A Macroeconomic Perspective on Resilience

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Strong, sustainable, balanced and inclusive growth and the ability to absorb and overcome shocks are fundamental to resilience. This requires sound economic policies and strong institutions. Utilizing well-designed fiscal policies and structural reforms to support growth while ensuring fiscal sustainability, strengthening institutions, and managing weaknesses in private sector balance sheets, including by completing the reform program to deliver a strong financial system, are key in that respect. The note lays out some specific policies essential for a robust and resilient economy.

Principles

Supporting Sustainable, Balanced, and Inclusive Growth

- Enhancing resilience requires sound fiscal policies that support growth, while ensuring fiscal sustainability. Fiscal sustainability and sustained growth can be achieved through appropriately designed tax and expenditure policies.
- Structural reforms, sequenced and prioritized to reflect macroeconomic circumstances, can strengthen public finances by lifting growth and, in some cases, delivering budgetary savings. At the same time, fiscal support can improve the growth impact of some reforms. Windows of opportunity for resilience-enhancing reforms should be seized.

Strengthening Institutions

- Greater fiscal transparency—including understanding and managing fiscal risks—solid fiscal frameworks, and strong institutions (fiscal councils and trustworthy governance structures) can help policymakers both to avoid the build-up of macroeconomic imbalances and to maintain fiscal sustainability and macroeconomic stability in the face of shocks.

Managing Risks from Private Sector Balance Sheets

- Raising resilience requires reducing the likelihood of severe financial and fiscal stress, as well as lowering the potency of feedback loops between banks and sovereigns. This includes reducing the prudential bias favoring banks' sovereign exposures and completing the timely implementation of agreed regulatory reforms.
- Debt resolution frameworks that provide incentives for debtors and creditors to participate in the restructuring process and fiscal support to expedite the voluntary restructuring of private debt can contribute toward reducing private sector debt overhang.

Resilient economies combine strong, sustainable, balanced, and inclusive growth with the ability to absorb and overcome shocks. Strong, sustainable, balanced, and inclusive growth requires several elements: (1) a consistent policy framework to respond to shocks; (2) reforms that raise potential output, by increasing efficiency and harnessing trade, capital flows, and innovation; (3) policies that ensure that the benefits of growth are appropriately shared; (4) medium-term fiscal sustainability; (5) strong institutions to underpin the policy framework; and (6) a stable financial sector. A significant amount of work has been done in many of these areas. This note focuses on those areas where resilience can be further enhanced.

Implementing a comprehensive three-pronged approach within a consistent and coordinated policy framework to revive demand and raise productivity remains essential. Where demand is still lacking, fiscal and monetary policies can support short-term growth while accelerating the positive impact of structural reforms. These policies need to be anchored in strong and consistent policy frameworks—such as inflation-forecast-targeting and medium-term fiscal frameworks—to manage long-term expectations while allowing for short- to medium-term accommodation. Coordinated policy actions exploit synergies and the effect of individual policy actions are amplified through positive cross-border spillovers.

There is room to enhance resilience in many countries. Eight years after the financial crisis, in many countries, growth remains low, debt levels high, and balance sheets under pressure. This suggests that there is considerable scope to implement the right structural reforms and fiscal policies to reduce vulnerabilities, lift growth, and enhance fiscal buffers. Structural reforms, designed and prioritized to fit individual country needs, support long-term growth and fiscal sustainability. Strong public finances, in turn, provide the fiscal space to support structural reforms and adjustments and allow automatic stabilizers to operate. At the same time, fiscal institutions and governance structures can be strengthened to prepare for future shocks. Finally, improving the frameworks to understand and manage weaknesses in private sector balance sheets can help directly address vulnerabilities in households, corporates or the financial sector before shocks occur, or when they do, resolve problems with minimal cost to growth and fiscal positions.

Moreover, external resilience can be strengthened further, as economies continue to integrate. In this respect, enhancing resilience requires a mix of monetary and fiscal policies, as well as appropriate exchange rate policies[1]. At the same time, macroprudential policies as well as adequate financial regulation and supervision can reduce the likelihood of severe financial stress and build up of vulnerabilities, helping limit systemic risks to the financial sector[2]. Finally, external resilience also requires the narrowing of global imbalances, through a more balanced policy mix that avoids excessive reliance on policies with significant demand-diverting effects and emphasizes demand-supportive measures and structural reforms.

This paper discusses fiscal and structural policy priorities that can enhance resilience.

- Section I lays out fiscal and structural reform **policies that support sustained, balanced, and inclusive growth, while ensuring fiscal sustainability**. This includes adopting sound tax and expenditure policies that minimize distortions, enhance economic

[1] The appropriate policy mix in the context of surges in capital flows is covered by the institutional view on the liberalization and management of capital flows and discussed in a separate paper, *Toward a More Resilient Global Financial Architecture*.

[2] See separate paper on *Increasing Resilience to Large and Volatile Capital Flows: The Role of Macroprudential Policies*.

efficiency, and foster inclusion. The section also advocates for implementing priority structural reforms that facilitate better allocation of resources; exploiting potential synergies between structural reforms and fiscal policy; and finding the right timing to implement reforms.

- Section II discusses **policies that strengthen institutions**. Promoting greater fiscal transparency, adopting practices for managing and analyzing fiscal risks, and strengthening fiscal frameworks are reviewed in this section.
- Section III highlights **policies that strengthen private sector balance sheets**. This includes fiscal policies to assist in deleveraging, frameworks for household insolvency and corporate debt resolution, and financial sector regulations to prevent destabilizing feedback loops between banks and sovereign.

I. Supporting Sustainable, Balanced and Inclusive Growth

Implementing Sound Fiscal Policies

Sound fiscal policy boosts growth, while ensuring fiscal sustainability, and enhances resilience. Fiscal policies should secure strong, sustainable, balanced, and inclusive growth, while safeguarding public finances. Sound fiscal policies—such as well-designed tax and expenditure policies that encourage labor force participation and boost productivity—can achieve both. The right policies can also enhance inclusion, which increases support for reforms needed to prevent or adjust to shocks and raise potential output. With fiscal sustainability ensured, there is fiscal space for automatic stabilizers to operate in the event of a shock and, more broadly, support short-term demand.

