

Beyond fragmentation: economic resilience in a shifting world*

di Fabio Panetta

Ladies and Gentlemen,

It is a great pleasure to welcome you to this G7-seminar on 'A fragmenting trading system: where we stand and the implications for policy'.

We are meeting today just a few hundred metres from Palazzo dei Conservatori, where the Treaties of Rome were signed in 1957. The Treaties laid the foundations for the European Economic Community and the European Atomic Energy Community. They set in motion a vision of cooperation and shared prosperity that still resonates strongly in the world today. Their objectives reflect a set of values that transcend European borders and remain strikingly relevant: to promote the free movement of people, goods, services and capital, and to ensure equal access to essential materials.¹

Almost 70 years later, these values are under strain.

In my remarks today I will touch on some of the forces that risk pushing the global system towards fragmentation. I will also outline some high-level criteria for tackling the problem.

The opening up to international trade, increased economic and financial integration, and closer cooperation between countries are important achievements for the international community after the devastation caused by the Second World War. We must safeguard these achievements to ensure prosperity and peace for future generations.

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¹ Article 52 of the EAEC states that: 'The supply of ores, source materials, and special fissile materials shall be ensured [...] by means of a common supply policy on the principle of equal access to sources of supply.'

There is perhaps no better way to describe the process of global integration than through the lens of international trade.

The ability to trade has always brought countries together. Two centuries ago, the house of Thomas Jefferson, one of the American founding fathers, was filled with wine, furniture and books imported from Europe.²

Since then, global trade integration has increased dramatically and its centre of gravity has shifted. Two hundred years ago, trade was mostly an Atlantic affair.³ Today, trade connects all regions across the world, and its value (imports plus exports) has reached 60 per cent of world GDP. Two main factors have contributed to this expansion.

First, falling trade costs. Jefferson could afford to import French wine because he was extremely wealthy. Today, import costs are much lower – for everyone. This is partly because the reduction in international tariffs under the GATT/WTO multilateral agreements has made imported goods cheaper. Indeed, research shows that the increase in import tariffs in the United States in 2018 significantly raised the price of imported goods – tariffs were passed on one-to-one to US consumers.⁴ Equally important is the fall in international transport costs: by some measures, air transport costs have fallen in real terms from almost \$4 per tonne-kilometer in 1955 to \$0.3 in 2004.⁵ Policy certainly matters, but so does technological progress.

A second key factor is that global trade now moves through complex global value chains. The furniture in Jefferson's living room was designed and manufactured entirely in Europe. Today, the material and intellectual inputs for both simple and complex objects come from all over the world. This has led to a spectacular increase in both the interconnectedness and specialization of global economies. Take the iPhone for example. It is designed in the United States, its display comes from South Korea, the memory chips come from Japan, South Korea and Taiwan, and it is all assembled in China.⁶

Globalization has been accompanied by a dramatic improvement in living standards, especially in China and in other parts of Asia. Hundreds of millions of people have

² For an account of Jefferson's private life, see S.N. Randolph, *The Domestic Life of Thomas Jefferson*, New York, Harper & Brothers, 1871. Some of Jefferson's furniture can be seen at the [official Thomas Jefferson Monticello website](#).

³ K. Pomeranz, 'The Great Divergence: China, Europe, and the Making of the Modern World Economy', Princeton University Press, 2000.

⁴ M. Amiti, S.J. Redding and D.E. Weinstein, 'Who's paying for the US tariffs? A longer-term perspective', *AEA Papers and Proceedings*, Volume 110, 2020, pp. 541-546; P.D. Fajgelbaum, P.K. Goldberg, P.J. Kennedy and A.K. Khandelwal, 'The return to protectionism', *The Quarterly Journal of Economics*, Volume 135, 1, 2020, pp. 1-55.

⁵ D. Hummels, 'Transportation Costs and International Trade in the Second Era of Globalization', *Journal of Economic Perspectives*, Volume 21, 3, 2007, pp. 131-154.

⁶ F.P. Hochberg, 'The iPhone Isn't Made in China: It's Made Everywhere', *The Wall Street Journal*, 31 January 2020.

been lifted out of poverty.⁷ This phenomenon has been so pronounced that between 1980 and 2008 the centre of gravity of global economic activity moved some 5,000 km eastwards.⁸ This shift in trade has also been accompanied by geopolitical shifts.

