EXECUTIVE SUMMARY

Fiscal Policy under Uncertainty

Escalating uncertainty and substantial policy shifts are reshaping economic and fiscal outlooks. Major tariff announcements by the *United States*, countermeasures by other countries, are contributing to financial market volatility, deteriorating prospects, and heightening downside risks. Disinflation has stalled in many countries, and already disappointing growth projections have been significantly downgraded (see April 2025 *World Economic Outlook*), while financial turbulence poses considerable downside risks to growth (see April 2025 *Global Financial Stability Report*). Public finances were already strained, and debt levels were elevated in many countries. Heightened uncertainty regarding tariffs and economic policy, rising yields in major economies, and widening spreads in emerging markets—alongside increased defense spending, particularly in Europe, and a challenging foreign aid landscape—are further complicating the fiscal outlook. Fiscal policy now faces a sharper trade-off between reducing debt, building buffers against uncertainties and accommodating spending pressures, all amidst weaker growth prospects, higher financing costs, and heightened risks.

Fiscal projections are subject to considerable uncertainty given the swift escalation of trade tensions and high levels of policy ambiguity. Based on the April 2025 *World Economic Outlook* "reference point" forecast, global public debt is projected to rise by an additional 2.8 percentage points of GDP by 2025 and approach 100 percent of GDP by the end of the decade, surpassing the pandemic peak.[1] More than one-third of countries are expected to see debt increase in 2025 compared to 2024. Collectively, these economies represent about 75 percent of global GDP and include major players— *China* and the *United States*—as well as *Australia*, *Brazil*, *France*, *Germany*, *Indonesia*, *Italy*, *Mexico*, *Russia*, *Saudi Arabia*, *South Africa*, and the *United Kingdom*.

Risks to the fiscal outlook have intensified since the October 2024 *Fiscal Monitor*. Global debt-at-risk three-years ahead—a metric encompassing all risk determinants to the end of 2024—has increased by 2 percentage points of GDP. In a severe adverse scenario, global public debt could soar to around 117 percent of GDP by 2027, marking levels not seen since World War II and about 20 percentage points above projections for that year.

Debt levels may continue to rise as revenues and output decline due to higher tariffs and increasing uncertainty (April 2025 *World Economic Outlook*). Elevated geoeconomic uncertainties may further increase public debt by pushing up spending, particularly in defense, especially in *Europe*. Tighter and more volatile financial conditions in the *United States* may spill over into emerging market and developing economies, increasing financing costs and lowering commodity prices. Limited improvements in fiscal positions could further exacerbate the risks associated with rising interest rates, at a time when many nations are already grappling with substantial gross financing needs. Higher-than-expected interest rates could crowd out essential spending, including social benefits and public investment, while shortfalls in foreign aid further aggravate financing risks in low-income developing countries. Higher and persistent fiscal deficits in the *United States*, weaker-than-expected domestic demand in *China*, prolonged uncertainty, and stagnant productivity growth would further exacerbate fiscal risks.

[1] The estimates and projections are based on statistical information available through April 14, 2025, but may not reflect the latest published data in all cases. For the date of the last data update for each economy, please refer to the notes provided in the online World Economic Outlook database.

In this uncertain and challenging landscape, countries will need to first and foremost put their own fiscal house in order. A gradual fiscal adjustment, within a credible medium-term framework, is needed in most countries to reduce debt while building buffers against heightened uncertainty. Adjustments should balance the pace of debt reduction with economic growth, tailored to each country's specific circumstances, fiscal space, and overall economic conditions.

Countries with limited fiscal space should prioritize public spending and allow automatic stabilizers to operate fully. Those with room for fiscal maneuver facing significant spending pressures and public investment needs (for example, *Germany*) can utilize this space within well-defined medium-term fiscal frameworks. In the *United States*, substantial fiscal adjustments are necessary to put public debt on a decisively downward path, which will require building social consensus to address ongoing fiscal imbalances. More broadly, advanced economies with aging populations should reprioritize expenditures, advance pension and health care reforms, eliminate inefficient tax incentives, and broaden the tax base. For *China*, on-budget fiscal expansion should help support the economy and lower the current account surplus. Given higher tariffs and the unusually high uncertainty, some additional fiscal support is warranted. Low-income developing countries should stay the course on planned fiscal adjustment in light of financing challenges. For many emerging market and developing economies, rationalizing spending and increasing revenues through tax reform, broadening tax bases, and enhancing revenue administration remain critical priorities.

Medium-term frameworks and modern public financial management systems should anchor adjustment paths effectively and reduce fiscal policy uncertainty. Countries facing new spending needs, particularly in defense, must demonstrate commitment to maintaining the integrity of their own fiscal rules while ensuring transparency. Any permanent increase in fiscal outlays for investment and defense must be accompanied by enhanced spending efficiency, strengthened procurement systems, and improved multiyear fiscal planning and macroeconomic forecasting to ensure realistic assessments of their impacts on economic growth and fiscal positions. Furthermore, these increased outlays should be supported by credible and detailed financing plans that clarify how they will be funded. For countries in debt distress, timely restructuring and coordinated efforts to provide concessional financing are essential, particularly for low-income developing countries. International cooperation and coordinated initiatives to provide concessional financing are vital to prevent undue fiscal tightening, alleviate human suffering, and sustain development efforts in these nations.

The recent volatility in financial markets underscores the need for preparedness against severe economic disruptions. During times of financial instability, fiscal policy can play a crucial role in supporting central banks through direct lending, guarantees, and equity injections, which help mitigate deleveraging and restore confidence. If necessary, governments should provide timely, temporary, and targeted support to businesses and communities affected by significant trade dislocations, ensuring transparency and careful cost management. In cases where trade disruptions become permanent, implementing active labor market policies and skills retraining is essential, with fiscal policy facilitating this transition. Ultimately, maintaining fiscal discipline is vital; failure to do so risks turning fiscal policy from a source of stability into one of turmoil.

Advancing fiscal and structural reforms is essential for reigniting medium-term economic growth (Georgieva 2024) and mitigating growth-debt sustainability trade-offs. Well-designed tax and spending reforms can boost employment and investment. Improving the efficiency of spending—especially on health, education, and infrastructure—can increase an economy's productive capacity.

While fiscal structural reforms are crucial for generating fiscal savings and promoting inclusive growth, public resistance has historically hindered progress. Chapter 2 examines the factors influencing the social

acceptability of major expenditure reforms (energy subsidies and pensions). The key finding is that sentiment regarding reforms from major stakeholders—including households, unions, civil society organizations, private sector entities, and opposition groups—plays a crucial role in advancing reforms, and their design is essential for acceptability and success. Building support among households, civil society organizations, unions, and opposition groups is key for advancing significant reform measures. The chapter also highlights that design, timing, and accompanying measures—particularly those alleviating impacts on affected groups—are critical for bolstering public support. Reforms are often considered in challenging macroeconomic environments, where larger, frontloaded measures may be necessary to stabilize the economy and gain public backing. In these circumstances, enhanced governance, trust, accompanying social transfers, and effective communication strategies are particularly important for fostering acceptability. Ownership and political commitment are also essential for building consensus and enhancing the credibility of reforms.

ASSUMPTIONS AND CONVENTIONS

The estimates and projections are based on statistical information available through April 14, 2025, but may not reflect the latest published data in all cases. For the date of the last data update for each economy, please refer to the notes provided in the online WEO database.

The following symbols have been used throughout this publication:

. . . to indicate that data are not available

— to indicate that the figure is zero or less than half the final digit shown, or that the item does not exist

– between years or months (for example, 2008–09 or January–June) to indicate the years or months covered, including the beginning and ending years or months

/ between years (for example, 2008/09) to indicate a fiscal or financial year

"Billion" means a thousand million; "trillion" means a thousand billion.

"Basis points" refers to hundredths of 1 percentage point (for example, 25 basis points are equivalent to ¼ of 1 percentage point).

"n.a." means "not applicable."

Minor discrepancies between sums of constituent figures and totals are due to rounding.

As used in this publication, the term "country" does not in all cases refer to a territorial entity that is a state as understood by international law and practice. As used here, the term also covers some territorial entities that are not states but for which statistical data are maintained on a separate and independent basis

CHAPTER 1

The estimates and projections are based on statistical information available through April 14, 2025, but may not reflect the latest published data in all cases.

Fiscal Policy under Uncertainty

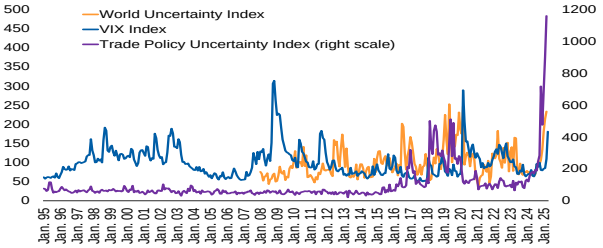
Fiscal Outlook Worsens amid High Uncertainty

Elevated uncertainty and significant policy shifts are reshaping economic and fiscal outlooks. Major tariff announcements by the *United States*, countermeasures by other countries, and exceptionally high levels of policy uncertainty, are contributing to worsening prospects and heightened risks. Progress with disinflation appears to have stalled in many countries; growth prospects, already disappointing, have been significantly downgraded (see April 2025 *World Economic Outlook*), while escalating financial turbulence presents considerable downside risks (see April 2025 *Global Financial Stability Report*). On the fiscal front, many countries were already grappling with stretched budgets and rising public debt burdens. Increased economic and policy uncertainty (Figure 1.1, panels 1 and 2), rising yields in key economies, and widening spreads in emerging markets (Figure 1.1, panels 3 and 4), coupled with higher defense spending—particularly in Europe—and a challenging foreign aid landscape, are now further complicating the fiscal outlook. In this volatile landscape, countries will need to first and foremost put their own fiscal house in order. A gradual fiscal adjustment within a credible medium-term framework is crucial for most countries to reduce debt, build fiscal buffers against uncertainties, accommodate priority spending, and improve long-term growth prospects.

Figure 1.1. Rising Uncertainties with Tighter and More Volatile Financial Conditions

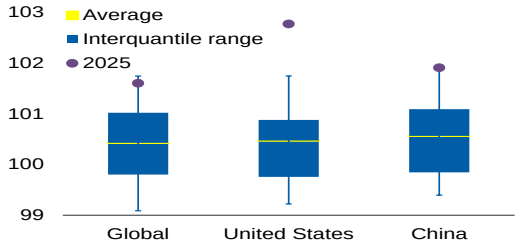
1. Geopolitical Risk, Trade Policy, and World Uncertainty Indexes

(Index)



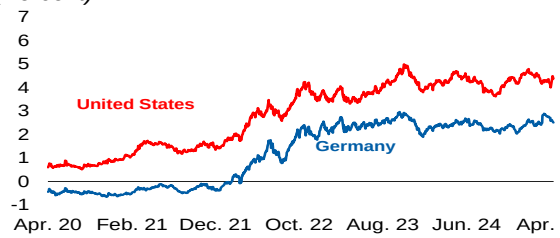
2. Fiscal Policy Uncertainty Index Distribution, 2005–25

(Index)

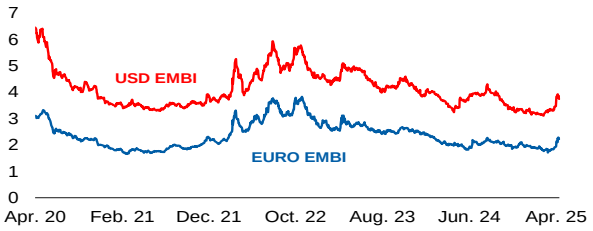


3. 10-year Bond Yields

(Percent)



4. Emerging Market Bond Index Global Sovereign Spread *(Basis points)*



Sources: Bloomberg Finance L.P.; Fiscal Policy Uncertainty Index: Hong, Nguyen, and Ke 2024; Geopolitical Risk Index: Caldara and Iacoviello 2022; Trade Policy Uncertainty Index: Caldara and others 2020; and World Uncertainty Index: Ahir, Bloom, and Furceri 2022.

Note: The data for panels 1 and 2 have April 10, 2025, as cutoff date. The data for panels 3 and 4 have April 14, 2025, as cutoff date. A higher number means higher uncertainty and vice versa. Panel 1 presents the index relative to 2008 (where index = 100 in 2008), meaning a value of 200 represents uncertainty that is twice as high as in 2008. Panel 2 standardizes the index with a mean of 100 and a standard deviation of one, meaning that an increase of one unit corresponds to a one-standard-deviation increase. Vertical bars in panel 2 correspond to the 10th and 90th percentiles. EMBI = Emerging Market Bond Index; USD = US dollars; VIX = Chicago Board Option Exchange Volatility Index.

The global fiscal situation deteriorated in 2024, but with notable divergence across countries. The global fiscal deficit increased by 0.1 percentage point, reaching an average of 5.1 percent of GDP (Table 1.1), whereas public debt rose by 1 percentage point to 92.3 percent of GDP (Table 1.2). This reflected ongoing legacies of high subsidies, social benefits, other current spending from the COVID-19 pandemic (Figure 1.2), and rising net interest expenses (Figure 1.3). Compounding these challenges, 53 percent of low-income developing countries and 23 percent of emerging markets were at high risk of debt distress or in debt distress.

Table 1.1. General Government Fiscal Balance, 2019–30: Overall Balance

(Percent of GDP, unless noted otherwise)

							Projections					
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
World	**-3.5**	**-9.5**	**-6.3**	**-3.7**	**-4.9**	**-5.0**	**-5.1**	**-4.7**	**-4.5**	**-4.5**	**-4.5**	**-4.6**
Advanced Economies	**-3.0**	**-10.3**	**-7.2**	**-2.9**	**-4.6**	**-4.7**	**-4.3**	**-3.9**	**-3.8**	**-3.9**	**-3.9**	**-4.0**
Advanced Economies excl. US	**-1.0**	**-7.6**	**-4.3**	**-2.3**	**-2.5**	**-2.6**	**-2.5**	**-2.5**	**-2.4**	**-2.5**	**-2.6**	**-2.6**
Canada	0.0	-10.9	-3.1	0.6	0.1	-2.1	-1.9	-1.6	-1.4	-1.2	-1.0	-0.8
Euro Area	-0.5	-7.0	-5.1	-3.5	-3.6	-3.1	-3.2	-3.4	-3.5	-3.5	-3.6	-3.7
France	-2.4	-8.9	-6.6	-4.7	-5.4	-5.8	-5.5	-5.9	-6.1	-6.1	-6.0	-6.1
Germany	1.3	-4.4	-3.2	-2.1	-2.5	-2.8	-3.0	-3.5	-3.9	-4.1	-4.3	-4.4
Italy	-1.5	-9.4	-8.9	-8.1	-7.2	-3.4	-3.3	-2.8	-2.6	-2.4	-2.5	-2.5
Spain[1]	-3.0	-10.0	-6.7	-4.6	-3.5	-3.2	-2.7	-2.4	-2.3	-2.2	-2.1	-2.0
Japan	-3.0	-9.1	-6.1	-4.2	-2.3	-2.5	-2.9	-3.1	-3.3	-4.0	-4.6	-5.3
United Kingdom	-2.5	-13.2	-7.7	-4.6	-6.1	-5.7	-4.4	-3.7	-3.1	-2.8	-2.6	-2.3
United States	-5.8	-14.1	-11.4	-3.7	-7.2	-7.3	-6.5	-5.5	-5.4	-5.6	-5.5	-5.6
Other Advanced Economies	-0.1	-4.7	-1.1	0.7	-0.2	-0.5	-0.6	-0.3	-0.1	-0.1	-0.2	-0.2
Emerging Market and Developing Economies	**-4.4**	**-8.4**	**-5.0**	**-4.8**	**-5.2**	**-5.5**	**-6.1**	**-5.9**	**-5.5**	**-5.4**	**-5.3**	**-5.3**
Emerging Market and Middle-Income Economies	-4.4	-8.6	-5.0	-4.9	-5.3	-5.6	-6.3	-6.1	-5.6	-5.5	-5.4	-5.4
Emerging Markets excl. China	-3.1	-7.8	-4.2	-2.9	-4.2	-4.3	-4.5	-4.2	-3.8	-3.5	-3.4	-3.3
Excluding MENA Oil Producers	-4.6	-8.7	-5.3	-5.6	-5.8	-6.0	-6.5	-6.3	-5.9	-5.8	-5.7	-5.7
Asia	-5.6	-9.4	-6.3	-7.0	-6.4	-6.7	-7.6	-7.6	-7.2	-7.2	-7.1	-7.1
China[2]	-6.0	-9.6	-5.9	-7.3	-6.7	-7.3	-8.6	-8.5	-8.1	-8.1	-8.0	-8.1
India	-7.7	-12.9	-9.4	-9.0	-7.9	-7.4	-6.9	-7.2	-7.1	-7.0	-6.8	-6.7
Vietnam	-0.4	-2.9	-1.4	0.7	-2.4	-1.6	-3.4	-3.2	-3.0	-2.9	-2.9	-2.9
Europe	-0.6	-5.4	-1.7	-2.4	-4.2	-4.4	-4.0	-3.4	-3.0	-2.8	-2.7	-2.7
Russia	1.9	-4.0	0.8	-1.6	-2.5	-2.2	-1.0	-1.2	-1.1	-1.1	-1.2	-1.3
Latin America	-3.7	-8.2	-3.9	-3.6	-5.2	-4.8	-4.8	-4.0	-3.4	-3.1	-2.9	-2.9
Brazil	-4.9	-11.6	-2.6	-4.0	-7.7	-6.6	-8.5	-7.7	-6.3	-5.2	-4.9	-4.7
Mexico	-2.3	-4.3	-3.7	-4.3	-4.3	-5.7	-4.0	-3.3	-2.9	-2.9	-2.9	-2.9
MENA	-2.3	-8.2	-1.9	3.6	0.1	-1.6	-3.4	-3.2	-2.4	-1.8	-1.5	-1.2
Saudi Arabia	-4.2	-10.7	-2.2	2.5	-2.0	-2.8	-4.9	-4.9	-4.0	-3.7	-3.3	-3.1
South Africa	-5.1	-9.6	-5.5	-4.3	-5.4	-6.1	-6.6	-6.1	-5.9	-5.8	-5.7	-5.6
Low-Income Developing Countries	**-4.1**	**-5.4**	**-4.6**	**-4.5**	**-3.9**	**-3.4**	**-3.5**	**-3.3**	**-3.1**	**-3.1**	**-3.2**	**-3.2**
Kenya	-7.4	-8.1	-7.2	-6.1	-5.7	-5.5	-5.4	-5.0	-4.4	-3.9	-3.6	-3.6
Nigeria	-4.7	-5.6	-5.5	-5.4	-4.2	-3.4	-4.5	-4.5	-3.9	-4.3	-4.7	-4.7
Oil Producers	**-0.1**	**-7.3**	**-0.6**	**3.0**	**0.5**	**-0.9**	**-1.2**	**-1.3**	**-1.0**	**-0.8**	**-0.6**	**-0.5**
Memorandum												
World Output (percent)	**2.9**	**-2.7**	**6.6**	**3.6**	**3.5**	**3.3**	**2.8**	**3.0**	**3.2**	**3.2**	**3.2**	**3.1**

Source: IMF staff estimates and projections.

Note: The estimates and projections are based on statistical information available through April 14, 2025, but may not reflect the latest published data in all cases. For the date of the last data update for each economy, please refer to the notes provided in the online World Economic Outlook database.

All country averages are weighted by nominal GDP converted to US dollars (adjusted by purchasing power parity only for world output) at average market exchange rates in the years indicated and based on data availability. Projections are based on IMF staff assessments of current policies. For country-specific details, see "Data and Conventions" and Tables A, B, C, and D in the Methodological and Statistical Appendix. excl. = excluding; MENA = Middle East and North Africa.

[1] Including financial sector support.

[2] China's deficit and public debt numbers presented in this table cover a narrower perimeter of the general government than the IMF staff estimates in China Article IV reports (see IMF 2024 for a reconciliation of the two estimates).

Table 1.2. General Government Debt, 2019–30

(Percent of GDP)

							Projections					
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross Debt												
World[1]	**83.8**	**98.9**	**94.0**	**89.9**	**91.3**	**92.3**	**95.1**	**96.7**	**97.5**	**98.2**	**98.9**	**99.6**
Advanced Economies	**103.6**	**122.0**	**115.5**	**109.3**	**108.2**	**108.5**	**110.1**	**110.9**	**111.5**	**112.0**	**112.6**	**113.3**
Advanced Economies excl. US	100.4	114.8	109.1	101.7	99.5	98.4	99.7	100.2	100.2	100.4	100.4	100.7
Canada[2]	90.2	118.1	112.6	104.2	107.7	110.8	112.5	110.9	109.4	107.9	106.2	104.1
Euro Area	83.6	96.5	93.9	89.5	87.4	87.7	88.7	89.7	90.4	91.1	91.9	92.9
France	98.1	114.8	112.7	111.3	109.7	113.1	116.3	119.1	121.6	123.9	126.1	128.4
Germany	58.7	68.0	68.1	65.0	62.9	63.9	65.4	67.0	68.5	70.4	72.5	74.8
Italy	133.8	154.3	145.7	138.3	134.6	135.3	137.3	138.5	138.6	138.2	137.7	137.7
Spain	97.6	119.2	115.6	109.4	105.0	101.8	100.6	99.0	97.6	96.0	94.5	93.0
Japan	236.4	258.4	253.7	248.3	240.0	236.7	234.9	233.7	232.1	231.2	231.1	231.7
United Kingdom	85.7	105.8	105.1	99.6	100.4	101.2	103.9	105.4	106.1	106.5	106.5	106.1
United States[2]	108.2	132.0	124.7	118.8	119.0	120.8	122.5	123.7	124.9	125.9	127.0	128.2
Emerging Market and Developing Economies	**54.5**	**64.1**	**63.2**	**63.4**	**67.4**	**69.5**	**73.6**	**76.7**	**78.4**	**79.7**	**80.9**	**82.0**
Emerging Market and Middle-Income Economies	55.2	65.0	64.0	64.2	68.2	70.3	74.8	78.1	80.0	81.5	82.9	84.2
Emerging Markets excl. China	**52.0**	**61.4**	**58.4**	**55.0**	**57.5**	**56.7**	**58.4**	**59.6**	**60.0**	**60.2**	**60.2**	**60.1**
Excluding MENA Oil Producers	56.8	66.5	65.7	66.7	70.8	72.9	77.3	80.7	82.5	84.0	85.4	86.8
Asia	58.8	68.9	69.6	73.1	77.8	82.3	87.9	92.0	94.3	96.4	98.3	100.2
China[3]	59.4	69.0	70.1	75.5	82.0	88.3	96.3	102.3	105.9	109.2	112.6	116.0
India	75.0	88.4	83.5	82.2	81.2	81.3	80.4	79.6	78.8	77.9	76.9	75.8
Vietnam	41.0	41.3	39.2	34.9	34.4	32.9	33.6	34.9	35.6	36.1	36.6	37.1
Europe	28.4	36.9	34.4	31.8	33.6	34.9	37.9	40.0	40.9	41.6	42.2	42.8
Russia	13.7	19.2	16.5	18.5	19.5	20.3	21.4	22.5	23.7	24.7	25.9	27.2
Latin America	67.5	76.6	70.8	68.3	74.0	70.4	71.6	72.5	72.9	73.0	72.6	72.2
Brazil[4]	87.1	96.0	88.9	83.9	84.0	87.3	92.0	96.0	98.1	99.1	99.4	99.4
Mexico	51.9	58.5	56.7	53.8	52.8	58.4	60.7	61.1	61.1	61.1	61.2	61.3
MENA Region	43.1	54.2	51.3	43.4	44.0	44.6	47.4	49.8	50.8	51.6	52.2	52.5
Saudi Arabia	21.6	31.0	28.6	23.8	26.2	29.9	34.8	38.5	40.9	42.9	44.5	45.9
South Africa	56.1	68.9	68.7	70.8	73.4	76.4	79.6	81.7	83.7	85.5	87.1	88.7
Low-Income Developing Countries	**43.1**	**50.1**	**49.4**	**50.2**	**53.7**	**52.7**	**52.0**	**50.3**	**48.9**	**47.7**	**46.4**	**45.2**
Kenya	59.1	68.0	68.2	67.8	73.0	65.6	68.3	70.2	69.8	68.1	66.2	64.4
Nigeria	30.2	35.6	36.8	40.4	48.7	52.9	52.5	51.6	49.1	47.6	46.4	45.4
Oil Producers	**45.3**	**59.6**	**55.0**	**48.0**	**51.4**	**53.2**	**55.8**	**57.1**	**57.5**	**57.8**	**57.9**	**58.0**
Net Debt[5]												
World[1]	**67.0**	**78.2**	**75.7**	**72.0**	**72.0**	**73.1**	**75.0**	**76.1**	**76.8**	**77.4**	**78.0**	**78.7**
Advanced Economies	**73.3**	**84.8**	**82.0**	**78.6**	**78.6**	**79.6**	**81.2**	**82.2**	**82.9**	**83.7**	**84.6**	**85.6**
Canada[2]	8.7	16.3	14.2	13.6	14.4	11.9	12.5	13.2	13.6	13.9	14.2	14.1
Euro Area	68.6	78.4	76.6	74.8	73.8	74.7	76.0	77.4	78.4	79.4	80.6	81.8
France	89.0	101.6	100.5	101.1	101.6	105.0	108.2	111.0	113.5	115.8	118.0	120.3
Germany	39.8	45.3	46.3	46.3	46.2	47.7	49.6	51.6	53.7	56.0	58.6	61.3
Italy	121.4	140.9	133.6	127.1	124.1	125.1	127.3	128.8	129.2	129.0	128.8	129.0
Spain	83.1	100.7	96.4	98.6	93.5	91.2	89.5	88.3	87.1	86.0	84.9	83.7
Japan	151.6	162.0	156.0	149.5	136.0	134.6	134.2	134.3	134.2	134.8	136.2	138.1
United Kingdom	75.8	93.1	91.6	89.8	91.8	93.7	95.1	96.4	97.1	97.5	97.4	97.0
United States[2]	81.1	95.6	95.5	91.6	94.0	96.5	98.0	99.2	100.4	101.4	102.7	104.0

Source: IMF staff estimates and projections.

