フ

# INTERNATIONAL MONETARY FUND

ASIA AND PACIFIC DEPARTMENT

# Upgrading Fiscal Frameworks in Asia-Pacific

Prepared by Enrique Flores, Pranav Gupta, Yinqiu Lu, Paulo Medas, Dinar Prihardini, Hoda Selim, Weining Xin, and Masafumi Yabara

DP/2024/008

**2024** SEP



# INTERNATIONAL MONETARY FUND

#### ASIA AND PACIFIC DEPARTMENT

**DEPARTMENTAL PAPER** 

# **Upgrading Fiscal Frameworks** in Asia-Pacific

Prepared by Enrique Flores, Pranav Gupta, Yinqiu Lu, Paulo Medas, Dinar Prihardini, Hoda Selim, Weining Xin, and Masafumi Yabara

# Cataloging-in-Publication Data IMF Library

Names: Flores, E. (Enrique), author. | Gupta, Pranav, author. | Lu, Yinqiu, author. | Medas, Paulo A., author. | Prihardini, Dinar, author. | Selim, Hoda, author. | Xin, Weining, author. | Yabara, Masafumi, author. | International Monetary Fund, publisher.

Title: Upgrading fiscal frameworks in Asia-Pacific / Prepared by Enrique Flores, Pranav Gupta, Yinqiu Lu, Paulo Medas, Dinar Prihardini, Hoda Selim, Weining Xin, and Masafumi Yabara.

Other titles: International Monetary Fund. Asia and Pacific Department (Series).

Description: Washington, DC: International Monetary Fund, 2024. | DP/2024/008. | Sep. 2024. | Includes

bibliographical references.

Identifiers: ISBN:

9798400284915 (paper) 9798400285042 (ePub) 9798400285011 (WebPDF)

Subjects: LCSH: Fiscal policy-Asia-Pacific. | Finance, Public-Asia-Pacific.

Classification: LCC HJ1301.F4 2024

#### Acknowledgments

The authors gratefully acknowledge guidance and feedback from Thomas Helbling, Krishna Srinivasan, and other senior staff (Asia and Pacific Department). We are grateful to the IMF country teams for their survey responses and comments and to the participants of the Asia and Pacific Department seminar for their valuable comments. The paper also benefited from very useful comments and suggestions from IMF departments and the Executive Directors' offices. Chao Wang, Vyshnavi Saikrishnan, and Mariam Olivia Souleyman provided excellent research and administrative assistance.

The Departmental Paper Series presents research by IMF staff on issues of broad regional or cross-country interest. The views expressed in this paper are those of the authors and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.

Publication orders may be placed online or through the mail:
International Monetary Fund, Publication Services
P.O. Box 92780, Washington, DC 20090, U.S.A.
T. +(1) 202.623.7430
publications@IMF.org
IMFbookstore.org
elibrary.IMF.org

# **Contents**

Executive Summary	/
1. Introduction	1
2. The Role of Fiscal Policy in Asia-Pacific	2
A. Responding to Crises	2
B. Managing Public Finances	7
3. Fiscal Frameworks in Asia: A Cross-Country Perspective	7
A. Fiscal Rules	7
B. Medium-Term Fiscal Frameworks	2
4. Upgrading Fiscal Frameworks	7
A. A Comprehensive, Risk-Based Approach to Public Finances	3
B. New Fiscal Rules?22	
C. Longer-Term Perspective to Address Climate and Aging24	1
5. Conclusions	)
Annex 1. Fiscal Stabilization in Asia-Pacific	1
Annex 2. Fiscal Frameworks in Asia-Pacific	7
Annex 3. When to Adopt Exceptional Support Measures for Crisis Interventions?	7
<b>References</b>	
BOXES	
Box 1. Fiscal Accounts at the Subnational Level: The Cases of China and India	
Box 2. Pacific Island Countries: Challenges in Operating Fiscal Frameworks	
Box 3. Enhancing Fiscal Rules in Asia: New Zealand and Sri Lanka	
Box 4. Recent Reforms to Fiscal Frameworks: Experience Outside Asia	7
FIGURES	
Figure 1. Public Debt Soared in Asia-Pacific since the Global Financial Crisis	l
Figure 2. The Global Financial Crisis and the Pandemic Has Triggered Increases in Economic  Volatility since 2007	)
Figure 3. Fiscal Countercyclicality: Asia-Pacific, Pre- and Post-Global Financial Crisis	
Figure 4. Fiscal Countercyclicality: Asia-Pacific and Rest of the World, Post-Global Financial Crisis	
Figure 5. Fiscal Countercyclicality of Asia-Pacific Countries during the Global Financial Crisis	
and the Pandemic.	
Figure 6. Off-Budget Measures, 2020-21	
Figure 7. Policy Mix (Fiscal-Monetary) in Asia-Pacific.	
Figure 8. Fuel Subsidies, 2020-22	
Figure 9. Public Debt Has Been Rising Persistently since 2007 across Asia-Pacific	
Figure 10. Public Debt and Fiscal Balances: Asia-Pacific and the Rest of the World	
I IQUIE II. LIIECLIVE IIILEIESL NALE III ASIA-FACIIIC	)

Figure 12. Fiscal Frameworks in Asia-Pacific	9
Figure 13. Number of Fiscal Rules	. 10
Figure 14. Pre- and Postpandemic Deviations from Fiscal Rules: Asia-Pacific versus the	
Rest of the World	. 11
Figure 15. Role of MTFFs in Annual Budget Preparation in Asia-Pacific	. 12
Figure 16. Average PEFA Score of Asia-Pacific Countries	. <b>1</b> 3
Figure 17. Post-Global Financial Crisis Change in Debt and Growth in the Asia-Pacific	. 17
Figure 18. Enhancing Revenue Collection Would Help Fund Development Goals in Asia and the Pacific	. 19
Figure 19. Debt Coverage of Asia-Pacific SRDSF Countries	. 20
Figure 20. Changes in Public Debt during Crises and Normal Times in Asia-Pacific	. 21
Figure 21. Social Safety Nets in Asia-Pacific	. 21
Figure 22. Public and Private Debt in Asia-Pacific	. 21
Figure 23. Fiscal Limits among Asian Emerging Market Economies	. <b>2</b> 3
Figure 24. Setting a Debt Anchor	. 24
Figure 25. Increases in Age-Related Spending and the Elder Population Share in Asia-Pacific	. 28
Annex Figure 1.1. Fiscal Countercyclicality Coefficients in Asia and the Pacific	. 32
Annex Figure 1.2. Average Fiscal Countercyclicality: Weak versus Strong Growth	. 33
Annex Figure 1.3. Fiscal Countercyclicality During the Global Financial Crisis and the Pandemic	. 33
Annex Figure 1.4. Fiscal Countercyclicality During the Global Financial Crisis and the Pandemic	. 34
Annex Figure 1.5. Fiscal Countercyclicality: Asia-Pacific versus ROW, Post-Global Financial Crisis	. 35
Annex Figure 1.6. Fiscal Countercyclicality during the Global Financial Crisis and the Pandemic:	
Across Income Groups and Regions	. 35
Annex Figure 1.7. Fiscal Countercyclicality: Asia-Pacific, Pre- and Post-Global Financial Crisis,	
Including Oil Exporters	
Annex Figure 2.1. Fiscal Frameworks in Asia-Pacific Countries	
Annex Figure 2.2. Type of Fiscal Rule in Place	
Annex Figure 2.3. Countries in Asia with an MTFF	
Annex Figure 2.4. Key Features of Fiscal Rules in Asia and Pacific, 2022	. 41
Annex Figure 2.5. Key Features of Medium-Term Fiscal Frameworks in Asia and Pacific, 2022	. 42
TABLES	
Table 1. Main Types of Fiscal Rules	. 25
Annex Table 2.1. Fiscal Frameworks in Asia and Pacific, 2022	43
Annex Table 2.2. National Fiscal Rules: Key Characteristics, 2022	.44
Annex Table 2.3. Medium-term Fiscal Frameworks in Asia and Pacific.	. 47

# **Executive Summary**

Countries in the Asia-Pacific region have taken unprecedented fiscal policy measures in response to large shocks in the past two decades. Both during the global financial crisis and the COVID-19 pandemic, Asia-Pacific economies faced much weaker economic activity. Exceptionally large fiscal support was particularly prevalent in advanced economies and emerging markets in the region, while the support measures were smaller in low-income countries, reflecting tighter financing constraints. In addition, when global inflation surged in 2021–22, governments reacted to contain inflationary pressures and help vulnerable households affected by the cost-of-living crisis. Fiscal policy, together with central banks, took concerted efforts to manage these shocks.

The responses to the crises, however, came at a cost, with public debt rising continuously since the global financial crisis. The shocks, especially the COVID-19 pandemic, have put pressure on public finances, with public debt reaching the highest levels, especially among some of the region's largest economies. In China, for example, public debt has more than doubled to above 100 percent of GDP between 2007 and 2023, and in Japan, public debt rose above 250 percent of GDP. At the same time, governments face prospects of more modest economic growth and growing spending pressures from efforts to achieve the Sustainable Development Goals, demographics, and climate change.

The large shocks, especially the pandemic, have also highlighted that fiscal frameworks in the Asia-Pacific region have not been sufficiently robust. During the pandemic, there were large deviations from fiscal rules across the region and, in some cases, suspension of the rules. Debt levels in Asia-Pacific are on average 50 percent of GDP higher relative to 2007 among advanced economies and 15 to 20 percent of GDP higher among emerging markets and LICs. The tools used to respond to crises, including social safety nets, were also underdeveloped in some countries, requiring ad hoc actions that were not always well targeted or timely. In addition, some countries did not have clear exit strategies, which, in some cases, led to procyclical expansionary policies after the shocks. The weaker growth outlook and higher interest rates imply that the maximum public debt levels that governments can sustain have declined, constraining fiscal policy. Against this backdrop, upgrading fiscal frameworks—regulations and procedures that influence how fiscal policy is planned, implemented, monitored, and assessed—could help in making fiscal policy more effective and better manage risks and policy tradeoffs.

Enhancing medium-term fiscal frameworks would help governments in the region tackle long-standing challenges and manage larger risks. While many countries already have some form of medium-term fiscal frameworks—frameworks that encompass a fiscal plan or strategy, medium-term projections, and targets or rules that guide annual budgets—they are not always well-developed or effective. Strengthening such frameworks could have large benefits. For example, for countries with high or rising debt risks, it would help develop credible medium-term plans to gradually reduce risks, while avoiding disruptive fiscal adjustments. For low-income countries, it would help build support for a medium-term strategy, including enhancing domestic revenues, to achieve the Sustainable Development Goals. Upgrading fiscal frameworks would also help in creating stronger incentives to rebuild fiscal buffers during normal times and in enhancing safety nets and other crisis tools to allow for swifter and better targeted responses to adverse shocks. Finally, countries need to enhance their management of fiscal risks. Broadening the coverage of fiscal frameworks beyond the central government and boosting the quality of government finance and debt statistics, and enhancing fiscal information, will take time but are critical for better fiscal management.

vi

More robust fiscal rules can help guide and enhance credibility of fiscal strategies. Before the pandemic, Asia-Pacific countries tended to comply better with their rules than peers in other regions. However, when the pandemic hit, and with debt already rising, countries in the region faced difficulty in following the rules. To be better prepared, many countries would benefit from making their rules more robust, especially to large shocks, by embedding them in a broader medium-term framework. Such approach would include three elements: (1) medium-term fiscal plans that are more ambitious depending on the degree of fiscal risks, including by linking the fiscal anchors to a debt sustainability assessment. When risks are high, the rules should be less flexible. (2) Rules should be designed and calibrated taking into account evolving risks and the need to build enough buffers in good times. Countries could introduce correction mechanisms for when there are large deviations from the rules. (3) The framework should allow flexibility to react to large shocks through well-designed and transparent escape clauses. To be effective and credible, it needs to be accompanied by improved fiscal institutions. Greater fiscal transparency and independent monitoring could help boost credibility and accountability.

Other challenges, notably climate change and population aging, also call for an enhancement for fiscal frameworks. Population growth is projected to become negative in the early 2030s and 2040s in emerging markets and low-income countries in the Asia-Pacific region, respectively. The population is already shrinking in some countries (for example, China, Japan, and Korea). The Asia-Pacific region also includes some of the most vulnerable countries to climate change. Governments will need to assess and communicate the long-term impact of climate change and aging on public finances, given the high risks to long-term fiscal sustainability. Such analysis will help inform the design of complex reforms that involve large intergenerational trade-offs. Medium-term fiscal frameworks can be upgraded to reflect the transition to a green economy, including by incorporating the effects of climate change and natural disasters in medium-term projections, debt sustainability assessment, and the calibration of fiscal rules. Countries can benefit from introducing long-term fiscal sustainability analysis to gauge the fiscal impact from long-term spending pressures and reform measures. Support by the international community will be critical for Pacific island countries and low-income countries where climate change is a major risk, including for the building of capacity to prepare, adapt, and manage the risks.

### 1. Introduction

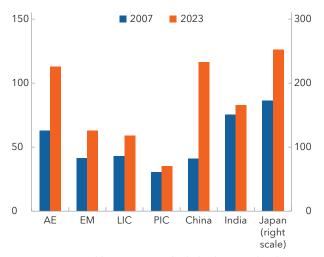
Large global shocks have highlighted the critical role of fiscal policy in economic stabilization and protecting households and firms. Governments, including in Asia and the Pacific, adopted large exceptional measures, but at a large fiscal cost. Fiscal policy has also been called to be more active in helping central banks anchor inflation expectations during the cost-of-living crisis. These experiences suggest that fiscal policy can be

swift and forceful during crises. However, the surge in public debt since the global financial crisis amid a reduction in average growth poses new challenges and calls for caution (Figure 1).¹ Fiscal frameworks, including fiscal rules, have been put to the test in recent years and failed to prevent the large buildup of vulnerabilities in some cases. Against this backdrop, it is timely to assess the role of fiscal policy and the effectiveness of fiscal frameworks in Asia and the Pacific.

This paper first provides an overview of fiscal policy conduct in the Asia-Pacific region, especially at time of large, negative economic shocks. It assesses to what degree fiscal policy was used to stabilize the economy and to protect households and firms, and it evaluates the impact on debt vulnerabilities. It also analyzes the consistency of fiscal and monetary policies in periods of large contractions in economic activity or large inflation surprises. Finally, it proposes areas where fiscal frameworks can be enhanced to make fiscal policy more effective and to better manage trade-offs.

Figure 1. Public Debt Soared in Asia-Pacific since the Global Financial Crisis

(Mean of respective group, percent of GDP)



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

Note: AE = advanced economies; EM = emerging markets; LIC = low-income countries; PIC = Pacific island countries.

Building on a novel database, the paper also examines the existing fiscal frameworks in Asia and the Pacific and their ability to withstand challenges ahead when public debt is at historically high levels. The paper reviews fiscal rules, medium-term fiscal frameworks (MTFFs), and fiscal councils, based on a survey of IMF country teams. Drawing on the lessons from recent shocks, the paper recommends using more comprehensive and risk-based fiscal frameworks. Such an approach can improve the design of policies, better identify risks, and help prepare for future crises and tackle climate change and aging.

The paper has three main chapters. Chapter 2 discusses the role of fiscal policy in the Asia-Pacific region since 2007, focusing on the ability to respond to large shocks and to ensure sound public finances. Chapter 3 provides an overview of existing fiscal frameworks in the region. Chapter 4 builds on the lessons from the last decade and a half and proposes an agenda to upgrade fiscal frameworks. Chapter 5 presents the conclusions.

<sup>&</sup>lt;sup>1</sup> Simple (unweighted) averages are used throughout the paper unless otherwise noted.

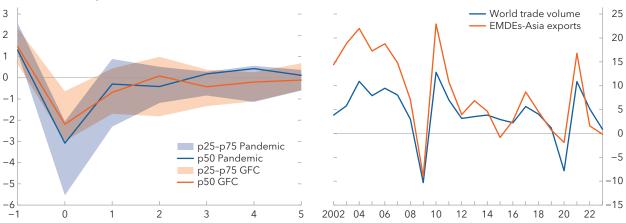
# 2. The Role of Fiscal Policy in Asia-Pacific

In the last few decades, countries have taken unprecedented fiscal policy actions in response to large shocks. Asia-Pacific economies have been no exception. Both the onset of the global financial crisis in 2008-09 and the COVID-19 pandemic led to large falls in global trade and economic growth, affecting especially Asia-Pacific economies that rely on exported-oriented strategies (Figure 2). In addition, as global inflation surged in 2021-22, governments had to react to contain inflationary pressures and help vulnerable households affected by the cost-of-living crisis. Analyzing the fiscal response since the onset of the global financial crisis provides insights on the role and effectiveness of fiscal policy in Asia and the Pacific.

Figure 2. The Global Financial Crisis and the Pandemic Has Triggered Increases in Economic Volatility since 2007







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

Note: Output gaps are calculated using the Hodrick-Prescott filter. EMDEs = emerging market and developing economies; GFC = global financial crisis; p = percentile; PPP = purchasing power parity.

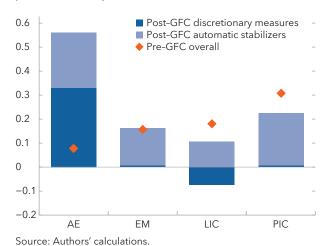
#### A. Responding to Crises

Fiscal policy has played a key role in responding to global shocks since 2007. Governments responded swiftly to the global financial crisis, the pandemic, and the cost-of-living crisis in the pandemic aftermath, seeking to stabilize the economy and shield households and firms from the shocks. One approach to evaluate the stabilization role of fiscal policy is to assess whether it is countercyclical—that is, whether the budget deficit increases (declines) when the economy weakens (strengthens), which helps in stabilizing the economy—or procyclical. In the latter case, deficits decrease when the economy weakens, and vice versa, which exacerbates economic fluctuations.<sup>2</sup> The following analysis suggests that fiscal policy was broadly neutral before the global financial crisis in the Asia-Pacific region and became more countercyclical afterwards as countries responded to the crises.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> The coefficient is estimated based on a regression where the dependent variable is a fiscal variable (the overall fiscal balance) and the independent variable is real GDP growth (as in Jalles and others 2023). This approach is preferred given limited available data and allows for comparison across countries and over time, while being mindful of its limitations. For example, it does not consider the fiscal multiplier effects. As such, the estimate has a downward bias. See Annex 1 for more details.

<sup>&</sup>lt;sup>3</sup> The pre-global financial crisis sample includes years 1995-2007 and the post-global financial crisis sample includes years 2008-23.

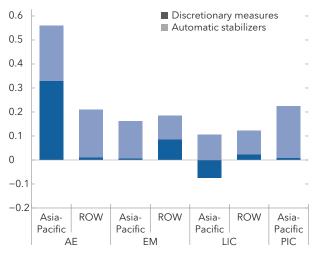
Figure 3. Fiscal Countercyclicality: Asia-Pacific, Pre- and Post-Global Financial Crisis (Percent of GDP)



Note: Blue and light blue bars denote the estimated fiscal countercyclicality coefficient—the deterioration (improvement) in fiscal balance in response to a 1 percentage point reduction (increase) in growth—for discretionary measures and automatic stabilizers on post-global financial crisis sample, respectively. Orange diamonds denote that for the overall budget balance on pre-global financial crisis samples. See Annex 1 for details.

AE = advanced economies; EM = emerging markets; GFC = global financial crisis; LIC = low-income countries; PIC = Pacific island countries.

Figure 4. Fiscal Countercyclicality: Asia-Pacific and Rest of the World, Post-Global Financial Crisis (Percent of GDP)



Source: Authors' calculations.