The relationship between fiscal sustainability and growth is bi-directional.

Fiscal sustainability can reduce the risk of a crisis and support growth. Fiscal policy is sustainable if the primary surplus it generates stabilizes or brings down the debt-to-GDP ratio, taking into account the interest rate-growth differential and the debt level (IMF, 2011a). Excessively high government debt and deficits can hamper growth by increasing uncertainty about future taxation, crowding out private investment, and weakening a country's resilience to shocks. Moreover, very high levels of debt expose a country to rollover risks and potential fiscal-financial crises, which can have long-lasting adverse effects on output and growth. As such, countries should aim to build fiscal buffers, while taking into consideration the macroeconomic setting and existing structural gaps. When output gaps are positive or commodity price windfalls are in hand, fiscal buffers should be augmented. When output gaps are negative and fiscal multipliers large, building fiscal buffers could, however, be self-defeating. Under such circumstances, it reduces demand and lowers growth which in turn can increase financing costs and financial market volatility.

Growth is also critical for fiscal sustainability. Historically, fiscal adjustment rarely occurs without healthy economic growth (Cottarelli and Jaramillo, 2012). Fiscal effort has also been more likely to reduce public debt when growth has been stronger (Abbas and others, 2013). This highlights the need to employ fiscal policy not only to ensure fiscal sustainability but also to support growth.

- When economic slack is large, failure to support demand could protract the downturn, which can negatively impact public finances and make debt reduction more challenging. In this case, fiscal policy can be used to provide support, including through targeting infrastructure gaps and complementing certain structural reforms. Countries can also boost growth without increasing the deficit by reorienting tax and expenditure policies. The tradeoff between fiscal sustainability and growth favors fiscal action in countries with large output gaps, more efficient public spending, and lower funding costs. When there is no economic slack but the current account surplus is significant, fiscal policy can still play a role in increasing productive capacity, supporting external rebalancing (including through an internal appreciation), with only a temporary or limited effect on the output gap and inflation.
- Where fiscal adjustment is required, it is important to get the pace and composition of fiscal consolidation right and mitigate the negative short-run growth impact, as the cost of fiscal consolidation to short-term growth could be sizable because of fiscal multiplier effects. Indeed, the debt ratio may initially increase.

Where space is constrained, a more measured pace of fiscal adjustment will be credible only if embedded in a medium-term fiscal consolidation strategy buttressed by strong budget institutions (see the discussion below). Growth-enhancing measures, such as structural reforms, will also be important to improve growth in the medium and longer term and to durably help reduce the debt ratio.

Tax and expenditure policies can be designed to boost growth.

Appropriately designed tax and expenditure policies are critical for promoting sustained and more inclusive long-term growth, while maintaining fiscal sustainability. They enhance investment in physical capital, expand labor supply, promote human capital accumulation, and boost total factor productivity (IMF, 2015b). For instance, in advanced economies, reducing taxes on either labor or capital income by 5 percentage points in a revenue neutral manner can add about ¼ percentage point to long-run economic growth. Shifting the composition of spending toward infrastructure investment can yield a growth dividend of a similar magnitude. Moreover, they can reduce inequality, including by expanding economic opportunities for all.

Tax policy

The level and composition of taxes affect long-run economic growth. New research finds that there is a tipping point in the relationship between taxation and long-term growth, with countries having a tax-to-GDP ratio above 15 percent growing systematically faster than the ones below (Gaspar, Jaramillo, and Wingender, forthcoming). However, while revenue mobilization is the principal objective of tax systems, it is not the sole concern: quality matters too. For instance, to minimize adverse growth effects of taxation, countries should not rely too much on distortionary income taxes, should minimize distortionary tax expenditures in the value added tax, and should make better use of property taxes and efficient excises, such as carbon taxes. Moreover, tax systems should support macroeconomic stability, e.g. by not incentivizing debt over equity (IMF, 2016e).

Tax design should be based on the clear guiding principles of efficiency, fairness and simplicity—and be backed by strong political commitment at the highest level (IMF, 2011b).

- Efficiency requires that the tax system minimizes distortions to business and consumer behavior, such as investment, innovation and employment. This may be achieved through, for instance, a system with broad tax bases and low rates and reliance on taxes that are hard to avoid, such as real estate taxes and taxes on the rents earned from natural resources.
- Fairness is often based on ability to pay and achieved through progressive tax structures. However, also strong compliance and good governance are critical for fairness, e.g. to minimize opportunities for rent seeking and corruption.
- Simplicity is necessary to reduce administrative and compliance costs; but it may be extended to tax certainty, reflected in clear, coherent laws and regulations and transparent institutions and practices.

Adhering to these principles will help mitigate resistance to taxation and improve compliance. While principles offer guidance, the precise tax policy design should be tailored to a country's specific situation, needs and constraints and backed by political leadership to achieve progress.

There is significant scope to mobilize more revenues—and enhance fiscal sustainability—through tax reform. Many countries can do better in exploiting opportunities to tax immovable property, which is a fair and efficient revenue source; and many can enhance the design of the VAT by making it simpler and with a broader base. Business tax incentives are often found redundant and costly and should be phased out or reformed. The design of fiscal regimes for extractive industries can often be improved in a way that both is less distortionary and raises more revenue.

Building resilient and sustainable tax revenue systems requires that macro-relevant cross country spillovers are addressed (IMF, 2014a). Tax avoidance by multinationals and tax evasion by individuals may contribute to inequality and perceptions of unfairness—undermining citizens' trust in government. The global initiative on exchange of information for tax purposes and the G20/OECD-led initiative on base erosion and profit shifting (BEPS) are welcome steps to support countries' efforts to address them. However, applying the new BEPS guidelines to developing countries may require amendment to tailor anti-avoidance policies to their needs and capacities (IMF, OECD, UN and World Bank, 2016).