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For all the successes I have listed, we must acknowledge that globalization has also created vulnerabilities. Some have only recently become apparent. Others have been brewing for a long time.⁹ This brings me directly to the issue of global fragmentation.

The COVID-19 pandemic and the geopolitical tensions following Russia's aggression against Ukraine have highlighted the vulnerabilities associated with over-reliance on single suppliers or regions. These events have shown how specialization can improve efficiency but also lead to excessive concentration, creating bottlenecks in global supply chains.

Interdependence is increasingly perceived as a source of risk to national security. Examples include the sudden interruption of Russian gas flows to Europe, or China's export quotas on gallium. At the same time, several advanced economies have curbed technology exports to non-aligned countries.¹⁰ Geopolitical blocs are now considering how to manage specialization and international trade to ensure their supremacy in the race for technology.

Companies are already taking note.¹¹ Geopolitical considerations are becoming more important in their foreign direct investment decisions.¹² In the European Union (EU), companies have begun to implement de-risking strategies, mainly by replacing Chinese suppliers with EU-based ones.¹³ Globalization is not over, but the geography of trade is changing.¹⁴

⁷ At the global level, inequalities have decreased since the 1980s thanks to a reduction in the gaps between countries. See L. Chancel, T. Piketty, E. Saez and G. Zucman (coordinators), *World Inequality Report 2022*, World Inequality Lab, 2022.

⁸ D. Quah, 'The Global Economy's Shifting Centre of Gravity', *Global Policy*, Volume 2, 2011, pp. 3-9.

⁹ F. Panetta, 'The future of Europe's economy amid geopolitical risks and global fragmentation', *Lectio Magistralis* delivered on the occasion of the conferral of an honorary degree in Juridical Sciences in Banking and Finance by the University of Roma Tre, Rome, 23 April 2024.

¹⁰ Export quotas on gallium on the one hand, and limitations on technological transfers on the other, are in fact related. See H. Ziady and X. Xu, 'China hits back in the chip war, imposing export curbs on crucial raw materials', *CNN*, 3 July 2023.

¹¹ M. Bottone, M. Mancini, A. Boffelli, D. Pegoraro, A. Kutten, I. Balteanu and J. Quintana, 'Sourcing governance and de-risking strategies in Europe: a comparative study of Germany, Italy and Spain', *Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers)*, 880, 2024; Centro Studi Confindustria, 'Catene di fornitura tra nuova globalizzazione e autonomia strategica', *Confindustria Servizi*, 2023.

¹² IMF, 'World Economic Outlook. A Rocky Recovery', April 2023.

¹³ I. Balteanu, M. Bottone, A. Fernández-Cerezo, D. Ioannou, A. Kutten, M. Mancini, and R. Morris, 'European firms facing geopolitical risk: Evidence from recent Eurosystem surveys', *VoxEU column*, 18 May 2024.

¹⁴ F.P. Conteduca, S. Giglioli, C. Giordano, M. Mancini and L. Panon, 'Trade Fragmentation Unveiled: Five Facts on the Reconfiguration of Global, US and EU Trade', *Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers)*, 881, 2024.

Other forces are also pushing towards greater fragmentation. In several advanced countries, critics argue that – by embracing globalization – democratic countries have given up some of their autonomy in implementing national policies that could have offered protection to the most vulnerable workers and citizens.¹⁵ Such considerations deserve attention.

At the same time, globalization has often been an easy scapegoat. For example, empirical analysis shows that technological progress has a much greater impact on wage inequality than outsourcing or participation in global value chains.¹⁶

It has also become increasingly clear that some countries have been able to attract significant volumes of global production thanks to substantial public subsidies.¹⁷ For example, the rapid growth of the electric vehicle industry in China has been supported by generous production subsidies.¹⁸ Multilateral rules and institutions have not always been effective in addressing these distortions. This has contributed to the erosion of the multilateral system.

As a central banker, let me also comment on the state of the international financial system. At global level, the degree of financial integration remains high, and the financial safety net has expanded significantly since the 2008 financial crisis. However, this safety net remains uneven across countries.¹⁹ There are signs that the landscape is changing. For instance, there is growing debate about the impact of trade and financial sanctions on the structure of the international payments system. In addition, some central banks are reducing their holdings of major currencies while increasing their gold reserves.²⁰

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How should we address the challenges of global fragmentation?

Recognizing that this is an extremely complex issue, I will refrain from offering a specific solution. Instead, I will propose a methodological approach and outline some concrete examples of its application.