Note: The estimates and projections are based on statistical information available through April 14, 2025, but may not reflect the latest published data in all cases. For the date of the last data update for each economy, please refer to the notes provided in the online World Economic Outlook database.
All country averages are weighted by nominal GDP converted to US dollars (adjusted by purchasing power parity only for world output) at average market exchange rates in the years indicated and based on data availability. Projections are based on IMF staff assessments of current policies. For country-specific details, see "Data and Conventions" and Tables A, B, C, and D in the Methodological and Statistical Appendix. excl. = excluding; MENA = Middle East and North Africa.

[1] Gross and net debt averages do not include the debt incurred by the European Union and used to finance the grants portion of the NextGenerationEU package. This debt totaled €58 billion (0.4 percent of European Union GDP) as of December 31, 2021, and €158 billion (1 percent of European Union GDP) as of February 16, 2023. Debt incurred by the European Union and used to onlend to member states is included within member state debt data and regional aggregates.

[2] For cross-economy comparability, gross and net debt levels reported by national statistical agencies for economies that have adopted the 2008 System of National Accounts (Canada, United States) are adjusted to exclude unfunded pension liabilities of government employees' defined-benefit pension plans.

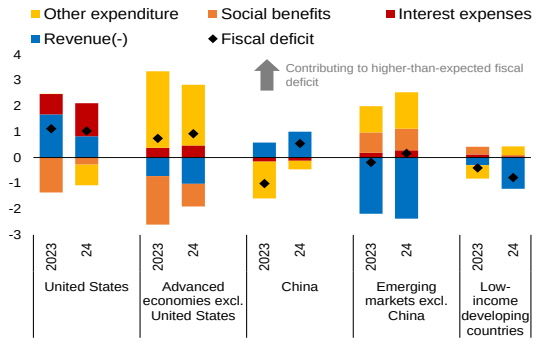
[3] China's deficit and public debt numbers presented in this table cover a narrower perimeter of the general government than the IMF staff estimates in China Article IV reports (see IMF 2024 for a reconciliation of the two estimates).

[4] Gross debt refers to the nonfinancial public sector, excluding Eletrobras and Petrobras, and includes sovereign debt held on the balance sheet of the central bank.

[5] Net debt refers to gross debt minus financial assets in the form of debt instruments.

Figure 1.2. Fiscal Policy Legacies from the COVID-19 Pandemic

(Percentage points of GDP)

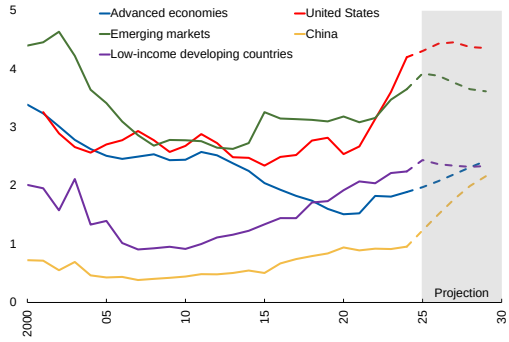


Sources: IMF, World Economic Outlook database; and IMF staff calculations.

Note: For China, spending on social benefits is not separately reported in the *World Economic Outlook*s. Current projections refer to April 2025 *World Economic Outlook* reference point; pandemic projections refer to April 2020 *World Economic Outlook* projections. excl. = excluding.

Figure 1.3. General Government Interest Expenses

(Percent of GDP)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.

Economic forecasts are surrounded by high uncertainty mostly due to the swift escalation of trade tensions and policy ambiguity. Based on the April 2025 *World Economic Outlook* "reference point" forecast, using information available as of April 4, 2025, global public debt is projected to rise by an additional 2.8 percentage points of GDP in 2025, approaching 100 percent of GDP in 2030 and surpassing the pandemic peak (Table 1.2). Major economies, such as *Brazil*, *China*, *France*, *South Africa*, the *United Kingdom*, and the *United States*, are key contributors to the increase in global public debt.[2] In addition, gross financing needs are expected to remain elevated across many countries. Risks of even higher debt levels have increased due to tighter and more volatile financial conditions and heightened economic uncertainty.

Recent Fiscal Developments and Outlook

Budget deficits and debt levels in many countries remained elevated in 2024, diminishing room for budgetary maneuver, albeit with considerable heterogeneity across countries (Tables 1.1 and 1.2; Figure 1.4).

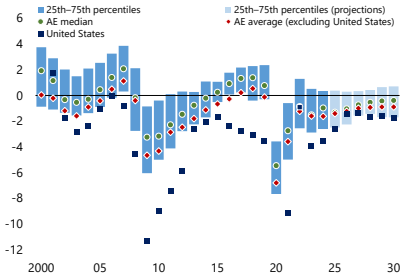
Based on the April 2025 *World Economic Outlook* "reference point" forecast using information available as of April 4, 2025, the fiscal outlook is influenced by three main factors: tariffs, uncertainty, and financial conditions. Tariffs imposed by importing countries create a negative supply shock, resulting in higher prices and reduced output and productivity in the medium term. Conversely, exporting countries experience a negative demand shock from these tariffs, leading to a short-term decline in demand and downward price pressures. Retaliatory tariffs from exporting countries have the opposite effect. Recent tariff announcements have increased uncertainty and contributed to tighter, more volatile financial conditions, leading to higher borrowing costs. The interplay between demand and supply effects will also influence exchange rate movements against trading partners. Moreover, tariffs directly impact import revenues. While higher tariffs may yield increased short-term revenue, this effect is likely to wane as higher prices lead to declining imports and output.

[2] In this chapter, data on *China's* public finances cover a narrower scope of the general government compared to the staff estimates presented in the IMF China Article IV. For a reconciliation of the two estimates, refer to IMF (2024).

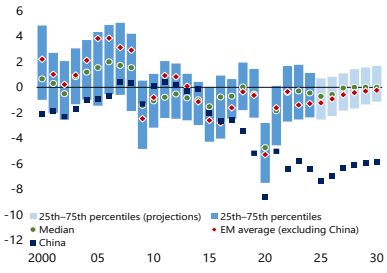
Figure 1.4. Primary Balances in Advanced Economies, Emerging Markets, and Low-Income Developing Countries

(Percent of GDP)

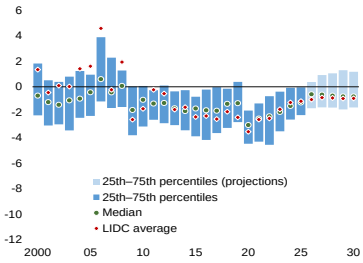
1. Advanced Economies



2. Emerging Markets



3. Low-Income Developing Countries



Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: The light-toned blocks from 2025 to 2030 in each panel indicate projections. Afghanistan and Sudan are excluded from the sample of low-income developing countries analyzed in panel 3. AE = advanced economy; EM = emerging market; LIDC = low-income developing country.

The Two Largest Economies: Diverging from Other Income Groups

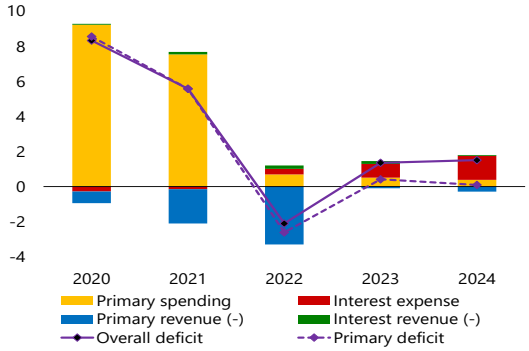
Fiscal deficits and debt in the two largest global economies, the *United States* and *China*, continue to critically shape global fiscal developments.

United States

In 2024, the general government fiscal deficit in the *United States* remained broadly unchanged and elevated at 7.3 percent of GDP. While the primary fiscal deficit declined from 3.9 to 3.6 percent of GDP, the increase in net interest expenses offsets this improvement, through both higher interest rates and initial debt levels. Revenue increased by 0.4 percentage point of GDP, partly owing to postponed tax deadlines from the previous year for some disaster-affected taxpayers. Primary spending as a share of GDP remained broadly unchanged, in part resulting from a pause in education spending on student loan cancellations, which is currently in litigation, and the phaseout of pandemic-related income-security programs. With both revenue and primary spending as a share of GDP nearly back to prepandemic levels, the 2024 fiscal deficit exceeded them primarily because of interest expense, which increased by 1.4 percentage points of GDP compared to 2019 (Figure 1.5).

Figure 1.5. Drivers of Changes in the US Fiscal Deficit Relative to Prepandemic Levels

(Percentage points of GDP, relative to 2019)



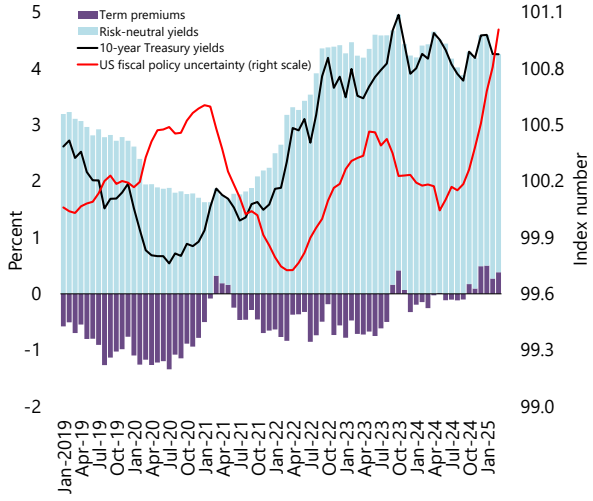
Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: The figure shows changes in the general government overall deficit-to-GDP ratio and its components for the United States relative to 2019. Changes in the primary-revenue-to-GDP ratio contribute negatively to changes in the overall deficit.

Nominal yields on 10-year US Treasury bonds surged to about 4.75 percent at the start of 2025—the highest since November 2023 as the Federal Reserve signaled a slower pace of rate cuts as a result of strong economic data, stickier inflation, and rising fiscal policy uncertainty (Figure 1.6; April 2025 *Global Financial Stability Report*). Since then, the upward trend has reversed, and nominal yields fell to 4.2 percent at the end of March, driven largely by the term premium amid fiscal and debt issuance strategy

considerations, only to climb back to 4.5 percent by April 11, 2025, following the April 2 tariff announcements. From April 1 to April 11, 2025, the 10-year U.S. nominal interest rate increased 31 basis points.

The overall fiscal deficit is projected to decrease from 7.3 percent of GDP in 2024 to 6.5 percent in 2025 (Table 1.1), contingent on higher tariff revenues. However, the magnitude of the tariff revenue increase is highly uncertain. Higher tariffs generally lead to a reduction in imports, with the extent of this decline depending on the price elasticity of demand at the bilateral product-country level. Estimates of price elasticity are affected by factors such as changes in real demand due to higher import prices, tariff evasion, and trade diversion—where imports from high-tariff countries are redirected through low-tariff countries. The tariff schedule itself is also uncertain and plays a crucial role. The pause of on April 2 tariffs and the ratcheting up of tariff rates between *China* and the *United States* announced around April 9 (top-down model-based scenario in the April 2025 *World Economic Outlook*) could lead to a very different tariff schedules and results in lower import revenues. For instance, a tariff rate of 100 percent could substantially reduce imports of goods with a price elasticity of -1, resulting in negligible revenue, while imports of inelastic goods may experience minimal decline, potentially generating higher revenue. Additionally, tariffs can dampen economic activity (see Box 1.2 of the April 2025 *World Economic Outlook*), which may negatively affect other tax bases, such as income taxes, potentially offsetting some of the revenue gains from tariffs.

Figure 1.6. US 10-Year Treasury Nominal Yields, Risk Premiums, and Fiscal Uncertainty



Sources: Federal Reserve Bank of New York; Hong, Nguyen, and Ke 2024; and IMF staff calculations.
Note: The data in the figure have the cutoff date of April 10, 2025. The decomposition into monthly risk-neutral yields and term premiums is based on Adrian, Crump, and Moench (2013). Fiscal policy uncertainty is reported as a 12-month moving average.

Without significant policy changes, the deficit is projected to drop to 5.6 percent of GDP in the medium term, fueled by a 0.7 percentage point rise in revenues. Net interest expenses are projected to remain historically high at about 3.8 percent of GDP, while the debt-to-GDP ratio could rise by about 1 percentage point annually, reaching 127.6 percent by 2030 (Table 1.2). These projections are highly uncertain and do not account for measures under discussion in Congress, under budget reconciliation., The debate will focus on raising the debt ceiling, extending or making permanent the provisions of the Tax Cuts and Jobs Act set to expire at the end of 2025, and examining various spending cuts and increases.

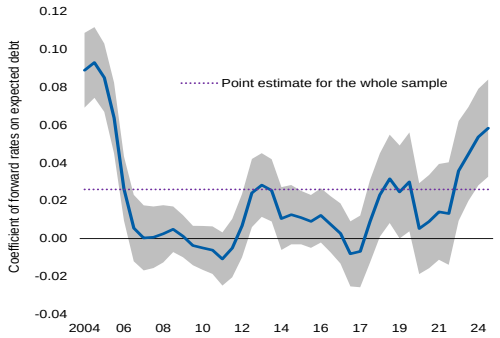
In addition, rising future debt could add further pressure on long-term interest rates and government financing costs. New analysis confirms that higher expected future debt and deficits could lead to higher long-term interest rates (Furceri, Gonçalves, and Li, forthcoming). Specifically, an increase of 10 percentage points of GDP in US public debt between 2024 and 2029 could lead to a 60-basis-point rise in the 5-year forward to 10-year rate. Similar results hold for the 10-year Treasury nominal yield (Figure 1.7). The analysis also suggests that projected fiscal balances are significantly and positively associated with the 10-year term premiums (see Online Annex 1.1).

China

China's fiscal deficit increased by 0.6 percentage point of GDP in 2024, reaching the high level of 7.3 percent. General government revenues fell by 0.4 percent of GDP (Figure 1.8, panel 1), primarily because of a 3.4 percent decline in tax revenues. Moreover, land sales dropped by 22.4 percent year over year owing to the depressed property market. This decline was partially offset by a 25.4 percent increase in nontax revenues, likely driven by contributions from state-owned enterprises and enhanced local government efforts to collect fines and fees. Budget execution was slow until last September 2024, with local government financial vehicles facing financing limitations. Notably, net bond issuance from these vehicles turned negative since the last quarter of 2023, despite low spreads (Figure 1.8, panel 2), likely because the central government imposed stricter borrowing constraints.

Figure 1.7. Effect of Expected Public Debt on US Forward Interest Rates

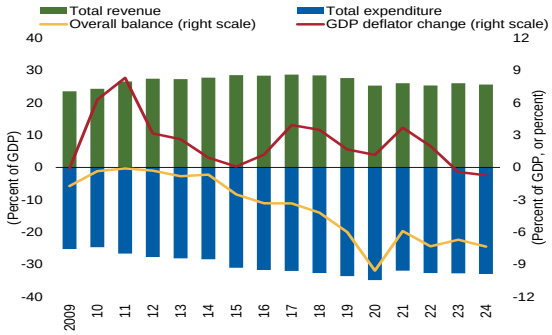
(Time-varying coefficient of forward rates on expected debt)



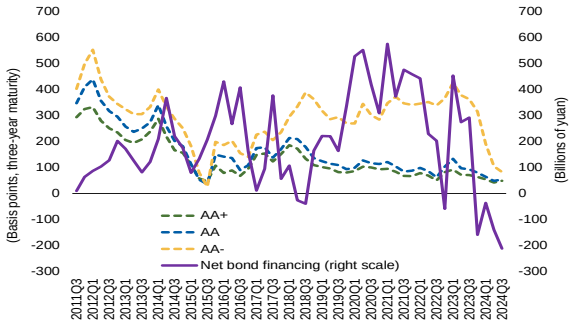
Source: Furceri, Gonçalves, and Li forthcoming.
Note: Shaded area represents the 90 percent confidence interval. See Online Annex 1.2 for details.

Figure 1.8. General Government Fiscal Variables, GDP Deflator Change, and Local Government Financial Vehicle Net Bond Financing in China

1. General Government Fiscal Variables and the GDP Deflator Change



2. Local Government Financial Vehicle Net Bond Financing and Credit Spread of Bonds by Credit Rating



Sources: IMF, World Economic Outlook database; Wind; and IMF staff calculations.
Note: AA+, AA, and AA– denote the credit rating.

Since September 2024, government agencies have announced various policies to support the economy, including a multiyear plan to address local governments' hidden debt. *China* plans to swap 10 trillion yuan of off-budget debt with official debt from 2024 to 2028, which will raise the official debt-to-GDP ratio while alleviating some financing pressures on local governments. Consequently, budget execution saw an uptick in the last quarter of 2024.

China's fiscal stance is expansionary in 2025 with the deficit projected to further increase to 8.6 percent of GDP. This increase is driven by lower nontax revenues, and policies announced in the 2025 budget aimed at modestly boosting consumption and strengthening social safety nets. The (on-budget) fiscal expansion outlined in the 2025 budget is a positive step, as it will help support the economy and lower the current account surplus. Although recent reforms to increase the retirement age may alleviate some spending pressures, elevated deficits are expected to push public debt to 116 percent of GDP by 2030, based on its augmented definition. However, the outlook faces unusually high uncertainty. Escalating

geoeconomic tensions and prolonged trade policy uncertainty present considerable headwinds to growth, which not only reduce the tax base but also necessitate increased fiscal support, further elevating the pressure on both deficits and debt.

Advanced Economies (Excluding the United States): Debt Is Stabilizing but with Large Divergences

The average primary deficit in advanced economies (excluding the *United States*) remained unchanged at 1.6 percent of GDP in 2024 (Figure 1.4, panel 1), whereas the overall deficit increased slightly by 0.1 percent of GDP from 2023 (Table 1.1). Lower short-term interest rates and longer debt maturities relative to the *United States* helped mitigate the rise in interest expenses (Figure 1.3). However, some advanced economies experienced an increase in their deficits, because of the persistence of high or even slightly rising fossil fuel subsidies (*Finland*).[3]

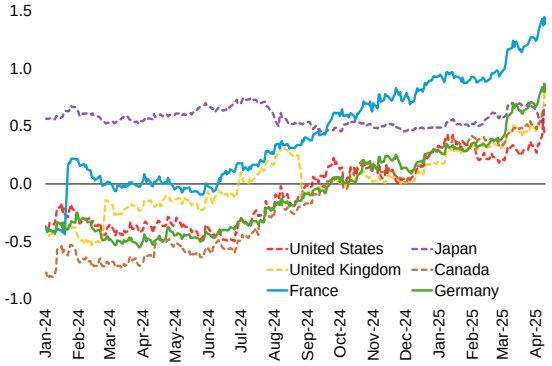
Since early 2023, long-term bond yields have been somewhat volatile across most advanced economies. However, term spreads—defined as the difference between 10- and 2-year bond yields—have been on a rising trend since mid-2024 (Figure 1.9, panel 1). This increase is driven primarily by heightened risk stemming from concerns about trade uncertainty, future inflation and growth, fiscal and monetary policy, and debt management. A notable example is the recent spike in the German Bund term spread, which followed the announcement of a political agreement to ease government debt limits, highlighting the volatility in term spreads observed in recent weeks. The April 2 tariffs initially led to a decline in long-term yields of benchmark government bonds, as investors sought safe-haven assets amid fears of a deteriorating global economic outlook. However, this decline was short-lived, with 10-year yields rising sharply within days. In contrast, 2-year bond yields have consistently decreased, reflecting expectations of further policy rate cuts by major central banks (April 2025 *Global Financial Stability Report*). New domestic and external debt issuances have exhibited a relatively flat trend, regardless of the volumes and maturities involved, although with sizable fluctuations around the trend (Figure 1.9, panel 2).

[3] In 2024, fossil fuel subsidies in *Finland* amounted to 0.5 percent of GDP (see Black and others 2023 and their estimates and forecasts at https://climatedata.imf.org/pages/mitigation#mi3).