Expenditure policy

Efficient public investment, especially in infrastructure, can raise an economy's productive capacity. Increased public infrastructure investment raises output in both the short and long term, particularly during periods of economic slack and when investment efficiency is high (IMF, 2015c). However, substantial inefficiencies in public investment processes across countries need to be addressed. Strengthening institutions could close a substantial part of the public investment efficiency gap relative to the most efficient countries (IMF, 2015d). Similarly, the private sector can be an active and substantial participant in the provision of economic infrastructure, including through involvement in public-private partnerships and other types of contractual arrangements.

More equitable access to education and health care contributes to human capital accumulation, a key factor for growth. Public spending on education can directly affect education outcomes and raise the stock of human capital. Education reform in both advanced and developing economies should focus on improving access for disadvantaged groups. Investing in health care also supports human capital accumulation. Maintaining proper access of the poor to health care services during periods of expenditure rationalization is a priority. In developing economies, a focus on universal access to a basic package of health services would yield the highest growth dividends. In many countries, there is scope for improving the targeting of social programs.

Tax incentives to stimulate private investment and enhance productivity should be used sparingly and only implemented if their benefits exceed the costs. Many countries use investment tax incentives aimed at attracting FDI, such as tax holidays or exemptions in special economic zones. These are often costly, without being effective by themselves in attracting investment (IMF and others, 2015). Phasing out such incentives can therefore strengthen the revenue base and enable countries to invest more in education, which itself can attract FDI and facilitate the absorption of foreign technologies. In advanced countries, fiscal instruments such as tax credits and direct subsidies for research and development (R&D) could encourage innovation and boost productivity growth (IMF, 2016c). On a global scale, the benefits from increased R&D (both public and private) could be much larger than those in the originating countries as a result of international knowledge spillovers.

Improving the design of social benefits, and implementing focused expenditure policies can induce a positive labor supply response. Unemployment benefits can be designed to strengthen incentives to seek employment without compromising their important contribution to the social safety net. More intense use of active labor market policies (ALMP) and targeted spending measures for specific groups, such as women and older workers, could elicit an even greater labor supply response, particularly in countries facing rising dependency ratios and falling populations.

Fiscal space enables fiscal policy to offset cyclical fluctuations.

The symmetric functioning of automatic stabilizers can have positive benefits for medium-term growth. The potential growth dividends from fiscal stabilization through moderating output volatility are large in advanced economies in particular, where an increase in the responsiveness of fiscal policy to output by one standard deviation could boost annual growth by about 0.3 percentage point. Dividends are smaller in emerging markets and LICs where fiscal stabilization is less effective and is dominated by development priorities (IMF, 2015a).

Beyond automatic stabilizers, fiscal policy can play a role in supporting economic activity, in particular when deployed as part of a comprehensive, consistent, and coordinated policy approach. Where demand is weak, fiscal policy, deployed within a mutually supportive three-pronged approach—together with structural and monetary policies, and within consistent frameworks guides economic policies over time—can be used to provide support even when policy space is scarce. Moreover, coordinated policies across major economies can amplify the impact of policy action (Gaspar, Obstfeld, Sahay, 2016).

Carrying out Structural Reforms

Structural reforms boost potential growth and economic resilience. They facilitate the efficient allocation of resources within an economy, speed up the adjustment to shocks, and boost potential, and eventually actual, growth. In addition, structural reforms can also increase demand and accelerate economic recovery (IMF, 2016a). In particular, structural reforms not only enhances confidence and increase income and profit expectations, but also directly increases demand through, for instance, higher spending on ALMPs or lower tax wedges. The short-term effects vary depending on the type of reforms, size of the shocks, and complementarities between market initiations and other policies settings.

Structural reforms should be prioritized.

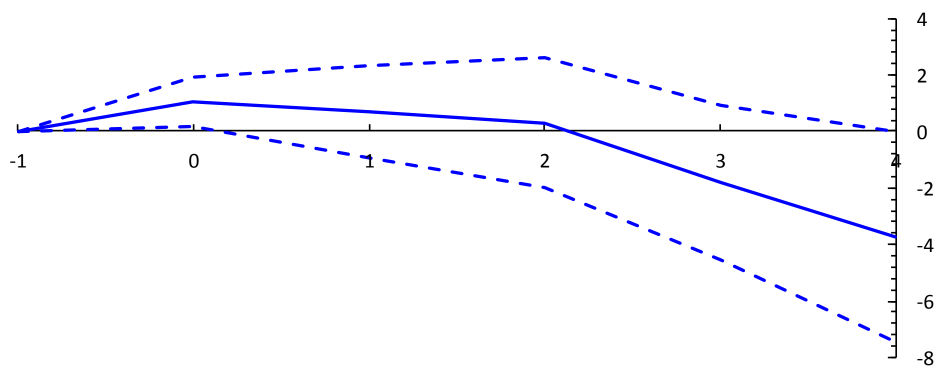
The design and choice of structural reforms will need to reflect the macroeconomic circumstances, including stage of development, resource space to finance reforms, and position in the economic cycle. Crucial structural reforms in advanced economies include infrastructure investment, fiscal structural reforms that enhance the efficiency of resource allocation, and product and labor market reforms. In EMDCs, stronger institutions, openness to FDI, public investment, and structural reforms can encourage technology transfer. Strengthening institutions can increase efficiency, generate fiscal savings to finance growth- and equity-enhancing programs, and facilitate private investment. For commodity exporting EMDCs, supporting diversification through an improved business climate, trade and FDI liberalization, and financial deepening is critical.

Synergies between structural reforms and fiscal policy should be exploited.

The impact of structural reforms on public finances involves both direct effects and indirect effects through output. Direct effects typically reflect budgetary reform gains (e.g., a reduction in the duration of unemployment benefits) or costs (e.g., an increase in public spending on ALMPs, a reduction in labor taxation). They also include additional budgetary costs that may be incurred to elicit political consensus for reforms (e.g., to compensate losers from reform). Indirect effects reflect primarily the dynamic impact of reforms on output and employment, which can vary widely across types of reforms (IMF, 2016a).

