial instruments by fostering the emergence of large market players. For example, in the US the existence of a large market for US treasuries contributed to increasing the liquidity of other instruments, like certificate deposits (D'Amico & Alekseev, 2025).

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3 Technically speaking, in the first case what changes is the quantity of risk, i.e., the covariance between investors' discount factors and the payoffs of the bond. In the latter case it is the price of risk, i.e., the compensation required by less risk-averse investors to hold the bond.

4 The paper analyses the impact of liquidity on corporate bond yield spreads, highlighting how less liquid instruments carry significantly higher premiums. The authors emphasize that an improvement in liquidity conditions is associated with a substantial reduction in spreads, all else being equal in terms of credit risk.

Quantifying the price effects

We assume that capital market integration decreases financing costs for firms by 20 to 30 basis points by lowering risk and liquidity premia. To see how we reach this estimate, let us start from the effect of improved risk sharing on risk premia. Although empirical studies on the effect of *cross-sectional* risk sharing on investment via financial markets are lacking, a recent paper on the US economy (Schneider, 2022) estimates the effect of a fall in *inter-temporal* risk. The two concepts are different but closely related. Intertemporal risk sharing connects the same economic agent at two different points in time, while cross-sectional sharing connects two different economic agents at the same point in time. Schneider (2022) finds that eliminating intertemporal risk in the US economy would lead to a sizeable fall of the term premium, by about 40 basis points.[5] This is a large number, as the complete elimination of risk is unrealistic, but it provides a benchmark estimate. As for liquidity premia, Chen et al. (2007) show that a small euro-area country would experience a reduction in average corporate debt financing costs of 48 basis points if the regulatory framework on insolvency were improved. Again, this is a large effect that probably overstates the reduction in the cost of financing that capital market integration could generate. Aiming for conservative assumptions, we assume that this could amount to one fourth of the effects outlined above, so about a 25 basis points reduction, putting together lower risk and liquidity premia. As for the risk-free component of R (the interest rate), estimates by Pallara et al. (2025) suggest that by capturing liquidity and convenience premia currently reflected in Bund yields, a European safe asset could reduce risk-free rates by 20 to 30 basis points.

Putting together these numbers, our working assumption is that capital market integration could lead to a fall in the cost of capital for the European economy by about 50 basis points.

The quality effects

Investment could also increase due to a change in the pool of investors and stronger foreign direct investment (FDI). An easier-to-navigate financial ecosystem would attract, for example, venture capital funds, fostering new investment opportunities

5 The exercise uses a calibrated macro-finance model to quantify the fall of term premia that would follow from a reduction of the intertemporal elasticity of substitution (IES) of risk averse agents. In the model real bonds are risky assets, i.e. their value goes down in bad states, and therefore risk-averse investors require a premium to hold them. A lower IES implies that agents are less averse to consumption fluctuations over time, hence require a lower premium to hold long-term bonds (i.e. the price of risk falls), leading to lower long-term rates. A fall in inter-temporal physical risk would affect long-term rates in the same direction. The fall of 40 basis points estimated in the model is likely to be an upper bound, as it would imply a flat yield curve. An important caveat is that financial markets integration may also act as a source of foreign spillovers, with an opposite effect on consumption volatility and risk premia.

in high-productivity projects. Kortum and Lerner (2000) find that 'a dollar of venture capital appears to be about three times as potent in stimulating patents than a dollar of traditional corporate R&D investment[6].' Moreover, both venture capital and FDIs generate significant positive spillovers for other domestic firms. Venture capital funds increase the propensity to innovate of existing mature firms and foster the creation of new businesses (Schnitzer & Watzinger, 2022). FDIs enhance the productivity of local firms (Keller & Yeaple, 2021), especially that of direct suppliers to the foreign firm (Blalock & Gertler, 2008).

Quantifying the quality effects is particularly hard due to the lack of empirical evidence. In Section 4, we simply consider a scenario where the current gap in venture capital investments between Europe and the US directed to R&D is halved.