Note: Blue and orange bars (solid and light colored) denote the estimated countercyclicality coefficients (for discretionary measures and the automatic stabilizers). See Annex 1. AE = advanced economies; EM = emerging markets; LIC = low-income countries; PIC = Pacific island countries; ROW = rest of the world.

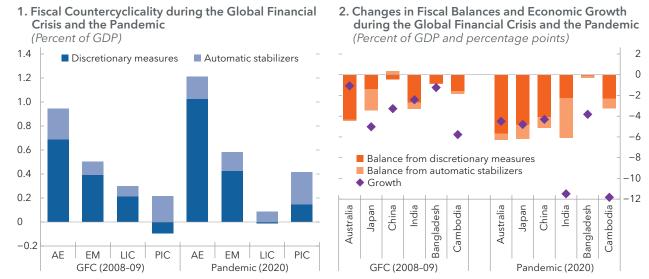
The magnitude of fiscal support varied significantly across country groups. 4 Not surprisingly, policies became more countercyclical since the global financial crisis among advanced economies (AEs)-for a 1 percentage point decline in real economic growth, the fiscal balance is estimated to deteriorate by almost 0.6 percent of GDP (Figure 3). This reflects both automatic stabilizers (for example, changes in income tax and unemployment benefits due to changes in economic activity) and discretionary measures. Among emerging markets (EMs), the degree of countercyclicality has been low throughout the entire sample period. The difference likely reflects AEs' greater access to funding and that monetary policy was constrained at the zero lower bound in those countries, making fiscal policy the main and more powerful policy tool (see Hauptmeier, Kamps, and Radke 2020; Woodford and Xie 2022; and Hofmann and others 2021). Among low-income countries (LICs), policies have become neutral with procyclical discretionary measures after the global financial crisis, but there is wide country variation,<sup>5</sup> while for Pacific island countries, the fiscal stabilization coefficient stayed broadly similar and was not statistically different from zero after the global financial crisis (suggesting acyclical policies). In addition, after the onset of the global financial crisis, fiscal policy became more countercyclical in Asian AEs than in other regions (Figure 4). Among other income groups, the degree of countercyclicality in Asian EMs is broadly similar with their peers, while Asian LICs had fewer countercyclical policies, but with considerable country variation.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup> We classify Asia-Pacific countries in four groups: advanced economies (AEs), emerging markets (EMs), low-income countries (LICs), and Pacific island countries. See Annex Table 2.1. Oil exporters are excluded from the analysis presented because their fiscal balance and GDP growth can be significantly affected by oil prices and therefore countercyclicality estimates may not reflect the stabilization role of fiscal policy. See Annex 1 for results including oil exporters.

<sup>&</sup>lt;sup>5</sup> A large empirical literature found that fiscal policy in developing countries tends to be procyclical (Talvi and Végh 2005; Ilzetzki and Végh 2008; Beyer and Milivojevic 2019; IMF 2022a; Jalles and others 2023).

<sup>&</sup>lt;sup>6</sup> Before the global financial crisis, the countercyclicality estimate for Asia-Pacific AEs was about one-third of their peers in Europe and in North America (0.1 versus 0.3). LICs around the world had broadly acyclical policy before the global financial crisis, with those in Asia-Pacific having somewhat larger countercyclical estimates (0.2 versus 0), but it was not statistically significant.

Figure 5. Fiscal Countercyclicality of Asia-Pacific Countries during the Global Financial Crisis and the Pandemic



Source: Authors' calculations.

Note: In panel 1, blue and light blue denote the countercyclicality coefficients based on five-year windows that include the global financial crisis (2008 and 2009) or the pandemic (2020). In panel 2, orange and light orange bars denote the deviation in the balances from the previous three-year average, and purple diamonds denote the deviation in growth from its previous three-year average. See Annex 1. AE = advanced economies; EM = emerging markets; GFC = global financial crisis; LIC = low-income countries; PIC = Pacific island countries.

The degree of countercyclicality was especially large during crises, more so during the pandemic. The average degree of countercyclicality and use of discretionary policies can mask large differences depending on the economic cycle and size of the shocks. In general, countries in Asia-Pacific pursued more countercyclical policies during periods of low growth, especially AEs (Annex 1).7 The different behavior is especially visible for large shocks (Figure 5). AEs and EMs relied mainly on discretionary measures during both the global financial crisis and pandemic, suggesting that automatic stabilizers were too limited given the magnitude of the shock (EMs tend to not use discretionary measures outside of large crises).8 Australia and Japan adopted large discretionary policies in response to the pandemic, with overall balances deteriorating by more than 6 percent of GDP in 2020 relative to the previous three-year averages. Among EMs, fiscal deficits also expanded significantly in China and India, although the growth decline in India was much larger, with China relying more on discretionary measures. Among LICs, while the fiscal responses tended to be more muted, there were some important differences. Fiscal balance in Bangladesh barely changed, while the deficit deterioration in Cambodia was larger, but still smaller than in AEs and EMs despite the large decline in growth. The fiscal measures employed during the pandemic included cash transfers, subsidies for public and private financial institutions' lending, support to workers (employment guarantee, unemployment benefits, wage subsidies), and tax cuts and exemptions.

The timely exit from large-scale fiscal support can be challenging to achieve, given high uncertainty about economic prospects, implying risks of such support becoming procyclical. The COVID-19 pandemic is an example of the challenge. Many countries responded swiftly to the shock, with large and often novel measures. However, economic activity surprised by bouncing back strongly in AEs in 2021, with growth up by about 8 percentage points on average and even more so in EMs (15 percentage points). This meant that, after the fact, fiscal policies turned less countercyclical, as their fiscal balances improved only by 3

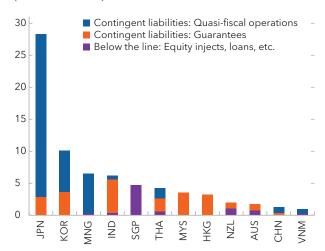
<sup>&</sup>lt;sup>7</sup> To investigate potential asymmetric response of fiscal policy during the business cycle, the regression is augmented by interacting growth with dummies for years with below-median growth of each country (see Annex 1).

<sup>8</sup> Countries with weaker automatic stabilizers are more likely to enact large discretionary measures during recessions (Dolls, Fuest, and Peichl 2012).

and 2 percentage points of GDP on average, respectively. Governments faced difficult tradeoffs in real time, between removing support too early and the costs of delaying the unwinding of the exceptional measures, including worsening public finances and inflation pressures. This highlights the benefits of having automatic stabilizers (for example, social safety nets) and ex ante strategies and tools to deploy during large shocks.

Governments, especially during the pandemic, have used a wide set of tools, including public banks and state-owned enterprises (SOEs), to provide fiscal support. The previous analysis on stabilization effects focused on budgetary measures. However, Asia-Pacific governments also undertook significant off-budget measures especially during the pandemic given the severity of the crisis (Figure 6). Japan was among the countries with the largest set of off-budget support at 28 percent of GDP, including through public financial institutions. Korea also adopted

**Figure 6. Off-Budget Measures, 2020-21** (Percent of GDP)



Sources: IMF, Fiscal Measures in Response to the COVID-19 Pandemic Database; and authors' calculations.

Note: Countries with responses of at least 1 percent of GDP are included. Quasi-fiscal activities are activities undertaken by public financial and nonfinancial corporations on behalf of the government. Data labels in the figure use International Organization for Standardization (ISO) country codes.

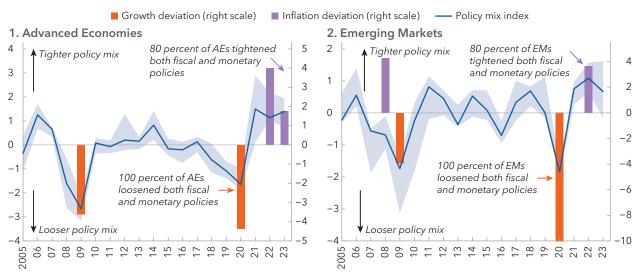
quasi-fiscal operations through establishing stabilization funds and introducing additional measures under the Credit Recovery Program by the Korea Asset Management Corporation. India provided guarantee support for firm borrowings, while Singapore set aside loan capital to support firms. These types of exceptional (off-budget) support highlight the need to have a framework to assess the cost and benefits, ensure transparency, and have a strategy for when to use these tools and how to manage potential fiscal risks.

Fiscal and monetary policies in Asia-Pacific complemented each other during large shocks. While fiscal and monetary policy stances do not need to be always aligned, as they may be pursuing different objectives or face implementation constraints, during large shocks there are stronger arguments for greater consistency. This is the case during the pandemic, when fiscal policy played a crucial role given the severity of the economic and health crises and when monetary policy was constrained by the effective lower bound in many countries. In addition, during large increases in inflation, tighter fiscal policy can help central banks anchor inflation expectations. Indeed, 95 percent of the Asia-Pacific economies adopted a looser policy mix through both more expansionary fiscal and monetary policies in 2020, at the height of the pandemic-related lockdowns and sharp economic contraction, and more than half tightened both fiscal and monetary policies in 2022 when inflation surprised on the upside. To analyze how the policy mix (fiscal and monetary) varied during crises—and how consistent policies were in those periods—we construct a policy mix index as the sum of year-over-year changes in a country's primary balance and policy rate (after standardizing). The more positive (negative) the index, the more the two policies are consistently tightening (loosening) when the economy is hit by large shocks. The results show that fiscal and monetary policies consistently loosened during the global financial crisis and the pandemic and tightened during the cost-of-living crisis to counter the large growth declines and high inflation (Figure 7).<sup>10</sup>

Tightening (loosening) fiscal policy is defined as a year-over-year increase (decrease) in primary balance (in percent of GDP) and tightening (loosening) monetary policy is defined as a year-over-year increase (decrease) in policy rates (in percentage points). Using cyclically-adjusted primary balance does not change the results in a significant way.

<sup>10</sup> The results are similar to the findings in IMF (2023a) that a large share of countries around the world loosened both fiscal and monetary policies in 2020 and a majority tightened both in 2022. It is important to note that the policy mix index only reflects part of the policy response as some measures were not reflected in changes in the government budget or the policy rates.

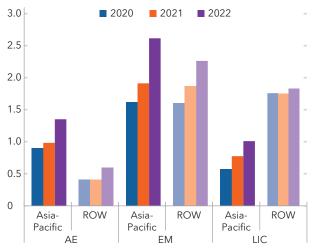
Figure 7. Policy Mix (Fiscal-Monetary) in Asia-Pacific



Source: Authors' calculations.

Note: In both panels, blue lines denote the median of all countries' policy mix index in each year, where the index is constructed as the sum of year-on-year changes in a country's primary balance and policy rate (after standardizing). The more positive (negative) the index, the more consistent tightening (loosening) the fiscal and monetary policies. The shaded area denotes the interquartile range between 25th and 75th percentile of distribution in each year. Orange and purple bars denote the average of deviation in growth and inflation from their previous three-year averages, when average growth and inflation is in the bottom and top decile of the sample distribution, respectively. AEs = advanced economies; EMs = emerging markets.

Figure 8. Fuel Subsidies, 2020-22 (Percent of GDP)



Sources: IMF, Fossil Fuel Subsidies Database (Black and others, 2023); and authors' calculations.

Note: Fuel subsidies—calculated as (supply cost – fuel user price) × (fuel consumption)—are showed in percent of GDP. Oil exporters are excluded. AE = advanced economies; EM = emerging markets; LIC = low-income countries; ROW = rest of the world.

During the cost-of-living crisis, Asia-Pacific countries also used other fiscal tools to contain the rise in prices, especially for energy and food. As in other countries, the region adopted some degree of price controls or increased subsidies to contain domestic inflation given the rise in global food and energy prices (Figure 8). In some cases, the costs of the policies were immediately reflected in the budgets, but in other instances, these costs were passed on to the SOEs that incurred losses or reduced profits and eventually impacted the fiscal accounts, including through need to provide financial support to the SOEs or through lower dividends. These types of instruments, while they can bring some temporary relief, tend to be ill-targeted and costly to the budget.

1. Public Debt 2. Change in Public Debt Ratio 140 40 2008-09 ΑE ΕM - LIC - PIC 2010-19 35 120 2020 30 2021-23 25 100 20 80 15 10 60 5 40 0 -5 20 -10 COVID-19 -15 **ROW** ROW ROW 05 06 07 98 09 10 18 19 20 21 22 23 Asia Asia Asia 04 Pacific Pacific Pacific ΑF FM LIC.

Figure 9. Public Debt Has Been Rising Persistently since 2007 across Asia-Pacific (Mean of respective group, percent of GDP)

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

Note: AE = advanced economies; EM = emerging markets; GFC = global financial crisis; LIC = low-income countries; PIC = Pacific island countries; ROW = rest of the world.

## B. Managing Public Finances

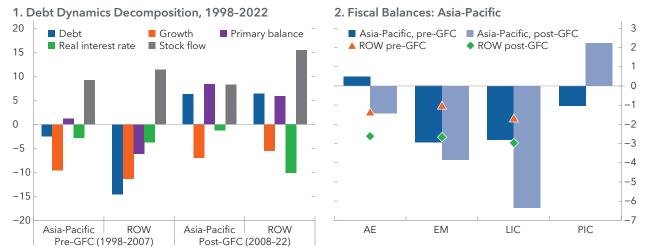
As countries responded decisively to crises, debt dynamics have deteriorated since 2007. Historically, helped by higher economic growth, Asia-Pacific governments had lower public debt than other regions. However, after the global financial crisis, Asian AEs have seen faster debt increases than their counterparts (Figure 9). During the COVID-19 pandemic, global debt soared as revenues fell due to the economic recession and measures taken by governments. In Asia-Pacific, between 2019 and 2023, debt rose by more than 8 percent of GDP in half of the economies and in some cases surged by more than 40 percent of GDP (Lao P.D.R. and Palau).<sup>11</sup> In contrast, more than half of Pacific island countries experienced a decline in government debt, partly benefiting from donor support, although debt risks remain elevated in many of them owing to their low debt-carrying capacity.

Declining economic growth and rising deficits have been key drivers of the worsening public finances. Since 2008, amid several shocks, significant declines in economic growth in many economies in the region contributed to larger deficits and rising public debt. For example, in China, average growth in the post-global financial crisis period has been almost 5 percentage points lower than before, and debt has been rising. The deterioration in primary balances has been a key driver for the deterioration in debt dynamics since the global financial crisis, even more than in other regions (Figure 10).<sup>12</sup> In particular, EMs and LICs in Asia-Pacific had weaker fiscal balances than their peers in other regions both before and after the global financial crisis—with an average fiscal deficit of 3.8 and 6.3 percent of GDP in EMs and LICs after the global financial crisis, respectively. Asian AEs, however, despite a deterioration since the global financial crisis, maintained stronger fiscal balance than other AEs. Pacific island countries have strengthened their fiscal balances since the global financial crisis, but with large country variation. In some countries (for example, Lao

<sup>&</sup>lt;sup>11</sup> Debt also increased significantly in Singapore in gross terms, but it was driven by issuances to meet the needs of the Central Provident Fund and to deepen the domestic debt market. Singapore's large public financial assets result in a positive net asset position for the government. Singapore's large fiscal support package to address the pandemic was financed by reserves. China's debt stock uses the augmented definition which includes government-guided funds and the activity of local government financing vehicles.

<sup>&</sup>lt;sup>12</sup> In commodity-exporting countries (for example, Australia and Mongolia), the deterioration in their fiscal positions partly reflected sluggish commodity prices in the first half of the 2010s, which reduced revenues and boosted expenditures to support the economy.

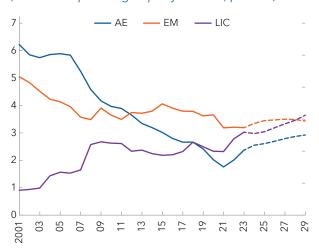
**Figure 10. Public Debt and Fiscal Balances: Asia-Pacific and the Rest of the World** (Mean of respective group, percent of GDP)



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

Note: AE = advanced economies; EM = emerging markets; GFC = global financial crisis; LIC = low-income countries; PIC = Pacific island countries; ROW = rest of the world.

**Figure 11. Effective Interest Rate in Asia-Pacific** (Mean of respective group in year each, percent)



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

Note: Effective interest rate is computed as the ratio of the government interest payments in year t to the stock of government debt (average of debt stocks of year-end t and t-1). Dashed lines indicate projections for 2024-29. AE = advanced economies; EM = emerging markets; LIC = low-income countries.

P.D.R., Mongolia, and Sri Lanka), currency depreciation contributed to a rise in foreign currency denominated debt.

With debt levels expected to rise in the years ahead, low tax revenues will challenge the ability of governments to absorb higher interest burden, pursue stabilization, and address spending pressures. Public debt levels in Asian AEs are projected to increase to 59 percent of GDP by 2029, from 55 percent of GDP in 2023.13 Similarly, EMs and LICs in the region would also see their median debt levels increase over the medium term. China's debt ratio is projected to increase by about 27 percentage points. Pacific island countries are projected to see the largest increase in their median debt level, from 28 percent of GDP in 2023 to about 37 percent of GDP by 2029. Vanuatu is expected to have the largest increase, a rise of 23 percentage points, as the primary deficit would deteriorate sharply toward double digit territory. At the same time, lower growth prospects and higher interest rates (Figure 11) will

make it more difficult to manage debt levels.<sup>14</sup> At the same time, tax revenues in the region tend to be lower, while Pacific island countries remain highly dependent on grants (for example, grants are almost 10 times of LICs in other regions). This will make it increasingly difficult to manage rising budgetary pressures, including from an aging population and climate change, and contain debt levels.

 $<sup>^{13}</sup>$  Based on IMF (2023b). Projections for three out of the five AEs envisage a decline in debt.

<sup>&</sup>lt;sup>14</sup> Countries had seen an increased in fiscal space before and during the COVID-19 pandemic thanks to low natural interest rates, but this is unlikely to continue in the future (see last section on the paper on debt limits).

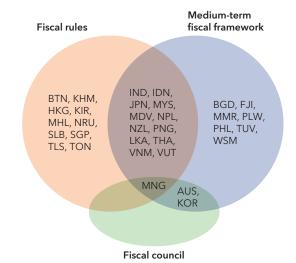
# 3. Fiscal Frameworks in Asia: A Cross-Country Perspective

There is a wide diversity of fiscal frameworks across the Asia-Pacific region.<sup>15</sup> Fiscal frameworks are regulations and procedures that influence how fiscal policy is planned, approved, implemented, reported to the public, and monitored and assessed. We focus on three key elements of frameworks in this analysis: (1) fiscal rules, (2) medium term fiscal frameworks (MTFFs), and (3) independent fiscal councils. Fiscal rules set numerical limits on key fiscal aggregates (for example, debt and deficit) to promote fiscal discipline and credibility. MTFFs involve setting medium-term fiscal targets and anchors and formulating policies to achieve

them. Having an MTFF can increase transparency and predictability of policies. Fiscal councils are independent institutions providing oversight and analysis of fiscal policies and promoting greater transparency. For example, they can assess the realism and sustainability of fiscal plans and monitor compliance with fiscal rules.

Fiscal rules and MTFFs are prevalent in most Asia-Pacific economies, but only a few have independent fiscal councils (Figure 12). Among the 37 Asia-Pacific economies, 12 have both fiscal rules and a MTFF (for example, India, Indonesia, Japan, Malaysia, New Zealand, Sri Lanka, and Thailand), while Australia and Korea have MTFFs and fiscal councils. Only Mongolia has all the three elements of a fiscal framework. Fiscal frameworks in most Pacific island countries often rely on only one component, either fiscal rules or an MTFF. Some countries do not have any of the three elements in their fiscal framework (Brunei, China, Lao P.D.R., Macao SAR, and Federated States of Micronesia), in some cases because of limited

Figure 12. Fiscal Frameworks in Asia-Pacific



Sources: Survey of IMF country teams; and authors' calculations. Note: Data labels in the figure use International Organization for Standardization (ISO) country codes.