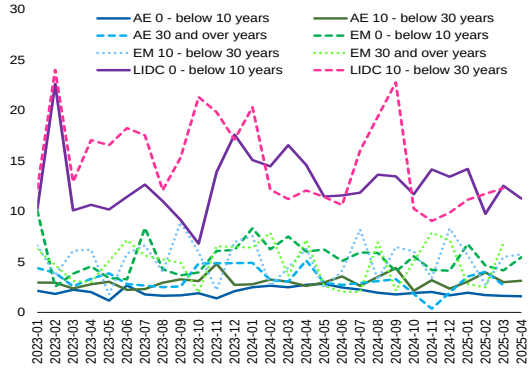
Figure 1.9. Evolution of Term Spreads for Select Advanced Economies and the Weighted Average of Yield to Maturity of Recent Emissions in Different Income Groups

(Percent)

1. Recent Evolution of Term Spreads for Select Advanced Economies



2. Weighted Average of Yield to Maturity of Recent Government Bond Issuances



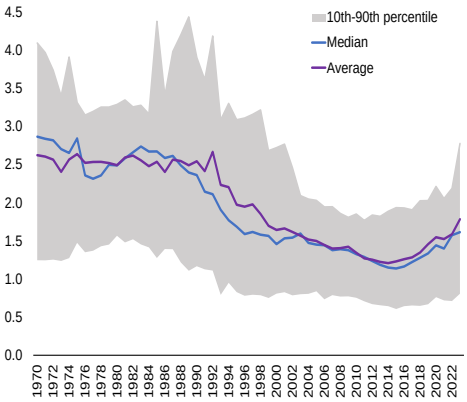
Sources: Bloomberg Finance L.P.; and IMF staff calculations.
Note: The data in the figure have the cutoff date of April 10, 2025. Lines in panel 1 show the difference between the 10- and 2-year yields for each selected advanced economy. Lines in panel 2 show the weighted average for all primary domestic and external debt issuance yield to maturities for distinct country groups across different maturity categories. AE = advanced economy; EM = emerging economy; LIDC = low-income developing country.

Planned fiscal consolidation is expected to stabilize debt at about prepandemic levels in the medium term, although there are significant differences across countries (Figure 1.4, panel 1) and high uncertainty about the projections, given the increased trade policy uncertainty. The weighted average of public debt is projected to surpass 100 percent of GDP by 2030 (Table 1.2). Notably, whereas public debt in *Belgium*, *France*, and the *Slovak Republic* is projected to rise by more than 10 percentage points of GDP in the next five years, it is expected to decline by more than 15 percentage points of GDP in *Cyprus*, *Greece*, and *Portugal*. Expenditure pressures may further increase debt risks and strain fiscal sustainability (October 2024 *Regional Economic Outlook: Europe*). Those pressures include population aging, notably if pension and health care reforms are not enacted (Chapter 2; Chapter 2 of the April 2025 *World Economic Outlook*), and spending to soften the potential impact of tariffs.

In *Europe*, a stronger strategic alliance within the *European Union* has heightened pressure on defense expenditures. Most European Union countries have been increasing their defense budgets in recent years, averaging a rise of 0.2 percentage point of GDP between 2020 and 2023 (Figure 1.10). In some instances, the increases have exceeded 1 percent of GDP (notably in *Poland*). The macrofiscal impact of higher military spending will depend on how it is financed, the monetary policy response to the resulting demand shock, and the implications of economies of scale and regional spillovers. However, fiscal vulnerabilities may emerge if European countries fail to outline a credible plan for gradually financing higher spending, including the intended mix of tax hikes and spending cuts, while managing their defense budgets transparently. This will also have implications for the credibility of the new European Union Governance Framework (Box 1 of the

Figure 1.10. Military Spending in the European Union

(Percent of GDP)



Sources: Stockholm International Peace Research Institute Military Expenditure Database; and IMF staff calculations.

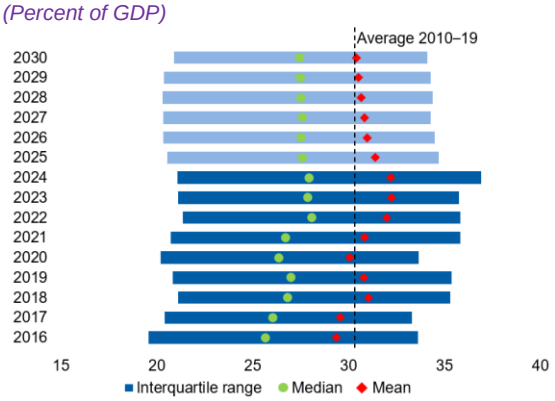
April 2024 *Regional Economic Outlook: Europe*; Box 1.3 of the April 2024 *Fiscal Monitor*).

Emerging Markets (Excluding China): Modest Expenditure-Based Consolidation Ahead

In emerging markets (excluding *China*), the average primary deficit remained stable in 2024 at 1.3 percent of GDP, whereas the overall deficit increased slightly to 4.3 percent of GDP. This is attributed to higher revenues (Figure 1.11)—for example, in some oil-exporting countries—which partially offset rising expenditures. However, fiscal developments varied markedly across countries. *Argentina* achieved its first primary surplus since 2008 by cutting expenditures by more than 5 percentage points of GDP. In contrast, many economies with elections in 2024, as well as large emerging markets such as *Indonesia*, *Mexico*, and *Saudi Arabia*, reported higher fiscal deficits compared to 2023.

Figure 1.11. Distribution of Fiscal Revenues in Emerging Markets (Excluding China) per Year

(Percent of GDP)

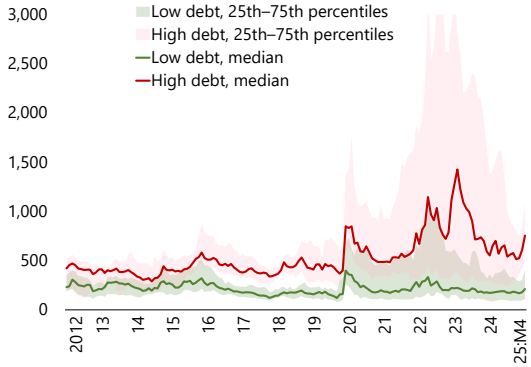


Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: Light-toned blocks indicate projections.

Sovereign spreads, on average, continued to decline in many emerging market and developing economies in 2024 (Figure 1.12). This trend persisted despite the strength of the US dollar (2024 *External Stability Report*) and its effect on foreign-denominated debt,[4] as well as rising economic and fiscal policy uncertainty, which could potentially affect spreads (Box 1.1 of the April 2024 *Fiscal Monitor*). One possible explanation is the compression in fluctuations of the global risk premium for US dollar-denominated credit-risk instruments observed in 2024. In addition, domestic policies that have reduced debt levels and improved policy frameworks have also played a significant role in some emerging market and developing economies. However, spreads have widened since April following higher financial market volatility.

Figure 1.12. Foreign-Currency Sovereign Spreads in Emerging Market and Developing Countries

(Basis points, monthly)



Sources: Haver Analytics; and IMF staff calculations.
Note: The data in the figure have the cutoff date of April 10, 2025. "Low debt" refers to countries whose public debt levels are in the bottom third of the sample; "High debt" refers to countries whose public debt levels are in the top third. Solid lines correspond to the median distribution of foreign-currency spreads, whereas shaded areas correspond to the interquartile range.

Fluctuations in yields on new domestic and external issuance (Figure 1.9, panel 2) have impacted overall issuance levels. External debt issuance has fallen by 20 percent year over year in the first quarter of 2025, while total issuance has increased by 6 percent in the same period, highlighting the divergence in borrowing costs across countries. Whereas *Mexico*, and *Saudi Arabia* have benefited from similar or lower foreign-currency yields compared to previous years—helping them to increase issuance volumes—

[4] In recent decades, most emerging market and developing economies have transitioned from a negative aggregate net international investment position in foreign currency to a positive one, thereby reducing risks associated with (*continued*)

others, such as *Egypt*, have seen their external bond yields rise significantly.

Emerging markets (excluding *China*) are projected to gradually reduce their primary deficits, mainly through spending cuts. By 2025, the primary deficit is expected to slightly decline by 0.1 percentage point to 1.2 percent of GDP, driven by stricter public spending controls and reforms in countries such as *India*, *Mexico*, and *Türkiye*. Although projected tax revenues are expected to decline in the medium term, particularly in oil-exporting countries given softer oil prices, the primary deficit should decrease to 0.2 percent of GDP on average by 2030. Yet, significant improvements in public debt are hindered by high debt-servicing costs, slow fiscal adjustments, and risks from new sources of unidentified debt (October 2024 *Fiscal Monitor*). Under current policies, public debt is projected to rise to 60 percent of GDP by 2030. Notably, debt is expected to increase by more than 18 percentage points of GDP in *Romania* and 25 percentage points of GDP in *Gabon*.

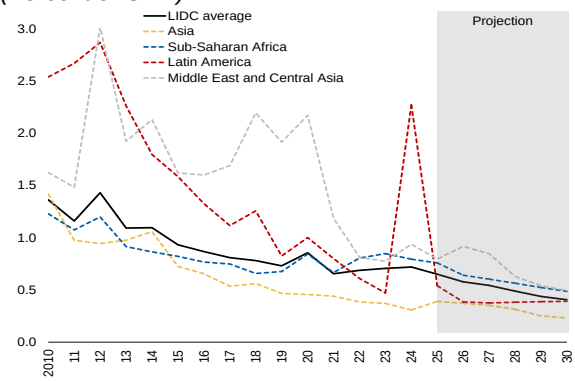
Low-Income Developing Countries: Less Aid and Lower Interest-Growth Rate Differential

In 2024, low-income developing countries experienced an improvement in their primary deficit from 1.8 to 1.2 percent of GDP. Revenue-to-GDP ratios increased because of higher economic growth, but this was partially offset by rising primary expenditures on average. Notable examples of such offsetting are *Nigeria* and *Somalia*. Effective interest rates have resulted in the highest net interest outlays in two decades, averaging 23 percent of tax revenues. The average public-debt-to-GDP ratio decreased from 53.7 percent in 2023 to 52.7 percent in 2024, although it remains 10 percentage points higher than before the pandemic. Many countries face challenges accessing external financing and have seen a recent decline in foreign aid, which is projected to continue decreasing in the medium term (Figure 1.13, panel 1). For example, annual grants as a percentage of GDP in the *Republic of Tanzania* have fallen to less than one-sixth of the average over the previous two decades. Additionally, in the *Sahel region*, traditional development partners have been reluctant to reengage after military coups (October 2024 *Regional Economic Outlook: Sub-Saharan Africa*).

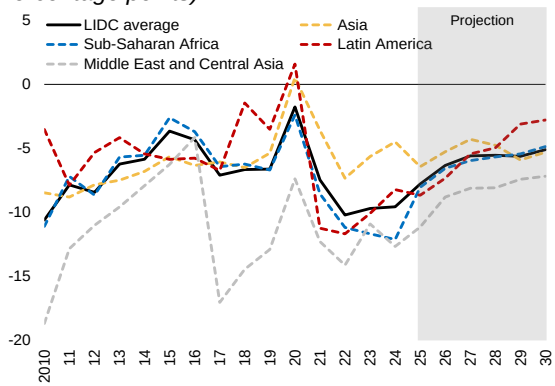
domestic currency depreciation and enhancing the insurance role of national balance sheets in response to economic shocks. Nonetheless, the prevalence of short positions in foreign currency for debt among these economies renders them vulnerable to depreciation pressures (Box 1.2 of the 2023 *External Stability Report*).

Figure 1.13. Grants and Interest-Growth Rates Differential in Low-Income Developing Countries

1. Grants
(Percent of GDP)



2. Interest-Growth Rates Differential
(Percentage points)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: The spike in 2024 for the Latin American regional average in panel 1 reflects a sharp increase in foreign aid for Haiti, given the debt forgiveness granted by Venezuela of $1.7 billion in exchange for a lump-sum payment of $500 million. Panel 2 shows the difference between long-term real interest rate and real GDP growth. Panel 2 excludes Sudan from the sample. LIDC = low-income developing country.

Average primary deficits and public debt levels are expected to improve by 2025 and remain relatively stable in the medium term (Figure 1.4, panel 3), whereas public debt is expected to decline to 45.2 percent of GDP in the medium term. About two-thirds of low-income developing countries are expected to consolidate their debt in 2025, with reductions in their public-debt-to-GDP ratio notably exceeding 15 percentage points in *Zambia* and *Zimbabwe*. This adjustment will be driven more by increased revenues than by spending cuts, as expected for *Ethiopia*. Despite these improvements, fiscal challenges persist, exacerbated by a declining interest-growth differential (Figure 1.13, panel 2) that adds to debt risks. Accordingly, high net interest expenses are estimated to remain above 2 percent of GDP (20 percent of tax revenues) for all years until 2030.

Risks to the Fiscal Outlook

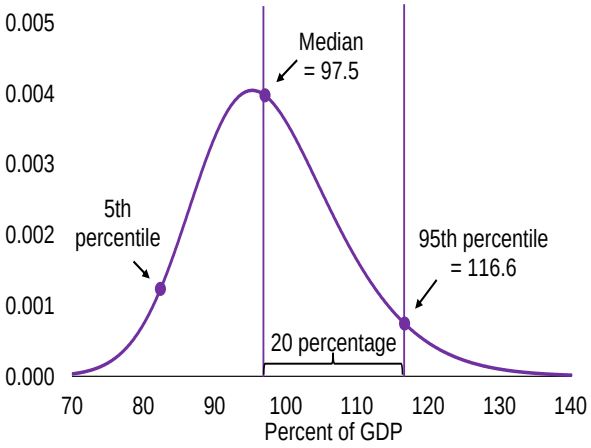
Risks to the fiscal outlook have intensified since the October 2024 *Fiscal Monitor*. The IMF's debt-at-risk framework uses information up to December 2024 to estimate the likelihood of all potential future trajectories of public debt, quantifying the impact of a wide range of factors on future debt levels and uncertainties surrounding them.[5] Global debt-at-risk three years ahead is estimated at about 117 percent of GDP for 2027 (Figure 1.14, panel 1), around 2 percentage points of GDP higher than projected in the

[5] The IMF's debt-at-risk framework uses information up to December 2024 to estimate the likelihood of all potential future trajectories of public debt, quantifying the impact of a wide range of factors on future debt levels and uncertainties surrounding them. The debt-at-risk analysis complements current tools reported in bilateral surveillance to assess debt vulnerabilities, such as the IMF Sovereign Risk and Debt Sustainability Framework. The debt-at-risk framework does not examine debt sustainability but complements other tools by forecasting empirically the probability distribution of the global debt path in a way that allows for asymmetries and comparisons across countries and over time. For more details, see the October 2024 *Fiscal Monitor*, Online Annex 1.1, and Furceri and others (forthcoming).

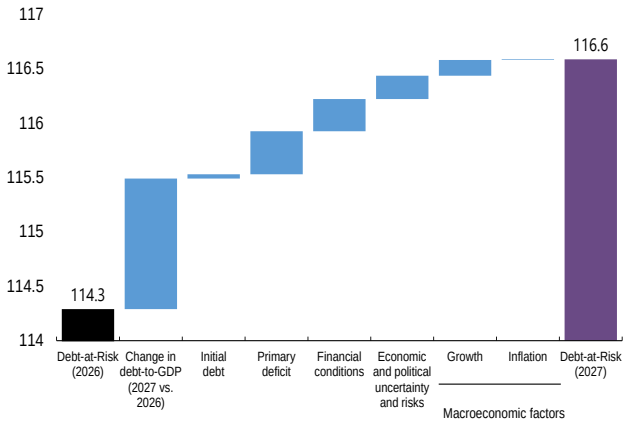
October 2024 *Fiscal Monitor*. This increase is primarily driven by higher projected debt levels for 2027 and persistently elevated primary deficits in 2024 (Figure 1.14, panel 2).[6]

Figure 1.14. Global Public Debt-at-Risk 2027 and Changes from 2026

1. Global Public Debt-at-Risk 2027
(Probability density of the three-year-ahead debt-to-GDP ratio forecast using data from 2024)



2. Drivers of the Change in Global Debt -at-Risk between 2026 and 2027
(Percentage points)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: Panel 1 displays the probability density function, which is estimated using panel quantile regressions of the debt-to-GDP ratio on various political, economic, and financial variables. The global sample is comprised of 47 countries, accounting for more than 90 percent of global debt. Dots indicate the predicted 5th, 50th (median), and 95th percentiles of the debt-to-GDP ratio (October 2024 Fiscal Monitor, Online Annex 1.2). Panel 2 plots the contributions from the conditioning variables used for the debt-at-risk model to the estimated level of debt-at-risk. The black bar denotes the debt reference point from the April 2025 *World Economic Outlook*. Blue bars refer to contribution from the conditioning variables. The purple bar indicates the value of the global debt-at-risk.

Major policy shifts since early 2025 have introduced new risks. Soaring tariffs announced by the *United States* on April 2, 2025, and countermeasures by other countries, escalating uncertainty, and tighter global financial conditions could significantly amplify debt risks. While the U.S. administration's April 9, 2025, announcement to pause some country-specific tariffs partially mitigates some risks associated with higher tariffs and retaliation, geoeconomic uncertainty and risks of financial turbulence remain elevated. In addition, according to the April 2025 *World Economic Outlook* post-April 9 model-based forecast, a ratcheting up of trade wars between the United States and China is projected to result in lower growth outcomes for both countries. This decline would propagate through global supply chains, resulting in significant negative spillovers on output and fiscal positions in other countries (April 2024 *Fiscal Monitor*). Specifically, the effects of weaker growth in China and the United States are expected to intensify in 2026 and beyond, while gains in other regions will diminish. This dynamic will ultimately contribute to weaker global growth and an increase in global deficits and debt through trade, financial, and commodity price channels. A narrowing of global imbalances and an increase in global output relative to the reference point could lead to more favorable fiscal outcomes (Box 1.1 of April 2025 *World Economic Outlook*).

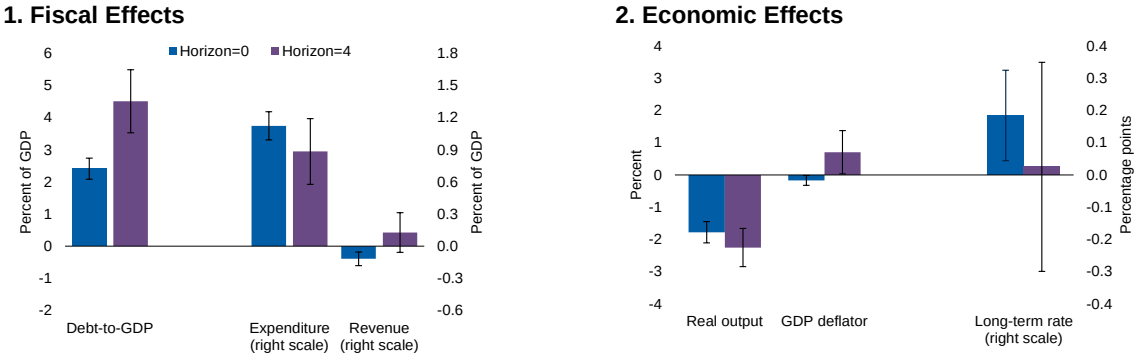
[6] The median of the global debt distribution for 2027 is fitted to match the corresponding debt reference point projection in the April 2025 *World Economic Outlook* (see also Online Annex 1.1). The upside risks to the global debt outlook—that is, the difference between the 95th percentile and the median—are estimated at 20 percentage points of GDP. That is a much higher level than downside risks—that is, the difference between the median and the 5th percentile—which is estimated at 15 percentage points.

Escalating Geoeconomic Uncertainty

Geoeconomic uncertainty has escalated in recent months (Figure 1.1, panel 1), fueled by the sharp increase in import tariffs, and heightened trade and policy uncertainty.[7] These uncertainties can exacerbate fiscal risks by slowing economic growth, primarily through their detrimental impact on investment. Uncertainties can also disrupt trade (Aiyar and others 2023; Campos and others 2023) by reducing consumption and investment levels and creating a potential need to rearrange supply chains (Aslam and others 2018; Constantinescu, Mattoo, and Ruta 2020). In addition, increased military spending, notably in European economies, will impact fiscal positions both directly and indirectly by influencing overall economic output.

New analyses indicate that a significant rise in geoeconomic uncertainty—reflecting sharp shifts in trade policies, investment, supply chains, finance, labor, and technology flows—is associated with a public debt increase of about 4.5 percent of GDP in the medium term (Figure 1.15).[8] This increase is driven by a widening of the overall fiscal deficit, marked by higher expenditures and lower revenues, a persistent reduction in real output, and a temporary rise in long-term interest rates. Specifically, geoeconomic uncertainty results in a persistent increase in public spending of 0.9 percentage point of GDP in the medium term, coupled with an initial decline in revenues of 0.1 percentage point of GDP. There is also a persistent reduction of 2.3 percent in GDP in the medium term and a temporary 0.2 percentage point increase in long-term interest rates.

Figure 1.15. Macrofiscal Effects of Geoeconomic Uncertainty



Sources: Fernandez-Villaverde, Mineyama, and Song 2024; IMF, World Economic Outlook database; and IMF staff calculations.
Note: The bars indicate the response to a one-standard-deviation increase in the Geopolitical Fragmentation Index (Fernandez-Villaverde, Mineyama, and Song 2024). The lines represent the 90 percent confidence band. Horizons denote the years after the shock. See Online Annex 1.3 for more details on the analyses and estimations.

Importantly, geoeconomic uncertainty has a more pronounced effect on the higher end of the future debt distribution as it increases both the level of debt and the uncertainty surrounding it, with the 95th percentile (debt-at-risk) estimated to be about 3 percentage points larger than the 50th percentile. The findings also indicate that debt risks for countries already experiencing high debt levels are likely to amplify during times of heightened geoeconomic uncertainty, such as now.

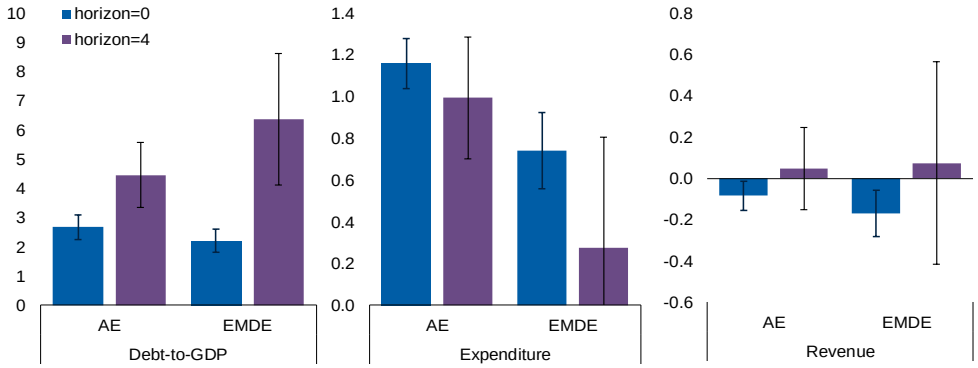
[7] Geoeconomic uncertainty stems from the uncertainties about economic and political variables affecting the level of global economic integration, such as movements in trade policies, investment, supply chains, finance, labor, and technology flows.