First, two important remarks. Price and quality effects are distinct but not independent. They are distinct because the former assumes the production frontier is fixed and unchanged, and only captures the effect of a reduction in the cost of financing available to firms. The latter assumes that the frontier is endogenous (both at the firm level and in aggregate) and that it expands thanks to a change in the investors' ecosystem and opportunities. They are, however interrelated in many ways. For example, the increase in financial market liquidity implied by capital market integration not only lowers the cost of funding but also facilitates the entry of venture capitalists. Since the goal of these funds is to liquidate investments after a certain period, limited exit opportunities can hinder ex-ante the presence of such funds. Second, the effects could be larger, through some of the channels mentioned at the beginning of the section, which we have not explicitly considered and quantified. For instance, most proposals for improving financial integration suggest using tax incentives to develop private pension schemes. This would channel retail investors towards security markets. Securitization is also an area of development that would foster risk diversification and the participation of a broader investors' base[7]. Considering these additional channels, the economic effects could therefore be larger than here estimated.

3. Model Description and Calibration

We evaluate the macroeconomic effects of capital market integration on the economy by simulating a (quarterly) dynamic equilibrium model

6 The study uses variation in American legislation that allowed pension funds to invest in venture capital to generate an exogenous change in venture capital investment.

7 By dividing securities into tranches with varying levels of risk and return, securitization enables investors to select exposures that align with their risk tolerance. This mechanism broadens the investor base and facilitates the distribution of risk across different market participants.

calibrated to the euro area. The economy exchanges one good and a one-period bond with the rest of the world. The good is used for consumption and investment purposes. The bond is representative of the overall net foreign asset (NFA) position and pays an interest rate which, for the sake of simplicity, is kept constant. The rest of the world is taken as exogenous.

In the domestic economy, there is one representative household and one representative firm. Both household and firm act under perfect competition; thus, all prices are fully flexible (the only exception is the interest rate on the bond, which is constant) and taken as given.

The household consumes, supplies labour, and invests in the physical capital, the R&D stock, and the internationally traded bond[8]. The accumulation laws of physical capital and R&D stocks are subject to (specific) quadratic adjustment costs on the corresponding change in investment. The position in the internationally traded bond is also subject to standard quadratic adjustment costs[9].

The firm produces the good according to a constant elasticity of substitution (CES) production function, using capital, the stock of R&D, and labour as inputs, all supplied by the domestic household.

Crucially, the stock of R&D, differently from physical capital, positively affects the level of the firm's total factor productivity (TFP). Thus, investing in R&D has positive supply-side effects on EA production through both the accumulation of the R&D stock and the resulting higher TFP level.

The model is stylized but has all the necessary ingredients to study the macroeconomic effects of the channels described in Section 2.

In the model, the so-called 'great-ratios' (e.g., long-run, steady-state values of consumption-to-GDP ratio, investment in physical capital-to-GDP, investment in R&D-to-GDP ratio) and parameters are set in line with the existing literature.

Given this calibration, the relationship between the cost of capital and investment matches that of the European Commission model used in Draghi (2024)[10].

Finally, we take particular care in matching the elasticity of TFP to investment in R&D, as this provides an upper bound of the economic effects of

8 Household's consumption is also subject to external habit. This assumption mitigates the volatility of the macroeconomic responses following a shock.

9 This is a common assumption in this class of (incomplete market) models to guarantee the model's stationarity.

10 In particular, according to Draghi (2024), '[t]o unlock private investment in the order of magnitude of 4% of GDP through market financing alone would require a reduction in the private cost of capital – by approximately 250 basis points in the European Commission model'. See also, box 3 'Macroeconomic effects' in Draghi (2024).

higher investment. A vast literature has documented the positive effect of R&D investment on productivity and output growth, but empirical estimates of the elasticity of output with respect to R&D vary across methodologies, data sources, and levels of aggregation. However, they all consistently point to substantial private and social returns. At the micro level, firm-level studies generally estimate output elasticities in the range of 0.1 to 0.3 (and some as high as 0.6, see Nadiri, 1993; Wieser, 2005). These elasticities typically reflect the direct returns firms obtain from their own R&D activities. Industry- and macro-level studies find lower elasticities, with central tendencies between 0.05 and 0.2 (CBO, 2005; Blanco et al., 2016; Hall & Mairesse, 1995). A similar range is obtained in cross-country studies (Van Elk et al., 2019; Guellec & van Pottelsberghe, 2004). When spillovers are explicitly considered, elasticity estimates rise markedly, supporting the hypothesis of underinvestment in R&D from a social efficiency perspective[11].