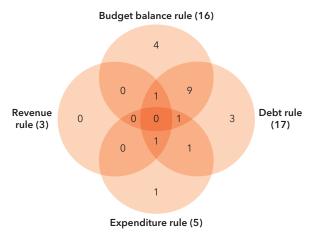
capacity. Only three (Australia, Korea, Mongolia) have independent fiscal councils that perform tasks such as assessing forecasts, evaluating long-term sustainability, and quantifying effects of measures and reforms. The degree of development of MTFFs and effectiveness of fiscal rules varies significantly across countries, which we explore in the following sections.

#### A. Fiscal Rules

Among the Asia-Pacific economies that have adopted fiscal rules, the most common are budget balance and debt rules (Figure 13). Fiscal rules are numerical limits on budgetary aggregates that are revised on a low-frequency basis and binding for at least three years (Davoodi and others 2022a, 2022b). Among the 23 countries with fiscal rules, 15 have more than one rule, with the combination of debt and budget balance

<sup>15</sup> The analysis is based on a survey of IMF country teams (see Annex 2). For more general details on MTFFs see IMF (forthcoming).

Figure 13. Number of Fiscal Rules



Sources: Survey of IMF country teams; and IMF staff estimates. Note: One country has both revenue and debt rules, and one has both budget balance and expenditure rules.

rules being the most common.¹6 Five countries have expenditure rules (ceilings on the level or growth of expenditure) that are often used in conjunction with deficit or debt rules. A few countries (Mongolia, Tonga, Vietnam) have three rules. The coverage of expenditure and budget balance rules is usually limited to the central government, with India being an exception as its budget balance rule applies for central and subnational governments. In contrast, the coverage of debt rules is relatively broader, with half of the countries having debt limits for the general government or the wider public sector.

Debt and budget balance rules tend to be set by law, but most do not have well-specified enforcement mechanisms or escape clauses. In general, having a legal basis, including integrated in fiscal responsibility laws, can help strengthen

the rules and make them more difficult to reverse and can increase transparency (IMF 2009). In most Asia-Pacific economies, debt and budget balance rules often rely on a strong statutory basis. For example, in Sri Lanka, the Fiscal Management (Responsibility) Act of 2003 introduced numerical limits on the fiscal deficit, debt, and government guarantees. However, expenditure rules rely mostly on political commitment. Most of the rules do not include enforcement procedures, with only a few countries having some type of formal procedures (for example, Marshall Islands, Mongolia, Papua New Guinea, and Singapore). Six countries have external monitoring mechanisms, but they are not always effective. In addition, most countries do not have well-defined escape clauses that set cases when rules can be suspended to respond to large shocks. Some countries also change or suspend rules frequently, which can undermine effectiveness and credibility if the reasons for the change and plans to return to the rules are not properly communicated with the public. For example, debt limits in Mongolia have been changed frequently since the inception, while the ceiling on structural fiscal deficit has also been revised several times.

Before the pandemic, Asia-Pacific countries tended to comply more with the rules, or have smaller deviations, than their peers in other regions. Between 2004 and 2019, the median deviation from the debt ceiling in Asia-Pacific was just over 5 percent of GDP, well below those observed in other regions (see Figure 14).<sup>17</sup> One reason may be that most countries in Asia-Pacific (around 70 percent) introduced debt limits at a time when their debt levels were below the ceiling. In contrast, in other regions, debt rules are being used to bring debt down to the ceiling—less than 15 percent of countries in the Western Hemisphere and less than 45 percent of European countries had debt below the ceiling when the rule was introduced. Similarly, the median breach of the fiscal deficit rule in the Asia-Pacific countries was relatively low at 1.2 percent of GDP, and 7 out of 10 countries recorded breaches (compared to 86 percent of countries in the rest of the world). However, there is significant variation across countries. For example, Sri Lanka systematically posted deficits above its limits, while Mongolia mostly met its limits, albeit the limits were revised frequently. In India, the timeline for meeting the medium-term deficit target has been consistently pushed out.

<sup>&</sup>lt;sup>16</sup> This is similar to global trends, as approximately 80 percent of countries with fiscal rules have either debt or deficit rules, or a combination of both (Davoodi and others 2022a).

<sup>&</sup>lt;sup>17</sup> Note that when we refer to deviations or breaches from the rules, this is based on comparison of actual deficits or debt levels with limits in the rules. However, it may not imply legal breaches of the rules which depend on specific regulations.

1. Prepandemic Debt Deviations 2. Prepandemic Budget Balance Deviations 100 0 80 -2 60 -440 -6 20 -8 0 -10 APD ROW APD ROW 3. Postpandemic Debt Deviations 4. Postpandemic Budget Balance Deviations 100 0 -2 80 -460 -6 40 -8 20 -10 0 -12

Figure 14. Pre- and Postpandemic Deviations from Fiscal Rules: Asia-Pacific versus the Rest of the World (Percentage of GDP)

Sources: Survey of IMF country teams; and authors' estimates.

ΔPD

Note: The square indicates the interquartile range from the first to third quartiles, the line inside the box represents the median, and the marker represents the mean. The covering periods are 2004-19 for the prepandemic and 2020-22 for the postpandemic. APD = Asia-Pacific region; ROW = rest of the world.

APD

**ROW** 

ROW

Governments bypassed or modified their fiscal rules to address the unprecedented shock of the COVID-19 pandemic. A sharp deterioration in economic conditions warranted large support. As debt levels had already been rising in the Asia-Pacific region since the global financial crisis, the effects and policy responses to the pandemic led to large deviations from fiscal rules across the region and, in some cases, suspension of the rules (India, Indonesia, Maldives, Mongolia, New Zealand). These developments were similar around the world, where nearly 80 percent of countries with fiscal rules either suspended or modified their rules (Davoodi and others 2022a). Most governments breached the deficit rules–70 percent in Asia-Pacific and 93 percent in the rest of the world–between 2020 and 2022, while only a few remained within the limits (for example, Bhutan, Nauru, and Vietnam). The median deviation in Asia-Pacific reached 6.6 percent of GDP, larger than that in other regions (Figure 14). Deviations from debt limits were less frequent: 25 percent in Asia-Pacific and 60 percent elsewhere. Among the countries that breached the debt ceilings, the median deviation reached 40 percent of GDP, which was larger than in other regions. Some countries were able to remain under the debt ceiling given significant space at the onset of the pandemic or reliance on grants (for example, Cambodia, Indonesia, Solomon Islands, and Vietnam), while others revised their ceiling upwards (Malaysia, Papua New Guinea, Thailand).<sup>19</sup>

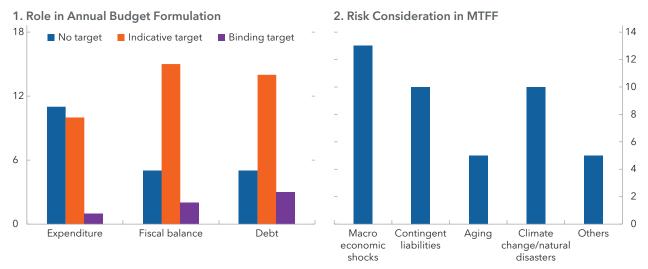
<sup>&</sup>lt;sup>18</sup> Indonesia regained compliance with the budget balance rule in 2022, one year ahead of the target.

<sup>&</sup>lt;sup>19</sup> Budget balance limits could not be constructed for Nepal and Solomon Islands, and debt ceilings could not be constructed for Timor-Leste due to their specific definitions.

#### B. Medium-Term Fiscal Frameworks

Most Asia-Pacific countries have MTFFs, but the link with annual budgets remains relatively weak. MTFFs encompass a fiscal strategy, medium-term projections of macrofiscal aggregates (economic growth, inflation, expenditures, revenues, budget balances) to guide annual budgets. They can include requirements to commit to, report against, and be held accountable for medium-term fiscal objectives, such as debt limits, surplus targets or deficit ceilings, or broad expenditure limits. A total of 22 countries in the region have an MTFF, and in three-quarters of the cases it is established by law. The MTFFs are typically prepared over a three-year horizon and cover the central government; some countries have adopted specific frameworks for subnational governments to varying degrees (Box 1). Most MTFFs have targets or ceilings on debt and fiscal balances, mostly set on an indicative basis (Figure 15), with only three countries setting binding targets (Malaysia, Mongolia, Thailand). In Malaysia, the MTFF guides fiscal planning and priorities over a three- to five-year period and sets targets on debt, capital spending, deficit, and government guarantees. Ex post analysis of MTFF performance remains sparse. Some countries conduct the analysis within the government (Australia, New Zealand, Palau, Samoa), while in others the analysis is conducted by an agency outside of the administrative government (Korea, Mongolia). In some cases, MTFFs are subject to frequent revisions and often represent the government's aspiration without specific policies (for example, Bangladesh and Mongolia).

**Figure 15. Role of MTFFs in Annual Budget Preparation in Asia-Pacific** (Number of countries)



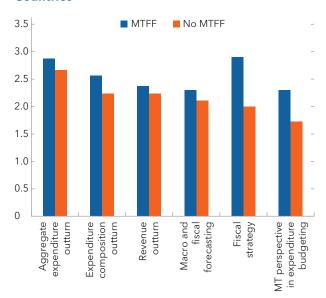
Sources: Survey of IMF country teams; and authors' calculations. Note: MTFF = medium-term fiscal framework.

MTFFs have faced implementation challenges and have not always led to more predictable fiscal policy in Asia-Pacific. The challenges include weak technical capacity and enforcement, lack of integration between the MTFF and annual budgets, and high volatility of revenue and expenditure. MTFFs incorporate mostly a qualitative discussion of risks, with only a handful of countries undertaking quantitative analyses, such as debt sustainability analysis. The relevant Public Expenditure and Financial Accountability<sup>20</sup> scores for developing economies are only slightly higher for countries with MTFFs (Figure 16). The MTFFs have not ensured that budget projections are realistic and implemented as intended. In 8 out of the 22 countries with an MTFF, the responses to the survey suggested that budget projections are subject to an optimistic bias. For

<sup>&</sup>lt;sup>20</sup> Public Expenditure and Financial Accountability is a methodology for assessing the strengths and weaknesses of public financial management performance.

example, in Sri Lanka, revenue projections were systematically overly optimistic by 2.3 percent of GDP, and the average forecast error on primary spending reached 1 percent of GDP (Doherty and others 2023). In Mongolia, capital expenditure approved in the budget deviated from the MTFF projections by an average of 13.5 percent for the same year and 24 percent for the next year in 2021-23. On the other hand, in Vietnam, actual revenues have been around 8 percent higher than the MTFF projections. Although conservative revenue projections could help contain pressures to spend, they can also undermine the ability to plan well as spending may be adjusted on an ad hoc approach, instead of being consistent with a more realistic medium-term plan. Moreover, weak capacity, especially in Pacific island countries (Box 2), and unexpected shocks such as COVID-19 and natural disasters have created challenges in meeting the goals set in the MTFFs.

# Figure 16. Average PEFA Score of Asia-Pacific Countries



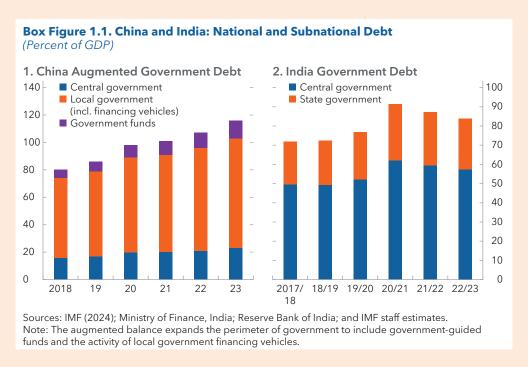
Sources: PEFA database; and authors' calculations. Note: MT = medium term; MTFF = medium-term fiscal framework; PEFA = Public Expenditure and Financial Accountability.

The evidence, however, suggests that developing economies benefit from having MTFFs and implementing public financial management (PFM)-related reforms. While it is difficult to assess the effectiveness of MTFFs, developing economies in Asia-Pacific with MTFFs tend to have a better articulated fiscal strategy than others, as shown by the Public Expenditure and Financial Accountability score (Figure 16). Markets could react favorably to the introduction of an MTFF, given its importance in ensuring fiscal and macroeconomic sustainability. For example, India's sovereign rating was upgraded in the years following the introduction of the MTFF, with ratings agencies citing commitment to fiscal prudence, a clearer path of fiscal consolidation, and improvements to transparency and accountability resulting from MTFF reforms, as drivers of the upgrade. Countries that implemented PFM reforms were also able to strengthen budget credibility and implementation of their fiscal strategy. Progress has been made to improve budget credibility in the Maldives, based on the 2014 and 2020 Public Expenditure and Financial Accountability scores, including due to clearer strategic guidance (budget ceilings are approved by the cabinet) and better quality of in-year budget reports.

#### Box 1. Fiscal Accounts at the Subnational Level: The Cases of China and India

Effective fiscal policy requires sound public finances at the subnational level, especially in decentralized countries. In China and India, subnational governments account for 89 and 60 percent of government spending, respectively (Wingender 2018). In both countries, a key mechanism to promote subnational fiscal responsibility is through ceilings on new debt issuances imposed by the central government. However, this has been undermined by off-budget borrowing and, in the case of India, loss-making state-owned enterprises. Local government debt in China is estimated to have reached 80 percent of GDP in 2023 when including the debt of local governments' financing vehicles (Box Figure 1.1). In India, state government debt reached 26 percent of GDP in fiscal year 2022/23 (versus a 20 percent of GDP target, Box Figure 1.1), and contingent liabilities from public utility companies are estimated at 2.3 percent of GDP (Mukherjee and others 2022).

Legislation supporting medium-term frameworks have been in place for over a decade in India, but there is room to improve their effectiveness. Fiscal responsibility laws were implemented by states in India following the 2003 Fiscal Responsibility and Budget Management Act at the central government. However, only some states have updated laws reflecting changes to the Fiscal Responsibility and Budget Management Act, including introducing a debt anchor and aligning it to the general government debt target. In China, State Council directives for shifting to a medium-term budget framework were released in 2014; implementation has been slow, although there has been progress in areas like budget transparency (Wong 2018).



There are additional challenges in designing and implementing fiscal frameworks at the subnational level.

 Setting fiscal targets becomes more complex when subnational governments are heterogenous and there are horizontal imbalances. Before the pandemic, India set the same deficit limit and debt target for all states, with the view that imbalances are equalized through revenue sharing and grants.

#### Box 1. (continued)

- Earmarked grants from central governments can hamper autonomy of subnational governments and incentives to be fiscally prudent. While these transfers help address vertical imbalances (low revenue capacity versus expenditure responsibilities), they can reduce budgetary flexibility.¹ Conditional transfers are 40 percent of total transfers in China (Wingender 2018) and around 50 percent in India.
- Monitoring and enforcement become more important as the perception that the central government will bailout subnational governments reduces market discipline. In India, despite wide variations in fiscal performance, spreads between state government and central government debt are within a narrow range. In China, bond spreads do not correlate with fiscal fundamentals, also suggesting implicit guarantees (Lam and Wang 2018). Differences in accounting practices across subnational governments also make monitoring more difficult. In China, adoption of the government finance reporting standard is slowly progressing as there are more than 3,200 budgeting authorities with varying capacity (Wong 2018). In India, authorities are working toward publishing state government data on a Government Finance Statistics Manual 2014 basis.

<sup>&</sup>lt;sup>1</sup> Like in many countries, there are significant vertical fiscal imbalances in China and India. In China, local government revenue is 50 percent of general government revenue, compared to over two-thirds of expenditure (Lam and Moreno-Badia 2023). Similarly, own source tax revenue for Indian states is approximately 36 percent of general government tax revenue, while expenditure is 60 percent.

#### **Box 2. Pacific Island Countries: Challenges in Operating Fiscal Frameworks**

Pacific island countries face unique challenges in designing and operating fiscal frameworks. These include large economic and climate-related risks, as well as significant capacity constraints.

- As small states, most Pacific island countries suffer from capacity constraints hindering effective public financial management. According to the World Bank's Country Policy and Institutional Assessment, Pacific island countries lag behind emerging markets and low-income countries in the region in terms of quality of budgetary and financial management. Weaknesses are witnessed throughout the whole budget process, including the management of budget formulation, appraisal of public investments, revenue forecasting, cash management, fiscal statistics and reporting, and auditing.
- Isolation and small market size, coupled with non-business-friendly regulatory environments, have led to underdeveloped private sectors. The economies are dominated by government activity, with government expenditure accounting for 63 percent of GDP in Pacific island countries, compared with 26 percent in emerging markets and low-income countries in the region. Much of the private sector economic activity is concentrated in primary industry (agriculture and fisheries) and tourism, making government revenues vulnerable to shocks in these sectors, such as from the global economy, commodity prices, and climate change.
- Pacific island countries also have a high degree of dependence on grants from multilateral and bilateral donors, in some cases more than 30 percent of GDP (for example, Marshall Islands, Micronesia, and Palau). Donor grants help deliver essential public services such as health and education and can also promote necessary reforms. However, grants can be volatile and the requirements to access them and coordinate with donors can be a drain on the limited capacity of Pacific island countries. It is also difficult to monitor and coordinate all donor support as some is provided off-budget and directed to specific projects or programs, which may not be fully aligned with development priorities.<sup>1</sup>
- Natural disasters and climate change. On average, Pacific island countries have a 34 percent chance of being hit by a disaster–such as storms, floods, earthquakes, and droughts–each year, causing 14 percent of GDP damage and affecting 11 percent of the population (Lee, Zang, and Nguyen 2018). The capacity to cope with disasters is limited, while ongoing climate change is increasing the frequency and intensity of natural disasters, posing an increasingly large budgetary burden to Pacific island countries due to the large costs for climate adaptation and reconstruction.<sup>2</sup>
- Demographics. Some countries in the Pacific are facing a rapid decline in labor force, driven by emigration, while others have a growing young population.<sup>3</sup> Declining labor force, especially among high-skilled workers, could undermine economic growth and pose a rising fiscal burden, while increased remittance inflows from emigrants could boost consumption. Population growth could bring a demographic dividend, but it can also entail significant fiscal costs, such as education, urban development, and social safety nets.

<sup>&</sup>lt;sup>1</sup> For example, the World Bank (2022) estimates that around 90 percent of donor spending for Solomon Islands was off budget in 2019.

<sup>&</sup>lt;sup>2</sup> Samoa's total spending needs to cope with climate change and natural disasters are estimated at about \$650 million for 2022-26, 17 percent of GDP per year (IMF 2022b).

<sup>&</sup>lt;sup>3</sup> Compared to a decade ago, the working-age population declined by more than 10 percent in Marshall Islands and the Federated States of Micronesia, while it increased by more than 30 percent in Papua New Guinea and Solomon Islands.

# 4. Upgrading Fiscal Frameworks

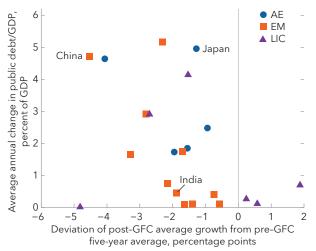
The last years have demonstrated that fiscal policy plays a critical role in mitigating the impact of large shocks, protecting vulnerable households, and contributing to economic stabilization more broadly. Asia-Pacific governments deployed a wide set of budget and off-budget tools to address the recent crises. While these measures helped, as assessed in the previous sections, their cost was large and carried substantial risks.

Countries in the region have experienced an uninterrupted rise in public debt since 2007 amid lower economic growth (Figure 17). Fiscal rules were suspended, modified, or breached especially with the onset of the COVID-19 pandemic.