[8] The significant increase in geoeconomic uncertainty refers to a one-standard-deviation rise in the Geopolitical Fragmentation Index (Fernandez-Villaverde, Mineyama, and Song 2024), similar in magnitude to the drop observed in 2001 with China's accession to the World Trade Organization. For further details on the data and methodology, see Furceri, Poplawski-Ribeiro, and Prifti forthcoming and Online Annex 1.3.

The impact of geoeconomic uncertainty on public debt is similar across different economies, although slightly more pronounced in emerging market and developing economies than in advanced economies. Specifically, geoeconomic uncertainty is associated with a significant and sustained increase in public debt, amounting to 4 percentage points of GDP in advanced economies and 6 percentage points of GDP in emerging market and developing economies (Figure 1.16). The fiscal mechanisms underlying this increase vary markedly between these groups. In advanced economies, the debt rise is primarily driven by a substantial and lasting increase in public spending, estimated at about 1 percentage point of GDP in the medium term. This increase can be attributed largely to expenditure on other forms of fiscal support and on heightened military spending. In contrast, increases in public debt in emerging market and developing economies stem from a significant decline in revenues, which is particularly pronounced in the near term (Online Annex Figure 1.3.2, Figure 1.16).

Figure 1.16. Fiscal Effects of Geoeconomic Uncertainty in Advanced versus Emerging Market and Developing Economies

(Percentage points of GDP)



Sources: Fernandez-Villaverde, Mineyama, and Song 2024; IMF, World Economic Outlook database; and IMF staff calculations.
Note: The bars indicate the response to a one-standard-deviation increase in the Geopolitical Fragmentation Index (Fernandez-Villaverde, Mineyama, and Song 2024) index. The lines represent the 90 percent confidence band. Horizons denote the years after the shock. See Online Annex 1.3 for more details on the analyses and estimates. AE = advanced economy; EMDE = emerging market and developing economy.

Tighter and More Volatile Financial Conditions in the United States

A further tightening of financial conditions and heightened market volatility in the *United States* could have significant repercussions for economies worldwide by raising sovereign borrowing costs. Additionally, fluctuations in commodity prices—driven by weakened growth prospects and financial market volatility—could severely affect these countries. Uncertainty about US fiscal policy and long-term rates could amplify these risks.

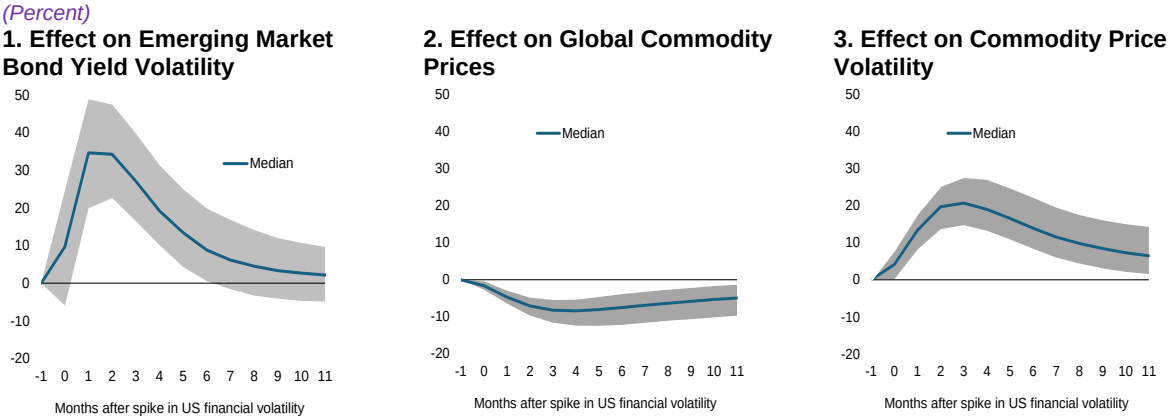
Large and sudden increases in nominal Treasury yields typically lead to surges in government bond yields and exchange rate turbulence in emerging market and developing economies. For instance, a 100-basis-point increase in the 10-year US nominal interest rate could trigger an increase in long-term nominal

interest rates peaking at 90 basis points in advanced economies and 100 basis points in emerging markets, with effects lasting over several months (April 2024 *Fiscal Monitor*).[9]

US financial volatility, including fluctuations in US sovereign yields, significantly effects the volatility of sovereign bond yields, particularly in emerging markets and developing economies. Empirical evidence indicates that US financial volatility is a key driver of common factors influencing sovereign bond yields across countries (see October 2024 *Fiscal Monitor*).[10] These common factors account for more than 50 percent of fluctuations foreign-currency-denominated sovereign bond yields and more than 30 percent in local currency-denominated bond yields for emerging market and developing economies, on average.[11] Furthermore, new analyses indicate that a substantial (two-standard deviations) increase in US financial volatility is associated with a rise in emerging market bond yield volatility of approximately 30 percent after four months (Figure 1.17, panel 1).

Figure 1.17. Spillovers of Financial Volatility in the United States

(Percent)



Sources: Federal Reserve Economic Data; JPMorgan; Ludvigson, Ma, and Ng (2021); and IMF staff calculations.
Note: The figure shows the impulse response functions from a Bayesian Vector Autorregressive model including U.S. financial volatility, commodity price, the Chicago Board Options Exchange (CBOE) gold volatility, CBOE crude oil volatility, the volatility of sovereign bond yields in advanced economies (excluding the *United States*), and the volatility of sovereign bond yields in emerging market economies. The sample is from June 2008 to December 2024. The advanced economies and emerging market sovereign bond yield volatility is the standard deviation of daily Global Bond Index yields and Emerging Market Bond Index yield in the month, respectively. Commodity prices volatility in the figure is the CBOE crude oil volatility index. The US financial volatility is from Ludvigson, Ma, and Ng (2021). The financial volatility shock is scaled to be about two standard deviations. Shaded areas represent the 90th confidence interval.

Finally, US financial volatility significantly impacts commodity prices, resulting in lower prices and heightened price volatility. Specifically, a two-standard-deviation increase in the US financial volatility could lead to a decline in an approximate 8 percent decline in commodity prices and 20 percent increase in commodity price volatility (Figure 1.17, panel 2 and 3). Lower oil prices can have significant effects on fiscal positions of oil-exporting countries (October 2015 *Fiscal Monitor*; Agboola, Chowdhury, and Yang 2024), impacting the size and design of their fiscal adjustments (Danforth, Medas, and Salins 2016).

[9] Additionally, uncertainty about US fiscal policy and resulting increase in US long-term rates also have a negative impact on financial conditions in other countries (see Box 1.1 of April 2024 *Fiscal Monitor*).

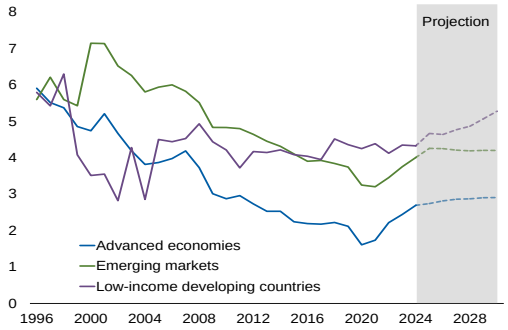
[10] A dynamic factor model with time-varying parameters and stochastic volatility is estimated for 45 emerging market and developing economies allowing for time-varying and country-specific estimates of the globally driven volatility of sovereign yields explained by global factors. US financial volatility is obtained from Ludvigson, Ma, and Ng (2021), which measures the volatility of the purely unforecastable component of future financial indicators, conditional on all available information.

[11] These findings are consistent with the literature suggesting that global factors drive bond yields (Diebold, Li, and Yue 2008; Gilchrist and others 2022) and also attest to the presence of a global financial cycle (Miranda-Agrippino and Rey 2020).

Higher-than-Expected Interest Rates

While effective yields on government debt are expected to stabilize at elevated levels (Figure 1.18), the increased financial market volatility and larger-than-anticipated fiscal deficits heighten the risks of rising interest rates and expenses. Fiscal deficits may exceed expectations due to escalating spending pressures, including increased defense spending, initiatives to mitigate the potential impact of tariffs, and a challenging landscape for foreign aid, all of which could contribute to rising interest rates. For example, recent empirical analysis (Nose and Menkulasi 2025) suggests that a 1 percentage point of GDP increase in primary deficits in emerging markets and developing economies could lead to a persistent rise in 10-year bond yields, peaking at approximately 36 basis points after 2.5 years (see Online Annex 1.4 and Online Annex Figure 1.4.1).[12]

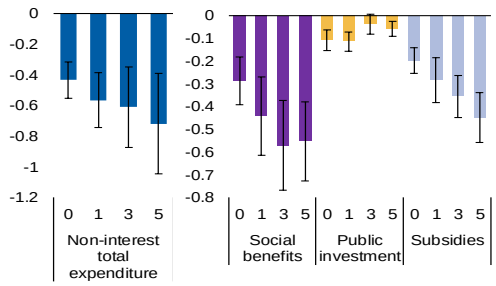
Figure 1.18. Effective Yields on Government Debt
(Percent)



Sources: IMF, Sovereign Debt Monitor; IMF, World Economic Outlook database; and IMF staff calculations.
Note: The figure shows the ratio of interest expenditures to debt. The shaded area highlights reference point projections.

Emerging market economies, already grappling with the highest real financing costs in a decade, may now face the need to refinance their debt and fund fiscal spending at even higher rates. Higher-than-expected interest expenses present significant challenges to essential government spending.[13] Empirical evidence from 75 advanced and developing economies indicates that a 1 percentage point of GDP increase in interest expenses typically results in a permanent reduction of about 0.6 percentage point of GDP in non-interest expenditures in the medium term (Figure 1.19). In particular, social benefits decline by an average of 0.5 percent of GDP, and public investments fall by an average of 0.1 percentage point of GDP. For the average economy in the sample, this translates to a potential reduction in public investment of about 4 percent from its initial level of 2.5 percent of GDP following a 1 percentage point of GDP increase in interest expenses (see Online Table 1.5.1).

Figure 1.19. Crowding-Out Effects of Interest Expenses on Other Public Spending
(Percent of potential GDP)



Sources: IMF, Global Debt Database; IMF, Government Finance Statistics, IMF, World Economic Outlook; and IMF staff calculations.
Note: The figure shows the effect of a 1 percent of potential GDP increase in interest expenditures on selected budget categories 0, 1, 3, and 5 years ahead. The vertical lines show 68 percent confidence intervals (see Online Annex 1.5).

[12] In addition, bond yields in emerging market and developing economies are becoming increasingly sensitive to domestic banks' exposure to public debt and the growth of local currency bond markets (October 2023 *Global Financial Stability Report*). Estimates suggest that a stronger sovereign-bank nexus—that is, a larger share of domestic sovereign bonds in domestic banks' total asset portfolio—amplifies the effect of expected fiscal policies on bond yields in these economies (Online Annex 1.4).

[13] The tightening of financing conditions could also trigger capital outflows, sharp exchange rate adjustments, and balance of payments crises for countries tries with weak buffers and high foreign currency debt (2024 *External Stability Report*).

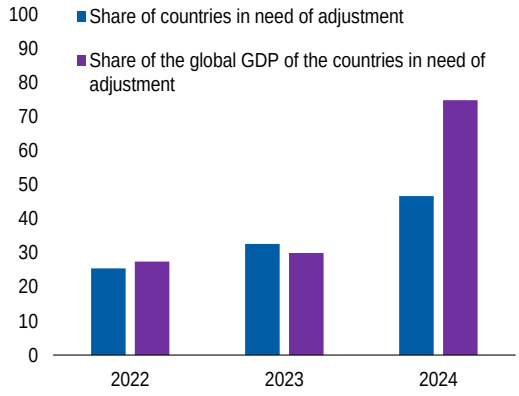
Fiscal Adjustment Needs and Effects

Higher debt levels and interest-growth differentials require larger primary balances to stabilize public-debt-to-GDP ratios. In 2024, the primary deficit that advanced and emerging market economies could sustain while stabilizing debt decreased by 0.6 percentage point of GDP on average (from 2.9 percentage points of GDP in 2023 to 2.3 percentage points of GDP in 2024). More economies exceeded debt-stabilizing primary deficit levels in 2024—57 percent of advanced economies in 2024 compared to 22 percent in 2023, and 51 percent of emerging market economies compared to 33 percent in 2023—indicating a greater need for adjustment (Figure 1.20, panel 1).[14] For low-income developing countries, this figure declined to 36 percent in 2024 from 39 percent in 2023.

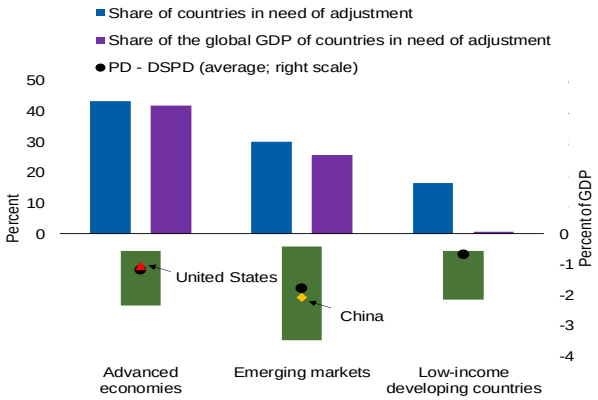
Figure 1.20. Required Adjustment of the Primary Balance to Stabilize Public Debt

(Percent, unless stated otherwise)

1. Share of Economies with Primary Deficit above the Debt-Stabilizing Level



2. Share of Economies with Primary Deficit above the Debt-Stabilizing Level in 2030, and the Adjustment Required in the Primary Deficit



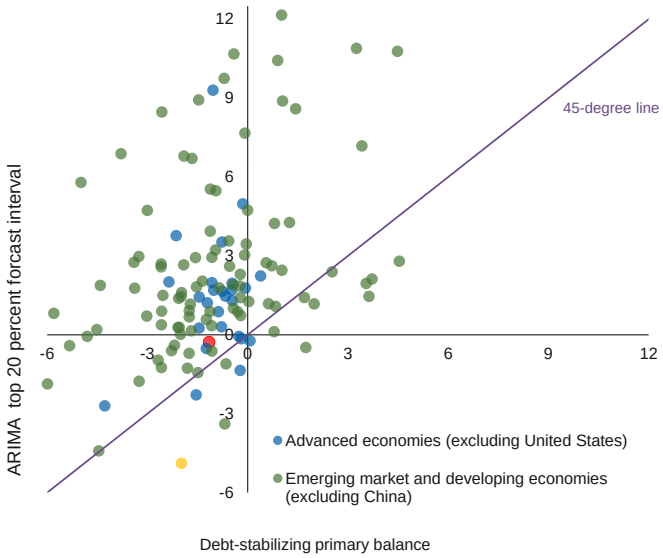
Sources: IMF, World Economic Outlook database; and IMF staff calculations.
Note: See Online Annex 1.6 for the formula describing the calculation of the debt-stabilizing primary balance and more details about the analyses in this figure. Blue bars in panel 1 show the share of economies with primary deficit (PD) higher than the debt-stabilizing primary deficit (DSPD), that is, PD > DSPD in each year for a sample of 37 advanced economies and 86 emerging market economies. Purple bars indicate the contribution of these economies to global GDP. Values in the blue bars in panel 2 indicate the share of economies with PD > DSPD in 2030. Purple bars indicate the contribution of these economies to global GDP. Adjustment needs (black dots for the weighted average for the income group) indicate the necessary change in primary deficits to stabilize debt for economies with PD > DSPD in 2030.

[14] Debt-stabilizing primary deficits are calculated considering the reference-point forecast in the April 2025 *World Economic Outlook* database. See Online Annex 1.6 for a description of the methodology used to calculate them. The increase in the number of countries has been observed since 2022, as shown in Figure 1.20, panel 1.

More than a quarter of the countries, surpassing two-thirds of the global economy, are projected to have primary deficits above debt-stabilizing levels by 2030 (Figure 1.20, panel 2)—even before accounting for potential unidentified debt (October 2024 *Fiscal Monitor*) or new spending pressures such as higher military spending. To stabilize debt levels, the average adjustments required are 1.8 percentage points of GDP in advanced economies excluding the *United States*, 1 percentage point of GDP in emerging markets excluding *China*, and 0.4 percentage point of GDP in low-income developing countries (Figure 1.20, panel 2). Even in optimistic scenarios, many countries struggle to stabilize public debt. Figure 1.21 shows that even with lower and more ambitious primary deficits, 20 percent above their past performance, 12 percent of economies (or 15 countries in the sample) would still have primary deficits above debt-stabilizing primary deficits (see also Online Annex 1.6).

Figure 1.21. Debt-Stabilizing Primary Balance versus an Optimistic Forecast of Primary Balance

(Percent of GDP)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.

Note: The vertical axis indicates the forecast of the primary balance with a 20 percent probability, given its historical time series for each country, whereas the horizontal axis corresponds to the debt-stabilizing primary balance (for details, see Online Annex 1.6). ARIMA = autoregressive integrated moving average.

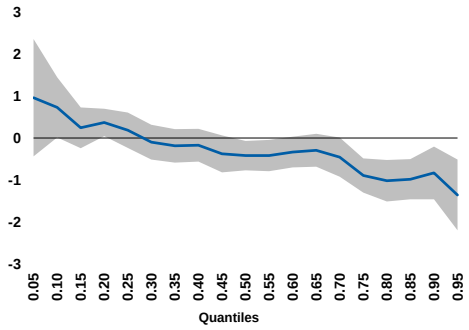
Fiscal adjustment is crucial to reduce not only debt levels but also debt risks. New analysis using the debt-at-risk methodology indicates that fiscal adjustments lower the future debt distribution, particularly impacting the right end of the debt forecast distribution (Figure 1.22, panel 1; Frangiamore, Furceri, and Pizzuto, forthcoming).[15] This is because fiscal adjustment reduces both the level of debt and uncertainty surrounding it (Figure 1.22, panel 2). A 1 percent of GDP fiscal adjustment is estimated to reduce the three-year-ahead debt-at-risk by about 0.3 percentage point of GDP in the short term, and 1.2 percentage points in the medium term (Figure 1.22, panel 3). These effects arise from improvements in the primary balance and real interest rates, which more than offset the decline in output. Furthermore, fiscal adjustments lead to a greater decline in debt-at-risk in countries with fiscal rules (Figure 1.22, panel 4), enhancing the credibility of fiscal measures and amplifying interest rate reductions.

[15] Fiscal adjustment in the analysis corresponds to unexpected changes in fiscal balances that are exogenous to economic conditions.

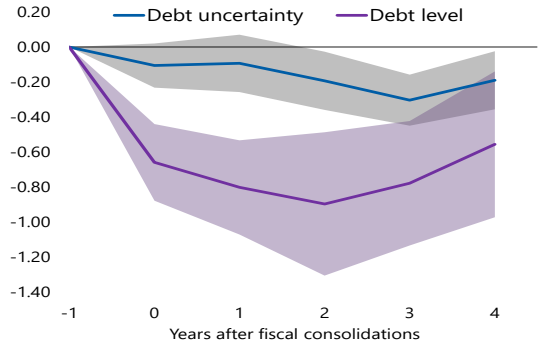
Figure 1.22. Effects of Fiscal Adjustments on Debt and Debt-at-Risk

(Percent of GDP)

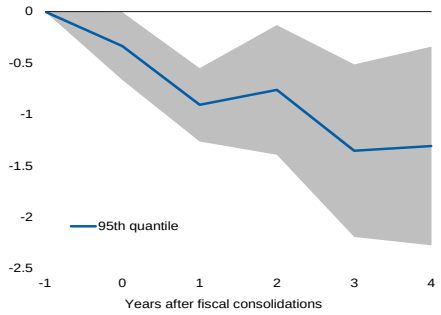
1. Effect by Percentile of the Debt-at-Risk Distribution Three Years Ahead



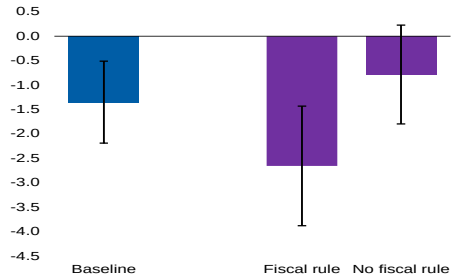
2. Average Effect of Fiscal Adjustment on the Level and Uncertainty about Debt



3. Average Effect of Fiscal Adjustment on Debt-at-Risk



4. Average Effect of Fiscal Adjustment on Debt-at-Risk in the Baseline and in the Presence of Fiscal Rule



Sources: Frangiamore, Furceri, and Pizzuto (forthcoming); World Economic Outlook database; and IMF staff calculations.
Note: Shaded areas in panels 1, 2, and 3 represent the 90 percent confidence interval. Panels 2 and 3 indicate the impulse response functions of debt-at-risk to fiscal consolidation over time. Bars in panel 4 represent the point estimate and lines the confidence intervals.

Policy Conclusions

The fiscal outlook has deteriorated since the October 2024 *Fiscal Monitor*. Major tariffs announcements, heightened uncertainty, financial market volatility, and diminishing foreign aid are adversely affecting public debts and deficits. Global public debt is now projected to reach nearly 100 percent of GDP by the end of the decade, surpassing the pandemic peak, with gross financing needs set to rise significantly. Sudden and disruptive tightening of financing conditions present a clear and present danger. Consequently, fiscal policy now faces a more pronounced trade-off among four key objectives: reducing debt, building and expanding buffers to address future shocks, meeting urgent spending needs, and enhancing growth prospects.

A gradual fiscal adjustment within a credible medium-term framework is needed in most countries to bring debt down while building additional buffers against heightened uncertainty. Adjustments must balance the pace and timing of debt reductions with economic growth and be tailored to the specific circumstances of each country, considering available fiscal space and overall economic conditions. Countries with limited fiscal space should prioritize public spending within their planned budgets and allow automatic stabilizers to operate fully. In contrast, nations with fiscal room facing significant spending pressures—including defense spending (for example, *Germany*)—could judiciously utilize available resources within well-defined medium-term fiscal frameworks. For the *United States*, a significant

fiscal adjustment will be required over the medium term to put public debt on a decisively downward path. Different policy options could lead to this adjustment, but they will also rely on building social consensus to effectively address the ongoing fiscal imbalances. For *China*, fiscal expansion is welcome but could place greater focus on boosting consumption and supporting the property sector to better tackle the deflationary pressures facing the economy. Low-income developing countries should, in turn, stay the course in their fiscal adjustment plans.

More broadly, advanced economies with aging populations should reprioritize expenditures, advance pension and health care reforms (Chapter 2; Chapter 2 of the April 2025 *World Economic Outlook*), remove inefficient tax incentives, broaden the tax base, and pursue active labor policies for their working-wage labor force, including migrants (Chapter 3 of the April 2025 *World Economic Outlook*). Broadening the tax base can involve eliminating exemptions and improving the efficiency of tax expenditure (*Spain*, the *United Kingdom*, and the *United States*), progressively increasing income taxes (the *United States*), or eliminating flat taxes on self-employment (*Italy*). Permanent increases in defense spending should be accompanied by credible financing plans that outline how these increases will be gradually financed, along with the intended mix of tax hikes and spending cuts depending on the country's available fiscal space (*European Union*).