We calibrate the TFP multiplier of R&D spending based on the results in Bertolotti et al. (2024). Using a structural production function model estimated on firm-level data, Bertolotti et al. (2024) find that a one-off 1% increase in private R&D investment generates a 0.016% increase after eight years in the level of TFP of firms undertaking the investment. Venditti et al. (2025) show that, considering that R&D spending amounts to around 2.5% of GDP, this elasticity can be transformed into a multiplier by using the formula:

$$\frac{dY}{dI_{R\&D}} = \frac{dY/Y}{dI_{R\&D}/I_{R\&D}} * \frac{Y}{I_{R\&D}} = \epsilon_{Y/I_{R\&D}} * \frac{Y}{I_{R\&D}} = \frac{0.1}{0.025} = 4$$

Results

We start by simulating the price effects by reducing the cost of capital used as inputs by firms by around 50 basis points. All else equal, this raises the (net) return on capital by the same amount and stimulates investment up to the point where the marginal productivity of capital matches the lower cost of capital. Given the model calibration, investment increases by 1% of GDP (i.e. €150bn for the euro area).

Since physical and R&D capital have different effects on the economy, we study two polar cases in which the increase in the return on capital occurs only for, respectively, physical or R&D capital. Feeding the model with these shocks

11 While the private rate of return to R&D investment is commonly estimated between 20% and 30%, social returns, which incorporate knowledge spillovers to other firms and sectors, can reach 50% or more. For example, Lucking et al. (2019) estimate a marginal private return of 17% and a corresponding social return of 67%, implying substantial externalities from R&D spending.

to physical capital investments or, alternatively, R&D investments for 20-years, yields the results in Table 1.

If higher investment is only directed to physical capital, the effect on GDP is relatively contained. Additional investment (amounting to about 1% of pre-shock euro area GDP) translates into an increase in output in this scenario by 1.5% after ten years (Table 1, column 1).

Table 1 Macroeconomic effects of higher investment generated by capital market integration

		SCENARIOS	
		(1)	(2)
Additional I (% of pre shock GDP)		1%	1%
Additional I (bn EUR)		150	150
in R&D		*0*	*150*
in physical K		*150*	*0*
		IMPACTS	
	HORIZON		
GDP change from baseline level	at year 10	1.5	4.5
	20-year average	1.2	3.8
TFP change from baseline level	at year 10	0	3.4
	at year 20	0	4.1
	20-year average	0	2.9

Figure 1 shows the evolution of the economy in this simulation. Under the assumption that the (ex-ante) return increases only for physical capital, investment in physical capital greatly expands. Investment in R&D, on the other hand, falls because firms have an incentive to substitute R&D with physical capital, whose return has risen[12]. Given adjustment costs on investment, output rises only slowly at the beginning, but then accelerates, as new capital is installed. Higher demand for physical capital is, therefore, initially satisfied with imports from abroad, leading to an initial deterioration of the current account and of the net foreign asset position[13]. At the beginning, consumption contracts slightly, as saving becomes relatively more attractive, but then picks up as permanent income increases. TFP is assumed to remain constant in this exercise.