Governments in the region are now debating how to strengthen fiscal frameworks to address the existing vulnerabilities, manage large spending pressures, and prepare for future shocks and crises. <sup>21</sup> Amid significantly depleted fiscal buffers, governments will need to develop strategies to reduce vulnerabilities, while tackling emerging spending pressures, and to meet the Sustainable Development Goals (SDGs). In that context, it will be important to improve the effectiveness of MTFFs. At the same time, countries will need to strengthen management of fiscal risks and their preparedness to respond to shocks.

Fiscal frameworks can be upgraded along several fronts to make fiscal policy more effective and better manage policy trade-offs. Building on the recent experience in the region, we propose three areas for improvement. These have also been identified as important by other countries and in the literature.<sup>22</sup> First, adopt a more comprehensive risk-based approach to public finances. This includes developing the tools (for

Figure 17. Post-Global Financial Crisis Change in Debt and Growth in the Asia-Pacific



Sources: IMF, World Economic Outlook database; and authors'

Note: The x-axis shows the deviation of post-global financial crisis average real GDP growth from its pre-global financial crisis five-year average (in percentage points), and the y-axis shows the post-global financial crisis average annual change in public debt-to-GDP ratio. Countries in the upper-left quadrant are those that have experienced lower growth and higher debt in the post-global financial crisis period. AE = advanced economies; EM = emerging markets; GFC = global financial crisis; LIC = low-income countries.

example, safety nets) to be able to respond to shocks in a timely and targeted way, which was challenging in recent years, and upgrading existing MTFFs. Second, make fiscal rules more effective and resilient, avoiding ad hoc and frequent suspensions or modifications. Third, develop fiscal strategies that tackle new challenges

<sup>&</sup>lt;sup>21</sup> Some countries already made changes or are debating possible modifications (for example, Bangladesh, Korea, Mongolia, and New Zealand)

For example, a study by the European Commission (Weise 2023) highlights the importance of strengthening reporting of comprehensive fiscal statistics (including extrabudgetary activities), having clearly specified numerical fiscal rules (including escape clauses), having independent fiscal councils, and developing a medium-term approach to budgeting that stabilizes expectations. These can help avoid procyclicality and allow a more transparent setting of political priorities. Battersby and others (2022) argue for the need to develop institutional capacity for governments to provide large financial support measures during large crises while managing risks. IMF (2021) also highlights that to be credible, governments should design fiscal frameworks that account for and manage fiscal risks. Risk analysis should inform the fiscal targets and the flexibility embedded in frameworks to allow for countercyclical responses, while budgets should also account for expected costs of loan guarantees, and the frameworks should cover at least the general government.

that will have long-term impacts and will require significant reforms and efforts—namely, population aging and climate change. Taken together, these improvements can help achieve a better balance of the different objectives of fiscal policy while keeping sound public finances.

#### A. A Comprehensive, Risk-Based Approach to Public Finances

A more comprehensive approach to fiscal policy would help improve the effectiveness of fiscal policy. We highlight three key pillars: the first is to extend the horizon of public finances to the medium term. The second is to broaden the coverage of the fiscal frameworks beyond the central government to help strengthen fiscal management and promote greater transparency and accountability. The third pillar is strengthening the ability to manage crises and fiscal risks.

#### **Enhance Medium-Term Fiscal Frameworks**

Improving fiscal management will require a more decisive move toward a medium-term policy orientation. Despite the benefits, using medium-term plans as policy guidance has been challenging due to political economic factors and capacity constraints (Caselli and others 2022; Vlaicu and others 2014). While many Asia-Pacific countries prepare medium-term fiscal statements, their effectiveness tends to be limited.

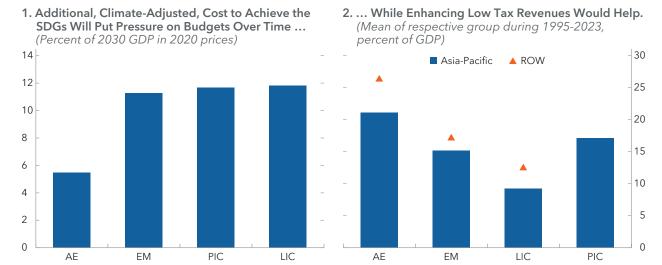
Enhanced MTFFs could serve as a credible forward guidance to annual budgets. Making greater efforts to anchor budgets on feasible and sustainable medium-term fiscal plans would help make fiscal policy more credible and transparent, especially as budget decisions usually have implications beyond one year. Such an approach would help to better identify risks and inform the design of current policies, which is lacking in most Asia-Pacific countries. It would help illustrate the benefits of taking measures today to achieve medium- to long-term policy objectives, such as raising tax revenues to fund investments to achieve the SDGs (Figure 18) and improve capacity to manage shocks.<sup>23</sup> The MTFF could also be complemented with longer-term strategies to tackle climate change and population aging. Furthermore, setting credible medium-term fiscal plans to achieve debt sustainability over time would allow for more gradual fiscal adjustments.

Setting fiscal anchors consistent with sound public finance principles and operational rules could strengthen the medium-term orientation of fiscal policy. Committing to a medium-term anchor (for example, a safe debt anchor) would help guide fiscal policy and establish credibility with market participants and the public in general. Operational fiscal rules could be used to link more effectively the annual budget with the medium-term objectives, while maintaining some degree of flexibility. For example, setting multiyear expenditure ceilings consistent with achieving the fiscal anchor over time would allow a stable and predictable path of expenditures. At the same time, the actual deficit could vary depending on the business cycle (by allowing automatic stabilizers to work), and there should be an escape clause for large shocks (see the following discussion).

Countries could consider further reforms, including using independent forecasts and establishing fiscal councils, to improve the quality and credibility of medium-term fiscal plans. For MTFFs to be credible, they need to be anchored by sound macroeconomic assumptions and projections, while costing of new measures or reforms should be realistic. Systematically overoptimistic projections can lead to persistent excessive deficits. Countries could consider using independent forecasts (for example, market forecasts) as inputs to the preparation of medium-term fiscal plans and annual budgets. There is some evidence that doing so is associated with smaller forecast errors and better credibility of the framework (Frankel and Schreger 2016; Caselli and others 2022). Introducing fiscal councils—which are mostly absent in Asia-Pacific—could contribute to strengthening transparency and accountability and raising the overall quality of fiscal management. In some countries outside Asia, fiscal councils already provide independent macroeconomic

<sup>&</sup>lt;sup>23</sup> The formulation of national development plans and costing SDGs strategies would inform the formulation of the MTFF and the budget. Nepal has successfully mapped more than 60 percent of the national budget to the 17 SDGs (UNESCAP 2019).

Figure 18. Enhancing Revenue Collection Would Help Fund Development Goals in Asia and the Pacific



Sources: Aggarwal and others (2024); IMF, World Economic Outlook database; and authors' calculations.

Note: AE = advanced economies; EM = emerging markets; LIC = low-income countries; PIC = Pacific island countries; ROW = rest of the world.

forecasts and estimates for fiscal measures (for example, Brazil, The Netherlands, the United Kingdom, and the United States). However, fiscal councils can demand significant resources and for countries with weak capacity, the priority should be to develop their own ability to prepare MTFFs and budgets and collect and disseminate comprehensive fiscal data.

#### A Comprehensive Approach to the Public Sector

Expanding fiscal coverage to include the entire public sector balance sheet would help better design policies and assess and manage vulnerabilities. As seen during the pandemic, governments in Asia-Pacific used SOEs, public banks, and extrabudgetary funds to respond to shocks. At the same time, these parts of the public sector, together with subnational governments, can also present fiscal risks as central governments may face pressure to provide support if they are under financial distress. For example, fiscal costs related to subnational bailouts averaged 3.5 percent of GDP per incident over 1990 to 2014, and the average cost of government intervention in SOEs across a sample of 80 countries over the past decades exceeded 5 percent of GDP (Baum and others 2020). In addition, in several Asia-Pacific countries, SOE debt surpasses 10 percent of GDP, and public banks hold more than 40 percent of the total banking system assets in some cases (for example, China, India, Indonesia, and Vietnam), emphasizing the need to monitor and limit possible fiscal risks.

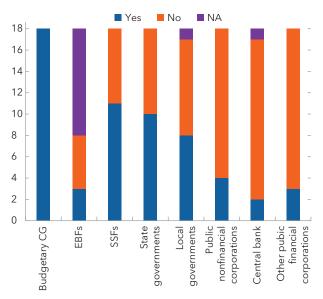
Bolstering government statistics and fiscal information would be an important step forward. In many economies in the region, there is a need to significantly enhance the timeliness and quality of fiscal statistics and disseminate comprehensive information on MTFFs and budgets. This should include efforts to collect data and information on the wider public sector balance sheets and associated vulnerabilities (Figure 19), which would strengthen risk management. Transparency is also critical for the effectiveness and credibility of medium-term fiscal plans and fiscal rules.

#### Responding to Crises and Managing Risks

An area that remains underdeveloped in many Asia-Pacific countries is the ability to manage risks and adopt timely countercyclical policies. Governments are passive risk takers, for example, when automatic stabilizers operate (unemployment benefits, income tax revenues) in response to a negative economic shock, leading to larger deficits and debt. Governments are active risk takers when they are taking on more risks

Figure 19. Debt Coverage of Asia-Pacific SRDSF Countries

(Number of countries)



Sources: Country staff reports; and authors' calculations. Note: The figure is based on available information as of November 2023. CG = central government; EBFs = extra budgetary funds; NA = not available; SRDSF = Sovereign Risk and Debt Sustainability Framework of the IMF; SSFs = social security funds.

to respond to shocks and surprises (transferring risks from households and firms to the public sector). Some of these measures add directly to government deficits and debts, but others—such as equity injections, loans, and contingent liabilities in the form of government guarantees and quasi-fiscal activities undertaken by public financial and nonfinancial corporations—might not immediately impact the budget in some cases but create risks for governments that need to be managed.<sup>24</sup>

Governments should design policy frameworks that take into greater account the need to respond to large shocks, while limiting fiscal costs and risks, including by:

• Building larger fiscal buffers than previously thought. As seen during the global financial crisis and pandemic, the deterioration in public finances can be large and undermine the ability to respond to shocks. Partly, this reflected that most Asia-Pacific governments did not rebuild buffers in between crises—public debt grew significantly between the global financial crisis and pandemic in most countries (Figure 20). Governments will need to save more

during normal times, depending on their debt carrying capacity, to increase ability to conduct counter-cyclical policies. However, this may be difficult for countries with large development needs. Raising tax revenues would help address both development needs and need to build buffers.

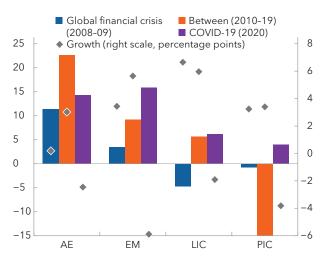
- Strengthening institutions to respond to shocks with timely and targeted measures. Asia-Pacific governments had to face the pandemic with social safety nets that provided low coverage and were too small to adequately protect the poorest, with coverage in Pacific island countries particularly dire (Figure 21). Developing adequate traditional social safety nets would help ensure that support measures are better targeted, timely, and cost effective, reducing the need to rely on discretionary measures.<sup>25</sup>
- Building institutional capacity to design, deploy, and manage exceptional fiscal support before a major shock takes place (see Annex 3). Such fiscal support should be transparent, reflected in budget documents, and supported by a sound governance framework. For example, measures implemented by central banks and development banks should be transparent and follow criteria to limit the potential fiscal costs. A well-planned exit strategy would help target the support better, limit distortions in the economy, and contain fiscal costs. Australia and the United Kingdom have established checklists and templates to ensure that new financial support measures or contingent liabilities have adequate justification and that their risks are assessed before approving them.

<sup>&</sup>lt;sup>24</sup> Battersby and others (2022) note that governments act as the financier of last resort during large crises by providing large financial support measures. Such support prevented bankruptcies and attenuated the recession by increasing firms' liquidity, reducing risk premiums, and boosting confidence. But they also carry large and long-lasting fiscal costs and risks.

<sup>&</sup>lt;sup>25</sup> See IMF (2022a) on strategies to help people bounce back. Furceri (2009) found that social spending devoted to the elderly and unemployment are those that contribute more to provide smoothing across all categories of social spending.

Figure 20. Changes in Public Debt during Crises and Normal Times in Asia-Pacific

(Mean of respective group, percent of GDP)



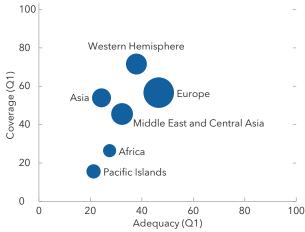
Sources: IMF, World Economic Outlook database; and authors' calculations.

Note: AE = advanced economies; EM = emerging markets; LIC = low-income countries; PIC = Pacific island countries.

 Such a comprehensive approach would allow avoiding procyclical policies both at the onset of the crisis or the aftermath. In addition, the ability to quickly adopt countercyclical policies would help maintain greater consistency with monetary policy.

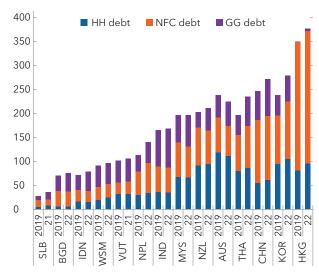
Developing capacity to identify and quantify the different types of medium- to long-term fiscal risks can help design current policies and avoid debt distress in the future. Past studies show that even excluding the COVID-19 pandemic, governments experienced, on average, an adverse fiscal shock of 6 percentage points of GDP approximately once every 12 years (IMF 2016). Main fiscal risks, beyond the ones emerging from the broader public sector discussed earlier, include macrofiscal shocks, such as unexpected changes in output, exchange rates, or commodity prices. For example, a majority of Asia-Pacific economies hold over a quarter of their government debt in foreign currencies, making them vulnerable to currency depreciation. Another source of risks emanates from excessive leverage in

**Figure 21. Social Safety Nets in Asia-Pacific** (*Percent*)



Sources: World Bank, ASPIRE database; and authors' calculations. Note: Unweighted averages of a sample of 94 countries. Data refers to the most recent year available. Adequacy for the first quintile is the size of transfer amount received by those in the bottom quintile as a share of the pretransfer total income/ expenditure of all beneficiaries. Coverage is the share of the bottom quintile that receives a social assistant benefit as a fraction of all individuals in the first quintile.

**Figure 22. Public and Private Debt in Asia-Pacific** (Percent of GDP)



Sources: IMF, Global Debt database; IMF, World Economic Outlook database; and authors' calculations.

Note: Data labels in the figure use International Organization for Standardization (ISO) country codes. GG = general government; HH = household; NFC = nonfinancial corporations.

the private sector, especially in countries where private debt is large (Figure 22). There could be large fiscal costs if governments decide to bailout private companies (sectors) that are highly leveraged due to concerns with spillovers to the economy and financial sector (for example, problems in the real estate sector).

Governments can enhance their institutional framework to better manage fiscal risks, including through better monitoring and mitigation. Countries can have a fiscal risk unit that coordinates work in identifying key risks and informing preparation of budgets and medium-term projections and strategies. Many countries in Asia-Pacific already produce some information on their fiscal risks (the nature, size, and exposure) although the quality varies, especially in quantifying risks (Annex 2). Lack of comprehensive data on the public sector in many countries hampers risk management, although some countries have made progress. Australia has a full coverage of general government flows and stocks, New Zealand publishes the public sector balance sheet, and the Philippines publishes an annual fiscal risks statement. There could also be more systematic efforts to adopt policies to mitigate risks. For example, (1) putting controls and limits on government guarantees (as planned under Sri Lanka's upcoming PFM law) and subnational government debt; (2) strengthening governance across public agencies, public-private partnerships, and SOEs; and (3) strengthening the supervision and regulation of systemically important banks and public banks.

#### B. New Fiscal Rules?

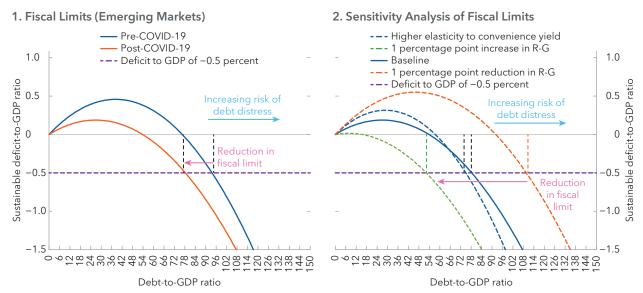
Fiscal rules can help restore fiscal credibility in a period of high debt but need to balance with enough flexibility to respond to adverse shocks. Fiscal rules should be primarily to constrain excessive and persistent deficits that can lead to unsustainable debt dynamics. But rules should not be so rigid as to eliminate discretion by governments on how to conduct fiscal policy, within sound principles, or to hinder response to large shocks (like the pandemic). These trade-offs can be balanced by having simple fiscal rules as part of a well-developed MTFF that allows flexibility to respond to shocks (Caselli and others 2022). The framework can be based on general principles—preserve sound and transparent public finances—and include a medium-term fiscal anchor and one operational rule that is under the control of the government and guides the budget process (for example, New Zealand; Box 3). But to be effective and credible, it needs to be accompanied by stronger fiscal institutions, as discussed earlier.

Fiscal rules should be based on an assessment of risks and create the incentives to build enough fiscal buffers during normal times to respond to adverse shocks. Fiscal rules in Asia and the Pacific are not necessarily linked to risk considerations and most do not have well-defined escape clauses. A risk-based rules approach would include:

- Medium-term fiscal plans that are more ambitious depending on the degree of fiscal risks, including by linking the fiscal anchors to a debt sustainability assessment. When debt sustainability risks are high, the rules should be less flexible and require a faster fiscal adjustment. This is what recent changes in the European Union and Latin American countries are trying to achieve (Box 4).
- Rules should incentivize building buffers over time—for instance, setting lower medium-term debt anchors that involve accumulating fiscal buffers needed for large shocks. Countries could introduce correction mechanisms for when there are large deviations from the rule. For example, Colombia has a correction mechanism that requires a larger fiscal adjustment depending how much public debt is above the debt anchor. In some countries, governments must present adjustment plans if debt is above a threshold.
- The framework should also allow flexibility to react to shocks through well-designed escape clauses. First, escape clauses should define specific circumstances that are outside the government's control under which temporary deviations from the rules are allowed. Second, the activation of the escape clause should require explaining the reasons and expected size of the deviation, in addition to setting a medium-term path in a MTFF to return to below the limits under the rules. But it will be important to strike the right

<sup>&</sup>lt;sup>26</sup> See Larch, Malzubris, and Busse (2021) and Arnold and others (2022) on problems with European rules, including complexity, lack of compliance, and focus on yearly budgets rather than credible medium-term plans. See Debrun and others (2018) for a discussion on trade-offs when designing fiscal rules. Blanchard, Leandro, and Zettelmeyer (2021) and Furman and Summers (2020) also discuss alternative options mainly in the context of the European case and for AEs.

**Figure 23. Fiscal Limits among Asian Emerging Market Economies** (Percent of GDP)



Sources: Mian, Straub, and Sufi (2022); and authors' estimates.

Note: The estimates are based on medium-term trends in the World Economic Outlook in October 2019 (prepandemic) and October 2023 for a selected group of emerging markets. Panel 1 shows the relationship between deficit and debt levels. The peak of the curve corresponds to the debt level consistent with the maximum sustainable primary deficit, given the economy's potential growth and neutral rate. Different regions of the diagram imply different deficit-debt combinations to maintain fiscal sustainability. The analysis assumes that countries can at most run a surplus of 0.5 percent of GDP for a prolonged period.