¹⁵ D. Rodrik, *The Globalization Paradox: Democracy and the Future of the World Economy*, New York-London, W.W. Norton, 2011.

¹⁶ R.C. Feenstra and G.H. Hanson, 'The impact of outsourcing and high-technology capital on wages: estimates for the United States, 1979-1990', *Quarterly Journal of Economics*, 114, 3, 1999, pp. 907-940; R.C. Feenstra and G.H. Hanson, 'Global production sharing and rising inequality: a survey of trade and wages', in E. K. Choi and J. Harrigan (eds.), *Handbook of International Trade*, Oxford, Blackwell Publishing, 2003, pp. 146-185; 'Fostering inclusive growth', document prepared by IMF staff for the G20 meeting in Hamburg on 7-8 July 2017.

¹⁷ L. Rotunno and M. Ruta, 'Trade Spillovers of Domestic Subsidies', IMF Working Papers, 41, 2024.

¹⁸ European Commission, 'EU imposes duties on unfairly subsidised electric vehicles from China while discussions on price undertakings continue', press release, 29 October 2024.

¹⁹ The global financial safety net comprises central banks' FX reserves, central banks' bilateral swap arrangements (BSAs), Regional Financing Arrangements (RFAs), and the IMF. Its expansion since 2008 was driven mainly by increased coverage from BSAs and RFAs, which however are limited to selected participating countries. The IMF remains the only elements of the global financial safety net that provides universal coverage. See S. Aiyar et al., 'Goeconomic Fragmentation and the Future of Multilateralism', IMF Staff Discussion Notes, 1, 2023.

²⁰ F. Panetta, 'Beyond money: the euro's role in Europe's strategic future', Speech at the conference for the Ten years with the euro, Riga, 26 January 2024.

My basic premise is that we must avoid the illusion that blanket measures erecting protectionist barriers are the solution to our problems. A blanket measure is like a kitchen knife: it is not the right instrument to perform complex surgery. The global economy is extremely complex in its trade, investment and financial interconnections. Attempts to divide the global economy into rival blocs would do more harm than good.

An escalation of trade barriers between blocs would lead to severe efficiency and welfare losses for all.²¹ It would reduce the diversification of our economies and increase the volatility of output and inflation. Indeed, several studies have shown that trade openness and participation in global production networks improve the diversification of sources of supply and demand, thereby reducing exposure to local shocks.²² The weaponization of critical supply chains by commodity-producing countries would severely affect EU manufacturing production, with heterogeneous effects across regions, sectors and firms. For example, value-added in the electrical equipment industry could fall by more than 7 per cent, three times as much as in the textile industry.²³

Protectionism would not be as protective as it might seem, as blunt policies would inevitably be circumvented. Key products targeted by bilateral trade restrictions would find indirect routes to opposing blocs through trade with third countries,²⁴ simply turning a bilateral relationship into a three-party trade. This would only add a third trade intermediary, increasing costs and risks and reducing transparency.²⁵ Such unintended consequences would undermine economic efficiency and security.

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So, how can we pursue a more focused de-risking strategy?

In my view, this strategy rests on four main pillars: information, innovation, flexibility and international cooperation. As an example of this approach, I will refer to possible de-risking strategies in the sourcing of critical raw materials. This is a crucial issue for the EU, which accounts for only 0.5 per cent of global production of these inputs.²⁶

²¹ See, among others, M.G. Attinasi, L. Boeckelmann and B. Meunier, 'The economic costs of supply chain decoupling', ECB Working Papers, 2839, 2023; G. Felbermayr, H. Mahlkow and A. Sandkamp, 'Cutting through the value chain: The long-run effects of decoupling the East from the West', *Empirica*, 50, 2023, pp. 75-108; B. Javorcik, L. Kitzmüller, H. Schweiger and M.A. Yıldırım, 'Economic costs of friendshoring', *The World Economy*, 47, 7, 2024, pp. 2871-2908.

²² A. Borin, M. Mancini and D. Taglioni, 'Measuring exposure to risk in global value chains', World Bank, Policy Research Working Papers, 9785, 2021.

²³ L. Panon et al., 'Inputs in distress: geoeconomic fragmentation and firms' sourcing', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 861, 2024.

²⁴ For instance, in the case of sanctions imposed on Russia following the invasion of Ukraine, there are signs of a rerouting of EU sanctioned goods through specific third countries. See A. Borin et al., 'The impact of EU sanctions on Russian imports', *VoxEU*, 29 May 2023.