Emerging market and developing economies should reduce spending and increase revenues by reforming tax systems, broadening tax bases, and improving revenue administration. They should phase out energy subsidies (Chapter 2) and rationalize public wage bills while safeguarding public investment and upgrading social safety nets. Reforming state-owned enterprises is essential to enhance resource allocation, foster sector growth, and mitigate fiscal risks. Countries with low tax-to-GDP ratios must reassess existing tax rates and thresholds (*Mexico*), particularly for the value-added tax (VAT) and personal income taxes. Others might consider increasing VAT rates (*Thailand*), reintroducing goods and services taxes (*Malaysia*), and rationalizing tax expenditures (*Brazil*, *Egypt*, *Kyrgyz Republic*). Reforming and phasing out energy and fuel subsidies, as *Morocco* did between 2013 and 2015 (Chapter 2), is vital to limit cuts in other government spending (*Togo)* and foster market efficiency. Countries such as *Gabon* need to rein in public wage bills. Others should focus on investing in infrastructure and social programs to protect vulnerable populations (*India*, *Indonesia).*

The recent roller coaster in financial markets, as highlighted in the April 2025 *Global Financial Stability Report*, underscores the need for preparedness against potential severe economic and financial disruptions. In cases of significant financial instability, fiscal policy can play a crucial role in supporting central banks and financial supervisors through tools such as direct lending, guarantees, and equity injections. These measures mitigate excessive deleveraging, prevent fire sales, and help restore confidence.

If necessary, governments could offer timely, targeted, and temporary support to communities and sectors severely affected by trade dislocations. Such extraordinary support must be accompanied by careful costing and enhanced transparency and monitoring. When trade disruptions are expected to be permanent, active labor market policies and skills retraining become essential. Fiscal policy plays a crucial role in facilitating and accelerating this adjustment. In all instances, policies must account for the country's available fiscal space. It is crucial for authorities to maintain fiscal discipline; failure to do so could turn fiscal policy from a source of confidence, protection, and support into one of instability and turmoil.

Medium-term frameworks and modern public financial management systems should effectively anchor adjustment paths and reduce fiscal policy uncertainty. For countries facing new spending needs—for example, in defense—it is essential to demonstrate a strong commitment to fiscal sustainability and prudence while ensuring transparency. Any permanent increase in fiscal outlays for investment and

defense spending must be coupled with enhanced spending efficiency, strengthened procurement systems (*European Union*), and improved multiyear fiscal planning and macroeconomic forecasting to ensure realistic assessments of their impact on economic growth. The increase in outlays must be backed by credible financing plans detailing how they will be financed, including the planned mix of tax and spending measures.

More generally, trust in fiscal policy can be enhanced by integrating robust institutional frameworks (Chapter 2) with effective communication strategies (Bianchi, Dabla-Norris, and Khalid forthcoming) and involving stakeholders in the design of reforms (Chapter 3 of the October 2024 *World Economic Outlook*). Strengthening fiscal frameworks by improving compliance with fiscal rules, enhancing forecasting, better integrating medium-term plans into annual budgets, and making clear contingency plans for unforeseen developments can bolster credibility in advanced economies as well as emerging markets (*Brazil*, *India*, *Indonesia*, *South Africa*). Independent fiscal institutions, such as fiscal councils, should be adequately resourced to effectively assess and communicate fiscal plans, and so reinforce adjustment efforts. Medium-term fiscal plans should be further developed in consideration of financing conditions. To this end, medium-term debt management strategies should be developed simultaneously with fiscal frameworks to incorporate the potential impact of financing risks in the fiscal policy outlook.

Enhancing fiscal and debt governance, along with debt transparency, is essential to improve efficiency and mitigate debt risks. Countries must proactively identify and manage contingent liabilities, particularly those related to state-owned enterprises (October 2024 *Fiscal Monitor*). Governments should provide clear, detailed, and timely information about debt, including creditor composition and exposure to risks—such as interest rate and exchange rate risks. This transparency, which would benefit from sound legal underpinnings (Vasquez and others 2024), fosters scrutiny and accountability, and reduces dependence on nontraditional debt instruments. Strengthening expenditure controls and implementing active cash management can help prevent overspending.

Advancing fiscal and structural reforms is essential for reigniting medium-term economic growth (Georgieva 2024) and mitigating growth-debt sustainability trade-offs. Well-designed fiscal reforms following a structural and coherent path can enhance employment, investment, and growth (IMF 2015). Targeted tax incentives can stimulate private investment and productivity through research and development (Chapter 2 of the April 2024 *Fiscal Monitor*). Strengthening spending efficiency—especially in health, education, and infrastructure investment—can raise an economy's production capacity.

Timely and orderly debt restructuring alongside fiscal adjustments is essential for countries facing debt distress. Recent initiatives by the international community have streamlined sovereign debt restructuring and reduced timelines. There has been ongoing progress on the functioning of the Common Framework for countries such as *Ethiopia* and *Ghana*. Strengthening these processes further is vital for effective debt restructuring. International cooperation and coordinated efforts to provide concessional financing to low-income developing countries are vital to avoid undue fiscal tightening and human suffering and distress and sustain development efforts in these countries.

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CHAPTER 2

PUBLIC SENTIMENT MATTERS: THE ESSENCE OF SUCCESSFUL ENERGY SUBSIDIES AND PENSION REFORMS

Introduction

Many countries need a strategic pivot to reduce debt and create fiscal space (Chapter 1). Achieving this requires concerted efforts to rationalize public budgets and reform expenditure programs. This chapter focuses on two key programs in national budgets: energy subsidies, which are particularly relevant for emerging markets and low-income countries, and public pensions, which are more pertinent to advanced economies and emerging markets. Reforms in these areas can generate fiscal savings and promote inclusive growth by enhancing efficiency, increasing labor force participation, and reducing inequality.

Explicit energy subsidies, which reflect undercharging for energy supply costs, represent a significant fiscal cost to the government. This cost exceeds 1½ percent of GDP in emerging markets and low-income countries (Figure 2.1, panel 1), surpassing social spending for poor households. Implicit subsidies, which represent undercharging for environmental costs and forgoing consumption tax revenues, are even larger. Countries use energy subsidies to ensure energy access, stabilize prices, support households, promote development, and redistribute resource wealth (Beblawi and Luciani 2015; Chelminski 2018). But subsidies are ineffective tools to address these concerns. Reducing energy subsidies can strengthen public finances, eliminate price distortions, promote efficient energy use, and attract investments in energy-efficient technologies, fostering long-term growth (von Moltke, McKee, and Morgan 2004; Burniaux and others 2009; Ellis 2010). Rationalizing these often-regressive subsidies along with implementing mitigating measures can reduce inequality (Abdallah and others 2015; Coady, Flamini, and Sears 2015).

Pension spending accounts for about 8 percent of GDP in advanced economies and 4 percent in emerging market economies, projected to rise by 2 to 4 percentage points of GDP by 2050 (Figure 2.1, panel 2). A key factor driving the increase is rising life expectancy at retirement, which has grown in the last two decades and is expected to continue increasing in the future (OECD 2023). Without reforms, pension spending is likely to increase public debt and crowd out other essential spending. Closing the growing gap between life expectancy and retirement ages is critical to supporting economic growth by encouraging older individuals to work longer (Echevarria 2004; Catalán and Magud 2017; Geppert and others 2019; Zhang and Cao 2024). If retirement ages are not adjusted, pension systems may face higher contribution rates (which discourage labor supply) or lower benefits (raising risks of old-age poverty).

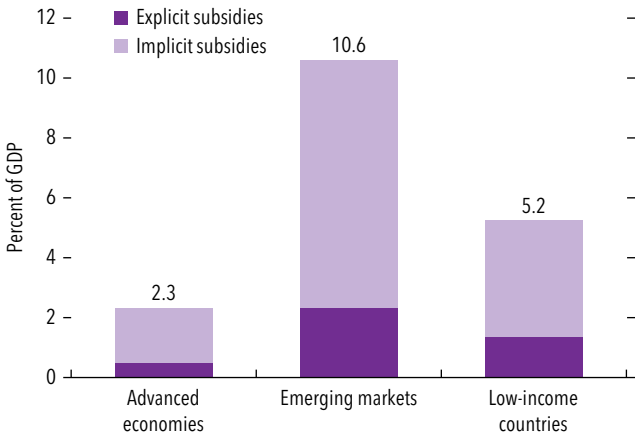
Reforms to these programs are often contentious, making it difficult to secure social and political acceptability. They can incite social unrest, as evidenced in Nigeria regarding energy subsidies and in France regarding pensions. Although the costs of reform are immediate and tangible, the benefits—such as increased efficiency, employment, and economic growth—are diffuse and less visible (Galasso and Profeta 2004; Acemoglu and others 2015; Chapter 3 of the October 2024 *World Economic Outlook*). The short-term costs of subsidy reforms are immediate, noticeable, and widespread (Cheon, Urpelainen, and Lackner 2013; Couharde and Mouhoud 2020), complicating their implementation. Pension reforms can also provoke backlash, as they directly affect the financial well-being of an increasing number of elderly households (Casamatta and Batté 2016; Bremer and Bürgisser 2022; Ortiz and others 2022; Barilari, Mastrorocco, and Paradisi 2024). Moreover, their intergenerational nature leads to differential costs and benefits across cohorts of workers and retirees (Fouejieu and others 2021). Furthermore, perceptions of fairness regarding these measures, reflecting both individual and broader concerns, can significantly affect public reactions.[1]

Against this backdrop, this chapter explores how these reforms can be designed to gain social and

[1]Perceptions of fairness regarding energy subsidy and pension reforms vary across regions, shaped by cultural, economic, and political factors. In resource-rich nations, energy subsidies are often seen as rightful benefits from natural wealth (Hoy and others 2023) In Europe, fairness within pensions often centers on intergenerational equity, with concerns that younger generations bear most of the costs.

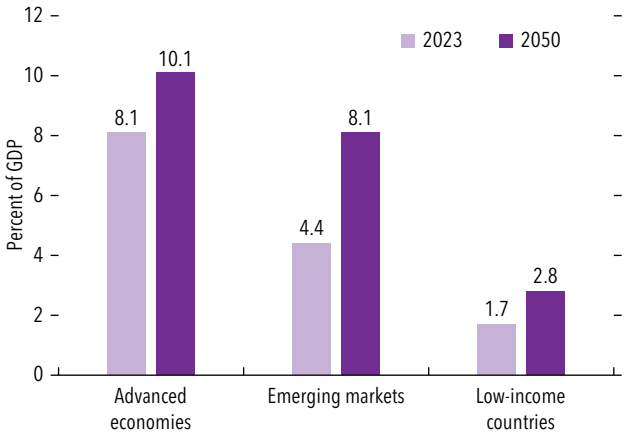
Figure 2.1. Energy Subsidy and Pension Expenditures and Inefficiencies

1. Energy Subsidies, 2022



Source: Black and others 2023.
Note: Explicit subsidies correspond to undercharging for energy supply. Implicit subsidies involve undercharges for environmental costs and forgone energy consumption taxes.

2. Pension Expenditures, 2023 and 2050



Source: IMF staff calculations.
Note: The figure plots current and projected public pension expenditure levels in 2023 and 2050 by income group.

political acceptance.[2] Specifically, the chapter addresses the following key questions:

1. How have energy subsidies and pension reforms evolved across regions and countries over time? What patterns can be observed in the types and intensity of reforms, as well as their durability or reversals?
2. What factors influence reforms during their announcement, implementation, and sustainment or reversal? How does the sentiment of key stakeholders impact the reform process?
3. How do economic conditions, institutions, governance, fiscal policy, and reform design affect stakeholder sentiment and reform acceptability, and how do these factors interact?

The chapter uses novel data and techniques to answer these questions. The key findings are as follows:

- *Energy subsidy and pension measures are common, but significant changes—such as major reductions in subsidies or raising retirement ages—are rare*. In emerging markets and low-income countries, energy subsidy reforms (such as adjustments to diesel prices and utility tariffs) occur frequently because subsidies are higher and more burdensome on public finances. However, these measures are often short-lived, resulting in minor price changes and reversals. In advanced economies, pension measures are also common, particularly in countries with older populations and more developed pension systems. Major adjustments, such as changing the statutory retirement age, are infrequent and typically follow systemic crises. Changes in retirement ages tend to be gradual, with reversals occurring in about 15 percent of cases, often prolonging implementation.
- *Public sentiment is a crucial driver of energy and pension reforms.* Although economic conditions—lower growth, higher fiscal deficits, and spikes in oil prices—influence the timing of reforms, public sentiment is one of the strongest predictors of policy measures. Improving the sentiment toward reforms of households, civil society organizations (CSOs), unions, and opposition parties, increases the likelihood of reform success. Addressing stakeholder concerns is vital for advancing ambitious policy measures.
- *Reform design, timing, accompanying measures, and broader governance all influence sentiment toward reform*. First, more gradual reforms typically result in less negative sentiment. Second, measures announced and implemented during periods of higher growth tend to garner a more favorable response. Third, redistribution policies and transfers can alleviate public apprehension about reforms, especially for energy subsidies. Fourth, trust in public institutions and accountability can mitigate negative sentiment. Importantly, these factors interact. For example, strong governance and supportive measures can ease public concerns during major and front-loaded reforms in challenging

[2]Measures refer to discretionary policy actions, such as fuel price adjustments or changes to statutory retirement ages. They exclude changes in fuel subsidies attributable to changes in international fuel prices or pension adjustments attributable to longevity. The terms "reforms" and "measures" are used interchangeably. However, "reforms" may also refer to a combination of measures (IMF 2015).

economic conditions. Last, effective communication is crucial. Clear messaging builds trust and keeps stakeholders informed and engaged throughout the reform process.

Historical Experience with Energy Subsidy and Pension Measures

This chapter constructs two novel reform databases. The Energy Subsidy Reform Measures database covers more than 170 countries from 1990 to 2023, detailing fuel and utility price changes, measures for state-owned enterprises, and reform characteristics, supplemented with granular retail fuel price data and information from more than 1.4 million news articles.[3] The Global Pension Reform database spans 134 countries from 1960 to 2024, focusing on pension age measures supported by insights from 600,000 news articles. Both databases use news articles to identify the timing of measures and stakeholders' reactions, leveraging large language models and staff expertise for comprehensive information on reform measures (see Online Annex 2.1 for details). The databases yield several insights.

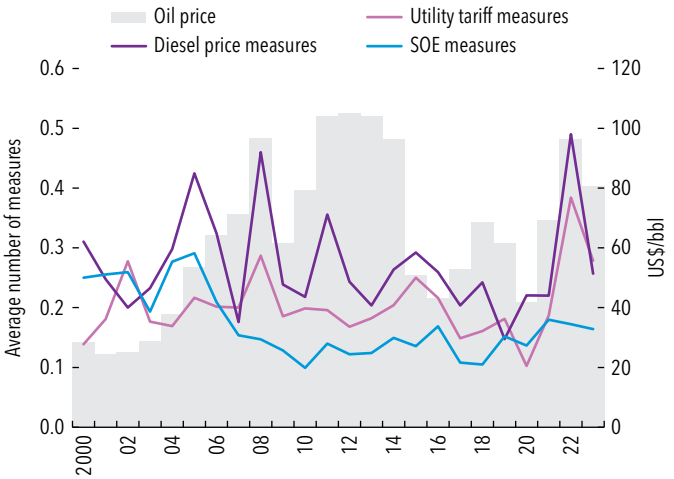
- *Energy subsidy measures are common*, with countries implementing an average of 0.6 measures per year. Fuel price increases, especially for diesel, often spike during oil price peaks, averaging 0.3 measures per country in 2008 and 2022 (Figure 2.2, panel 1).[4] Approximately 23 percent of countries enact at least one diesel price measure, and 19 percent implement a utility tariff measure annually. Low-income countries and emerging markets, particularly in Africa and the Middle East and Central Asia, tend to implement these measures more frequently because of higher subsidies (Figure 2.2, panel 2). Most measures consist of price increases, but in 2022, many European economies implemented utility price decreases in response to electricity market shocks from Russia's war on Ukraine (Box 2.1).

[3]The data capture measures corresponding to price changes in countries with administratively set prices and changes in pass-through in countries with flexible prices. This includes substantial changes that often precede the adoption of an automatic pricing mechanism or price liberalization. The Energy Subsidy Reform Measures database also provides insights into reform design, communication, mitigation strategies, and automatic pricing mechanisms, albeit with limited coverage. See Online Annex 2.1.

[4]Fuel prices respond more quickly to positive than negative international oil price shocks (Kpodar and Abdallah 2017). The correlation between diesel price increase measures and international oil prices is higher for oil-importing economies.

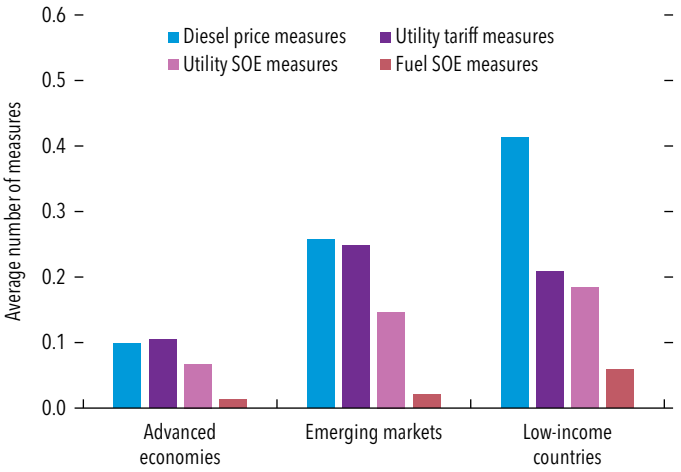
Figure 2.2. Historical Experiences with Energy Subsidy Measures

1. Average Number of Measures per Year



Sources: Energy Subsidy Reform Measures database; Global Retail Fuel Price database; Global Petrol Prices database; and IMF staff calculations.
Note: The figure plots the average number of diesel price measures, utility tariff measures, and state-owned enterprise (SOE) measures per year. Diesel measures are implemented. Utility tariff measures could be either implemented or planned. The average is calculated as the total number of measures per year across countries divided by the number of countries that had a staff report or fuel price data. The units for the right-hand vertical axis are US dollars per barrel of crude oil (US$/bbl).

2. Average Number of Measures per Income Group



Sources: Energy Subsidy Reform Measures database; and IMF staff calculations.
Note: The figure plots the average number of measures for advanced economies, emerging markets, and low-income countries between 2000 and 2023. The average is calculated as the total number of measures per year across countries divided by the number of countries within each income group that had a staff report or fuel price data. SOE = state-owned enterprise.

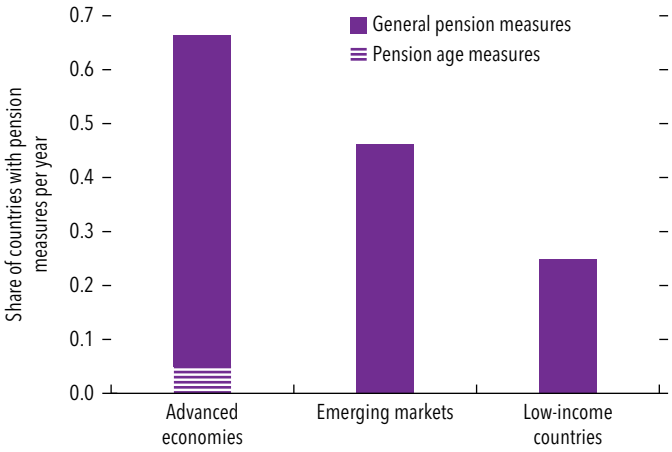
- *Fuel price measures are typically ad hoc and minor*, with median price changes of about 5 percent. Measures occurring within 12 months of one another are less frequent, but they result in a median price increase of 23 percent when combined. About 17 percent of energy subsidy measures are reversed,

Figure 2.3. Historical Experiences with Pension Measures

1. Share of Countries with Pension Measures, 1990–2023

Sources: Global Pension Reform database; and IMF staff calculations.
Note: The figure shows the share of countries with pension measures over time in a sample of 134 countries and identifies the share of advanced economies (AEs) with pension age measures over time.

2. Share of Countries with Pension Measures, by Income Group



Sources: Global Pension Reform database; and IMF staff calculations.
Note: The figure presents the average share of countries with pension measures per year and within each income group. The figure plots the average over 2000–23 for a sample of 134 countries. Pension age measures are reported only for advanced economies.

usually within eight months, offsetting most of the price increase (Online Annex 2.1).[5]

- *Pension measure*s are quite common, with about 50 percent of countries implementing such measures annually (Figure 2.3, panel 1). Advanced economies, particularly in Europe, tend to enact these measures more frequently, reflecting the rapid aging of the population and well-established pension systems in these nations.

  Adjustments to statutory retirement ages, although often central to the pension reform discussions, represent a small fraction of reforms—about 1 out of 10 of overall pension measures in advanced economies (Figure 2.3, panel 2). Most measures were made in response to the major financial crises of 2009 and 2011 and typically involved parametric adjustments to benefits, contributions, and coverage, as well as some systemic pension reforms.
- *Pension age measures are typically implemented gradually,* taking an average of 10 years to increase retirement ages by 3.7 years.[6] About 64 percent of these measures begin to raise retirement ages within two years of legislation. Some countries, including *The Netherlands*, *Portugal*, and *Sweden*, have introduced automatic adjustments to retirement age changes based on longevity gains, reducing the need for frequent changes.
- *Full reversals of pension age measures are rare*. About 15 percent of pension age measures are fully or partially reversed. One-third of reversals correspond to countries abolishing legislated increases in retirement ages fully, typically within four years of the legislation. The remainder represents delays in implementation timelines or exceptions for early retirement—such as *Türkiye* in 2023 and *Germany* in 2014—which partially undermine the intended effects of the original legislation (Online Annex 2.1).

Factors Driving Reforms

This section examines the various drivers of energy subsidy (fuel price) and pension (age) measures, including macroeconomic, fiscal, and political factors, as well as stakeholder sentiment. It evaluates how these factors influence the announcement, implementation, and legislation of new measures (fuel price and retirement age changes) and their durability.

Conceptual Framework

The conceptual framework distinguishes between stages of the reform process (Figure 2.4).

[5]Reversals are defined as measures that decrease fuel prices after previous increases. Even when measures are not reversed, their fiscal impact can be diluted by exogenous factors (Martinez-Alvarez and others 2022). For instance, fluctuations of exchange rates or international oil prices can change the size of subsidies. In the data, most reversals are followed by new measures within two years.

[6]Larger and less gradual pension age increases have been legislated for women, who traditionally have had lower retirement ages than men, and their pensions have been increasingly aligned with those of men.

Figure 2.4. Reform Process

Source: IMF staff.