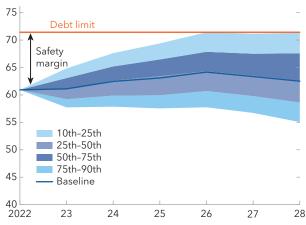
balance between ensuring a timely return to the rules and avoiding abrupt corrections (Gbohoui and Medas 2020). Third, governments should have frequent communication with the public, including the implications of the activation of the escape clause, the expected size and duration of the deviation, and the adjustment path to revert to the rule. A revised MTFF should be published to anchor expectations.

A key challenge to design fiscal rules is assessing *fiscal limits*, which can vary significantly across countries and over time. There is a *debt limit* above which there is a high risk of triggering a fiscal crisis. Debt limits can be estimated based on the maximum sustainable level of debt associated with a primary balance that governments can sustain over long periods (Mian, Straub, and Sufi 2022). How much debt a government can carry depends on structural factors, including potential growth, natural interest rates, the quality of institutions, and policy frameworks. Changes in these characteristics can have a large impact on fiscal limits. For example, in the post-COVID-19 period, fiscal limits appear to have significantly declined among Asian EMs, primarily driven by higher long-term interest rates (partially due to global conditions) and lower potential real growth.<sup>27</sup> To illustrate this effect, Figure 23, panel 1, displays two lines representing estimated fiscal limits during the prepandemic (blue) and postpandemic (orange) periods for a hypothetical economy based on a sample of Asian EMs. While there is large uncertainty around the level of fiscal limits, the estimates suggest that the fiscal limit contracted significantly (from around 95 percent of GDP to below 78 percent of GDP).<sup>28</sup> Moreover, Figure 23, panel 2, illustrates the sensitivity of the fiscal limits to changes in the interest rategrowth differential (R-G) and the sensitivity (elasticity) of interest rates to debt-to-GDP levels. The uncertainty

<sup>&</sup>lt;sup>27</sup> Before the COVID-19 pandemic, the long-term decline in the neutral interest rates increased governments' ability to borrow over time with maximum sustainable debt level for a typical EM rising from 70 to 95 percent of GDP (Caselli and others 2022).

<sup>&</sup>lt;sup>28</sup> This is a simulation based on an average of EMs in Asia (Brunei Darussalam, India, Indonesia, Maldives, Malaysia, Mongolia, Philippines, Thailand, Sri Lanka), and there is large uncertainty around estimates given the need to estimate unobservable variables (natural interest rates and potential growth). To calibrate the model, we assume the medium-term growth forecasts as a proxy for potential growth rates and long-term bond yields as indicative of the natural interest rates. In instances where data on long-term bond yields is unavailable, we use the policy rate plus a term premium of around 1.5 percent. An in-depth analysis is needed to estimate fiscal limits for individual countries.

**Figure 24. Setting a Debt Anchor** (Percent of GDP)



Source: IMF staff estimates.

Note: The buffer is calculated by simulating shocks based on historical data.

around fiscal limits can also reflect factors that vary in the short term. For example, tightening global financing conditions can adversely affect EM debt dynamics—a rise in global interest rates may reduce the demand for EM debt (Brunnermeier, Merkel, Sannikov 2022). As such, there can be large differences across countries and over time on what is perceived as the fiscal limits and safe debt levels. High and volatile inflation and policies such as financial repression can also hurt the attractiveness of government bonds (Reis 2022).

The medium-term fiscal anchor should promote building enough fiscal buffers to adopt countercyclical policies and withstand shocks. While the fiscal anchor can vary, a debt anchor is a natural and common choice and allows illustration of the benefits of building appropriate fiscal buffers. Countries can set the debt anchor such that the debt limit will be exceeded only with a

low probability when accounting for risks (Figure 24). The size of buffers is country-specific, depending how debt dynamics are affected by shocks to key variables (for example, economic growth, interest rates, and exchange rates).<sup>29</sup> It also depends on debt management (maturity, composition of debt, liquidity). The smaller the buffers, the more limited is the ability to adopt countercyclical policies and manage large shocks to the public sector balance sheet.

The choice of fiscal rules will depend on economic circumstances and existing institutions (Table 1). Countries will need to choose among the rules that can fit better their priorities—for example, need to reduce debt risks or a better balance between sustainability and stabilization—and capacity to implement and monitor (complex) rules. When debt is close to safe levels, a debt anchor could be appropriate to guide medium-term fiscal plans. But this may not be the best approach if countries have debt levels well above the appropriate (safe) debt level, and in this case, the desirable strategy is a gradual reduction in vulnerabilities. This is the approach in Sri Lanka, where a primary balance limit, consistent with restoring debt sustainability, was viewed as a better choice for a medium-term anchor (Box 3).<sup>30</sup> Multiyear expenditure ceilings will also be adopted in Sri Lanka, as an operational limit for the annual budget and to ensure consistency between budgets and medium-term anchors. For commodity exporters, fiscal frameworks, including rules, need to be resilient to large positive or negative terms-of-trade shocks, that can have disruptive effects in the domestic economy, and to long-term effects of the depletion on nonrenewable resources.<sup>31</sup>

## C. Longer-Term Perspective to Address Climate and Aging

Aging and climate change in Asia-Pacific are expected to have a large impact on fiscal accounts over the next decades. Population growth is projected to become negative in early 2030s and 2040s in Asia-Pacific EMs and LICs, respectively, and it is already shrinking in some countries (for example, China, Japan, and Korea). The adverse demographic trends could reduce the average annual growth rate during 2020-50 by

<sup>&</sup>lt;sup>29</sup> See IMF (2018) and Akanbi, Gbohoui, and Lam (2023) on how to calibrate fiscal rules.

<sup>&</sup>lt;sup>30</sup> Fixing a limit for debt at this juncture is neither feasible nor desirable. Central government debt stood at close to 116 percent of GDP in 2022. Setting a numerical debt limit at a "safe" level to be achieved in the near term would require a large and disruptive fiscal adjustment.

<sup>&</sup>lt;sup>31</sup> Eyraud, Gbohoui, and Medas (2023) propose options depending on the degree of dependence on commodities and other characteristics.

**Table 1. Main Types of Fiscal Rules** 

Type of Rule	Description	Main Goals	Implications as an Operational Rule	Implications as a Medium-Term Anchor
Debt ceiling	Limit on total (or external) stock of public debt (as share of GDP). Usually set for the central or general government.	Debt sustainability.	Can lead to procyclical policies if debt levels are near the ceiling. Debt can be volatile for reasons outside the government control (for example, exchange rate).	Allows flexibility in any given year, only need to converge to anchor over time. Needs to be calibrated with sufficient buffers and preferably accompanied by an operational rule.
Deficit ceiling	Limit on overall or primary balance as share of GDP.	Debt sustainability	Effective if priority is to contain or reduce debt risks but could lead to procyclical policies.	Allows flexibility as only need to converge to anchor over time. Should be done with an operational rule.
Expenditure ceiling	Multiyear limit on the level (or growth rate) of total or primary expenditures.	Debt sustainability; stabilization; control size of expenditures.	Easy to implement. Spending levels in the budget should include buffers for frequent shocks (for example, inflation).	Should be set consistent with an anchor closely linked to debt sustainability (for example, debt or deficit limits).
Revenue floor or ceiling	Either minimum level of revenue or ceiling.	Ensure desirable level of revenues to fund the budget.	Will not ensure debt sustainability or stabilization on its own.	Will not ensure debt sustainability or stabilization on its own.
Structural balances	Balances corrected by the business cycle or commodities.	Debt sustainability and stabilization.	Have the advantage of being counter-cyclical but can be complex and lack transparency.	Needs to be calibrated to achieve safe debt levels.

0.5 to 1 percentage point in rapidly aging economies in Asia, such as China, Japan, Korea, and Thailand (IMF 2017). Absent policy measures, age-related expenditure (pensions and health care) is expected to rise by more than 2 percent of GDP during 2023-30 in some countries (Figure 25). Such pressures could erode public finances and constrain Asian countries' other priority spending. Asia also has some of the most vulnerable countries to climate change (for example, Bangladesh and Pacific island countries) including sea-level rise and natural disasters, and addressing it will likely have substantial costs, including on adapting infrastructure (Dabla-Norris and others 2021). Despite these significant impacts, consideration of these risks is not common in the MTFFs of Asia-Pacific economies.

Tackling climate change and aging will have long-term effects and require adopting reforms with large intergenerational tradeoffs and fiscal frameworks need to be adjusted to reflect these challenges. Some countries are already starting to produce long-term fiscal sustainability analysis to different degree (for example, Canada and Europe) which can help inform the public debate for the needed reforms. In Asia-Pacific, for example, Australia's intergenerational report presents 40-year projections of the fiscal position

#### Box 3. Enhancing Fiscal Rules in Asia: New Zealand and Sri Lanka

**New Zealand** has a long history of using procedural and numerical rules in their fiscal framework. The Public Finance Act of 1989 laid out the initial public financial management framework. Numerical fiscal rules and fiscal responsibility principles were first introduced in 1994 (Fiscal Responsibility Act), and additional principles and fiscal reporting provisions were subsequently introduced. Fiscal policy is guided by the principles to run appropriate operating balances to attain and maintain prudent public debt levels.

After suspending the debt target range during the pandemic, New Zealand reintroduced a new set of fiscal rules in 2022. Two new fiscal rules were introduced: (1) an operating rule: the operating balance before gains and losses to be brought back to a surplus, and then for small surpluses to be maintained on average over time; (2) maintain net debt as share of GDP at a prudent level, estimated at 50 percent of GDP based on the net core Crown debt measure. The new government, in late 2023, made some updates to the framework while keeping broadly the same goals: bring the operating balance to surplus by 2027/28 and over time maintain operating surpluses sufficient to ensure consistency with the debt objective, and put net core Crown debt on a downward trajectory toward 40 percent of GDP and over time maintain it within a range of 20 percent to 40 percent of GDP, subject to economic shocks. The new rules are intended to keep fiscal sustainability as priority, while allowing flexibility to respond to shocks. The net debt ceiling ensures that there are sufficient fiscal buffers to tackle adverse shocks.

**Sri Lanka's** current fiscal framework did not prevent a fiscal deterioration and debt default, mainly due to weak compliance. The Fiscal Management (Responsibility) Act of 2003 introduced limits on debt, the fiscal deficit, and government guarantees. However, compliance has been weak despite envisaging parliamentary and public scrutiny. Several economic shocks and large tax cuts led to a surge in public debt, a loss of market access, and a default on some external debt obligations in 2022.

The authorities are revamping their fiscal framework to strengthen transparency and accountability. A new public financial management bill instilling principles of fiscal responsibility through an enhanced rule-based framework and more efficient budget preparation processes is under discussion. The bill incorporates key elements of budget preparation and approval processes, public investment management and public-private partnerships, among others. The proposed framework centers around the long-term objectives of debt reduction and building fiscal buffers. At the core of the new fiscal framework are a medium-term primary balance anchor consistent with debt sustainability and a primary expenditure ceiling as the operational rule. The expenditure ceiling is set in the law and would apply for an initial five-year period.

The new draft law gives a more prominent role to the medium-term financial framework and strengthens fiscal reporting. It requires the preparation and publication of an annual Fiscal Strategy Statement that sets the primary balance and expenditure ceiling targets over the medium term. It requires that the cabinet set the primary balance targets and that draft budgets are consistent with the primary expenditure ceiling. It will require a top-down approach to fiscal planning, with the medium-term financial framework and expenditure ceiling binding over the budget process. There is also a requirement for a Fiscal Responsibility Report which includes the Fiscal Strategy Statement and the medium-term projections. In exceptional cases, where ex ante deviations are unavoidable, the Minister of Finance must justify the circumstances and include remedial measures in the budget. Ex post deviations from the primary expenditures ceiling would be permitted only if the escape clause is triggered, requiring the Minister of Finance to present a justification to parliament and a supplementary budget and updated medium-term fiscal framework.

#### **Box 4. Recent Reforms to Fiscal Frameworks: Experience Outside Asia**

Countries around the world have been adjusting their rule-based frameworks to restore fiscal credibility while at the same time allowing for more flexibility. In some cases, this could result in complex rules that may prove difficult to implement and communicate.

Before reinstating the fiscal rules that were suspended in 2020, the European Union adopted a new economic governance framework in 2024. It puts a greater emphasis on country-specific medium-term fiscal structural plans to promote sustainable public finances and encourage growth-supporting reforms and investments. Countries that face risks to their public finances are required to submit adjustment plans that restore fiscal sustainability based on a long-term debt sustainability analysis. The operational rule guiding the fiscal adjustment plans is the primary expenditures net of cyclical unemployment expenditure, one-offs, and temporary expenditure and revenue measures (net expenditure path). The adjustment period can last between four and seven years depending on whether countries commit to reforms.

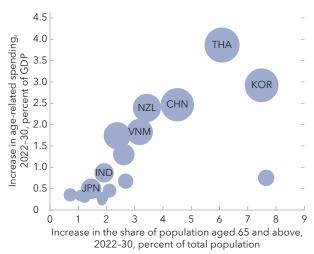
Restoring and securing fiscal sustainability is specified in two dimensions. Public debt should be plausibly placed on a downward path or maintained at prudent levels (*debt benchmark*). The framework requires an adjustment large enough to put debt on a declining path for 10 years at the end of the adjustment. Fiscal deficits (*deficit benchmark*) should be brought below 3 percent of GDP and maintained below this level for the entire postadjustment 10-year period. The framework also includes two minimum adjustment safeguards. If the debt levels are above 60 or 90 percent of GDP, debt should fall by no less than 0.5 or 1 percent of GDP annually. If the structural deficit is above 1.5 percent of GDP, there will be a minimum required annual adjustment. Member states that either have a deficit that exceeds 3 percent of GDP or fail to implement the net expenditure path can be placed in an Excessive Deficit Procedure and be required to make a minimum annual fiscal adjustment (0.5 percent of GDP).

**Brazil** has recently introduced significant changes to make the framework more flexible. The expenditure rule (no real growth) in the constitution has been replaced by a new rule-based framework: (1) set a three-year path, within a band, for the primary balance to stabilize public debt at sustainable levels; and (2) real federal spending growth with floor of 0.6 percent and ceiling of 2.5 percent, contingent on revenue collection and the distance to the primary balance targets. Spending growth (as percentage of revenue growth) will have a tighter limit of primary balance outside of the band. In addition, there is a floor on public investment of 0.6 percent of GDP and a cap on the increase in public investment.

**Colombia** strengthened further the fiscal rule framework after the pandemic, especially by adding a correction mechanism depending how far debt is from the debt anchor. In addition, Colombia also has a medium-term fiscal framework, escape clauses, and a fiscal council. The correction mechanism involves a debt limit (71 percent of GDP) and a prudent debt anchor (55 percent of GDP). The automatic adjustment depends on the gap between the actual debt level and the debt anchor. If debt is above the limit, the structural primary balance needs to be at least 1.8 percent of GDP to ensure a faster debt reduction.

**Chile** has also been making changes to its framework and fiscal institutions to strengthen effectiveness and credibility. The framework remains anchored on the structural balance (adjusted for the commodity cycle), but it needs to be consistent with medium-term debt anchor (45 percent of GDP) based on an analysis of debt sustainability (adopted in 2022). In 2019, a fiscal council was also created.

Figure 25. Increases in Age-Related Spending and the Elder Population Share in Asia-Pacific (Percent)



Sources: IMF, Fiscal Monitor database; United Nations, World Population Prospects database; and authors' calculations. Note: Bubble sizes show the net present value of the increase in age-related spending over 2022-50. Data labels in the figure use International Organization for Standardization (ISO) country codes.

under unchanged policy settings, accounting for demographic changes and other expected changes in the economy (for example, structural changes as a country shifts resources to the green economy or to the health care sector), with a view to assessing long-term fiscal sustainability (Commonwealth of Australia 2023). The New Zealand 2021 sustainability report undertakes projections beyond the medium term on how the fiscal position might evolve with new policies. The long-term analysis allows identifying policies under alternative demographic, economic, and fiscal policy scenarios. The report could motivate a discussion about required policy interventions and cost of implementation that should be reflected in the design of the medium-term fiscal plans. For LICs and Pacific island countries, the involvement of the international community will be critical given capacity constraints.

MTFFs can also be upgraded to reflect the transition to a green economy. The complex policy

trade-offs make adopting green fiscal rules (that exclude "green" spending) difficult and not credible—it would undermine debt sustainability or require drastic cuts in non-green spending without a public debate. Instead, some governments in the region have been making efforts to incorporate climate issues into the fiscal framework. Bangladesh, one of the most vulnerable to climate change, after conducting Climate Change Public Expenditure and Institutional Reviews in 2012, formulated a Climate Fiscal Framework in 2014 to help track climate-related expenditure as well as other costs of climate-related fiscal policies (Government of the People's Republic of Bangladesh 2020). In recent years, the Climate Fiscal Framework provided information on costing of climate fiscal policies and explicitly integrated climate into the annual budget process and MTFF.<sup>32</sup> Caselli, Lagerborg, and Medas (2024) propose a move toward greener MTFFs by:

- Incorporating the effects of climate change and natural disasters in medium-term projections (for example, impact on growth and government revenue and expenditure). The MTFF should also include climate-related risks. Analysis of a longer-term projection would identify risks that may materialize beyond the medium-term horizon.
- Costing different policies and measures and their consistency with achieving climate objectives (for example, effects of carbon taxes or energy subsidies). Taking into account the economic and budgetary impact of mitigation and adaptation policies would help design an appropriate mix of fiscal tools consistent with the broader medium-term fiscal strategy.<sup>33</sup> Debt sustainability analysis should include the effects of climate change and natural disasters, including the impact of different policies.

<sup>&</sup>lt;sup>32</sup> Cambodia, Nepal, Philippines, and Vietnam are making efforts to incorporate climate spending in the budget (Hallegatte and others 2019).

<sup>&</sup>lt;sup>33</sup> For example, spending on climate change adaptation should be weighed against the case of inaction, which would result in lower potential growth and larger climate-related shocks over time. Adaptation policies could make the economy more resilient to natural disasters, which would imply that fewer fiscal buffers will be needed in the future to deal with negative shocks.

- Better reflecting the effects of climate change and associated policies in designing rules. For example, fiscal and debt projections should incorporate the effects of climate change and adaptation measures, which will affect the calibration of the fiscal rules and the size of fiscal buffers needed. The rules should be reviewed regularly (for example, every five years) to reflect reassessments of climate risks. Countries are also adopting escape clauses to account for large natural disasters.
- Adopting other green PFM practices throughout the budget and investment process. Governments are increasingly adapting their budget institutions and processes to better align their policies with climate and environmental commitments.<sup>34</sup>

<sup>&</sup>lt;sup>34</sup> For a review of green PFM practices, see Gonguet and others (2021) and Aydin and others (2022).

## 5. Conclusions

Fiscal policy has played a key role in responding to large shocks in many Asia-Pacific economies in the past decade and a half. Fiscal policy became more countercyclical in Asia-Pacific in general, although financing constraints hindered policy responses in some cases, especially LICs. Many governments adopted exceptional fiscal support as the crises developed and automatic stabilizers (safety nets) proved too weak.

The more active fiscal policy approach came at a cost, notably higher public debt. The COVID-19 pandemic put further pressure on fiscal frameworks, with more countries breaching or modifying their fiscal rules and falling short on building enough fiscal buffers during good times. The more adverse growth outlook and higher interest rates implies that the maximum amount of debt that can be sustained (fiscal limit) has contracted. It will make it more difficult to manage the growing spending pressures from aging, achieving the SDGs, and tackling climate change.