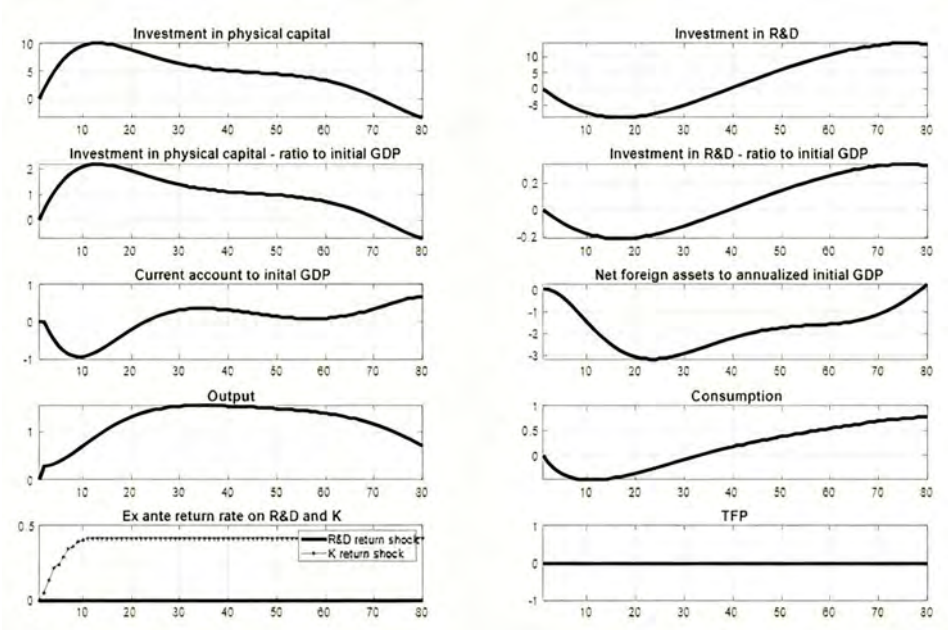
If investment were to be directed to R&D (Table 1, col. 2), the impact on

12 We assume that following the shock to the ex-ante return on physical capital investments, TFP remains unaffected by changes in the R&D stock. If we allowed instead TFP to endogenously change, it would persistently decrease.

13 Complementarity between capital and labour results in an increase in employment and in the real wage (not shown for brevity).

economic activity would be much larger. In this case, the additional R&D stock leads to a very persistent increase in TFP. After ten and twenty years TFP is, respectively, 3% and 4% higher than the initial baseline level. GDP is higher by 4% after ten years and by 6% after twenty years (3.6% on average over twenty years).

Figure 1 Macroeconomic impacts of a shock to the ex-ante returns on physical capital investments

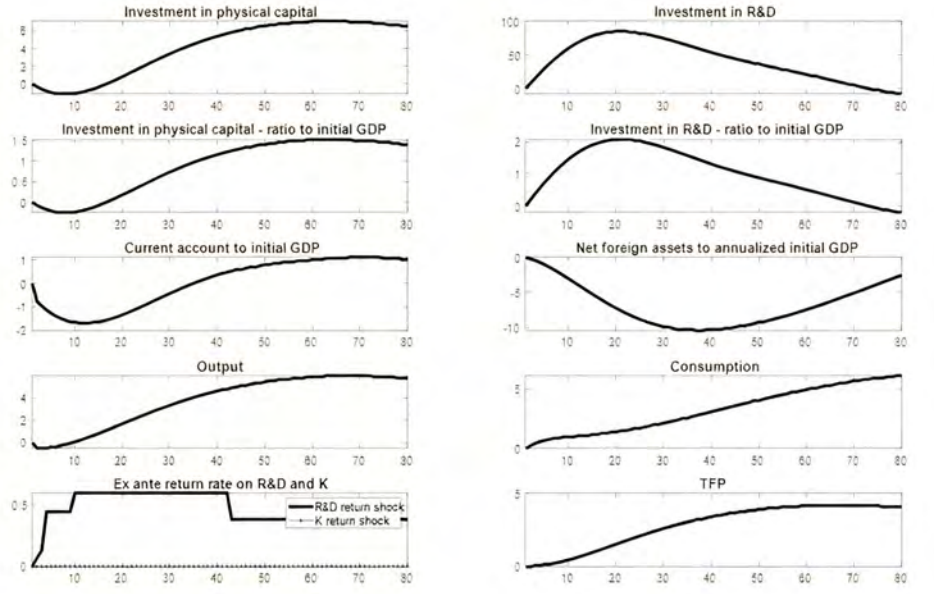


Note: investment in physical capital-to-initial GDP, investment in R&D-to-initial GDP, current account to initial GDP and net foreign asset position to annualized initial GDP ratios are in pp deviations baseline (steady-state) values; ex-ante return on R&D and physical capital are annualized pp deviation from baseline; all other variables are % deviations from steady state values.