The framework analyzes how various drivers—macroeconomic conditions, institutional environments, and public sentiment—affect reforms at different stages (Table 2.1). The framework simplifies the reform process into distinct stages (Dermont and others 2017). In reality, reforms may be anticipated before governments announce their intention to undertake reforms, may take years to implement, and may not follow a linear path. When changes in the law are necessary to advance policy measures, such as with pensions, the enactment of legislation becomes a crucial step between announcement and implementation.[7]

- *Macroeconomic and social conditions*. High oil prices, currency depreciation, and population aging create spending pressures likely to prompt reform announcements (Stocker and others 2015; Bettarelli and others 2024). High inflation and weak economic growth may compel policymakers to implement reforms (Dornbusch and Edwards 1991). Conversely, strong growth, low inflation, and improved fiscal indicators can support reforms because the population is better positioned to cope with associated costs (Bruno and Easterly 1998; Clements and others 2013). High levels of poverty and inequality can limit households' ability to cope with the cost of reforms (Morrisson 1996).
- *Institutional and political environment*. Key institutional characteristics—such as government accountability and governance—are critical for citizens to feel informed about the use of public resources, thus building trust in reform initiatives (Acemoglu and Robinson 2012). Electoral cycles can influence the timing of reforms, as policymakers may avoid changes before elections (Ciminelli and others 2019; Alesina and others 2024). Strong political mandates enable ambitious reforms, although weakened support may lead to reversals (Alesina and Perotti 1997). Transparency and effective communication strategies are crucial for fostering public trust and understanding of the reform process and its potential impact (Tompson 2009).
- *Sentiment regarding reforms*. The interaction between macroeconomic, institutional factors, and reform design shapes public sentiment and influence outcomes (Ceron 2017; Mohl and others 2021; Penney and others 2023; Anisimova and Patterson 2024; Chapter 3 of the October 2024 *World Economic Outlook*). Although concerns about energy subsidies and pensions—such as high costs, inefficiencies, and inequities—may not boost support for reforms, stakeholder input is essential once governments announce plans to modify expenditure programs. This input shapes the characteristics of reforms, including intensity and phasing, which can make proposals more acceptable. Public acceptance is also critical for the durability of reforms.

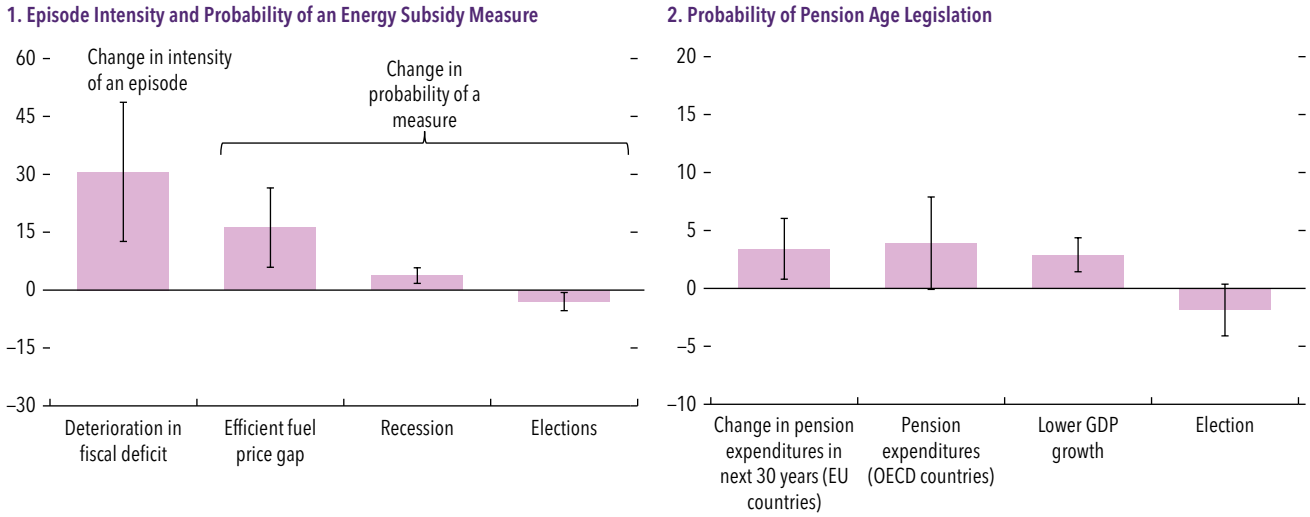
Table 2.1. Drivers of Reform Measures

		Stages of Reform Measure Process		
		From Status Quo to Announcement	**From Announcement to Implementation**	**From Implementation to Stay/Reverse**
Key factors affecting the reform process	**Macroeconomic factors**	Weak macroeconomic conditions, including fiscal situation, provide impetus for reform.	Larger imbalances may force the implementation of substantial reforms.	Strong macroeconomic conditions can make reforms more palatable to the public.
	Institutional and political environment	Reform timing could be influenced by political cycles.	Building trust can facilitate implementation of reforms.	Strong institutional capacity facilitates the durability of reforms.
	Sentiment regarding reforms	Public appetite for change can facilitate the introduction of reform proposals.	Stakeholder inputs can shape reform characteristics, making reforms more acceptable.	Strong opposition may affect the durability of reforms.

Source: IMF staff.

[7]Pension measures typically require legislative changes, whereas energy price measures are usually administratively enacted.

Figure 2.5. Factors Affecting Probability of a Measure
(Percentage point change)



Sources: Energy Subsidy Reform Measures database; Global Pension Reform Database; and IMF staff estimates.
Note: Panels 1 and 2 cover the period 2000–23. Panel 1 plots the coefficients from regressions between the price intensity of diesel reform episodes (first bar) and the probability of a diesel price increase measures (other bars) on standardized values of regressors. Panel 2 plots the association between legislation on pension age measures and standardized values of regressors. Black bands represent 90 percent confidence intervals. See Online Annex 2.2 for details. EU = European Union; GDP = gross domestic product; OECD = Organisation for Economic Co-operation and Development.

Stylized Facts

The Role of Macroeconomic and Political Factors

The likelihood of announcing or enacting energy subsidy and pension measures is shaped by the macroeconomic and institutional environment. For instance, about two-thirds of price increase announcements have occurred when crude oil prices have risen, with one-third happening during significant oil price surges. Higher-intensity diesel reform episodes often follow deteriorating fiscal balances (Figure 2.5, panel 1).[8] Recessions are associated with a 4 percentage point increase in diesel prices, although an increase in the efficient fuel price gap—the difference between efficient prices (including supply, environmental, and other costs) and retail diesel prices—correlates with a rise in the likelihood of a diesel price hike, especially in oil-importing economies. Fuel price increases are less common during election years but tend to rise afterward. The sustainability of reform measures is approximately two months longer when there is a higher efficient fuel price gap, stronger economic growth, and improved fiscal balance (Online Annex Figure 2.2.1, panel 1).

Increases in retirement ages are more frequent following periods of low growth (Beetsma and others 2020; Romp and Beetsma 2023). Specifically, a one-standard-deviation decrease in GDP growth is associated with a 2.9 percentage point increase in the probability of a pension age reform measure (close to 60 percent of the unconditional probability of the measure). During the euro debt crises of 2010–12, pension age reforms occurred twice as often compared with the average from 2000 to 2023, as seen in *Italy* (2011) and *Spain* (2012). Higher pension spending as a share of GDP positively correlates with a greater likelihood of pension age legislation. Similarly, pension age legislation is more likely when pension spending is projected to increase (Figure 2.5, panel 2).[9] Conversely, pension measures are less frequent in election years.

The Role of Sentiment

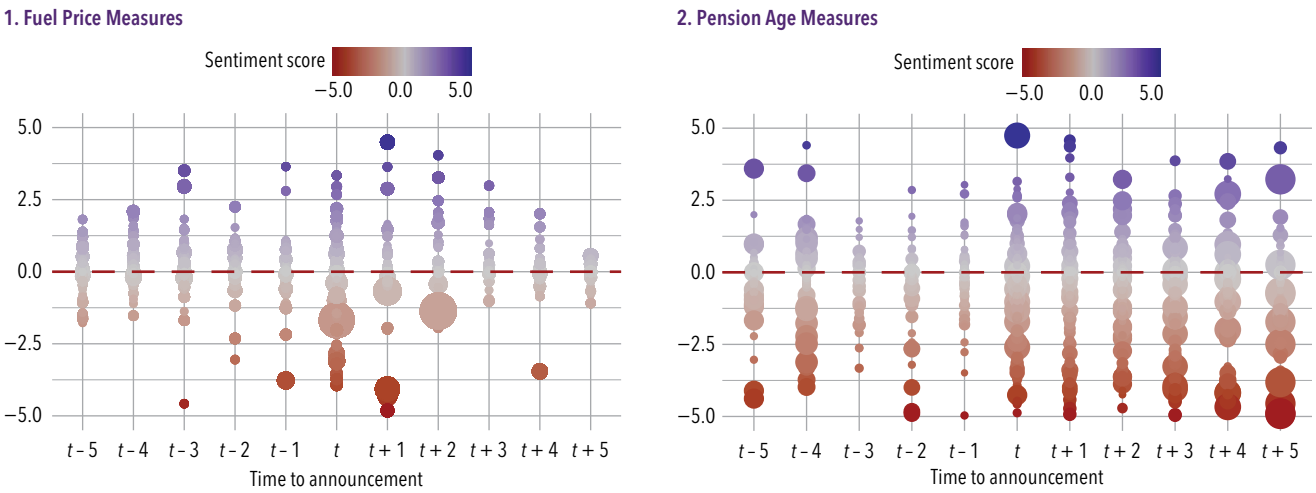
This subsection first describes the construction and measurement of stakeholder sentiment regarding reforms. It then evaluates how public sentiment influences the reform process.

- *Measuring sentiment.* This chapter develops a novel metric of public perceptions of reforms by analyzing print media articles from Factiva (Online Annex 2.3). Sentiment serves as a proxy for public opinion, capturing immediate reactions to policy

[8]Similarly, deteriorations in the current account and increases in debt-to-GDP ratio are associated with higher-intensity reforms.

[9]Evidence shows that fiscal considerations are the most frequently mentioned reason for retirement age reforms (Online Annex 2.1).

Figure 2.6. Overall Sentiment around the Time of Announcement



Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: The figure illustrates sentiment trends around the time of the announcement. The horizontal axis represents the time period, with time *t* being the month of the announcement, and $t - 5$ to $t + 5$ indicating months before and after the announcement. The vertical axis indicates the scaled sentiment score (average weighted sentiment of all stakeholders divided by the country-specific standard deviation). The size of the bubble represents the number of articles while the color indicates the direction of sentiment, with red representing negative sentiment and blue representing positive sentiment.

changes and broader perspectives shaped by cultural, political, and economic contexts. Unlike traditional measures of public support, such as individual-level surveys, print media offers real-time insights into diverse stakeholder opinions as reform events unfold. This chapter uses large language models to extract, classify, and quantify sentiment from direct quotes attributed to key stakeholder groups, including households, unions, opposition parties, private sector groups, CSOs, and oil companies.

Sentiment related to reforms is assessed on a scale from –5 (most opposed) to +5 (most supportive), identifying key concerns for each stakeholder regarding reforms such as inflation, household income, and economic growth. These metrics allow for monitoring sentiment throughout the reform process and assessing the dispersion of sentiment among stakeholders. Print media are valuable for understanding the acceptability of reforms because they reflect and shape public discourse, influencing policymakers and stakeholders. However, they also have some limitations, including selection bias, limited coverage where other media (such as radio) are more dominant, and challenges in interpreting context (Gentzkow and Shapiro 2006).[10] In addition, although print media offer perspectives on past reforms, social media also contributes to understanding public sentiment (Loureiro and Alló 2020; Kastrati and others 2023).

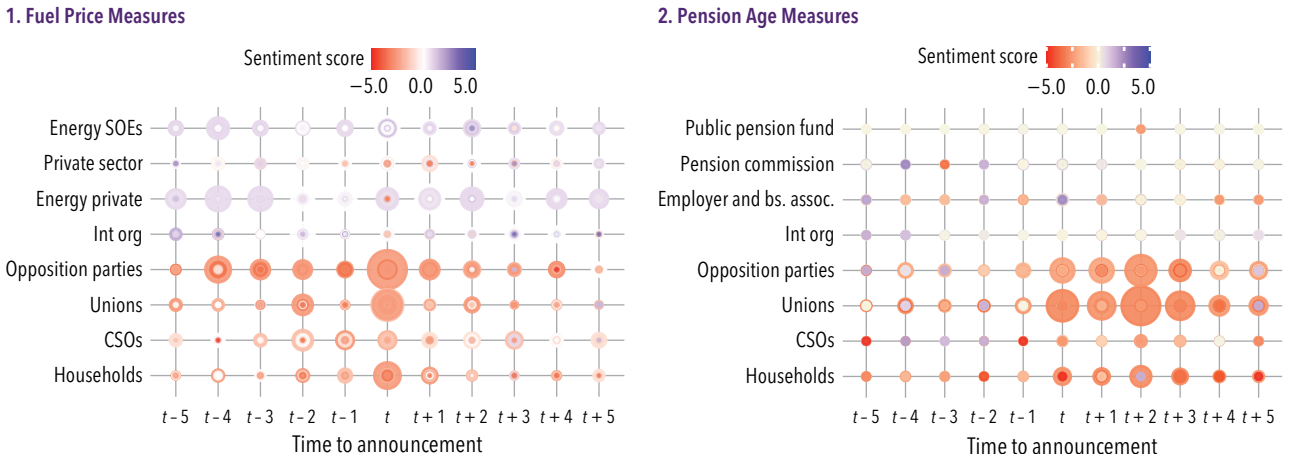
- *Evaluating sentiment at different reform stages.* Following announcements of fuel price and pension age measures, sentiment declines, turning negative and more dispersed, with stakeholders becoming increasingly vocal (Figure 2.6, panel 1). Announcements of fuel price measures lead to heightened negative sentiment lasting up to three months, although for pension reform announcements negative sentiment persists for at least six months (Figure 2.6, panel 2).[11]

Households, unions, and opposition groups are vocal during and after the announcements of fuel price and pension measures (Figure 2.7). CSOs also express strong opinions on fuel price measures. Following implementation sentiment remains negative for fuel price measures, whereas stakeholders remain muted after the enactment of pension legislation (Online Annex 2.4). Sentiment of households and unions improves after fuel price reversals, but they are more muted regarding reversals of pension age measures.

[10]Several studies have used print media for economic analysis (Tetlock 2007; Shapiro, Sudhof, and Wilson 2022).

[11]The volume of published articles on subsidies and pensions increases three to four times before and during the implementation of fuel price measures and the announcement and introduction of pension age legislation (Online Annex 2.3).

Figure 2.7. Sentiment across Stakeholder Groups versus Sentiment around the Time of Announcement

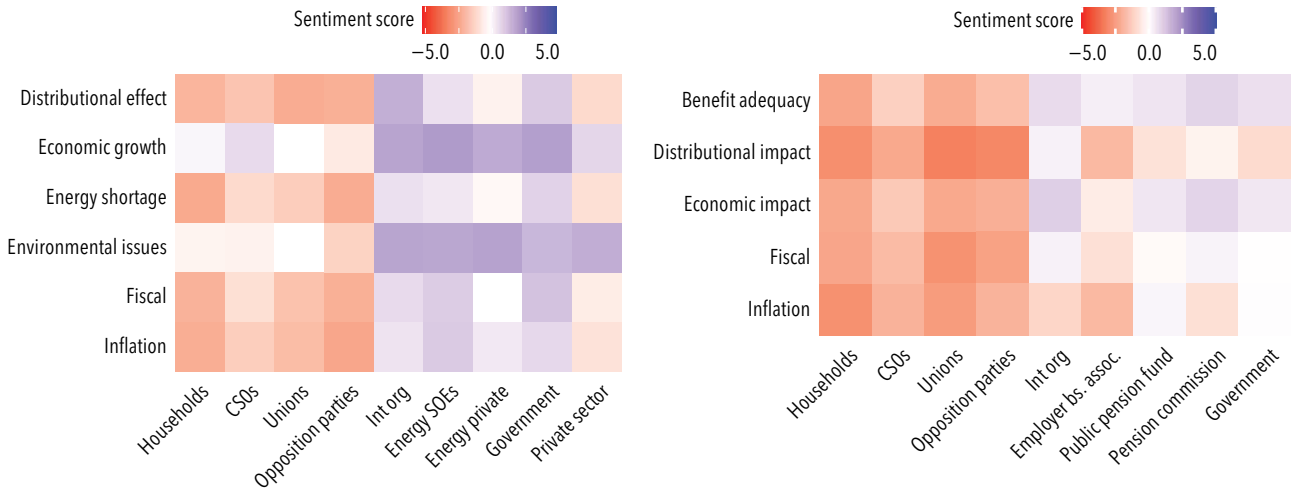


Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: The figure shows sentiment across stakeholder groups over time relative to an announcement month for fuel price measures (panel 1) and pension measures (panel 2). The horizontal axis represents the timeline, with *t* being the month of announcement and $t - 5$ to $t + 5$ indicating months before and after the announcement. The vertical axis lists the stakeholder groups. The size of the bubbles reflects the frequency of sentiment, while the color indicates its direction, with red representing negative sentiment and blue representing positive sentiment. Scaled sentiment is the average weighted sentiment of all stakeholders divided by the country-specific standard deviation.
CSOs = civil society organizations; Employer bs. assoc. = employer and business associations; Int org = international organizations; SOEs = state-owned enterprises.

Regarding fuel price measures, households, CSOs, and unions are concerned about the cost of living, distributional impacts, fiscal issues, and energy shortages. The government, oil companies, and international organizations maintain positive sentiment across topics, while the private sector has mixed sentiment (Figure 2.8, panel 1).

For retirement-age measures, households, opposition parties, and unions are negative about the distributional impact and adequacy of benefits. The government, international organizations, and pension commissions express more positive sentiments (Figure 2.8, panel 2). Word clouds show how households prioritize income effects (Figure 2.9).

Figure 2.8. Stakeholder Concerns about Reforms

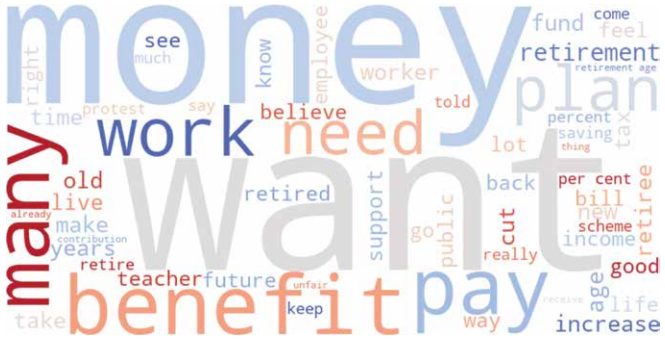


Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: The figure shows the distribution of concerns raised by stakeholders during the announcement of fuel price measures (panel 1) and pension measures (panel 2). Each block represents a concern for each stakeholder, while the color of the block reflects the direction of sentiment. CSOs = civil society organizations; Employer bs. assoc. = employer and business associations; Int org = international organizations; SOEs = state-owned enterprises.

Figure 2.9. Word Cloud Representation of Household Perspectives about Reforms

1. Fuel Price Measures

2. Pension Age Measures



Sources: Factiva; and IMF staff estimates.
Note: The word clouds illustrate the most frequently mentioned words from quotes in English-language print media articles discussing household perspectives, excluding common stop words, reform-related keywords, and nonalphabetic characters.

Empirical Analysis

Which factors—macroeconomic, institutional, political, or stakeholder sentiment—are the most significant predictors of reforms? How does their importance vary across the stages of the reform process? This section uses a machine learning method to analyze large data sets and identify patterns and complex relations between variables (see Online Annex 2.2). This approach allows for evaluating the key predictors at various reform stages and comparing their importance. Using an instrumental variable approach, the section then examines the causal effect of sentiment on the implementation and size of policy measures.

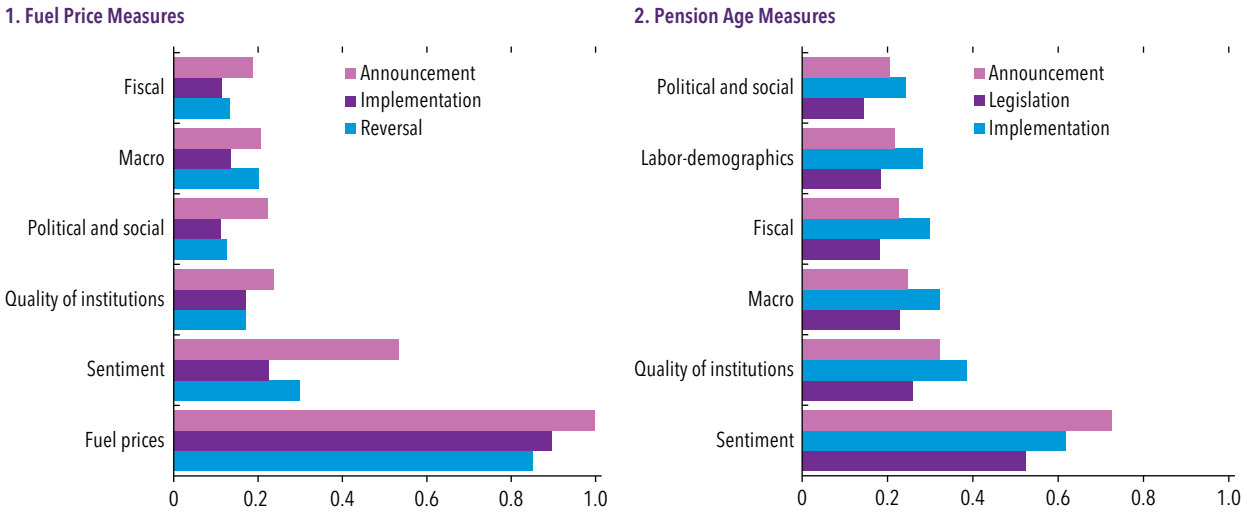
Among macroeconomic, institutional, and political factors, sentiment is a key predictor across reform stages for energy subsidy and pension reforms. Relevant variables include IMF program indicator, GDP growth, inflation, fiscal deficits, fiscal rules and council's strength, governance indicators, election cycles, political polarization, life expectancy (for pensions), and international crude oil price (for fuel price measures). Figure 2.10 shows the average importance of regressors in each group, with scores from 0 to 1, where 1 is the most important predictor. For energy subsidy reforms, sentiment ranks second to fuel price growth, consistent with a correlation between international oil prices and energy subsidy measures. Although reversals are fewer and therefore more challenging to predict, sentiment remains important for fuel price measure reversals. For pension age measures, sentiment is the primary predictor during the announcement and legislation stages, but it is less relevant during implementation (when retirement age changes take effect) suggesting diminished stakeholder influence after pension legislation is enacted.

Some stakeholders, such as households, CSOs, unions, and opposition groups, tend to exhibit negative sentiment about reforms while the government typically adopts a positive stance (as shown in Figure 2.8). The results in Online Annex 2.2 show that the sentiment of both negatively and positively inclined stakeholders has predictive value for reform measures. This observation has two main implications. First, government sentiment regarding reform significantly influences the likelihood of measures, reflecting a tendency of governments to speak positively about reforms to build consensus and demonstrate ownership. Second, the concerns of stakeholders with negative sentiment—households, CSOs, unions, and opposition groups—have implications for advancing reforms.