More robust fiscal frameworks in Asia-Pacific would help in managing policy trade-offs and risks. First, it is important to introduce a medium-term horizon to fiscal policy. While many countries already have MTFFs, they are underdeveloped and not effective. Upgrading medium-term fiscal plans and risk assessments will help to identify what measures are needed today to achieve medium- to long-term policy objectives and increase the credibility of fiscal policy. For example, developing a credible gradual fiscal adjustment would allow debt sustainability concerns to be addressed while avoiding large adjustments. An MTFF can also help build support to raise tax revenue to fund the SDGs and manage fiscal risks. Second, broadening fiscal coverage and boosting the quality of government finance statistics and fiscal information would be helpful. Governments also need to assess and communicate the long-term impact of climate change and aging on public finances. MTFFs can be upgraded to reflect the transition to a green economy, including by incorporating the effects of climate change and adaptation policies in projections, debt sustainability assessments, and the calibration of fiscal rules.

Governments are expected to be more proactive in shielding households and the economy from shocks, which implies taking on and managing larger risks. Countries in the region will need to strengthen their ability to manage economic shocks while protecting the soundness of public finances. A key element is to create incentives to accumulate larger fiscal buffers during normal times. In addition, as many Asia-Pacific countries have underdeveloped safety nets, enhancing them would allow for swifter and better targeted responses. Upgrading the institutional capacity to design, deploy, and manage exceptional measures would help ensure that they are timely and better targeted during crises. The improved fiscal tools would help ensure that policies are more countercyclical (both entering and exiting crises) and consistent with monetary and other policies. Finally, countries need to enhance the management of fiscal risks, including monitoring and mitigation.

Simple and risk-based fiscal rules, within a robust MTFF, can help increase ownership and accountability by governments. Fiscal rules should primarily help constrain excessive deficits, preventing unsustainable debt dynamics, while allowing enough discretion to respond to shocks. Adopting simple fiscal rules, which are easier to monitor, as part of a well-developed MTFF that allows flexibility to respond to shocks, can be a more robust alternative. The fiscal framework can include a medium-term fiscal anchor and operational rules that align medium-term goals and annual budgets. The rules should be linked to an assessment of risks and incentivize building fiscal buffers over time. Well-designed operational rules and escape clauses can provide flexibility to adopt countercyclical policies and respond to crises but need to be accompanied by stronger fiscal institutions. Promoting independent analysis of fiscal developments and plans, including by fiscal councils, can help promote credibility and accountability.

## Annex 1. Fiscal Stabilization in Asia-Pacific

This annex describes the empirical approach followed in this paper toward measuring fiscal stabilization and discusses the results in detail.

## **Estimating Fiscal Stabilization Coefficients**

The methodological framework follows Jalles and others (2023) where the degree of fiscal stabilization (how fiscal policy stabilizes output) is defined in terms of the product of the degree of fiscal countercyclicality and the effect of fiscal policy on the economy—the fiscal multiplier. With fiscal multipliers being hard to measure—and more so in a time-varying fashion—this framework assumes the countercyclical coefficient is a proxy for fiscal stabilization, with the caveats this entails. Specifically, the average fiscal countercyclicality in a group of countries over a certain time period is estimated by a panel regression that takes the following form:

$$b_{ct} = \alpha_c + \tau_t + \beta x_{ct} + \varepsilon_{ct'} \tag{1}$$

where  $b_{ct}$  is a measure of government balance in country c at time t,  $x_{ct}$  is a measure of economic activity,  $\alpha_c$  and  $\tau_t$  are country and time fixed effects, and  $\varepsilon_{ct}$  is a white noise disturbance term. The variable of interest is the estimated value of  $\beta$ , which seeks to measure the degree of fiscal countercyclicality. The empirical literature recognizes the challenges and difficulties in providing accurate estimates of fiscal countercyclicality—with this equation ignoring the impact of fiscal policy on economic activity and thus the estimate of  $\beta$  suffering from endogeneity. By ignoring this feedback loop, the estimate is downward biased—for positive fiscal multipliers<sup>35</sup>—with the size of the bias affected by the volatility of structural shocks and the size of the fiscal multipliers. Therefore, assessments of fiscal countercyclicality over time and across different country groups rest on the assumption that such structural shocks and multipliers do not change over time or across groups.

Equation (1) is first estimated with  $b_{ct}$  given by the overall budget balance in percent of GDP and  $x_{ct}$  given by the real GDP growth. In this case, the estimated  $\beta$  measures the overall degree of fiscal countercyclicality. To understand the composition of overall fiscal countercyclicality, equation (1) is re-estimated with  $b_{ct}$  given by two different but complementary components of overall budget balance: cyclically adjusted balance in percent of GDP to measure the countercyclicality of discretionary policy and the remaining balance (that is, the difference between overall budget balance and cyclically adjusted balance) in percent of GDP to measure the countercyclicality of automatic stabilizer.<sup>36</sup>

The implicit assumption that the countercyclicality does not change across a set of countries and across time is an important limitation of estimating equation (1). While a larger set of countries and a longer time period entail a larger sample and therefore higher statistical power, if the coefficients in fact vary across countries and time, the results from the panel could be misleading. In this context, to accommodate the estimation of country-specific and time-varying fiscal countercyclicality coefficient, a similar equation is estimated but in a 10-year rolling window for individual countries:

<sup>35</sup> Most studies find positive fiscal multipliers particularly at shorter time horizons (Spilimbergo, Schindler, and Symansky 2009). However, some studies found negative multipliers for very open economies and those with high debt levels (Ilzetzki, Mendoza, and Végh 2011).

<sup>&</sup>lt;sup>36</sup> For countries for which cyclically adjusted balances are available in the IMF's World Economic Outlook database, the estimation uses World Economic Outlook data. For other countries, cyclically adjusted balances are calculated using Hodrick-Prescott-based output gaps. First, potential GDP is calculated using one-sided Hodrick-Prescott filter. Second, cyclically adjusted revenues and expenditures are calculated based on assumed elasticity of government revenues and government expenditures to potential GDP as one and zero, respectively (Girouard and André 2005; Mourre and others 2013), and cyclically adjusted balances (in percent of potential GDP) are calculated as the difference divided by potential GDP.

$$b_{ct} = \alpha_{ct} + \beta_{ct} x_{ct} + \varepsilon_{ct'}$$
 (2)

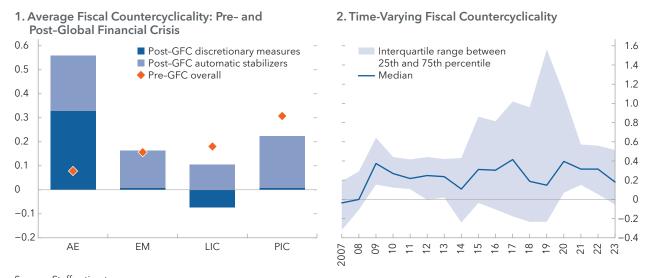
where  $\beta_{ct}$  is the fiscal countercyclicality coefficient for country c in a rolling window of specific length.

Data is from the IMF's World Economic Outlook database. The whole sample consists of 187 economies including 35 Asia-Pacific economies and covers the period between 1995 and 2023. For subperiods, the pre-global financial crisis sample covers years before and including 2007, and the post-global financial crisis sample covers the years after and including 2008. Statistical significance is reported at a 90 percent confidence level. Baseline results are based on the sample excluding oil exporters, because their fiscal balance and real GDP growth could be significantly affected by oil prices and therefore countercyclicality estimates may not reflect the stabilization role of fiscal policy. These countries include Algeria, Angola, Azerbaijan, Bahrain, Bolivia, Brunei Darussalam, Chad, Colombia, Democratic Republic of Timor-Leste, Ecuador, Equatorial Guinea, Gabon, Guyana, Iran, Iraq, Kazakhstan, Kuwait, Libya, Nigeria, Norway, Oman, Papua New Guinea, Qatar, Republic of Congo, Saudi Arabia, South Sudan, Turkmenistan, United Arab Emirates, Venezuela, and Yemen. This annex presents some results including oil exporters.

## Average and Time-Varying Fiscal Countercyclicality

Fiscal policy has played a more active role in economic stabilization in Asia-Pacific since 2008, especially in AEs (Annex Figure 1.1, panel 1). On average, fiscal policy was broadly neutral in Asia-Pacific. Specifically, for the entire Asia-Pacific sample during 1995-2023, fiscal balance would be about 0.2 percent of GDP lower (higher) in response to 1 percentage point lower (higher) growth, which is not statistically different from zero. However, there is large variation across income groups and individual countries and across time periods. AEs saw their coefficient rise from 0.1 to 0.6 after the global financial crisis—the latter means that for a 1 percentage point decline (increase) in real economic growth, the fiscal balance is estimated to deteriorate (improve) by almost 0.6 percent of GDP. For EMs, the estimates have been more stable, about 0.2

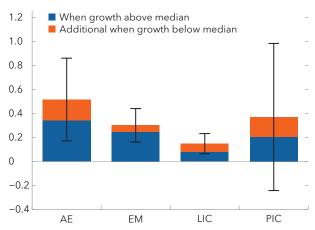
## **Annex Figure 1.1. Fiscal Countercyclicality Coefficients in Asia and the Pacific** (Percent of GDP)



Source: Staff estimates.

Note: In panel 1, blue and light blue bars denote the estimated fiscal countercyclicality coefficient for discretionary measures and automatic stabilizers from equation (1) on a post-global financial crisis sample of Asia-Pacific countries in specific income groups. Orange diamonds denote that for the overall budget balance on pre-global financial crisis samples. In panel 2, the solid line denotes the median of all countries' estimated time-varying overall fiscal countercyclicality from equation (2) in each year, and the shaded area denotes the interquartile range between the 25th and 75th percentile of distribution in each year. AE = advanced economies; EM = emerging markets; GFC = global financial crisis; LIC = low-income countries; PIC = Pacific island countries.

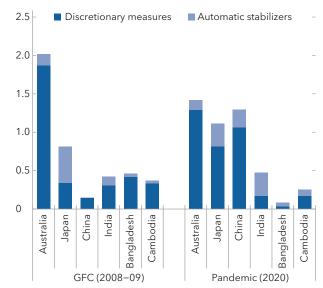
## **Annex Figure 1.2. Average Fiscal Countercyclicality: Weak versus Strong Growth**(Percent of GDP)



Source: Staff estimates.

Note: Blue bars denote the estimated fiscal countercyclicality coefficient when growth is above the median of each country's own distribution, and orange bars denote the difference between the estimated fiscal countercyclicality coefficient when growth is below the median of each country's own distribution and that when growth is above the median. Error bars denote the 90 percent confidence interval of the difference. AE = advanced economies; EM = emerging markets; LIC = low-income countries; PIC = Pacific island countries.

# Annex Figure 1.3. Fiscal Countercyclicality During the Global Financial Crisis and the Pandemic (Percent of GDP)



Source: Staff estimates.

Note: Blue and light blue bars denote the estimated fiscal countercyclicality coefficient for the discretionary component and the automatic stabilizer, respectively, based on five-year windows that include the global financial crisis (2008 or 2009) or the pandemic (2020).

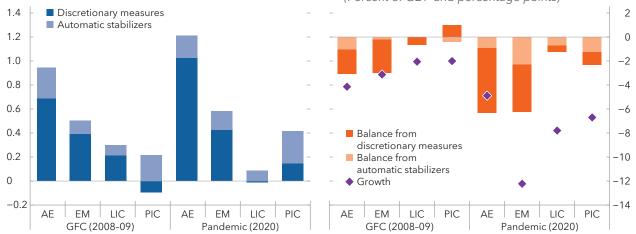
percent on average in both samples. For LICs, the evidence is not conclusive, with results pointing to a shift from somewhat countercyclical fiscal policy (with an estimate of 0.2 percent) to neutral (with an estimate of 0 percent) while both estimates are not statistically significant given wide variation among countries. For Pacific island countries, fiscal countercyclicality estimates became smaller–from 0.3 percent before the global financial crisis to 0.2 percent afterwards–and not statistically significant after the global financial crisis. Time-varying estimates also suggest that variation in fiscal countercyclicality in Asia-Pacific region has been mainly driven by responses during large shocks, for example, the global financial crisis and the pandemic (Annex Figure 1.1, panel 2).

Overall countercyclicality is the largest in AEs. In terms of the components, automatic stabilizers are the largest in AEs, followed by EMs and LICs, which likely reflects their differences in revenue mobilization and social safety nets. Discretionary measures are also larger in AEs, followed by EMs with neutral discretionary measures, while LICs appear to have procyclical discretionary measures. Pacific island countries have countercyclical automatic stabilizers but neutral discretionary measures.

The fiscal policy response tended to be stronger during economic downturns. To investigate potential asymmetric responses of fiscal policy during the business cycle–for example, whether the response is larger during cyclical downturns–equation (1) is augmented by interacting growth with a dummy for years with below-median growth of each country. The results suggest that AEs in Asia-Pacific pursue more countercyclical policies during periods of weak (that is, below-median) growth, with fiscal balances declining by an additional 0.2 percent of GDP in response to 1 percentage point reduction in growth, compared to periods of strong (that is, above-median) growth (Annex Figure 1.2). Similar results are also found in EMs and LICs but to a smaller degree—the additional deterioration in fiscal balances is less than 0.1 percent of GDP. Although the additional deterioration in fiscal balance is estimated to be large in Pacific island countries (about 0.2 percent of GDP), it is not statistically significant.

#### Annex Figure 1.4. Fiscal Countercyclicality During the Global Financial Crisis and the Pandemic

- 1. Fiscal Countercyclicality during the Global Financial Crisis and the Pandemic: Income Groups (Percent of GDP)
- 2. Deviation in Fiscal Balances and Growth from Previous Three-Year Average for the Global Financial Crisis and the Pandemic: Income Groups (Percent of GDP and percentage points)



Source: Staff estimates.

Note: In panel 1, blue and light blue bars denote the estimated fiscal countercyclicality coefficient for the discretionary component and the automatic stabilizer, respectively, based on five-year windows that include the global financial crisis (2008 or 2009) or the pandemic (2020). In panel 2, orange and light orange bars denote the deviation in the balances from discretionary policy and automatic stabilize, from their previous three-year average, and purple diamonds denote the deviation in growth from its previous three-year average. AE = advanced economies; EM = emerging markets; GFC = global financial crisis; LIC = low-income countries; PIC = Pacific island countries

The different fiscal responses are also clear when looking at the periods around the global financial crisis and the COVID-19 pandemic (see Annex Figure 1.3 for individual countries). In AEs, the estimated countercyclicality coefficient increased from 0.9 during the global financial crisis to 1.2 during the pandemic (Annex Figure 1.4, panel 1).<sup>37</sup> The increase was mainly driven by discretionary measures-its countercyclicality coefficient increased from 0.7 during the global financial crisis to 1.0 during the pandemic. Looking at the deterioration in fiscal balances and growth (relative to previous three-year averages) during these crises, fiscal balances in AEs in Asia-Pacific deteriorated the most during the pandemic compared to other groups, by almost 6.5 percent of GDP on average, while growth declines are smaller on average (Annex Figure 1.4, panel 2). For EMs, both discretionary measures and automatic stabilizers-the former to a lesser degree-became more countercyclical during the pandemic than during the global financial crisis, leading to an increase in overall countercyclicality. Fiscal balances deteriorated significantly during the pandemic, but the decline in growth was larger than other groups. For LICs, discretionary measures remained neutral during the pandemic-contrary to the global financial crisis when discretionary measures had an estimated countercyclicality of 0.2-and there was little deterioration in fiscal balances despite large growth declines. For Pacific island countries, the overall countercyclicality increased during the pandemic, mainly driven by discretionary measures turning countercyclical.

Countercyclical policy response became stronger than in other regions, especially in AEs. Before the global financial crisis, the countercyclicality estimates in Asia-Pacific AEs was one-third of their peers in Europe and in North America (0.1 versus 0.3). EMs in Asia-Pacific were more countercyclical than their peers in other regions, although both estimates were not large (0.2 versus 0.1). LICs in both Asia-Pacific and other regions tended to pursue acyclical policies with statistically insignificant countercyclicality estimates. After the onset of the global financial crisis, fiscal policy became more countercyclical in AEs in Asia-Pacific than in other

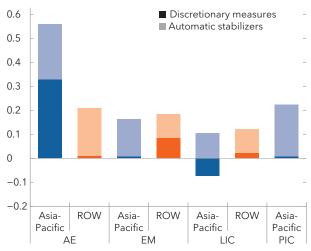
<sup>&</sup>lt;sup>37</sup> The estimates for the global financial crisis are the average of all country-specific time-varying estimates based on a five-year time window that includes 2008 and 2009 (that is, years during 2005-09) for specific country groups, and those for the pandemic are based on a five-year time window that includes 2020 (that is, years during 2016-20).

regions (Annex Figure 1.5). Countercyclicality in Asian EMs became similar with their peers in other regions, but it became less countercyclical in LICs in Asia-Pacific than other regions (although both with wide variation).

In response to large crises, AEs and EMs in Asia-Pacific pursued more countercyclical fiscal policies than their peers in other regions. During the global financial crisis, the overall countercyclicality coefficient in Asia-Pacific AEs (about 0.9 on average) was larger than that of their peers in Europe and North America, which was about 0.7 on average (Annex Figure 1.6). With increased countercyclicality during the pandemic in all of them, AEs in Asia-Pacific achieved this by pursing more discretionary measures but having lower automatic stabilizers. For EMs, overall countercyclicality was broadly similar to their peers in other regions and exceeded their peers during the pandemic mainly due to countercyclical

#### Annex Figure 1.5. Fiscal Countercyclicality: Asia-Pacific versus ROW, Post-Global Financial Crisis

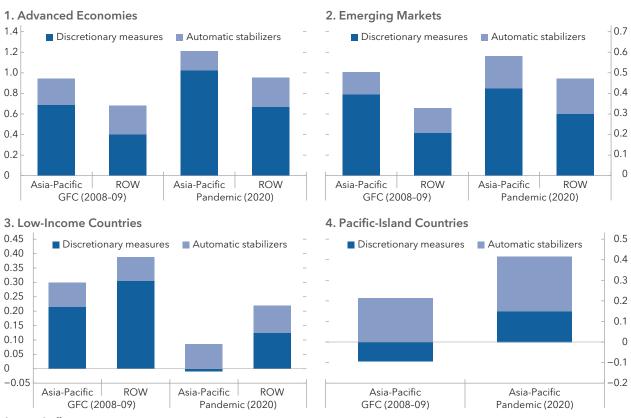
(Percent of GDP)



Source: Staff estimates.

Note: Blue and orange bars (solid and light colored) denote the estimated fiscal countercyclicality coefficients (for the discretionary measures and the automatic stabilizers). AE = advanced economies; EM = emerging markets; LIC = low-income countries; PIC = Pacific island countries; ROW = rest of the world.

Annex Figure 1.6. Fiscal Countercyclicality during the Global Financial Crisis and the Pandemic: Across Income Groups and Regions (Percent of GDP)

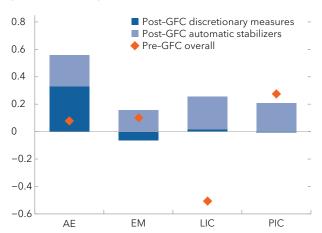


Source: Staff estimates.

Note: Blue and light blue bars denote the estimated fiscal countercyclicality coefficient for the discretionary component and the automatic stabilizer, respectively, based on five-year windows that include the global financial crisis (2008 or 2009) or the pandemic (2020). GFC = global financial crisis; ROW = rest of the world.

#### Annex Figure 1.7. Fiscal Countercyclicality: Asia-Pacific, Pre- and Post-Global Financial Crisis, Including Oil Exporters

(Percent of GDP)



Source: Authors' calculations.