The indirect effects of reforms on public finances can vary according to prevailing economic conditions. By boosting output, product market deregulation generally helps lower the public debt-to-GDP ratio over time (IMF, 2016b). On average, major past product market deregulation episodes in advanced economies reduced the debt-to-GDP ratio by about 4 percentage points after five years by boosting output (Figure 1). By contrast, labor market reforms that entail short-term output and employment costs, such as an easing of employment protection legislation, have less favorable—or even adverse—effects on public finances when carried out under weak macroeconomic conditions (Figure 2). This reflects the adverse implications of short-term output costs and the rise in unemployment for public debt dynamics.

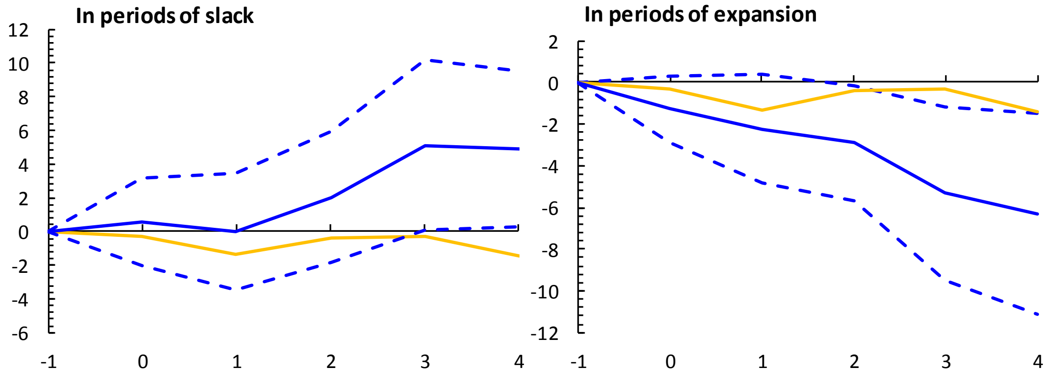
Figure 1. Effect of product market reforms on public debt-to-GDP ratio (deviation from no reform scenario, in percentage points)



Source: IMF Staff analysis.
Note: t=0 is the year of the reform shock—major historical deregulation of product markets (for details, see IMF, 2016a). Solid blue lines denote the estimated response to the shock, and dashed blue lines denote 90 percent confidence intervals. This analysis estimates the *average* effects of past reforms on public debt-to-GDP ratios. As such, it does not explicitly account for possible cross-country heterogeneity in such effects depending on reform design.

Figure 2. Effect of job protection reforms on public debt-to-GDP ratios: The Role of Macroeconomic Conditions

Impact of job protection reforms in periods of expansion vs. slack, percentage points



Source: IMF Staff analysis.
Note: t=0 is the year of the reform shock—major historical reform of employment protection legislation for regular workers (for details, see IMF, 2016a). Solid blue lines denote the estimated response to the reform shock, and dashed blue lines denote 90 percent confidence intervals. The solid yellow line shows the unconditional result, i.e. the average estimated impact across different growth regimes.

Supportive fiscal policy can bring forward the long-term gains from certain reforms and thereby improve public debt dynamics over the medium term. For instance, fiscal stimulus can amplify short-term confidence effects by improving the incentives of firms and workers to respond positively to reforms. Similarly, by boosting demand, fiscal support can make firms more willing to hire new workers rather than dismiss existing ones when employment protection legislation is relaxed, thereby enhancing the short-term impact of such reform. In turn, this positive output effect can improve the fiscal balance, thereby partly, or possibly even fully, offsetting the initial cost of fiscal stimulus. Fiscal support can also help build political support and help incentivize reforms (IMF, 2014b). However, the case for fiscal relaxation to accompany structural reforms is ultimately reform-and country-specific, depending in particular on the cyclical position of the economy and the available fiscal space[3]. Moreover, accompanying medium-term fiscal plans are needed to strengthen the effectiveness of this strategy.

Opportunities for reforms should be seized.

[3] Fiscal space is a multidimensional concept reflecting whether a government can raise spending or lower taxes without endangering market access and debt sustainability. An assessment of a country's fiscal space—one that considers both baseline and alternative scenarios—needs to take into account the level and trajectory of public debt, financing needs, fiscal track record, economic conjuncture, and market sentiment, among other things.

The combination of macroeconomic distress and structural reform gaps can open "windows of opportunity" for resilience-enhancing reforms. IMF Staff analysis of the political economy drivers of major labor and product market reforms in 26 advanced economies over the past four decades identifies weak macroeconomic conditions as the single most robust factor facilitating reform (Table 1). This suggests that crises, protracted low growth or persistent unemployment can break the political deadlock over reforms, as was the case for example in a number of countries in the aftermath of the 2008-2009 global financial crisis and the subsequent euro area crisis. Reform pressure also generally appears stronger in countries where there is greater scope for policy improvement—raising prospects of gradual convergence of structural policy settings through adoption of best practices.

Table 1. Past labor and product market reforms in advanced economies: contributing factors

Category	Area of Reforms					
	PMR	EPR reg.	EPR temp.	UB	UB cond.	ALMP
Initial Stance	+	+	+		+	–
International Spillovers	+		+		+	–
Weak Economic Conditions	+	+	+	+	+	+
Ageing	+		+			

Source: IMF staff estimates. For details, see Duval, Furceri and Miethe (forthcoming).
Note: The table shows results from a systematic econometric analysis of the drivers of major labor and product market reforms. + = positive effect on reforms; – = negative effect on reforms.
ALMP = active labor market policies; EPR reg. = employment protection reforms, regular workers; EPR temp. = employment protection reforms, temporary workers; PMR = product market regulations; UB = unemployment benefits; UB cond. = unemployment benefits with conditionality.

At the same time, the combination of low growth and rising inequality can worsen the political climate for reform. They threaten to open a negative dynamic in which political action fails to deliver the structural reforms needed to lift growth and instead turns toward a backlash on free trade. Indeed, recent IMF work finds that income inequality undermines collective trust (Gould and Hijzen, 2016), which has been found to promote trade (Cingano and Pinotti, 2016) as well as sound policies and institutions more broadly (La Porta et al., 1999; Tabellini, 2008; Nannicini et al., 2012).