²⁵ F.P. Conteduca, S. Giglioli, C. Giordano, M. Mancini and L. Panon, op. cit., 2024.

²⁶ IEA, 'World Energy Investment 2024', 2024; F. Panetta, 'The heat is on: challenges and opportunities of the energy transition', Opening remarks at the G7-IEA conference on 'Ensuring an orderly energy transition', Rome, 16 September 2024.

With better information, we can better identify and monitor vulnerabilities. Many G7 public institutions, including the European Commission and the US Department of Commerce, have developed analytical tools to map critical vulnerabilities in the availability of raw materials.²⁷ However, our understanding of production interdependencies remains limited. More data needs to be collected and pooled, and best practices and tools need to be shared.

Innovation is the second pillar. Scientific research and product development can provide us with alternative materials and technologies. This can be financed partly through public-private partnerships for large projects. In addition, multilateral financial institutions such as the European Bank for Reconstruction and Development can finance new supply chains that help diversify sources of critical raw materials.

Third, our policies must be flexible enough to adapt to an ever-changing landscape. We cannot predict exactly what future innovations will look like. Nor can we predict geopolitical developments. Nevertheless, we should set long-term goals. Flexibility is all the more important when change takes time.²⁸

The fourth pillar is cooperation. To unlock the greatest gains, we should remain committed to making cooperation truly global. The cost of a fragmented world would in fact be very high. Some research²⁹ suggests that it could exceed 6 percent of global GDP in extreme scenarios.³⁰

But as global cooperation becomes more difficult, there are reasons to at least strengthen cooperation among like-minded countries. The rewards are great: it was a joint US-European supply chain that developed and distributed one of the most

²⁷ R. Arjona, W. Connell García and C. Herghelegiu, 'An enhanced methodology to monitor the EU's strategic dependencies and vulnerabilities', Publications Office of the European Union, Single Market Economy Papers WP/14, 2023; European Commission, 'Strategic dependencies and capacities', Commission Staff Working Document, 352, 2021; U.S. Department of Commerce 'Fact Sheet: Department of Commerce Announces New Actions on Supply Chain Resilience', 10 September 2024.

²⁸ To understand what this means, consider the production of critical minerals needed for the climate transition. Europe needs a flexible policy mix to significantly reduce its critical dependencies (M. Draghi, 'The future of European competitiveness', September 2024). Projects to increase domestic production of critical minerals are under way, for example for lithium. However, uncertainties remain regarding potential yields, especially for rare earths. There is currently no domestic refining capacity for these elements in the EU, so decisions will also have to be made here (L. Gregoir and K. van Acker, 'Metals for Clean Energy: Pathways to Solving Europe's Raw Materials Challenge', KU Leuven, 2022). Some argue that, if technological innovation in recycling advances far enough, Europe could become a net exporter of these minerals in the long term. But, in the short term, we need to step up economic diplomacy to strengthen trade and investment partnerships with a wider group of suppliers, including those in sub-Saharan Africa. The G7 Partnership for Resilient and Inclusive Supply Chain Enhancement is a blueprint for innovative strategies on this front. It can help diversify our supply chains for clean energy products, while providing our partners in low- and middle-income countries with technology transfers that support their economic development.

²⁹ M.G. Attinasi and M. Mancini (coordinators), 'Navigating a fragmenting global trading system: Insights for central banks', European Central Bank, Occasional Paper Series, forthcoming.

³⁰ To put this figure into perspective, a 6 percent decline in global output corresponds to the impact of the COVID-19 pandemic on world GDP in 2020. This impact is calculated as the difference between realized world GDP in 2020 and the corresponding value projected by the IMF in its October 2019 'World Economic Outlook'.

successful vaccines against COVID-19. The EU is already discussing new ways to further coordinate its members' policies. We also need to work better with our international partners. For instance, we should reinvigorate discussions on trade and investment agreements. On industrial policy, better coordination would at least allow us to avoid costly subsidy wars.

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Let me conclude by emphasizing that the costs of international fragmentation are not only economic. Much more is at stake: from social progress to international cooperation. And so is freedom – the freedom to trade goods and services, to invest across borders, to share knowledge and ideas. These are the prerequisites for securing prosperity and peace.

I very much look forward to the discussions that will emerge from today's seminar. I am sure it will help raise awareness of the many benefits that only an integrated world can bring.