Note: Blue and light blue bars denote the estimated fiscal countercyclicality coefficient for the discretionary measures and the automatic stabilizers on post-global financial crisis sample, respectively. Orange diamonds denote that for the overall budget balance on pre-global financial crisis samples. AE = advanced economies; EM = emerging markets; GFC = global financial crisis; LIC = low-income countries; PIC = Pacific island countries.

discretionary measures. In both AEs and EMs, Asia-Pacific countries relied more on discretionary measures to pursue countercyclical fiscal policies, while automatic stabilizers were smaller than that in their peers. On the other hand, LICs in Asia-Pacific pursued less countercyclical responses to both crises—mainly driven by less countercyclical or even procyclical discretionary measures—in contrast to their peers' countercyclicality. Meanwhile, fiscal responses to large shocks in Pacific island countries have been relying significantly on automatic stabilizers while discretionary measures became countercyclical during the pandemic.

Including oil exporters in the analysis brings more noise given their fiscal balances and growth could be affected significantly by oil prices. Depending on the share of oil revenue and oil GDP in overall revenue and GDP, respectively, and the degree of oil revenue affecting government expenditure, the countercyclicality estimates based on overall balance and overall GDP growth may be contaminated by oil prices and thus not reflect the stabilization role of fiscal

policy. For example, with oil exporters included, EMs in Asia-Pacific would have procyclical fiscal policies after the global financial crisis and LICs would have neutral discretionary measures after the global financial crisis but overall procyclical policies before the global financial crisis (Annex Figure 1.7). The differences in estimated countercyclicality are mainly driven by those outlier estimates of oil exporters.

## Annex 2. Fiscal Frameworks in Asia-Pacific

This annex takes detailed stock of fiscal frameworks in the Asia-Pacific region, based on a survey that was completed by IMF teams for 37 countries and economies in the region. The survey is composed of (1) fiscal rules, (2) MTFFs, and (3) fiscal councils, covering the period up to 2022 (Annex Figure 2.1, Annex Table 2.1). The questionnaire on fiscal rules and fiscal councils follows previous IMF surveys conducted by the IMF Fiscal Affairs Department (see Davoodi and others 2022a, 2022b, 2022c). The following sections describe the definitions of fiscal rules, MTFFs, and fiscal councils and variables covered by the survey and present the key outcomes.

### **Fiscal Rules**

**Definition:** Numerical limits on budgetary aggregates that are revised on a low-frequency basis and binding for at least three years are considered as

# aggregates that capture a large share of public finances and at a minimum cover the central government level. Fiscal rules for subnational governments or fiscal subaggregates are not included here. We focus on de jure arrangements.

fiscal rules. Medium-term budgetary frameworks or expenditure ceilings that provide multiyear projections but can be changed annually are not considered to be fiscal rules. It only considers rules that set targets on

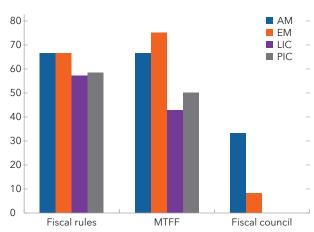
## **Types of fiscal rules in place:** The survey distinguishes four main types of fiscal rules based on the budgetary aggregate they seek to constrain.

- Debt rules: These rules set an explicit anchor or ceiling for public debt, often expressed in percent of GDP, aiming to achieve convergence to a sustainable debt target.
- Budget balance rules: These rules constrain the budget aggregate that primarily influences the debt ratio and are largely under government control. They can be specified as limits on the overall balance, primary balance, or structural or cyclically adjusted balance.
- Expenditure rules: These rules set limits on total, primary, or current government expenditures. They are typically set in absolute terms or growth rates, and occasionally in percent of GDP.
- Revenue rules: These rules set ceilings or floors on revenues aiming to boost revenue collection and/or prevent an excessive tax burden. Some rules restrict certain use of "windfall" revenue.

In Asia and the Pacific, 23 out of 37 countries have at least one fiscal rule (Annex Table 2.2). Budget balance and debt rules are prevalent, with 16 and 17 countries adopting budget balance and debt rules, respectively. Expenditure and revenue rules are adopted in five and three countries, respectively. The most widespread use of budget balance and debt rules in combination is a common trend seen across regions (Annex Figure 2.2).

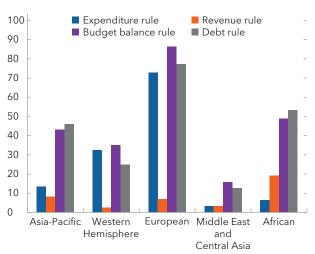
## Annex Figure 2.1. Fiscal Frameworks in Asia-Pacific Countries

(Percent of countries)



Sources: Survey of IMF country teams; and staff estimates. Note: AE = advanced economies; EM = emerging markets; LIC = low-income countries; MTFF = medium-term fiscal framework; PIC = Pacific island countries.

## **Annex Figure 2.2. Type of Fiscal Rule in Place** (Percent of countries)



Sources: Survey of IMF country teams; and staff estimates.

**Enforcement:** The enforcement of fiscal rules is significantly strengthened by the presence of external monitoring mechanisms and/or formal enforcement procedures. The survey shows if a formal enforcement procedure exists and if there is a monitoring mechanism outside the government for each fiscal rule. In Asia and Pacific, both of them are adopted only in a limited number of countries, five countries for a formal enforcement procedure, and six countries for a monitoring mechanism outside the government in 2022 (see Annex Figure 2.4).

Coverage: This indicates the government sector that is covered by the fiscal rule. Fiscal rules, especially those concerning expenditure and budget balance, are generally limited to the central government (see Annex Figure 2.4). On the other hand, debt rules tend to have a wider scope, with half of the countries implementing debt limits for

either the general government or the wider public sector.

**Legal basis:** This is divided into five categories: (1) political commitment, (2) coalition agreement, (3) statutory basis, (4) international treaty, and (5) constitution. In cases where multiple legal bases apply to a fiscal rule, the highest statutory basis is recorded. The survey result shows that in most Asia-Pacific countries, debt and budget balance rules often rely on a statutory basis and in some cases on the constitution (see Annex Figure 2.4). Expenditure rules, especially in Pacific island countries, rely largely on a political commitment.

**Escape clauses:** Escape clauses can provide flexibility to temporarily suspend the rule in face of a crisis. In the Asia-Pacific region, only eight countries have well-defined escape clauses (see Annex Figure 2.4).

**Stabilization:** This indicates if stabilization features are in place through setting its budget balance target in cyclically adjusted or structural terms or over the cycle. Only Mongolia falls into this category in the region, as its budget balance rule refers to a structural deficit that takes into account fluctuations in mineral prices.

**Investment:** This indicates if public investment or other priority items are excluded from the fiscal rules. Five countries have specific exclusions for public investment from their fiscal rules.

## Medium-Term Fiscal Frameworks

Definition: MTFFs are defined as reporting of multiyear projections of key fiscal aggregates (expenditures, revenues, budget balances). They can encompass standing requirements to commit to, report against, and be held accountable for medium-term aggregate fiscal objectives, such as debt limits, surplus targets or deficit ceilings, or broad expenditure limits. Analysis of past budget outcomes could also be included. In Asia-Pacific, 22 out of 37 countries have MTFFs (Annex Figure 2.3, Annex Table 2.3).

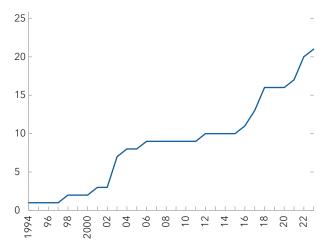
Projection horizon: For half of the countries with MTFFs (11 countries), the projection horizon of the MTFF is three years, while others chose a longer projection horizon such as five years (7 countries). The popularity of a projection horizon of three to five years is in line with the election cycle for most countries in Asia. Australia and Japan have a long projection horizon at 12 and 10 years, respectively.

Year of adoption: New Zealand was the earliest adopter of an MTFF, adopting a Charter of Budget Honesty in 1994. Malaysia, Papua New Guinea, and the Philippines are the most recent adopters of a MTFF, introducing their frameworks in 2022-23 to support the postpandemic fiscal operation.

Coverage: For the bulk of countries (17), MTFFs coverthe central government, with only 5 countries having MTFFs covering the general government (see Annex Figure 2.5). In Asia-Pacific, no country extends the remit of the MTFF to the wider public sector to cover, for example, SOEs.

Legal basis: The basis for the MTFFs is most often statutory (17 countries), including organic budget laws (see Annex Figure 2.5). MTTFs are based on a political commitment or government decision in four countries (Bangladesh, Japan, Papua New Guinea, Vietnam).

## **Annex Figure 2.3. Countries in Asia with an MTFF** (Number of countries)



Sources: Survey of IMF country teams; and staff estimates. Note: Vanuatu is not included as the data are not available. MTFF = medium-term fiscal framework.

Role of MTFF in annual budget formulation: MTFFs are effective when they are closely tied to the annual budget process and provide strategic guidance during budget preparations. For only three countries (Malaysia, Mongolia, and Thailand), MTFFs provide a binding ceiling for fiscal aggregates in the budget (see Annex Figure 2.5). In Malaysia, the MTFF provides a ceiling for debt and the fiscal balance, and in Mongolia it binds expenditure, budget balance, and debt, while in Thailand it places a ceiling on debt. At the other end of the spectrum, Bangladesh, Sri Lanka, and Vanuatu have a weak link between the MTFF and the annual budget process. For the remaining countries (16), the MTFF serves as indicative guidance.

Consideration of risks in MTFFs: An assessment of risks can help design the medium-term fiscal strategy. Over half of countries (13) include macroeconomic shocks in their MTFFs, while some take into account risks from climate change and natural disasters (10), as well as contingent liabilities (10) (see Annex Figure 2.5). Only a handful (five), mostly AEs, consider the implications from population aging. Other risks considered include risks to specific revenue sources, commodity price shocks, geopolitical conflicts, financial market volatility, energy supply disruption, downgrading of sovereign credit rating, risks from subnational governments, and changes in debt servicing costs, including from foreign exchange movements. These risks are typically analyzed through a qualitative discussion, as only eight countries conduct a quantitative assessment. Some (four countries) conduct a debt sustainability analysis, while three countries examine the implications for long-term fiscal sustainability. Australia and New Zealand also examine the effects of risks on the government's balance sheet.

Monitoring and ex post analysis: In over two-thirds of countries (16), no ex post analysis of adherence to MTFFs are conducted (see Annex Figure 2.5). In Korea and Mongolia, an entity outside of the administrative government evaluates the outcomes of MTFF projections, while in Australia, Palau, and Samoa, the government is held accountable for execution of the MTFF (that is, outturns versus projections).

Performance of MTFFs: Out of those countries with no monitoring or ex post analysis, more than half of them have MTFF projections that are considered to be consistently optimistic (seven countries) or pessimistic (two countries). For comparison, out of those countries with some form of monitoring, only one country, Mongolia, exhibits persistent bias in the MTFF. There are also countries where MTFF projections do not show a clear bias or have been generally in line with the outturns (10 countries).

### **Fiscal Councils**

Definition: In this survey, a fiscal council is defined as a permanent agency with a statutory or executive mandate to assess publicly and independently from partisan influence the government's fiscal policies, plans, and performance against macroeconomic objectives related to the long-term sustainability of public finances, short- to medium-term macroeconomic stability, and other official objectives (IMF 2013).<sup>38</sup>

General information: This section provides an overall description of the institutions, including their names, year of establishment, and the government level of their coverage.

Remit: This section reflects key elements of the mandate, such as macroeconomic or fiscal forecast preparation and assessment, analysis of long-term fiscal sustainability, and monitoring compliance with fiscal rules.

Task and instruments: This section provides indicators on councils' ability to communicate to the public and roles in the budget process. Information is provided on the instruments available for the fiscal councils to interact with participants in the budget process, including the use of their forecasts and the obligation for the government to explain deviations from these forecasts.

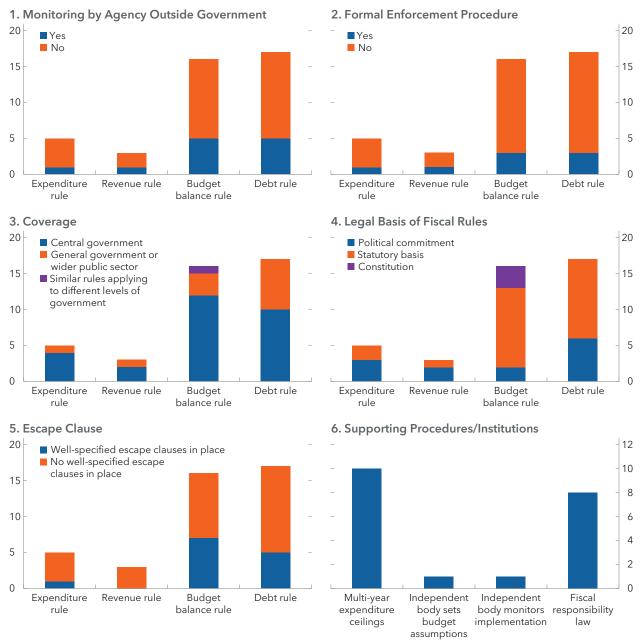
Independence and accountability: This section includes aspects of the council's legal and operational independence, including whether the council's independence from political interference is guaranteed and whether access to government information is guaranteed in the legislation.

Only three countries have a fiscal council in the Asia-Pacific region.

- Australia: The Parliamentary Budget Office has both legal and operational autonomy and conducts ex
  ante analyses to assess long-term sustainability issues and to quantify the impacts of policy measures
  and reforms. The council produces public reports detailing its activities and is assured timely access to all
  relevant information.
- Korea: The National Assembly Budget Office possesses both legal and operational autonomy, and its mandate includes producing and assessing macroeconomic forecasts, evaluating long-term sustainability issues, and providing assessment of government budgetary and fiscal performance. The council also quantifies effects of measures and reforms impacting public finances and provides recommendations. Forecasts produced by the council are incorporated into the budget process. Moreover, the council publishes reports on its activities and is guaranteed timely access to all pertinent information.
- Mongolia: The Fiscal Stability Council covers the general government and is mandated to produce and assess macroeconomic forecasts, quantify effects of proposed measures and reforms on public finances, monitor compliance with fiscal rules, and provide recommendations. The council's opinions and recommendations on the draft budget are distributed to Parliament members ahead of their discussion. Similar to fiscal councils in Australia and Korea, the council in Mongolia prepares reports on its activities and is legislatively guaranteed timely access to pertinent information.

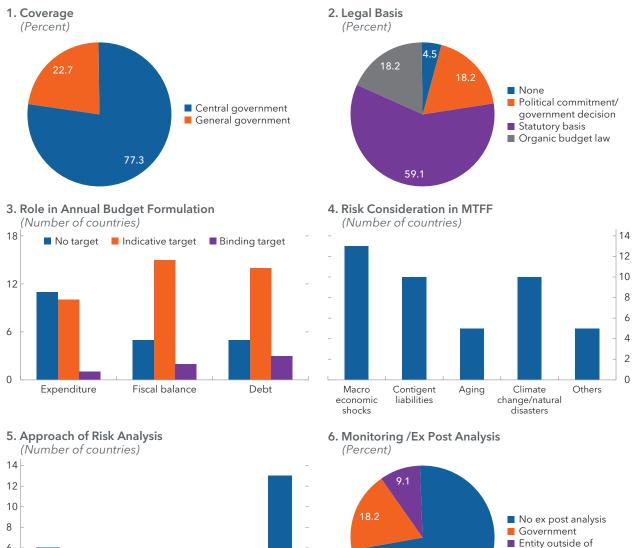
<sup>&</sup>lt;sup>38</sup> For further details, see Davoodi and others (2022a, 2022c).

## **Annex Figure 2.4. Key Features of Fiscal Rules in Asia and Pacific, 2022** (Number of countries)



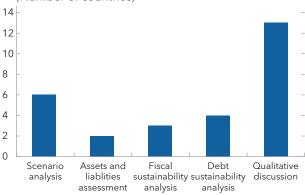
Sources: Survey of IMF country teams; and staff estimates.

#### Annex Figure 2.5. Key Features of Medium-Term Fiscal Frameworks in Asia and Pacific, 2022



government

72.7



Sources: Survey of IMF country teams; and staff estimates.

Annex Table 2.1. Fiscal Frameworks in Asia and Pacific, 2022

	Fiscal Rule	Medium-term Fiscal Framework	Fiscal Council
Advanced Economies Australia Japan Korea New Zealand Singapore Hong Kong SAR Macao SAR	BBR BBR; DR BBR BBR	• • •	•
Emerging Markets Brunei Darussalam China India Indonesia Malaysia Maldives Mongolia Philippines Sri Lanka Thailand Vietnam	BBR; DR BBR; DR DR BBR; DR ER; BBR; DR BBR; DR ER; DR RR; BBR; DR	• • • • • • • •	•
Low-Income Countries  Bangladesh Bhutan Cambodia Lao P.D.R. Myanmar Nepal Timor-Leste	BBR; DR DR BBR; DR RR; DR	•	
Pacific Island Countries Fiji Kiribati Marshall Islands Micronesia Nauru Palau Papua New Guinea Samoa Solomon Islands Tonga Tuvalu Vanuatu	ER BBR ER; BBR DR BBR; DR ER; RR; DR BBR; DR	•	
Total	ER:5; RR:3; BBR:16; DR:17	22	3

Sources: Survey of IMF country teams; and staff estimates.

Note: BBR = budget balance rule; DR = debt rule; ER = expenditure rule; RR = revenue rule.

Annex Table 2.2. National Fiscal Rules: Key Characteristics, 2022

	Type of Rules	Monitoring Outside Government	Formal Enforcement Procedures	Coverage	Legal Basis	Escape Clause	Investment or Others Excluded from Rules
Bhutan	Budget Balance	No	No	Central government	Constitution	No	Yes
	Debt	No	No	General government	Political commitment	Yes	No
Cambodia	Debt	No	No	General government	Political commitment	No	No
Hong Kong SAR	Budget Balance	No	No	General government	Constitution	No	No
India	Budget Balance	Yes	No	Central / state government	Law	Yes	No
	Debt	Yes	No	General government	Law	Yes	No
Indonesia	Budget Balance	No	No	General government	Law	No	No
	Debt	No	No	General government	Law	No	No
Japan	Budget Balance	No	No	Central government	Law	No	Yes
Kiribati	Expenditure	No	No	General government	Political commitment	No	No
Malaysia	Debt	Yes	No	Central government	Law	No	No
Maldives	Budget Balance	Yes	No	Central government	Law	Yes	No
	Debt	Yes	No	Central government	Law	Yes	No
Marshall Islands	Budget Balance	Yes	Yes	Central government	Law	Yes	No
Mongolia	Expenditure	Yes	Yes	Central government	Law	Yes	No
	Budget Balance	Yes	Yes	Central government	Law	Yes	No
	Debt	Yes	Yes	Central government	Law	Yes	No
Nauru	Expenditure	No	No	Central government	Political commitment	No	No
	Budget Balance	No	No	Central government	Political commitment	No	No

### Annex Table 2.2. (continued)

	Type of Rules	Monitoring Outside Government	Formal Enforcement Procedures	Coverage	Legal Basis	Escape Clause	Investment or Others Excluded from Rules
Nepal	Budget Balance	No	No	Central government	Law	No	No
	Debt	No	No	Central government	Law	No	No
New Zealand	Budget Balance	No	No	Central government	Law	No	Yes
	Debt	No	No	Central government	Political commitment	No	No
Papua New Guinea	Debt	No	Yes	Central government	Law	No	No
Singapore	Budget Balance	No	Yes	Central government	Constitution	Yes	No
Solomon Islands	Budget Balance	No	No	Central government	Law	Yes	Yes
	Debt	No	No	Central government	Political commitment	No	No
Sri Lanka	Budget Balance	No	No	Central government	Law	No	No
	Debt	No	No	Central government	Law	No	No
Thailand	Expenditure	No	No	Central government	Law	No	No <sup>1</sup>
	Debt	No	No	Public sector	Law	No	No
Timor-Leste	Revenue	No	Yes	Central government	Law	No	Yes
	Debt	No	Yes	Central government	Law	No	No
Tonga	Expenditure	No	No	Central government	Political commitment	No	No
	Revenue	No	No	Central government	Political commitment	No	No
	Debt	No	No	General government	Political commitment	No	No
Vanuatu	Budget Balance	No	No	Central government	Law	Yes	No
	Debt	No	No	Central government	Political commitment	Yes	No

#### Annex Table 2.2. (continued)

	Type of Rules	Monitoring Outside Government	Formal Enforcement Procedures	Coverage	Legal Basis	Escape Clause	Investment or Others Excluded from Rules
Vietnam	Revenue	Yes	No	General	Political commitment	No	No
	Budget	Yes		government	commitment		
	Balance		No	General	Political	No	No
	Debt	Yes		government	commitment		
			No	General government	Law	No	No

Sources: Survey of IMF country teams; and staff estimates.