Although sentiment is a strong predictor of all stages of the policy process, sentiment can be influenced by economic and political factors. Results of an empirical approach to isolate the causal effect of sentiment on reforms suggest that improving the sentiment of stakeholders, who generally oppose measures significantly, increases the likelihood of advancing those measures. The effects are economically significant, with a substantial increase in sentiment (two standard deviations) raising the probability of an announcement by 30 percent and the probability of implementation by 10 percent (Figure 2.11, panel 1; Online Annex 2.2).[12]

[12]The analysis uses sentiment in trading partners as the instrument for domestic sentiment; see Online Annex 2.2 for details.

Figure 2.10. Average Importance Score for Predicting Reform Stages



Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: Importance scores show the relative importance of each regressor for the model's predictive performance. All scores were normalized, divided by the maximum score, so that 1 is the maximum importance and 0 means no importance. The panels show simple averages of the importance of individual regressors.

Sentiment also plays a role in the implementation of episodes with multiple measures, boosting their probability by 13 percent. Improved sentiment also leads to larger policy actions; fuel price changes are, on average, 37 percent larger following significant improvements in sentiment (Online Annex 2.2). Similar results are found for announcements and legislation of pension reforms, although less precisely estimated (Figure 2.11, panel 2). In contrast, once pension age legislation is enacted, sentiment has limited influence on its implementation.

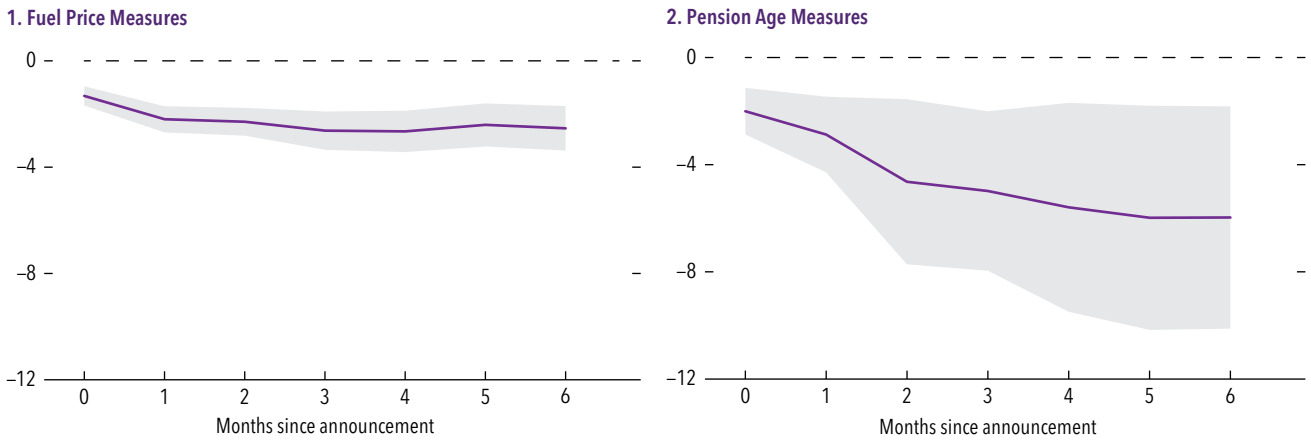
Policies and Reform Design to Improve Public Acceptance of Reforms

This section examines the key factors influencing sentiment regarding these measures and discusses strategies for improving public acceptance, drawing

Figure 2.11. Effect of Sentiment on the Stages of Measures
(Percent)

Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: The panels show the average marginal effects of a two-standard-deviation shock to sentiment. These are estimated using an instrumental variable approach with a probit model, where domestic sentiment is instrumented with sentiment in trading partners. The analysis refers to stakeholders with negative average sentiment regarding fuel price and pension measures, that is, households, unions, civil society organizations, and opposition groups. The analysis of pension measures focuses on advanced economies. Black bands represent 90 percent confidence intervals.

Figure 2.12. Impact of Measure Announcement on Stakeholder Sentiment



Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: The impulse response functions illustrate the cumulative impact of fuel price and pension age measure announcements on stakeholder sentiment (households, civil society organizations, unions, and opposition groups). The estimation accounts for baseline sentiment and includes stakeholder-by-country and stakeholder-by-year fixed effects (Online Annex 2.4).The regression analysis is conducted on a pooled stakeholder sample, covering 194 economies in the case of fuel price measures and 31 advanced economies in the case of pension measures. Standard errors are clustered at the country level. Shaded bands represent 90 percent confidence intervals.

from empirical analysis (Online Annex 2.4) and case studies (Online Annex 2.5).

Factors Influencing Sentiment Regarding Reforms

The empirical analysis consists of three steps. First, it quantifies the response of sentiment to reform measures. Second, it examines how reform design and macroeconomic and institutional conditions shape sentiment, assessing the average response of sentiment to changes in relevant conditions as well as heterogeneity across countries. Third, it assesses interactions among these variables to show how average responses can differ based on mediating factors such as reform design and governance.

Following the announcement of energy subsidy and pension age measures, media debate intensifies, making the months after an announcement critical for the reform process. Results in Figure 2.12 indicate that announcements typically trigger negative sentiment, especially among stakeholder groups most opposed to these reforms—households, unions, opposition parties, and CSOs. For fuel price measures, sentiment declines by more than one standard deviation one month after the announcement (Figure 2.12, panel 1). Announcements to increase the retirement age generate even sharper declines across stakeholders, with average sentiment deteriorating progressively over time (Figure 2.12, panel 2).

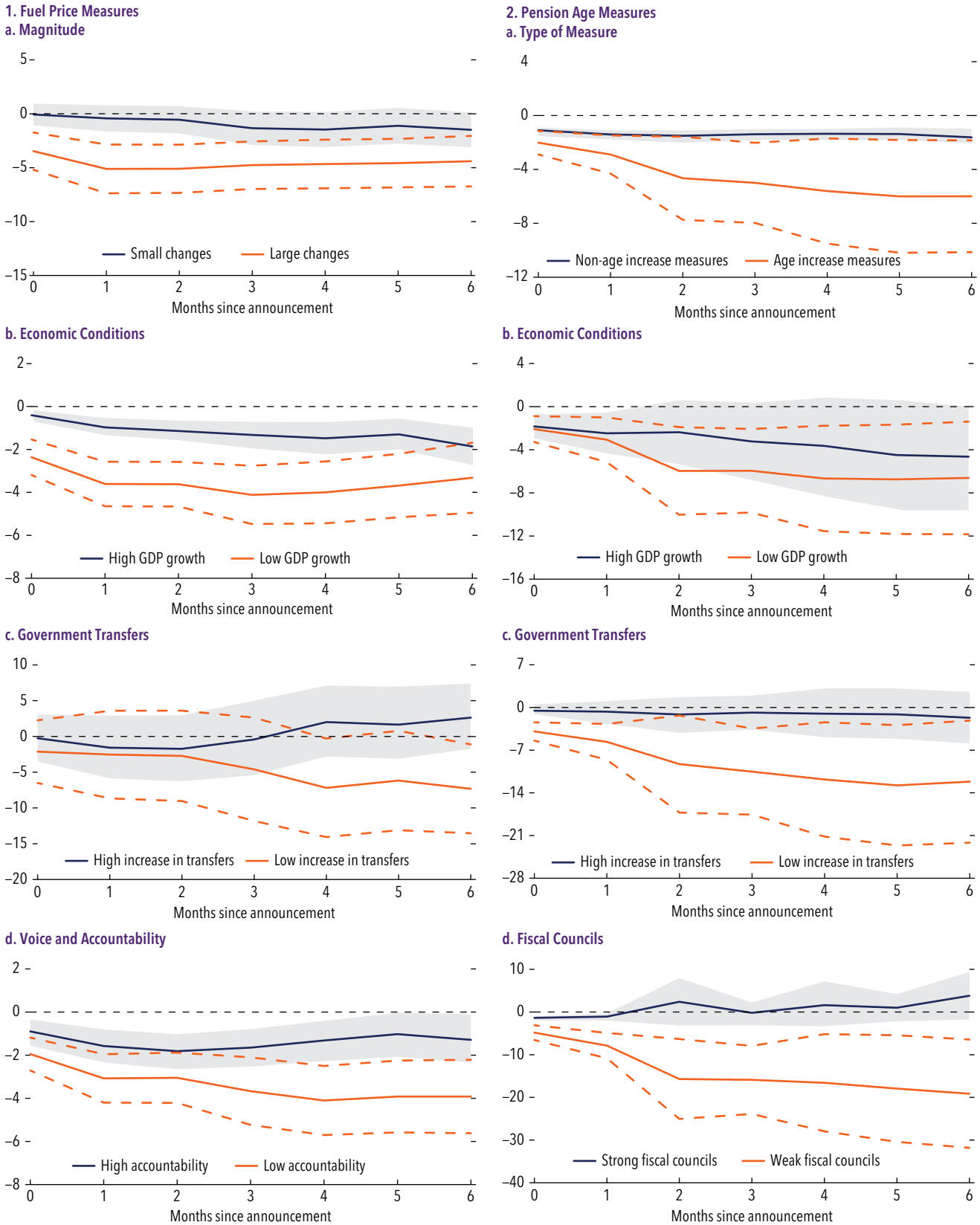
These responses, however, mask significant variation across countries and periods, influenced by reform design, structural characteristics, and accompanying policies. The following discussion examines the differing roles of these factors, drawing on empirical analysis, country experiences, and the extant literature.

Reform Design

The magnitude and phasing of fuel price adjustments significantly influence stakeholder sentiment. A modest fuel price hike (as implemented in *Colombia* in 2022) has a minimal impact on sentiment. In contrast, announcing a substantial price increase (as implemented in *Sri Lanka* in 2012) triggers a sharp and sustained decline in sentiment, with stakeholder sentiment deteriorating by nearly fourfold compared with initial levels (Figure 2.13, panel 1a). Similarly, gradual fuel price increases, on average, do not yield statistically significant negative effects, whereas more abrupt changes result in heightened resistance, amplifying negative reactions by up to four times (Online Annex 2.4). Small changes in pension ages, as in the 2007 pension reform in *Germany*, also lead to less negative sentiment.[13] In addition, sentiment regarding pension measures

[13]A structured and transparent mechanism for implementing gradual adjustments in retirement ages can be achieved by linking retirement ages to incremental changes in life expectancy, reducing financial imbalances, and avoiding the need for frequent policy changes (Arbatli Saxegaard and others 2016; OECD 2023).

Figure 2.13. Factors Shaping the Impact of Measure Announcements on Stakeholder Sentiment



Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: The panels depict the dynamic response of stakeholder sentiment (households, civil society organizations, unions, and opposition groups) to announcements of fuel price and pension age measures under different conditions, including 90 percent confidence bands (shaded bands and orange dashed lines). Impulse response functions are estimated using local projections with a smooth transition function (see Online Annex 2.4). The horizontal axis represents months since announcements ($t = 0$).

varies significantly when comparing pension age increases to other adjustments. Announcements of reforms to increase retirement ages generally lead to a sharp sentiment decline, while sentiments surrounding other pension measures, such as changes to contribution rates, are less negatively affected (Figure 2.13, panel 2a). This may be explained by the typically smaller magnitude of other measures and their technical nature (for example, changes in the indexation formula), which attract less public attention (Riekhoff 2021). Finally, it is important to note that these findings reflect average responses and indicate policy measures that governments can implement under normal economic circumstances. In the presence of significant macroeconomic imbalances, gradual reforms may be less feasible and other policy options can play a mediating role (see discussion later).

Macroeconomic conditions

Economic conditions at the time of announcement of a fuel price or pension age measure significantly shape stakeholder sentiment. Announcements made during periods of economic expansion show a marked reduction in negative sentiment (Figure 2.13, panels 1b and 2b). In contrast, reforms introduced during periods of weak growth result in sentiment twice as negative. This finding aligns with previous studies suggesting that voters attribute the current state of the economy to immediate government actions (Alesina and others 2024).

Structural characteristics

In advanced economies, the impact of fuel price changes on public sentiment is less negative and tends to improve over time. Conversely, in emerging markets and low-income countries, sentiment is more negative and deteriorates over time (Online Annex 2.4). This difference may be related to fuel price changes being less salient in advanced economies, where fuel expenditure is a smaller portion of household budgets, citizens are accustomed to price fluctuations from liberalized markets, and social protection systems are more robust.[14] Public sentiment regarding pension reforms is influenced by a country's population age structure. A higher old-age dependency ratio—the proportion of individuals age 65 and older to those ages 15–64 years—is associated with more negative sentiment toward pension age reforms (Online Annex 2.4). This is likely because a larger segment of the population is directly affected in older societies, intensifying opposition. Older age groups typically favor the status quo and oppose changes to retirement age (Bonoli and Häusermann 2009; Busemeyer, Goerres, and Weschle 2009).

Accompanying Measures and Inequality

Sentiment is driven by expected loss aversion (such as higher cost of living after fuel price hikes) and perceptions of fairness.[15] Low inequality (as indicated by a low Gini coefficient after taxes and transfers, as in *France* in 2011) is associated with muted negative sentiment following announcements of fuel price changes (Online Annex 2.4). Conversely, countries with high inequality have significant and persistent negative responses in sentiment. An increase in cash or in-kind transfers (of about 10 percent, such as in *Norway* in 2009) in the year preceding fuel price change mitigates the decline in sentiment (Figure 2.13, panel 1c). Similarly, for pension age measures, sentiment improves when there are substantial changes in government transfers before announcements (Figure 2.13, panel 2c).[16] Accompanying changes in retirement ages with expansions of pension coverage or improvements in the adequacy of benefits, as in the 2009 reform in *Australia* (Online Annex 2.5), can boost sentiment (Online Annex 2.4). These findings align with literature suggesting that low inequality and strong social protection systems help households absorb the impact of reforms and reduce resistance (Morrisson 1996).

Institutional Framework: Trust, Accountability, and Governance

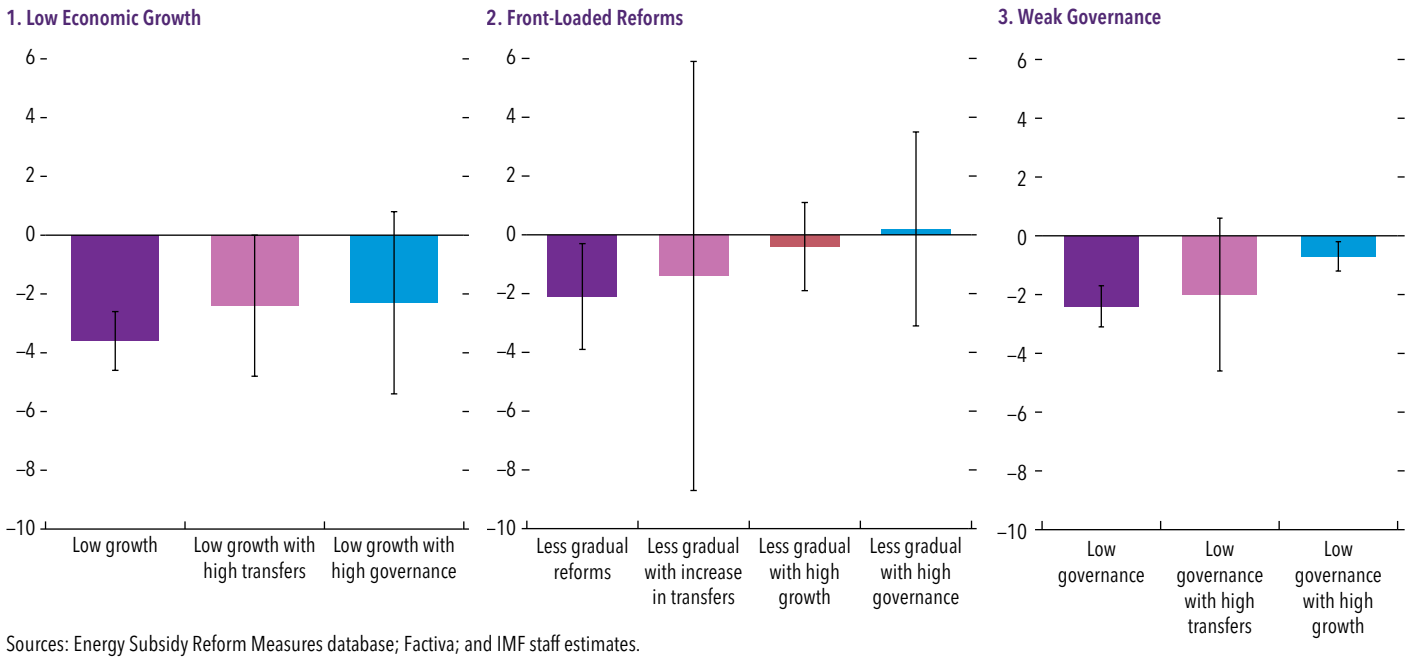
For fuel price increases, sentiment improves within two months of announcements, displaying immediate improvements in settings of high transparency, high trust, and stronger accountability (Figure 2.13, panel 1d). This finding is consistent with reduced public opposition when people trust the government to use budgetary savings effectively for the broader benefit of the population (Pritchett and de Weijer 2010; Strand 2013; Chapter 3 of the October 2024 *World Economic Outlook*). In contrast, resistance to reforms is notably higher in countries plagued by limited

[14]Besides the level of country income, the response of sentiment toward reforms does not vary significantly across regions or between oil exporters and importers (Online Annex 2.4).

[15]More broadly, perceptions of fairness are essential for reforms, as stakeholders' acceptance depends on both the expected direct impact of reform and the perceived impact on others (Chapter 3 of the October 2024 *World Economic Outlook*).

[16]The analysis covers cash and in-kind social benefits, including social security, social assistance, and employer-provided benefits.

Figure 2.14. Factors Mediating Stakeholder Sentiment in Response to Fuel Price Measure Announcements



Sources: Energy Subsidy Reform Measures database; Factiva; and IMF staff estimates.
Note: The panels depict the dynamic response of stakeholder sentiment (households, civil society organizations, unions, and opposition) to announcements of fuel price measures under different conditions, along with the associated 90 percent confidence error bars. Impulse response functions are estimated using local projections with triple interaction effects (Online Annex 2.4).

transparency, inefficiencies in public spending, and inadequate service delivery, where price subsidies often represent one of the few tangible benefits provided by the government (Online Annex 2.4).[17] In the case of pensions, countries with stronger fiscal councils and higher spending efficiency experience a faster recovery in sentiment after reform announcements (Figure 2.13, panel 2d; Online Annex 2.4). This finding also suggests that trust in public institutions, strong fiscal frameworks, and government spending efficiency can help support contentious pension reforms.

Overall, the results provide insight on first-best policies that governments can implement during normal times to advance reforms. Ultimately, the design of reforms (timing, graduality, and compensatory measures) depends on various aspects, including macroeconomic conditions, available fiscal space, and ability to identify and compensate specific groups affected by reforms. For example, governments may need to implement substantial, front-loaded adjustments as part of broader reforms to address macroeconomic imbalances. A critical question is how governments can enhance public sentiment in such circumstances. The analysis shows that even in challenging situations, governments can mitigate public opposition to their measures, as macroeconomic, institutional, and reform characteristics interact in important ways.[18]

- *Timing—low growth environment.* On average, sentiment regarding fuel price measures is generally more favorable during high-growth periods, yet governments may need to enact reforms during crises or when economic conditions are weak. In these instances, increasing government transfers can significantly improve negative sentiment. Furthermore, effective governance is crucial because it can reduce the negative sentiment linked to low growth conditions (Figure 2.14, panel 1).
- *Design—front-loaded reforms.* Strong governance plays a significant role in eliminating negative sentiment and facilitating front-loaded reforms. In addition, increasing cash or near-cash transfers can help reduce initial negative sentiment (Figure 2.14, panel 2). Studies have demonstrated that knowledge and understanding of reform objectives, benefits, and compensatory measures can significantly influence public support (Dabla-Norris and others 2023).

[17]Countries with less freedom have a marginally lower and not significant drop in sentiment following reform announcements.

[18]The analysis is based on triple interaction terms (Online Annex 2.4).

- *Institutional framework—weak governance.* In contexts of weak governance, public trust that the government will act in good faith to execute reforms or compensate losses in welfare tends to be low (Commander 2012; Calvo-Gonzalez, Cunha, and Trezzi 2015). In such environments, governments can mitigate negative sentiment through higher transfers (Figure 2.14, panel 3). The timing of reforms is also crucial; implementing measures during a period of strong economic growth can be particularly effective in reducing negative sentiment in low-governance contexts.

Lessons from Case Studies

The case studies for pension age reforms (*Australia*, *Germany*, and *Uruguay*) and fuel price reforms (*Colombia*, *France*, and *Morocco*) presented in Online Annex 2.5 provide detailed insights into the effective design and implementation of these measures, supporting the empirical analysis presented earlier.

The case studies demonstrate that although phased reforms generally garner public support, front-loading some adjustments can help build credibility for reforms. In *Morocco*, the government rapidly increased fuel prices to alleviate mounting fiscal pressures that would have imperiled their policy agenda. This approach helped build confidence in the continued implementation of a smooth liberalization of fuel prices from 2013 to 2015. The incremental approach that followed provides households and businesses with time to adjust, helping mitigate negative sentiment. Similarly, in *Colombia*, the incoming government in 2022 introduced a timeline for gasoline price adjustments over two years. Adhering to this schedule strengthened public trust and helped alleviate negative sentiment, although the government was not able to advance in the elimination of diesel subsidies. The phased approach in the pension reform in *Uruguay*, which gradually raised the retirement age, was crucial for gaining public acceptance.

Regarding the relevance of macroeconomic conditions, in *Germany*, the increase in the retirement age received support during a period of strong economic growth. Conversely, the experience of *Morocco* illustrates that reforms can still be implemented under challenging economic conditions by integrating them into a broader reform agenda that addresses the concerns of low- and middle-income households, emphasizing the trade-offs between sustaining subsidies and financing growth-enhancing public investments.

The case studies highlight the important role of stakeholder engagement and effective communication. The experience of *Uruguay* underscores the value of framing reforms strategically: the retirement age adjustment was presented as a means to sustain pension benefit levels, aligning with survey findings indicating strong public support for benefit adequacy. Country experiences also suggest that involving key stakeholders—such as the public, businesses, and civil society—in the reform process can enhance design and acceptance of the reforms through their valuable input. Both *Germany* and *Uruguay* illustrate the importance of bipartisan pension commissions in fostering trust and transparency, helping to secure political consensus before legislation is introduced. In *Morocco*, a comprehensive communication strategy was used to engage various stakeholders during the fuel subsidy reform. It involved using diverse platforms, including TV, radio, newspaper, and social media, with a particular focus on the needs of youth and middle-class families. This strategy effectively conveyed the message that subsidies were a poor instrument for social support, helping to alleviate concerns and garner support.

On the role of accompanying measures and reforms, the pension reform in *Germany* included a focus on initiatives to increase the employability of older individuals alongside increases in retirement ages. Similarly, the 2009 pension reform in *Australia* balanced the phased increase in the eligibility age for the Age Pension with a substantial boost to Age Pension benefits, particularly for low-income retirees. (Commonwealth of Australia 2009). In *Morocco*, although few direct measures were in place to support vulnerable households coping with the fuel subsidy reform, successful negotiations with the transportation sector helped contain the higher cost of living concerns, especially for poorer families. In *Colombia*, the government prioritized reforms to gasoline subsidies to protect the most vulnerable, delaying the removal of diesel subsidies until gasoline subsidies were fully phased out. The interaction of these reforms with other measures, such as simultaneous changes to spending or tax programs that could influence public support, is also important as seen in the case of *France*. Moreover, in *Uruguay*, the strategy of separating the retirement age reform from other pension modifications (such as increased contribution rates) helped reduce opposition to the measures.