In particular, following the positive shock to ex-ante returns firms gradually increase R&D investments (Figure 2). Knowledge accumulation favours TFP, which persistently rises over time. Higher TFP induces firms to gradually increase physical capital and labour. Households' consumption increases as well, given that households anticipate a persistently higher income. Again, the current account deteriorates at the beginning, inducing a reduction in the net foreign asset position (at the trough by around 10% of GDP). Thus, the higher aggregate demand, associated with the higher permanent income, is financed also by (net) capital inflows. Households borrow (in net terms) from abroad to finance the higher (domestic) investment without sacrificing their consumption.

Capital inflows thus contribute to sustaining the increase in demand for R&D investment. The current account-to-GDP ratio deteriorates at the trough, after 2-3 years, by around 1% of GDP. Over time, it improves again and brings back the NFA to equilibrium.[14]

Figure 2 Macroeconomic impacts of a shock to the ex-ante returns on R&D investments



Note: investment in physical capital-to-initial GDP, investment in R&D-to-initial GDP, current account to initial GDP and net foreign asset position to annualized initial GDP ratios are in pp deviations baseline (steady-state) values; ex-ante return on R&D and physical capital are annualized pp deviation from baseline; all other variables are % deviations from steady state values.

Assuming no issuance of the safe asset, the macroeconomic effects are halved relative to these scenarios.

Our modelling framework can also offer some guidance on the outcome that could be achieved if capital market integration also spurred an inflow of capital in the form of Venture Capital or FDIs, therefore activating 'quality effects'. In a scenario in which the gap in the share of venture capital investments between the US and Europe is halved (about 0.7 percentage points on average between

14 In the model, size and speed of adjustment of the NFA, and hence the changes in the current account needed to restore equilibrium of the NFA in the long run, depend crucially on the calibration of the adjustment costs that govern the dynamics of international bond positions. Specifically, the lower the adjustment costs that govern the NFA, the more households can borrow and, thus, increase consumption. This in turn further favours EA economic activity and, through general equilibrium effects, further strengthens the accumulation of R&D and physical capital in the short run.

2021 and 2023 (see Angelini, 2025: Chart 7)), additional investment for 0.35% of GDP would become available, which would finance high-productivity projects (R&D). Given that R&D investments have a multiplier of about 4.5 after ten years, this would produce, through this channel, an additional effect of 0.35 × 4.5 = 1.6% of GDP.

Before concluding, it is useful to dispel the notion that capital market integration alone can fill the investment gap in the euro area. Funding constraints and financial frictions are just one of the hurdles to investment and growth. Complex and fragmented insolvency procedures and regulations, a lack of human capital to complement physical capital, and insufficient public investment in areas with strong externalities are perhaps the main factors holding back the European economy. As pointed out in the Draghi report, other barriers that currently limit innovation and dimensional growth of European firms need to be removed in order to take full advantage of the opportunities provided by a well-functioning capital market.

Importantly, additional benefits, like increased resilience to external shocks or lower financial stability risks, are not directly considered in our estimates.

5. Conclusion

Completing capital market integration in Europe is an essential step towards the path to higher productivity and growth. It would reduce the cost of financing for firms and mobilize private capital, also from abroad, directed towards riskier projects with potentially high returns. The availability of a European safe asset would be crucial to increase market liquidity and to provide a common benchmark for the entire financial system.

In this paper, we spell out some of the mechanisms through which an integrated European capital market would spur investment. These include a reduction in the cost of capital (price effects) as well as increased participation, also from abroad, in market segments that finance high productivity projects (quality effects).

Using a general equilibrium model, we find that an integrated capital market centred around a common European security would reduce financing costs for businesses, triggering additional investments worth €150 billion per year and increasing output by 1.5 percent. The impact on GDP could be up to three times greater if the new investments were directed towards high-tech projects. Quality effects could add as much as 1.5% of GDP should they halve the gap in investment financed by venture capital between the US and Europe.

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