<sup>&</sup>lt;sup>1</sup> There is, however, a provision in the Fiscal Responsibility Act (Section 20) that protects public investment: "Capital expenditure must account for no less than 20 percent of the annual budget and must not be less than the fiscal year budget deficit."

Annex Table 2.3. Medium-term Fiscal Frameworks in Asia and Pacific

	Projection Horizon (in years)	Year of Adoption	Coverage	Basis	Role in Annual Budget Formulation <sup>1</sup>	Consideration of Risks	Monitoring/ Ex Post Analysis
Australia	12	1998	Central government	Legal	Indicative	Yes	Government
Bangladesh	3	2006	Central government	None legal	None	None	None
Fiji	3	2022	Central government	Legal	Indicative	Yes	None
India	3	2003	Central government	Legal	Indicative	Yes	None
Indonesia	3	2017	General government	Legal	Indicative	Yes	None
Japan	10	2018	General government	None legal	Indicative	Yes	None
Korea	5	2004	Central government	Legal	Indicative	Yes	Entity outside government
Malaysia	3	2023	Central government	Legal	Binding	Yes	None
Maldives	3	2003	Central government	Legal	Indicative	Yes	None
Mongolia	3	2003	General government	Legal	Binding	Yes	Entity outside government
Myanmar	3	2017	Central government	Legal	Indicative	None	None
Nepal	3	2018	General government	Legal	Indicative	None	None
New Zealand	4	1994	Central government	Legal	Indicative	Yes	Government
Palau	5	2021	Central government	Legal	Indicative	Yes	Government
Papua New Guinea	5	2022	Central government	None legal	Indicative	Yes	None
Philippines	7	2022	Central government	Legal	Indicative	Yes	None
Samoa	3	2001	Central government	Legal	Indicative	Yes	Government
Sri Lanka	5	2003	Central government	Legal	None	None	None
Thailand	5	2018	Central government	Legal	Binding	Yes	None

### Annex Table 2.3. (continued)

	Projection Horizon (in years)	Year of Adoption	Coverage	Basis	Role in Annual Budget Formulation <sup>1</sup>	Consideration of Risks	Monitoring/ Ex Post Analysis
Tuvalu	3	2012	Central government	None	Indicative	Yes	None
Vanuatu	5	n.a.	Central government	Legal	None	None	None
Vietnam	5	2016	General government	None legal	Indicative	None	None

Sources: Survey of IMF country teams; and staff estimates.

 $<sup>^{1}</sup>$  In case the role differs among fiscal aggregates (that is, expenditure, fiscal balance, or debt), the most binding role is presented.

# Annex 3. When to Adopt Exceptional Support Measures for Crisis Interventions?

This annex sets out some of the key policy and institutional questions that should be considered at the policy approval stage (see Battersby and others 2022).

## Policy Approval Framework for Crisis Interventions: A Concise Checklist

#### Deciding whether to intervene:

- Is there a need for government intervention?
- Can other macroeconomic policy levers provide the needed support?
- What are the areas fiscal policy measures need to support (for example, liquidity or income support)?
- What form of policy instrument is likely to be most effective in meeting these challenges?

#### Deciding on particular interventions:

- Is this measure the most cost-effective way of providing the needed support?
- Is the measure well targeted to those sectors, individuals, and firms most in need and/or where the impact will be largest? How will targeting affect the administrative burden and speed of deployment?
- Is there an advantage in government exposure to the sector or entity over the medium term?
- Does the government have capacity to administer and implement these measures?
- How quickly can the support be provided, and what are the lags associated with its economic impact?
- Are there any longer-term adverse implications of taking this action (for example, adverse incentives that distort behavior, asset allocation, and moral hazard)? How can these be managed?
- Are there implications for other government levels, and have they been consulted?

#### Determining whether costs can be accommodated:

- What are the costs of the measure? How will this impact the deficit, financing requirements, and debt?
- Are there longer-term costs that are not factored into the medium-term budget framework?
- What are the fiscal risks? What are the maximum costs under the worst-case scenario?
- Can the costs be accommodated within fiscal rules and undermining fiscal credibility?
- Should budget provisions be made for actions that may give rise to future budget costs?
- How do we best communicate the fiscal impacts to maintain credibility?

#### Risk mitigation:

- Have risks been identified as part of the proposal?
- Have appropriate risk mitigation measures been adopted? What will be their impact?
- Is there a clear exit strategy in place? How to best communicate to manage public expectations?

#### Management:

- Does the entity responsible for managing the intervention have the required capacities to do it effectively?
- Who will be responsible for monitoring and managing its associated risks?
- Are arrangements for periodic reporting of the financial impacts and risks clear?
- Should advice on implementation or design be sought from external experts?

## References

- Aggarwal, Rimjhim, Piergiorgio M. Carapella, Tewodaj Mogues, and Julieth C. Pico-Mejía. 2024. "Accounting for Climate Risks in Costing the Sustainable Development Goals." IMF Working Paper 2024/49, International Monetary Fund, Washington, DC.
- Akanbi, Olusegun Ayodele, William Gbohoui, and Waikei R. Lam. 2023. "Calibrating Fiscal Rules: A Consideration of Natural Disaster Risks." IMF Technical Notes and Manuals 2023/002, International Monetary Fund, Washington, DC.
- Arnold, Nathaniel, Ravi Balakrishnan, Bergljot B. Barkbu, Hamid R. Davoodi, Andresa Lagerborg, Waikei R. Lam, Paulo A. Medas, and others. 2022. "Reforming the EU Fiscal Framework. Strengthening the Fiscal Rules and Institutions." IMF Departmental Paper 2022/014, International Monetary Fund, Washington, DC.
- Aydin, Ozlem, Bryn Battersby, Fabien Gonguet, Claude P. Wendling, Jacques Charaoui, and Murray Petrie. 2022. "How to Make the Management of Public Finances Climate-Sensitive-"Green PFM"." IMF How-To-Note 2022/006, Washington, DC.
- Battersby, Bryn, Raphael A. Espinoza, Jason Harris, Gee Hee Hong, Sandra V. Lizarazo Ruiz, Paolo Mauro, and Amanda Sayegh. 2022. "The State as Financier of Last Resort." IMF Staff Discussion Note 2022/003, International Monetary Fund, Washington, DC.
- Baum Anja, Paulo A Medas, Alberto Soler, and Mouhamadou Sy. 2020. "Managing Fiscal Risks from State-Owned Enterprises." IMF Working Paper 2020/213, International Monetary Fund, Washington, DC.
- Beyer, Robert C. M., and Lazar Milivojevic. 2019. "Fiscal Policy and Economic Activity in South Asia." World Bank Policy Research Working Paper 8792, World Bank Group, Washington, DC.
- Black, Simon, Antung A. Liu, Ian Parry, and Nate Vernon. 2023. "IMF Fossil Fuel Subsidies Data: 2023 Update." IMF Working Paper 2023/169, International Monetary Fund, Washington, DC.
- Blanchard, Olivier, Álvaro Leandro, and Jeromin Zettelmeyer. 2021. "Redesigning EU Fiscal Rules: From Rules to Standards." PIIE Working Paper 21-1, Peterson Institute for International Economics, Washington, DC.
- Brunnermeier, Markus K., Sebastian A. Merkel, and Yuliy Sannikov. 2022. "Debt as Safe Asset." NBER Working Paper 29626, National Bureau of Economic Research, Cambridge, MA.
- Caselli, Francesca, Hamid Davoodi, Carlos Goncalves, Gee Hee Hong, Andresa Lagerborg, Paulo A. Medas, Anh D. M. Nguyen, and others. 2022. "The Return to Fiscal Rules." IMF Staff Discussion Note 2022/002, International Monetary Fund, Washington, DC.
- Caselli, Francesca, Andresa Lagerborg, and Paulo A Medas. 2024. "Green Fiscal Rules? Challenges and Policy Alternatives." IMF Working Paper 2024/125, International Monetary Fund, Washington, DC.
- Commonwealth of Australia. 2023. *Intergenerational Report 2023: Australia's Future to 2063*. Commonwealth of Australia, Parkes, ACT.
- Dabla-Norris, Era, James Daniel, Masahiro Nozaki, Cristian Alonso, Vybhavi Balasundharam, Matthieu Bellon, Chuling Chen, David Corvino, and Joey Kilpatrick. 2021. "Fiscal Policies to Address Climate Change in Asia and the Pacific." IMF Departmental Paper 2021/007, International Monetary Fund, Washington, DC.

- Davoodi, Hamid R., Paul Elger, Alexandra Fotiou, Daniel Garcia-Macia, Xuehui Han, Andresa Lagerborg, Waikei R. Lam, and others. 2022a. "Fiscal Rules and Fiscal Councils: Recent Trends and Performance during the Pandemic." IMF Working Paper 2022/011, International Monetary Fund, Washington, DC.
- Davoodi, Hamid R., Paul Elger, Alexandra Fotiou, Daniel Garcia-Macia, Andresa Lagerborg, W. Raphael Lam, and Sharanya Pillai. 2022b. "Fiscal Rules at a Glance: An Update 1985-2021." IMF Technical Manual, International Monetary Fund, Washington, DC.
- Davoodi, Hamid R., Paul Elger, Alexandra Fotiou, Daniel Garcia-Macia, Andresa Lagerborg, W. Raphael Lam, and Sharanya Pillai. 2022c. "Fiscal Council Dataset: 2021 Update." IMF Technical Manual, International Monetary Fund, Washington, DC.
- Debrun, Xavier, Andrew Hodge, Victor Duarte Lledo, and Catherine A. Pattillo. 2018. "Second-Generation Fiscal Rules: Balancing Simplicity, Flexibility, and Enforceability." IMF Staff Discussion Note 2018/004, International Monetary Fund, Washington, DC.
- Doherty, Laura, Ozlem Aydin, Olya Kroytor, Roberto Perrelli, and Matt Crooke. 2023 (unpublished). "Sri Lanka Fiscal Rules and the Public Financial Management Bill." IMF Technical Assistance Report, International Monetary Fund, Washington, DC.
- Dolls, Mathias, Clemens Fuest, and Andreas Peichl. 2012. "Automatic Stabilizers and Economic Crisis: US vs. Europe." *Journal of Public Economics* 96 (3-4): 279-94.
- Eyraud, Luc, William Gbohoui, and Paulo A. Medas. 2023. "A New Fiscal Framework for Resource-Rich Countries." IMF Working Paper 2023/230, International Monetary Fund, Washington, DC.
- Frankel, Jeffrey A. and Jesse Schreger. 2016. "Bias in Official Fiscal Forecasts: Can Private Forecasts Help?" NBER Working Paper 22349, National Bureau of Economic Research, Inc.
- Furceri, Davide. 2009. "Stabilization Effects of Social Spending: Empirical Evidence from a Panel of OECD Countries Overcoming the Financial Crisis in the United States." OECD Economics Department Working Paper 675, Organisation for Economic Co-operation and Development, Paris.
- Furman, Jason, and Lawrence Summers. 2020. "A Reconsideration of Fiscal Policy in the Era of Low Interest Rates." Unpublished.
- Gbohoui, W, and P. Medas. 2020. "Fiscal Rules, Escape Clauses, and Large Shocks." Special Series on Fiscal Policies to Respond to COVID-19.
- Girouard, Nathalie, and Christophe André. 2005. "Measuring Cyclically-adjusted Budget Balances for OECD Countries." OECD Economics Department Working Paper 434, Organisation for Economic Co-operation and Development, Paris.
- Gonguet, Fabien, Claude P. Wendling, Ozlem Aydin, and Bryn Battersby. 2021. "Climate-Sensitive Management of Public Finances—"Green PFM"." IMF Staff Climate Note 2021/002, International Monetary Fund, Washington, DC.
- Government of the People's Republic of Bangladesh. 2020. "Bangladesh Climate Fiscal Framework 2020." Dahka.
- Hallegatte, Stephane, Jun Rentschler, and Julie Rozenberg. 2019. "Lifelines: The Resilient Infrastructure Opportunity. Sustainable Infrastructure." World Bank, Washington, DC.
- Hauptmeier, Sebastian, Christophe Kamps, and Lucas Radke. 2022. "Counter-cyclical Fiscal Rules and the Zero Lower Bound." ECB Working Paper Series 2715, European Central Bank, Frankfurt.
- Hofmann, Boris, Marco J. Lombardi, Benoît Mojon, and Athanasios Orphanides. 2021. "Fiscal and Monetary Policy Interactions in a Low Interest Rate World." BIS Working Paper 954, Bank for International Settlements, Basel.

- Ilzetzki, Ethan, Enrique G. Mendoza, and Carlos A. Végh. 2011. "How Big (Small?) are Fiscal Multipliers?" IMF Working Paper 2011/052, International Monetary Fund, Washington, DC.
- Ilzetzki, Ethan, and Carlos A. Végh. 2008. "Procyclical Fiscal Policy in Developing Countries: Truth or Fiction?" NBER Working Paper 14191, National Bureau of Economic Research, Cambridge, MA.
- International Monetary Fund (IMF). 2009. "Fiscal Rules—Anchoring Expectations for Sustainable Public Finances." International Monetary Fund, Washington, DC.
- International Monetary Fund (IMF). 2013. "The Functions and Impact of Fiscal Councils." IMF Policy Paper, Washington, DC.
- International Monetary Fund (IMF). 2016. "Analyzing and Managing Fiscal Risks: Best Practices." IMF Policy Paper, Washington, DC.
- International Monetary Fund (IMF). 2017. "Asia: At Risk of Growing Old before Becoming Rich?" In Regional Economic Outlook: Asia and Pacific—Preparing for Choppy Seas. Washington, DC, April.
- International Monetary Fund (IMF). 2018. "How to Calibrate Fiscal Rules. A Primer." IMF How-To-Note 2018/002, Washington, DC.
- International Monetary Fund (IMF). 2021. Fiscal Monitor: Strengthening the Credibility of Public Finances. Washington, DC, October.
- International Monetary Fund (IMF). 2022a. Fiscal Monitor: Helping People Bounce Back. Washington, DC, October.
- International Monetary Fund (IMF). 2022b. "Samoa: Technical Assistance Report–Climate Macroeconomic Assessment Program." IMF Country Report 2022/083, Washington, DC.
- International Monetary Fund (IMF). 2023a. Fiscal Monitor: On the Path to Policy Normalization. Washington, DC, April.
- International Monetary Fund (IMF). 2023b. World Economic Outlook: Navigating Global Divergences. Washington, DC, October.
- International Monetary Fund (IMF). 2024. "People's Republic of China: 2023 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for the People's Republic of China." IMF Country Report 2024/038, Washington, DC.
- International Monetary Fund (IMF). Forthcoming. "How to Develop and Implement a Medium-Term Fiscal Framework." IMF How-to Note, Washington, DC.
- Jalles, João Tovar, Youssouf Kiendrebeogo, Waikei R. Lam, and Roberto Piazza. 2023. "Revisiting Fiscal Countercyclicality." IMF Working Paper 2023/089, International Monetary Fund, Washington, DC.
- Larch, Martin, Janis Malzubris, and Matthias Busse. 2021. "Optimism is Bad for Fiscal Outcomes." SUERF Policy Brief 234, The European Money and Finance Forum, Vienna, Austria.
- Lam, W. Raphael, and Marialuz Moreno-Badia. 2023. "Fiscal Policy and the Government Balance Sheet in China." IMF Working Paper 2023/154, International Monetary Fund, Washington, DC.
- Lam, W. Raphael, and Jingsen Wang. 2018. "China's Local Government Bond Market." IMF Working Paper 2018/219, International Monetary Fund, Washington, DC.
- Lee, Dongyeol, Huan Zhang, and Chau Nguyen. 2018. "The Economic Impact of Natural Disasters in Pacific Island Countries: Adaptation and Preparedness." IMF Working Paper 2018/108, International Monetary Fund, Washington, DC.

- Mian, Atif, Ludwig Straub, and Amir Sufi. 2022. "A Goldilocks Theory of Fiscal Deficits." NBER Working Paper 29707, National Bureau of Economic Research, Cambridge, MA.
- Mourre, Gilles, George-Marian Isbasoiu, Dario Paternoster, and Matteo Salto. 2013. "The Cyclically-Adjusted Budget Balance Used in the EU Fiscal Framework: An Update." European Commission, Directorate-General for Economic and Financial Affairs, Brussels.
- Mukherjee, Atri, Samir Ranjan Behera, Somnath Sharma, Bichitrananda Seth, Rahul Agarwal, Rachit Solanki and Aayushi Khandelwal. 2022. "State Finances: A Risk Analysis." RBI Bulletin. https://www.scobserver.in/wp-content/uploads/2022/08/6STATEFINANCESARISKANALYSIS143105EB27A744E1B-9C404CF7D96909A.pdf.
- Reis, Ricardo. 2022. "Steady Prices, Sustainable Debt." Finance and Development 17-19.
- Spilimbergo, Antonio, Martin Schindler, and Steven A. Symansky. 2009. "Fiscal Multipliers." IMF Staff Position Note 2009/011, International Monetary Fund, Washington, DC.
- Talvi, Ernesto, and Carlos A. Végh. 2005. "Tax Base Variability and Procyclical Fiscal Policy in Developing Countries." *Journal of Development Economics* 78: 156-90.
- UN Economic and Social Commission for Asia and the Pacific (UNESCAP). 2019. "Economic and Social Survey of Asia and the Pacific 2019: Ambitions beyond growth."
- Vlaicu, Razvan, Marijn Verhoeven, Francesco Grigoli, and Zachary Mills. 2014. "Multiyear Budgets and Fiscal Performance: Panel Data Evidence." *Journal of Public Economics* 111: 79-95.
- Weise, Christian. 2023. "National Fiscal Frameworks during COVID-19: Weathering the Storm, Challenges Ahead." Discussion Paper 184, European Commission, Brussels.
- Wingender, Philippe. 2018. "Intergovernmental Fiscal Reform in China." IMF Working Paper 2018/088, International Monetary Fund, Washington, DC.
- World Bank. 2022. "Solomon Islands: Public Expenditure Review–Fiscal Reform and the Path to Debt Sustainability." Washington, DC.
- Wong, Christine. 2018. "An Update on Fiscal Reform." In *China's 40 Years of Reform and Development:* 1978-2018, edited by Ross Garnaut, Ligang Song, and Cai Fang, 271-90. Canberra: ANU Press.
- Woodford, Michael, and Yinxi Xie. 2022. "Fiscal and Monetary Stabilization Policy at the Zero Lower Bound: Consequences of Limited Foresight." *Journal of Monetary Economics* 125: 18-35.



Upgrading Fiscal Frameworks in Asia-Pacific DP/2024/008