Finally, the example of *Uruguay* demonstrates the critical role of *strong political ownership* for the successful legislation of reforms. The president prioritized pension age changes as a central pillar of government policy and actively engaged with key political stakeholders to foster consensus.

Summary and Policy Implications

Key reforms to major expenditure programs, such as energy subsidies in emerging markets and low-income countries and pension reforms in emerging markets and advanced economies, are essential for generating fiscal savings and promoting inclusive growth. Public resistance has historically hindered these reforms. Although both energy subsidy and pension measures have been frequent, substantial changes—such as major or sustained reductions in subsidies or raising retirement ages—are rare. This chapter, using a new measure of reform acceptability based on real-time stakeholder sentiment, reveals that positive public sentiment is a strong predictor of reforms and that enhancing support among households, CSOs, unions, and opposition groups is crucial for advancing energy subsidies and pension reforms.

Energy subsidy reforms seek to align prices with market values and enhance efficiency. While gradual phaseouts are often associated with more positive public sentiment, front-loaded approaches can gain support if paired with compensatory measures. It is essential to convey that fiscal savings will be reinvested in social and infrastructure needs, alongside considering broader structural reforms involving SOEs.

Pension reforms aim to ensure the long-term viability of retirement systems. As these systems are not automatically adjusted for aging, policymakers must periodically revise parameters to ensure their sustainability. Gradual reforms can help people understand and adapt to the changes, but rapid adjustments may be needed to address funding shortfalls in periods of economic stress. Securing public support requires guaranteeing adequate benefits for retirees, emphasizing the sustainability of pension systems for future generations, and addressing perceived inequities, such as curtailing special regimes.

Ultimately, the reform design (the intensity and pace of measures and the magnitude and cost of accompanying measures) depends on the macroeconomic context, the fiscal space, and the ability to compensate groups affected by reforms as detailed in Table 2.2. When macroeconomic conditions are favorable, phased reforms can alleviate public apprehension, as illustrated by the case of the retirement age increase in *Germany* or the reform of the fuel stabilization fund in *Peru* in 2010 (Clements and others 2013). This approach aligns with the principle of "fixing the roof while the sun is shining" (Lagarde 2017), addressing distortions during favorable times, alongside public consultations and mitigating measures (Clements and others 2013; Amaglobeli and others 2022; Chapter 3 of the October 2024 *World Economic Outlook*).

In challenging macroeconomic conditions, such as downturns or fiscal crises, large, front-loaded measures

Table 2.2. Reform Design Considerations under Different Conditions

	Pace and Intensity of Measures	Accompanying Measures	Communication and Ownership
Negative macroeconomic conditions	Prioritize front-loaded efforts that set a clear path of adjustment to tackle distortions and fiscal costs.	Compensatory measures are essential to address the needs of those most affected by broad macroeconomic shocks. It is important to articulate reforms within broader structural agendas.	The effect of measures in restoring macroeconomic stability and potentially as part of a wider reform agenda should be stressed.
High inequality	The pace of the reform might be less of a concern because fast actions to counter inequities might be well received.	Strengthening social safety nets is crucial for effectively delivering benefits to the most vulnerable as reforms progress. Policies should be implemented to enhance redistribution and governance.	Communications that illustrate the unfairness of the status quo and potential distributional impact of reforms should be prioritized, alongside compensatory measures.
Low trust	Credibly demonstrating commitment to reforms may require some front-loading of measures.	Early and visible investment in social programs and infrastructure should be prioritized. Steps should be taken to improve governance and reduce corruption while enhancing spending efficiency.	Communication must be handled with care–actions speak louder than words. Efforts should aim to show tangible results.

Source: IMF staff.

may be necessary to stabilize the economy and bolster support for reforms. The threat of a crisis can create an urgent need for action, enhancing the credibility and political acceptability of reforms (Alesina and Drazen 1991; Alesina and others 2024). For energy subsidy reforms, prioritizing immediate fiscal sustainability while minimizing adverse effects on vulnerable populations is essential. Front-loaded adjustments (such as the initial 20 percent increase in fuel prices in *Morocco*) can build credibility and pave the way for recovery (Stuchlik, Eatock, and Delivorias 2015). For pension reforms, ensuring the long-term financial viability of the systems is critical. However, during crises, rapid adjustments to parameters may be necessary, especially to address broader structural issues and build credibility, as in the two-year increase in retirement age legislated in *Greece* in 2012. For both energy and pension reforms, articulating initiatives within a broader structural agenda is also important, including governance reforms for state-owned enterprises in the energy sector (Coady, Parry, and Shang 2018) and labor market reforms for pensions (Börsch-Supan and Ludwig 2013).

A key component of successful reforms is planning alternatives that mitigate welfare losses and perceptions of unfairness. Political obstacles to reform often hinge on the size and organizing power of stakeholder groups benefiting from energy subsidies or pension benefits. Therefore, reform plans must consider who the current beneficiaries are and how proposed changes affect welfare across groups.

To build support for energy subsidy reforms, it is essential to strengthen social protection systems to address perceptions of inequities and mitigate the impact on affected households. For instance, cash transfers can serve as an effective tool to cushion the impact, as demonstrated in Brazil in 2001 (Clements and others 2013). Although targeted transfers are more cost-effective, they require greater administrative capacity and risk overlooking groups affected by reforms.[19] These alternatives might claw back some fiscal savings; by boosting the acceptance of reforms, they can ultimately help address market distortions, increase efficiency, and generate fiscal savings through output effects (Banerji and others 2017).

For pension reforms, allowing individuals close to retirement to keep their current benefits provides younger individuals with time to adjust to the changes. Increasing benefits for low-income retirees can also mitigate perceived unfairness, as in *Australia* where pension ages increased alongside increases in benefits for vulnerable older households (Commonwealth of Australia 2009). There can also be scope for enhancing redistribution policies through higher tax progressivity (Dabla-Norris and others 2015).

An effective strategy is to reinvest fiscal savings into initiatives that enhance welfare, such as scaling up social programs or funding critical public investments. For energy subsidy reforms, announcing reinvestment of fiscal savings into public services can bolster support. In environments with weak governance and low trust, it is essential to deploy compensatory measures—especially visible investments in social programs—early on. This approach addresses immediate concerns and shows that reform resources benefit the public. Increasing public spending efficiency can further bolster confidence that savings from energy subsidy reforms will serve the broader community (April 2017 *Fiscal Monitor*). Implementing policies to enhance governance and institutional quality is also crucial for building trust in the process (Strand 2013; Furceri and others 2019).

Strategic communication is vital for securing buy-in for reforms. Public messaging should emphasize the importance of these reforms, especially in contexts of limited transparency (Chapter 3 of the October 2024 *World Economic Outlook*). Communications should also highlight the role of these measures in restoring macroeconomic stability and position them as part of a broader reform agenda. Equity arguments may be less persuasive for groups at risk of losing benefits. The communication strategy should therefore include clear information about any planned compensatory measures to address the concerns of affected populations (Dabla-Norris and others 2023), as done during the fuel subsidy reform in *Morocco* in 2012. In low-trust environments, prioritizing transparency and accountability is essential to demonstrate how additional resources from reforms will be used, as emphasized in communications during the fuel subsidy reform in *Ghana* in 2005 (Clements and others 2013).

The communication strategy for pension reforms must focus on enhancing financial literacy, ensuring that individuals are informed and knowledgeable about pensions and how the pension system operates. Initiatives to clarify pension rules and provide

[19]The targeting mechanisms should reflect country-specific contexts (Grosh, Wai-Poi, and Tesliuc 2022). Digitalization also offers promise to enhance the effective and efficient delivery of support to the most vulnerable (Bird and Hanedar 2023).

individuals with regular statements of their expected retirement income can help increase reform acceptance (Bottazzi, Jappelli, and Padula 2006; Boeri and Tabellini 2010; Lusardi and Mitchell 2014; Fornero and Lo Prete 2019; Oggero and others 2023).

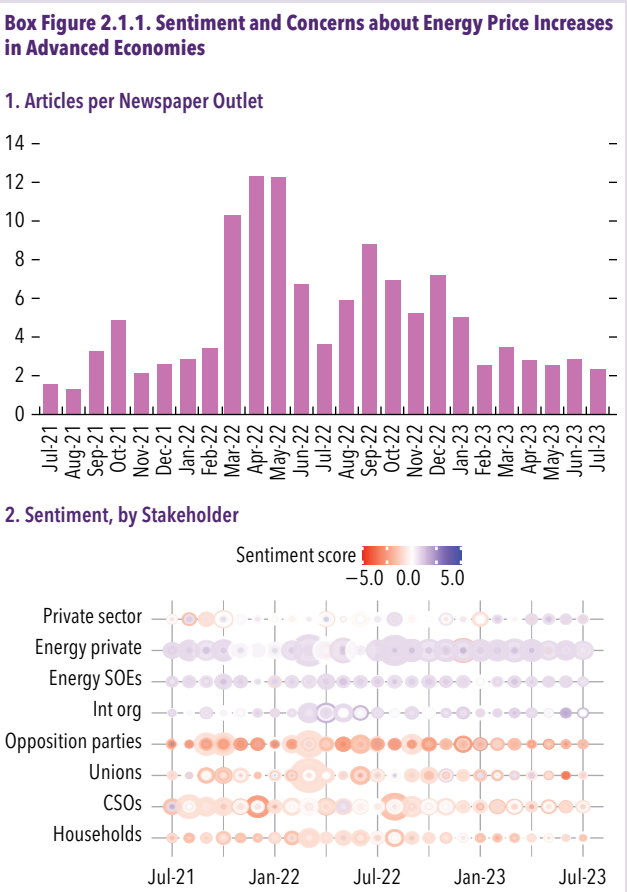
Finally, ownership and political commitment are key elements in building consensus and enhancing the credibility of the reform agenda (Branson and Hanna 2000; Banerji and others 2017). A technical approach that diagnoses issues and discusses options—such as the one used in *Uruguay* by its pension reform commission—can help foster a shared understanding among stakeholders, which is vital for advancing reforms. The evidence in the chapter shows that regularly published and institutionalized fiscal projections, such as projections by the Working Group on Ageing Populations and Sustainability of the European Commission, can facilitate necessary pension reforms. However, data and analytical skills within governments—especially in low-income countries—are often lacking. To address these challenges, capacity development efforts by the International Monetary Fund (IMF) and other organizations can provide essential support.

Box 2.1. Public Sentiment in Advanced Economies Regarding the 2022 Surge in Energy Prices

Following the onset of Russia's war in Ukraine, energy prices soared to record levels in early 2022—especially in Europe—because of rising natural gas prices. Because many advanced economies have liberalized fuel and utility markets, these international energy price hikes were passed to households and firms as higher fuel prices and utility tariffs. In response to the sharp increase in energy prices, many governments implemented measures to mitigate the impact, including limiting the pass-through of international prices to domestic prices by lowering consumption or excise taxes on retail energy products (Amaglobeli and others 2023). In addition, governments introduced cash and semi-cash transfers (vouchers, discounts) to further alleviate the burden of rising retail prices.

The 2022 energy shock illustrates the immediate impact of energy price fluctuations on public sentiment. From March to May 2022, the number of articles discussing energy prices more than tripled from their previous levels and remained elevated throughout 2023 (Figure 2.1.1, panel 1). Households, civil society organizations, unions, and opposition groups were particularly vocal right following the price surge, expressing negative sentiment. Even the private sector, typically neutral to positive in sentiment, voiced concerns about inflation, distributional issues, and the risks of energy shortages (Figure 2.1.1, panel 2). Rapid policy responses, particularly in Europe, where multiple measures were introduced by June 2022, helped mitigate the impact on households and contributed to a more muted sentiment in late 2022 and 2023.

Box Figure 2.1.1. Sentiment and Concerns about Energy Price Increases in Advanced Economies



Sources: Energy Subsidy Reform Measures database; Factiva; Global Pension Reform database; and IMF staff estimates.
Note: In panel 2, the size of the bubbles reflects the frequency of sentiment, and red represents negative sentiment, while blue represents positive sentiment, with shading indicating intensity. CSOs = civil society organizations; Int org = international organizations; SOEs = state-owned enterprises.

The event highlights how public sentiment reacts to sharp fluctuations in fuel and utility prices, even in advanced economies accustomed to such changes. It also highlights the role of timely mitigation measures in shaping public sentiment. Many advanced economies resorted to placing limits on retail price increases, likely from the widespread impact of rising energy costs and broader political economy considerations (Amaglobeli and others 2022). Although these actions may have provided short-term relief, they were fiscally costly and could have been suboptimal given that it is essential to preserve price signals to encourage needed adjustment by households and firms, while effectively deploying assistance through existing social safety nets (IMF 2022).

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IMF EXECUTIVE BOARD DISCUSSION OF THE OUTLOOK, APRIL 2025

The following remarks were made by the Chair at the conclusion of the Executive Board's discussion of the Fiscal Monitor, Global Financial Stability Report, *and* World Economic Outlook *on April 11, 2025.*

Executive Directors broadly agreed with staff's assessment of the global economic outlook, risks, and policy priorities. They concurred that the global economy is at a critical juncture, with significant internal and external imbalances and vulnerabilities. Directors recognized that major policy shifts are underway, generating a new wave of uncertainties with potentially significant implications for the functioning of the global economy.

Directors noted that the financial market landscape is marked by increased uncertainty and market volatility, against the backdrop of stretched valuations within many segments of financial markets. Global financial conditions have tightened, with near-term financial stability risks (as gauged by IMF's Growth-at-Risk metric) rising. Directors concurred that further correction of asset prices (with geopolitical risks being a potential trigger), the ongoing increase in leverage and interconnectedness in the financial system, especially among certain non-bank financial intermediaries (NBFIs) receiving strong investment flows in recent years, alongside still-rising sovereign debt levels, constitute key vulnerabilities keeping risks to financial stability elevated.

Directors noted that risks to the outlook are firmly tilted to the downside. They acknowledged that the escalating protectionism and elevated policy uncertainty could further reduce near- and long-term growth at a time when the world economy is entrenched in a low-growth, high-debt environment. Directors stressed that divergent and rapidly shifting policy stances or deteriorating sentiment could trigger more abrupt repricing of assets and sharp adjustments in foreign exchange rates and capital flows, especially for emerging market and developing economies. On the fiscal side, escalating uncertainty and unexpectedly high interest rates may lead to a significant increase in global public debt, particularly due to rising expenditures on defense and declining revenues linked to output uncertainty from tariffs. Furthermore, higher interest rates could limit key development spending and exacerbate financing risks in low-income developing countries, including against the background of declining official development assistance. Directors also highlighted that more limited international cooperation on common challenges could also hinder progress toward building a more resilient global economy and addressing development needs.

Directors noted that elevated uncertainty intensifies the growth-inflation trade-offs and called on central banks to carefully fine-tune monetary policy to achieve their mandates and ensure price stability. Monetary policy should remain data-dependent and clearly communicated to anchor expectations. Where near-term inflation risks are tilted to the upside or inflation expectations are rising, future cuts to the policy rate should remain contingent on evidence that inflation is heading decisively back toward target, while ensuring that financial stability is not compromised. Central banks should stand ready to act forcefully if inflation risks materialize. Directors acknowledged that

although major emerging markets have proved remarkably resilient in the face of adverse shocks, abrupt sell offs in global markets against the backdrop of potential divergence in monetary policy paths, coupled with high trade policy and economic policy uncertainty, could tighten their financial conditions and raise currency volatility. Emerging markets may thus require adoption of measures to mitigate disruptive capital outflows, and Directors recognized that the IMF's Integrated Policy Framework provides a toolkit for responses in such scenarios, tailored to country-specific circumstances.

Directors emphasized that a full, timely and consistent implementation of Basel III and other internationally agreed bank regulatory standards would ensure a level playing field across jurisdictions and guarantee ample and adequate capital and liquidity. Directors acknowledged that the growing nexus between banks and NBFIs calls for supervisors to enhance the risk assessment of such linkages. They recognized that continued buildup of debt and elevated economic uncertainty underscore the need to strengthen the macroprudential policy framework to contain excessive risk taking in the NBFI sector, alongside ensuring capital and liquidity buffers in banking systems are adequate to support the provision of credit through periods of stress. Directors emphasized the importance of macroprudential buffers and strong crisis preparedness and resolution frameworks to mitigate shocks.

Directors called for gradual and growth-friendly fiscal adjustment within a credible medium-term framework to reduce debt, rebuild fiscal buffers, and accommodate priority spending while protecting the vulnerable. In light of emerging fiscal risks and new spending pressures, economies with limited fiscal space should reprioritize public spending within their planned budgets. Economies with room for fiscal maneuver could use some of the available space, if appropriate, within well-defined medium-term fiscal frameworks. Directors noted that advanced economies should prioritize expenditure reforms, advance pension and healthcare reforms, eliminate ineffective tax incentives, and expand tax bases by removing exemptions to improve tax expenditure efficiency. For countries facing new spending needs—for example, in defense—it is essential to demonstrate a strong commitment to upholding the integrity of the existing fiscal rules while ensuring transparency. Emerging market and developing economies should enhance revenues through tax system reforms and improved revenue administration, phase out energy subsidies, and streamline public wage bills while safeguarding public investment and upgrading social safety nets.

Directors emphasized the need for fiscal and structural reforms to enhance growth potential and the criticality of international cooperation to respond to global challenges and bolster resilience. Given significant demographic shifts, they stressed the need for comprehensive policies to increase labor force participation among women and older workers, implement pension reforms, and effectively address migration challenges. Directors recognized that renewable energy sources and innovative production paradigms could help countries reap the benefits of advancements in artificial intelligence without escalating electricity prices. They also highlighted that economic activity thrives under clear and transparent trade policies that stabilize expectations for businesses and consumers while minimizing volatility. Furthermore, continued cooperation across various policy areas—

including trade, industrial policy, international taxation, climate, and development and humanitarian assistance—can help mitigate global spillovers and protect vulnerable populations.

FOREWORD

Global economic prospects have deteriorated, and risks are elevated. Uncertainty is unprecedented, and confidence has been weakening. Looking at financial markets, exuberance has partially corrected, and financial conditions have tightened. Policymakers should invest their political capital in building confidence and trust. That starts with keeping their own houses in order. That is especially important in a situation that is likely to test the resilience of individual economies—not to mention the entire system (April 2025 *World Economic Outlook*).

In a fast-changing and perilous world, and with limited policy space, ministers of finance face stark trade-offs and painful choices.

First, fiscal policy should be part of overall stability-oriented macroeconomic policies. Policies should be conducted within sound frameworks and institutions that anchor confidence and expectations. It is also vital to build political support and gain people's trust for advancing fiscal and structural reforms. Otherwise, the risk is that fiscal policy becomes a force operating against monetary stability and financial stability. Stability-oriented fiscal policy is an essential building block for keeping one's own house in order.

Second, fiscal policy should, in most countries, aim at reducing public debt and building buffers to create space to respond to spending pressures and other economic shocks. If policy space allows, fiscal consolidation should be measured and gradual. The consolidation should be designed carefully to allow countries to protect workers, communities, and businesses—in case, for example, they are disproportionately affected by surging tariffs and other protectionist measures. In emerging market and developing economies, where tax revenues are low, improving the tax system is key. However, when under market pressure, governments may be forced into abrupt and front-loaded adjustments that, in extreme cases, may require timely and orderly debt restructuring. But it is important to stress that country-specific factors and circumstances are crucial everywhere.

And last, fiscal policy should, together with other structural policies, aim at improving potential growth, thereby easing policy trade-offs. Otherwise, trade-offs become even starker and push governments into painful choices. That can be seen by considering a policy trilemma that has been introduced in earlier *Fiscal Monitors*. The trilemma is created by the difficulty in reconciling three elements: first, financial stability and public debt sustainability; second, spending pressures (as mentioned above); and third, political red lines on taxation. Importantly, the trilemma becomes less binding when growth improves. That is why taking a long view is so important.

In these times of high uncertainty, fiscal policy must be an anchor for confidence and stability that contributes to a competitive economy delivering growth and prosperity for all. Ministers of finance must build trust, tax fairly, spend wisely, and take the long view.

Vitor Gaspar
Director
Fiscal Affairs Department

Version date: April 18, 2025

PREFACE

The projections included in this issue of the *Fiscal Monitor* are drawn from the same database used for the April 2025 *World Economic Outlook* and *Global Financial Stability Report* (and are referred to as "IMF staff projections"). Fiscal projections refer to the general government, unless otherwise indicated. Short-term projections are based on officially announced budgets, adjusted for differences between the national authorities and the IMF staff regarding macroeconomic assumptions. The fiscal projections incorporate policy measures that are judged by the IMF staff as likely to be implemented. For countries supported by an IMF arrangement, the projections are those under the arrangement. In cases in which the IMF staff has insufficient information to assess the authorities' budget intentions and prospects for policy implementation, an unchanged cyclically adjusted primary balance is assumed, unless indicated otherwise. Details on the composition of the groups, as well as country-specific assumptions, can be found in the Methodological and Statistical Appendix of the April 2025 *Fiscal Monitor*.

The *Fiscal Monitor* is prepared by the IMF Fiscal Affairs Department under the general guidance of Vitor Gaspar, Director of the Department. The project was directed by Era Dabla-Norris, Deputy Director and Davide Furceri, Division Chief. The main authors of Chapter 1 in this issue are Marcos Poplawski-Ribeiro (team lead), Clara Arroyo, Mathieu Bellon, Yongquan Cao, Hamid Davoodi, Carlos Eduardo Gonçalves, Gabriel Hegab, Salma Khalid, Faizaan Kisat, Emanuelle Massetti, Jeta Menkulasi, Danielle Minnett, Anh Dinh Minh Nguyen, Manabu Nose, Nicola Pierri, Ervin Prifti, Galen Sher, and Alexandra Solovyeva; with contributions from Francesco Frangiamore, Domenico Giannone, Victoria Haver, Arika Kayastha, Hongchi Li, Xueqi Li, and Pietro Pizzuto. The authors of Chapter 2 are Davide Furceri (co-lead) and Mauricio Soto (co-lead), Diala Al Masri, Hussein Bidawi, Christoph Freudenberg, Radhika Goyal, Mengfei Gu, Emine Hanedar, Samir Jahan, Julieth Pico Mejía, Ana Sofia Pessoa, Delphine Prady, and Alexandre Sollaci; with contributions from Miyoko Asai, Nusrat Chowdhury, Kardelen Cicek, Yomna Gaafar, Victoria Haver, Huy Nguyen, Sultan Orazbayev, Vishal Parmar, Ervin Prifti, Irene Rausell, Jiemin Ren, Arash Sheikholeslam, Zobaed Sm, and Nate Vernon.

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Both projections and policy considerations are those of the IMF staff and should not be attributed to Executive Directors or to their national authorities.