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HOW TO

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How to Manage Fiscal Risks from Subnational Governments

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How to Manage Fiscal Risks from Subnational Governments

Prepared by Sandeep Saxena

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CONTENTS

I. Introduction 1

II. Sources of Subnational Fiscal Risks 3

III. Managing Fiscal Risks from Subnational Governments 6

A. Assessing Risks 6

B. Mitigating Risks 11

C. Provisioning for and Accommodating Residual Risks 17

D. Disclosing Fiscal Risks 17

IV. Dealing with Materialized Risks: An Insolvency Framework 18

V. Conclusions 19

Annex 1. Suggested Financial Soundness Analysis Framework 21

Annex 2. Essential Elements of a Sound Subnational PFM System 22

References 23

Boxes

1. Subnational Fiscal Risk Realizations: Selected Examples 2
2. Mexico: Early Warning System 8
3. Financial Sustainability Ratings, New South Wales, Australia 9
4. Reporting of Subnational Finances in Selected Countries 10
5. Framework for Regulating Subnational Borrowing in Colombia 15
6. Subnational PFM Architecture in New Zealand 16
7. Reporting on Subnational Governments under the Fiscal Transparency Code 18

Figures

1. Central Control and Monitoring of Subnational Government Risks 2
2. Subnational Debt, Selected Countries, 2016 3
3. Share of Subnational Government in General Government Capital Expenditure, Selected Countries, 2016 4
4. Subnational Contingent Liabilities in Selected European Union Countries, 2018 5
5. PEFA Scores, Selected Countries 6
6. US: Evolution of Financial Reserves of States, 2000–21 7

Tables

1. Thresholds Used for Subnational Borrowing Regulation: Selected Examples 12
2. Approaches to Controlling Subnational Borrowing 14

Subnational governments can create sizable fiscal risks for central governments.[1] In addition to impacting service delivery at the grassroots level, unsustainable subnational finances can be a continuous drain on central resources. The need for stronger public financial management systems and capacities to analyze and manage risks at the subnational government level cannot be overemphasized. Central governments need to develop sound institutional mechanisms to systematically monitor the health of subnational finances to be able to proactively manage associated risks.

This How to Note provides a framework for central governments that seek to assess and manage fiscal risks stemming from weak subnational finances. It analyzes the sources of subnational finance vulnerabilities and argues that central governments would benefit from putting in place the following: (1) a stronger regulatory framework, (2) improved fiscal reporting, and (3) enhanced central oversight. The lessons distilled from the international experience are particularly useful for developing economies where the management of risks can be improved.

I. Introduction

Unsustainable subnational government finances expose central governments to fiscal risks. Subnational governments typically are responsible for delivering a wide range of public services. In many countries, they enjoy significant autonomy in conducting their financial operations. They often contract debt, issue guarantees for debt contracted by enterprises they own, and implement large infrastructure projects with associated risks. They may also accumulate expenditure arrears. A weakening of the subnational financial position can put central finances under stress, as seen in the experience of some countries.

[1]The term "subnational government(s)" is used in this note in a generic manner to refer to all levels of subnational government, such as states, provinces, and municipalities. "Fiscal risks" refer to uncertainties that may cause fiscal outcomes to deviate from the forecasts or expectations. Fiscal risks emanate primarily from macroeconomic shocks, contingent liabilities, and institutional weaknesses.

Fiscal risks from subnational governments may be manifested in several forms:

- The central government may have to bail out a subnational government if its debt becomes unsustainable due to excessive deficits, off-budget borrowing, guarantees to subnational enterprises, or subnational enterprises' unsustainable debt.
- Central government credit guarantees to subnational governments—directly or through central institutions—may be called.
- Central government loans to subnational governments may have to be written off or restructured, or their value may erode.
- Central transfers to subnational governments—conditional or unconditional—may need scaling up. Equalization grants may have to be increased if subnational resources decline. Conditional transfers, particularly those linked to priority programs, may increase if the subnational government does not have enough resources to fulfill its obligations under the program.