International peer pressure matters, suggesting that G20 countries can lead by example. A given country appears more likely to undertake reform in a particular area when neighboring countries or trade partners do so—one illustration is the wave of product market reforms in network industries that took place across many advanced and some emerging economies during the 1990s and early 2000s. Coordinated policies could also amplify the helpful effects of individual policy actions through positive cross-border spillovers.

II. Strengthening Institutions

Understanding Fiscal Positions and Risks

Fiscal transparency and robust management of fiscal risks have become increasingly urgent. First, low growth and aging populations are creating persistent strains on public sector balance sheets in advanced and emerging economies (Clements and others, 2015). Second, public debt-to-GDP ratios have reached unprecedented levels. Gross general government debt is expected to be around 50 and 115 per cent of GDP across G-20 emerging market and advanced economies respectively in 2016. Third, fiscal risks pose a severe threat to public finances and debt sustainability. Fiscal shocks tend to be large, biased to the downside, correlated, with highly nonlinear impact. While macroeconomic and financial sector shocks tend to be the most damaging, the realization of other contingent liabilities can also be costly (Bova and others, 2016).

Pressing on toward greater fiscal transparency

Strengthening fiscal transparency can help governments better understand their underlying fiscal position, the impact of any policy changes, and risks to the fiscal outlook. Fiscal transparency provides legislatures, markets, and citizens with the information they need to make efficient financial decisions and to hold governments accountable for their fiscal performance and their utilization of public resources. Greater transparency can also help underpin credibility and market confidence. Empirical evidence points to a positive relationship between the degree of fiscal transparency and sovereign credit ratings (IMF, 2012).

The IMF's Fiscal Transparency Code was revised in 2014 and established international standards for disclosure and analysis of fiscal information:

- Fiscal reports should provide a comprehensive, relevant, timely, and reliable overview of the government's financial position and performance.
- Budgets and their underlying fiscal forecasts should provide a clear statement of the government's budgetary objectives and policy intentions, and comprehensive, timely, and credible projections of the evolution of the public finances.
- Governments should disclose, analyze, and manage risks to public finances and ensure effective coordination of fiscal decision-making across the public sector (see next section).

Analyzing and managing fiscal risks

In the current environment of high public debt in many countries, governments need to better understand the size and nature of the potential fiscal risks they face and their implications for public finances. To develop a complete understanding of their fiscal exposures and put in place comprehensive risk management strategies, governments need to:

- **Identify the main sources of fiscal risks they face and develop tools for fiscal risks analysis.** The approach adopted should depend on a country's level of institutional development. Countries should initially construct alternative macroeconomic scenarios to assess the impact of plausible shocks on public finances and prepare comprehensive and quantified fiscal risk statements. Countries with more developed risk-modeling capacity should undertake periodic stress tests of the public finances, combining stochastic shocks to key macroeconomic variables and realization of related contingent liabilities (IMF, 2016d).

- **Determine whether mitigating instruments should be used to reduce fiscal exposure**. The diverse array of potential shocks suggests there is no "magic bullet" to safeguarding public finances and that a range of tools may be needed. Mitigating measures can include: placing limits on fiscal exposure; regulations to reduce risky behavior; and transferring risks to third parties.[4] The choice of instrument depends on the nature of risks countries face, the cost-tradeoff between mitigating and accommodating risks, and institutional capacities.
- **Assess whether budget provisions or buffer funds should be used to help absorb risks that are not mitigated.** Good practice includes expensing in the budget the expected costs of risks that are highly probable; creating budget contingencies for moderate and possible fiscal risks; and assessing whether there is a need to set aside financial assets to meet the costs of larger risks should they materialize. This may be particularly relevant for countries that face a high risk that their access to international capital markets will be disrupted during times of stress.
- **Determine whether additional fiscal headroom is needed to accommodate some or all of retained fiscal risks.** Some risks maybe too large to provision for, too costly to mitigate, or simply not known with a sufficient degree of precision. Governments should take account of these risks in setting long-run fiscal targets or at least ensure they have a sufficient safety margin relative to their debt ceilings defined in their fiscal rules (IMF, 2016d).

To assist in implementing the above framework, and ensure a complete understanding of fiscal exposures and their interactions, governments should centralize overall fiscal risk oversight in a central body. A centralized unit can monitor and assess the magnitude of the government's overall exposure to risk and consider possible interdependencies between different sources of risks, as well as assess whether these risks are being adequately managed.

Reinforcing Fiscal Institutions

Fiscal institutions are important tools to enhance macroeconomic resilience. They ensure that the design and implementation of fiscal policies is consistent with the objectives of fiscal sustainability and economic stabilization. In particular, fiscal rules can help the authorities establish fiscal targets that support fiscal discipline. Combined with fiscal councils, fiscal rules can raise the financial and reputational costs of deviating from the announced targets. By establishing multi-year expenditure ceilings, medium-term budget frameworks (MTBFs) provide a platform to plan, explain, and deliver fiscal programs, thereby improving the predictability and the credibility of fiscal policy. In doing so, all these fiscal institutions help build buffers in good times to account for fiscal risks and create fiscal space for countercyclical policies during bad times, thereby improving the ability of economies to overcome shocks.

Developing solid rules-based fiscal frameworks

A rules-based fiscal framework should be structured around two main pillars: a medium-term fiscal anchor linked to the final objective of fiscal policy and one (or several)

[4] IMF (2016d) provides further details on good practices in managing a range of specific fiscal risks.

operational target(s) on fiscal aggregates (Eyraud and Wu, 2015). A natural anchor is the debt ratio, which provides a guide for both expectations and nearer term policies, creates an upper limit to repeated fiscal slippages, and whose threshold can be calibrated to ensure fiscal sustainability. In addition, the framework should include shorter-term operational target(s), which are under the direct control of governments, while also having a close and predictable link to debt dynamics. To the extent possible, these targets should be easy to monitor, and serve to communicate the fiscal stance to the public. There is a wide range of options for operational targets, such as an overall balance rule or an expenditure rule, but the choice of which to use will depend on economic circumstances and country-specific institutions (IMF, 2009b).

The rule-based framework needs to be simple and transparent to ensure credible and sustainable fiscal policies via market discipline and public pressure. The framework should be easy to understand and monitor by financial markets and the public, thus increasing the economic and political costs of non-compliance. The simplicity criterion applies to individual rules but also to the framework as a whole: an excessive number of rules, as in the case of the European Stability and Growth Pact, creates risks of inconsistency and overlap, with some rules dominating others and potentially sending conflicting signals. Complicated frameworks impede compliance, and provide scope to exploit loopholes or margins for interpretation (Andrle and others, 2015).

At the same time, fiscal rules need to be flexible enough to deal with economic shocks. Fiscal rules should be binding in good times to help build buffers, but also provide enough room to maneuver during bad times when the economy is weak and fiscal risks tend to materialize. Such flexibility can be achieved by expressing rules in structural terms and/or establishing well-defined escape clauses which allow governments to temporarily deviate from their stated fiscal objectives in the face of exceptional shocks. Expenditure rules can be effective at stabilizing the economy, while remaining transparent and easy to operationalize (Cordes and others, 2015).

Effective fiscal rules require strong and transparent enforcement mechanisms. Formal enforcement procedures should rely on mechanisms maximizing reputational cost and/or mandating corrective actions. Reputational costs can be increased in various ways, including a court ruling declaring unconstitutional violations of the rule, or an obligation to publicly explain deviations. Automatic mechanisms that correct for past deviations from fiscal targets have emerged among second-generation rules as a tool to strengthen enforcement, since they require "undoing" past fiscal excesses and determine the path back to the fiscal rule (Schaechter and others, 2012). Embodying rules in high-level national legislation has proved effective to improve their enforcement (Asatryan and others, 2016). To this effect, ensuring the consistency between supranational and national rules among currency unions is recommended, as the latter could take legal precedence over the former. Finally, PFM arrangements, such as medium-term forecasting, planning and reporting help support better monitoring and implementation of fiscal rules (see below).

Designing effective MTBFs

Some approaches to MTBFs are more successful than others in balancing medium-term certainty against flexibility (Harris and others, 2013). Binding MTBFs (which constrain future policy decisions beyond the budget year) are found to be more effective than indicative models (which only provide multiyear expenditure and revenue estimates to reflect the cost of current policies) in promoting fiscal discipline and enabling multi-year expenditure planning. Institutional preconditions are critical to the success of MTBFs—in particular a credible annual budget, based on prudent macroeconomic assumptions, guided by stable and transparent fiscal objectives, and implemented through a comprehensive and unified top-down budget process. MTBFs require the ability of government to prioritize expenditure within the medium-term envelopes and contain expenditure pressures. Finally, effective MTBFs combine discipline with responsiveness to shocks, which can be achieved in a number of ways, including by excluding cyclically- sensitive expenditures from multi-year spending ceilings.

The synergies between fiscal rules and MTBFs should be exploited. By constraining fiscal aggregates such as fiscal deficits, fiscal rules provide a global envelope for the formulation of detailed medium-term expenditure ceilings. At the same time, MTBFs, by ensuring that policy objectives of specific sectors are consistent with aggregate expenditure limits, and support fiscal rule compliance and credibility.

Setting up effective fiscal councils

Fiscal councils—whose main function is to assess fiscal policies, plans, and performance—improve policymakers' incentives to opt for sound fiscal policies (IMF, 2013). First, by fostering transparency over the political cycle, a fiscal council improves democratic accountability and discourage opportunistic shifts in fiscal policy (e.g., pre-electoral spending spree). Second, through independent analysis and forecasts, such bodies raise public awareness about the consequences of certain policy paths, and raise the reputational and electoral costs of unsound policies and broken commitments. Third, a fiscal council provides direct inputs to the budget process—e.g., forecasts or assessments of structural positions—thereby closing technical loopholes that allow governments to circumvent numerical fiscal rules.

Fiscal councils are more effective if they are designed in a way that guarantees their independence and the quality of their evaluations. To limit the scope for political interference, there should be merit-based selection of council members with long and non-renewable terms of office; autonomy over the work program and staffing decisions; and stable and adequate annual resources. The fiscal council should be accountable to its political principal (Parliament, Executive or both) and to the broader public.

Boosting revenue administration

Effective revenue administrations are important for ensuring governments' capacity to finance public spending and to support macroeconomic resilience. Revenue mobilization efforts are critical for investment in key development areas, such as infrastructure, education and health, and to secure macroeconomic stability.

All tax administrations face core challenges to deal with noncompliance in order to mobilize needed revenues (IMF, 2015e). Compliance worsened markedly in countries most affected by the financial crisis—very much indicating a lack of resilience in this area, and exposing structural weaknesses in many tax administrations. During an economic crisis the priority should be to safeguard revenues through short-term actions to *contain* noncompliance (by focusing on the greatest risks including stop-filing, underreporting, and tax arrears) and to help taxpayers cope with the pressures of the crisis (through enhanced communication, cooperation, assistance, and facilitation) (IMF, 2009a).

Measuring and analyzing 'compliance gaps' is a powerful first step to addressing noncompliance—and reducing them can raise significant amounts; doing so in a manner that ensures sustainable compliance in the face of adversity is critical for macro resilience. Estimating and dissecting the difference between tax due and tax collected is becoming a more common exercise, but remains the exception—even in advanced economies. The aim is not to completely eliminate gaps, but to reduce them. This can raise significant amounts: for example, reduced VAT gaps in Latin America in the early 2000s may have increased revenue by about 15 percent.

Some basic instruments to deter evasion—with supportive tax policies—are critical for strong compliance. The value of withholding and third-party information is well-established: where both apply, compliance in advanced counties is around 99 percent; even with only the latter it is over 90 percent. Taxpayer segmentation—primarily by size, but also in regard to 'hard-to-tax' segments such as high wealth individuals—is increasingly recognized as key for tailoring appropriately both enforcement actions and the provision of taxpayer services. And policy design needs to be sensitive to compliance challenges, pointing to broad bases and potentially blunter tools in lower income countries. Such tools may include reliance on withholding, although withholding is not foolproof and may present risks to revenue during a crisis. Finally, revenue agencies in most low-income countries need to intensify the use of third-party information (for example, cross-checking data between the tax and customs administrations, or accessing standard third-party data from financial institutions), to raise compliance levels.

Building Trustworthy Governance Structures

Corruption undermines the ability of countries to deliver inclusive growth. It weakens a country's capacity to tax, weakening its revenue base and its ability to perform core functions. By inflating procurement costs and skewing expenditures to areas of greater opportunities for graft, corruption undermines the quantity and quality of public spending. It also discourages private sector investment through higher costs and uncertainties of doing business, which act as a tax and increases "country risk". It can weaken financial oversight and thus threaten the stability of the financial system. It also perpetuates inefficiency by providing incentives to delay appropriate economic deregulation and innovation and limits economic dynamism by acting as a barrier to the entry of new market providers. Last, corruption entrenches poverty and inequality as it tends to reduce spending on public services such as education and health, upon which the poor are more reliant.

Due to its complexity, addressing corruption demands a holistic, multifaceted approach. Among the strategies that can be applied are enhancing the transparency of government decisions and transactions (for example, through the Fund's Fiscal Transparency Code, discussed previously); a credible threat of prosecution and an effective anti-money laundering framework; appropriate regulation that removes excessive discretion in the granting of licenses, permits and other approvals that could be used to create rents; and perhaps most importantly, building effective institutions. A key objective is to develop competent public officials who are independent of both private influence and political interference—and are proud of their independence

III. Managing Risks from Private Sector Balance Sheets

Strengthening private sector balance sheets is critical to resilience. Excessive leverage of the private sector may translate into systemic banking system vulnerabilities that can in turn impact government balance sheets. The Global Financial Crisis has highlighted the close and complex relationship between banking systems and their sovereigns. Experience has shown that this relationship may act as a powerful transmitter and amplifier of financial stress, exacerbating risks of adverse feedback loops that may precipitate twin crises.

Increasing resilience requires reducing the likelihood of severe financial and fiscal stress. Several reforms in the post-crisis period, including new international standards for bank capital and liquidity, have made progress to build stronger financial institutions and lowered distortions from contingent fiscal support and weaken the sovereign-bank nexus. But more needs to be done, including reducing the prudential bias that favors banks' sovereign exposures and completing the timely implementation of agreed regulatory reforms.

Reducing the debt overhang also help enhance resilience. This rests on two pillars: restoring growth and repairing private sector balance sheets. Countries with low nominal growth will take longer to reduce debt levels (Reinhart, Reinhart, and Rogoff, 2012). Therefore, demand management policies and structural reforms geared towards supporting economic activity can aid deleveraging. However, when the debt overhang is severe, policies to facilitate balance sheet repair may be needed, especially to overcome coordination problems, market failures, and the inability of corporates to absorb losses. The establishment of effective debt resolution frameworks is also essential to reducing the debt overhang.

Managing the sovereign-bank nexus

Bank and sovereigns are linked through multiple channels. First, banks typically hold large amounts of sovereign debt on their balance sheets. As the perceived safest asset, sovereign debt typically plays a key role in the operation of financial systems, providing a store of liquidity (including because of its role in central bank discount operations), a safe haven during financial storms, and a reference asset in financial markets. Second, banking systems operate against a background of government safety nets and guarantees, designed to reduce information frictions in tranquil times and to lower the probability and impact of financial disruption during severe stress. Finally, banks and sovereigns are connected through their respective impact (and dependence) on aggregate economic activity.

Financial distress can quickly transmit from one sector to the other, generating destabilizing feedback loops. The positive function of banks' sovereign-bond holdings turns into a balance-sheet vulnerability should the fiscal position deteriorate; and in the worst case, sovereign defaults typically lead to a sharp deterioration in banking system health and outright banking crises, which in turn further complicates the resolution of the fiscal crisis. Activation of contingent commitments under the financial safety net may place a heavy burden on public finances (especially in countries with large banking systems). At the same time, an increase in sovereign risk may cast doubt on the government's ability to play such a backstop role in the event of a banking crisis. And these fears may in turn undermine confidence in the banking system and increase the cost of its liabilities. Finally, the negative macroeconomic effects of sovereign distress (banking crisis) have immediate implications for financial stability (fiscal soundness).

Policies aimed at raising resilience should seek to reduce the likelihood of severe financial and fiscal stress, as well as lower the potency of the amplification mechanism. It should be recognized that the sovereign-bank nexus can be weakened but not severed. The best defense against negative feedback loops is not to trigger them. Policies that strengthen the stability and loss absorption capacity of the financial sector and promote a sound fiscal and macroeconomic framework may not weaken the nexus, but will certainly reduce its practical relevance. Complementing such policies by measures to address distortions that currently strengthen the nexus would yield additional benefits.

The current prudential treatment of sovereign exposures creates incentives for excessive holdings of sovereign debt. In particular, the widespread adoption of the regulatory option to exempt banks' exposures to their domestic sovereign in domestic currency from standard prudential regulation encourages such debt holding. Moreover, there are inconsistencies of treatment across different components of the prudential framework. A better alignment of prudential regulation with the underlying risk might avoid price distortions, create incentives for diversification of credit and foster fiscal discipline. Any adjustment would need to be phased in slowly and after clear assessment of its wider implications. In particular, measures should avoid introducing pro-cyclicality into the system.

The global regulatory reform agenda corrects a number of fault-lines and substantial progress has already been achieved. New international standards for bank capital and liquidity are raising resilience. Systemically important banks have been identified and face additional loss absorbency and supervisory requirements commensurate with the externalities of their potential failure. The introduction and upgrading of resolution regimes will further increase loss absorbency and enable the resolution of banks in an orderly manner, reducing the need for taxpayer support. Reforms of derivatives markets reduce the potential for contagion, limiting the costs of failure. And application of macroprudential policy frameworks helps authorities manage and contain potential systemic risks. This progress notwithstanding, further efforts are needed to ensure that financial risks are fully priced and that sufficient capital and liquidity buffers are held against them.

Full and timely implementation of the reforms would allow the financial system to operate as a shock absorber rather than shock transmitter. Implementation is ongoing but remains incomplete. Progress on bank resolution is steady but slow. Completing the work to enhance the resilience and resolvability of central counterparties (CCPs) remains an important priority given their systemic nature. Addressing potential structural vulnerabilities in the non-bank sector also remains important work in progress.

Using fiscal policy to facilitate private sector deleveraging.

Fiscal support to domestic demand can facilitate private sector deleveraging. Countercyclical policies can help ensure a buoyant aggregate demand and provide a macroeconomic environment that facilitates balance sheet restructuring and repair. The ability of the government to play such stabilizing role depends on the health of its fiscal position prior to the crisis.

In addition, specific fiscal policies can support the deleveraging process. For example, government-sponsored programs—including subsidies for creditors to lengthen maturities, guarantees, and direct lending—can expedite the voluntary restructuring of private debt.

The design of these targeted fiscal interventions is critical to ensure their effectiveness and mitigate moral hazard. Measures should be targeted to specific viable institutions or individuals, include conditionality, and involve burden sharing. Direct support measures are preferable over tax incentives. If bank recapitalization is necessary, it should be carried out swiftly with the private sector taking the lead. Strong governance principles should be applied in the decision making process to safeguard public funds.

Tax incentives favoring debt over equity in corporations (the so-called corporate debt bias) should be phased out to curb excessive leverage buildup. Equity finance should have a similar tax treatment as debt finance (De Mooij 2011; IMF 2016f). A promising way to achieve this would be to introduce a deduction for the normal return on equity. Alternatively, the tax deductibility of interest could be capped beyond a certain debt to equity ratio (so called “thin capitalization rule”). A combination of these two approaches can also be effective.

Designing effective resolution frameworks to assist deleveraging.

Effective debt resolution frameworks need to provide adequate incentives for debtors and creditors to participate in the restructuring process. Cross-country experience shows that despite differences in design, an effective debt resolution framework generally consists of three key pillars: a robust insolvency and debt enforcement system, effective supervisory policies, and development of distressed debt markets.

- ***A robust insolvency and debt enforcement system –*** The system should allocate risks and losses among market participants in a predictable and equitable manner; and maximize value for all stakeholders and the economy in general. In line with international best practices, the insolvency law should include provisions to support orderly rehabilitation of viable firms and swift liquidation of the non-viable ones, and the debt enforcement regime should allow for quick and efficient recovery of secured and unsecured claims. The law should also afford individuals and entrepreneurs a fresh start to allow for their return to productive activities. Out-of-court debt restructuring mechanisms can provide a cost-effective, market-friendly, and speedy alternative. Such mechanisms work best when backstopped by a robust and predictable formal regime allowing parties to negotiate in the shadow of the law, and by the existence of adequate incentives for debtors and creditors (including public creditors).
- ***Effective bank regulation and supervision –*** Prudential regulation and supervision should be used to promote more effective debt resolution. Unless banks are forced to swiftly recognize and provision for loan losses, they will lack incentives to engage in debt restructuring negotiations. Banks also need to be adequately capitalized so that loan losses can be absorbed. A well-developed supervisory toolkit to foster active management of distressed assets include more frequent and detailed regulatory reporting, intensified on-site supervision, and enhanced regulation and guidance. Banks should be required to have comprehensive plans to tackle impaired loans, including a separation of nonperforming from performing loans management, and detailed operational targets aimed at reducing impaired loans over the medium term.
- ***Developing distressed debt markets –*** Banks should have at their disposal a variety of tools to remove distressed loans off their balance sheets (e.g., outright loan sales; securitization of loan portfolios). Distressed debt markets can provide a cost-effective alternative to internal loan management, particularly for smaller banks, and any barriers for specialist distressed asset management firms and investors to participate should be removed. In some cases, centralized asset management companies (AMCs) can kick-start a distressed debt market by centralizing impaired assets to reduce the fixed costs of debt resolution, increase the efficiency of asset recovery, and facilitate better valuation and price recovery. Good governance and transparency are crucial to the success of AMCs.

Close coordination among government agencies is critical for the design and implementation of effective private debt resolution regimes. Extensive consultation with stakeholders helps raise their awareness of the problem and of the available restructuring instruments to foster the legal and business culture toward the early resolution of distressed debt. The design and sequencing of debt resolution measures should be tailored to country-specific circumstances and pay attention to the national legal system and traditions, institutional capacity, fiscal space, and restructuring expertise to ensure their success.

Addressing data gaps in private sector balance sheets.

The main data gaps that hamper the assessment of private sector indebtedness in most of the G-20 countries are related to the lack of balance sheet information for non-financial corporations (NFCs) and households. Indeed, such information is available on an annual basis for both sectors in only nine countries (see Table 2). For those countries with no balance sheet information for NFCs, some data on indebtedness could still be derived from the monetary survey (i.e., NFCs financing intermediated by the financial sector) and, to a lesser extent, from the international investment position (i.e., NFCs liabilities to non-residents).

Table 2: Availability of Balance Sheet data for the Non-Financial Sector (as of September 2016)

	NFCs	Households
Argentina		
Australia	2013	2013
Brazil		
Canada	2013	2013
China		
France	2012	2012
Germany	2012	2012
India		
Indonesia		
Italy	2012	2012
Japan	2012	2012
Korea	2012	2012
Mexico		
Russia		
Saudi Arabia		
South Africa		2013
Turkey	2012	
United Kingdom	2013	2013
United States	2013	2013
European Union		

Source: Principal Global Indicators. Year in cells refers to latest available period.

The lack of information on private sector indebtedness reinforces the efforts under the second phase of the G-20 Data Gaps Initiative (DGI-2) to advance progress in this area. Most importantly, improvements in data availability for debt securities issued will facilitate measuring indebtedness. Also, improved data availability for nonfinancial assets will usefully allow measuring wealth. Challenges in both areas include the identification of balance sheet items for NFCs and households and, critically, their valuation. Work towards closing these data gaps is underway as part of the implementation of the DGI-2 Recommendation II.8 (sectoral accounts and balance sheets). To assist countries in their efforts to implement this recommendation, the DGI-2 work program for 2017 includes a thematic workshop specifically dedicated to the compilation of sectoral accounts and balance sheets.

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