There have been several instances of central government bailout of subnational governments, putting severe impact on the public finances. An IMF study that looked at the sources of shocks to government debt in 80 countries between 1990 and 2014 identified 13 instances of macrocritical realizations of central government contingent liabilities from subnational governments, with an average cost of 3.7 percent of GDP and a maximum cost of 12 percent of GDP (Bova and others 2016). Box 1 provides an overview of some of the sizable fiscal risk realizations from subnational governments.

Central governments need to be concerned about the quality and sustainability of subnational finances because of the risk to their own finances, as well as to ensure continued public service delivery and overall macroeconomic stability. Unsustainable fiscal policy at the subnational level jeopardizes service delivery and undermines the safety of national financial systems and macroeconomic stability (Liu and Waibel 2008).

Box 1. Subnational Fiscal Risk Realizations: Selected Examples

In Brazil, the subnational debt in 1997 constituted nearly 40 percent of total public debt, and the large financing needs and debt servicing costs ultimately threatened the federal government's macroeconomic stabilization program (Cordes and others 2014). In 1993, subnational debt of R$39.4 billion was refinanced with federal loans as part of a substantial bailout package costing about 7 percent of GDP (Cebotari and others 2009).

In Argentina, estimates of the central government assumption of subnational debt during 2001–04 range from US$9.7 billion (Cordes and others 2014) to US$12.1 billion (Braun 2006).

In Mexico, extraordinary cash transfers during 1995–98, after the Tequila Crisis, cost the central government an estimated 0.5 percent of GDP (Cordes and others 2014).

In India, a deterioration in state finances during the late 1990s and early 2000s caused additional pressures on the already stressed central government finances. The combined center and state fiscal deficit increased from 7.3 percent of GDP in 1997–98 to an average of 9.3 percent of GDP during 1998–2004; the state's debt rose to 32.8 percent of GDP in 2003–04 (Rangarajan and Prasad 2013).

In Hungary, following nearly a decade of buildup, the central government between 2011 and 2014 took over the entire local government debt, which was estimated to have reached about ft 1,344 billion (€4.26 billion) (Lentner 2014). Most of this debt was denominated in foreign currency, which involved exchange rate risks threatening financial stability. The central government also took over the provisioning of education and health care services.

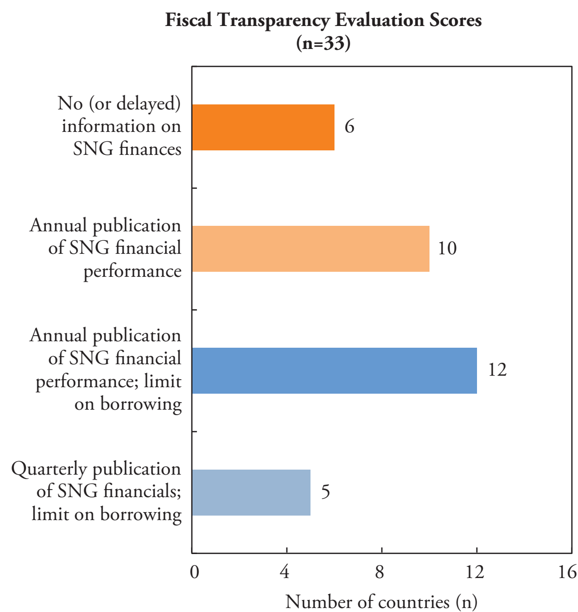
In France, following a buildup of exposure to so-called toxic loans, the central government in 2016 implemented a program costing €1.2 billion to assist local governments in unwinding the underlying structures of these debt instruments (Vallée and Sauvagnat 2021).

In Austria, the central government provided an emergency loan of €350 million to save the state of Carinthia from insolvency due to its exposure to a failed bank.

In the US, there have been instances of state government support to distressed municipalities. Examples include interventions by the state of New York in 1975 to avert the bankruptcy of New York City. The state advanced the city about $800 million, and it created the Municipal Assistance Corporation to sell up to $3 billion in state-backed bonds to refinance the city's debt. Despite its tough no-bailout stance, the federal government extended $2.3 billion in loans to the city to support its efforts.

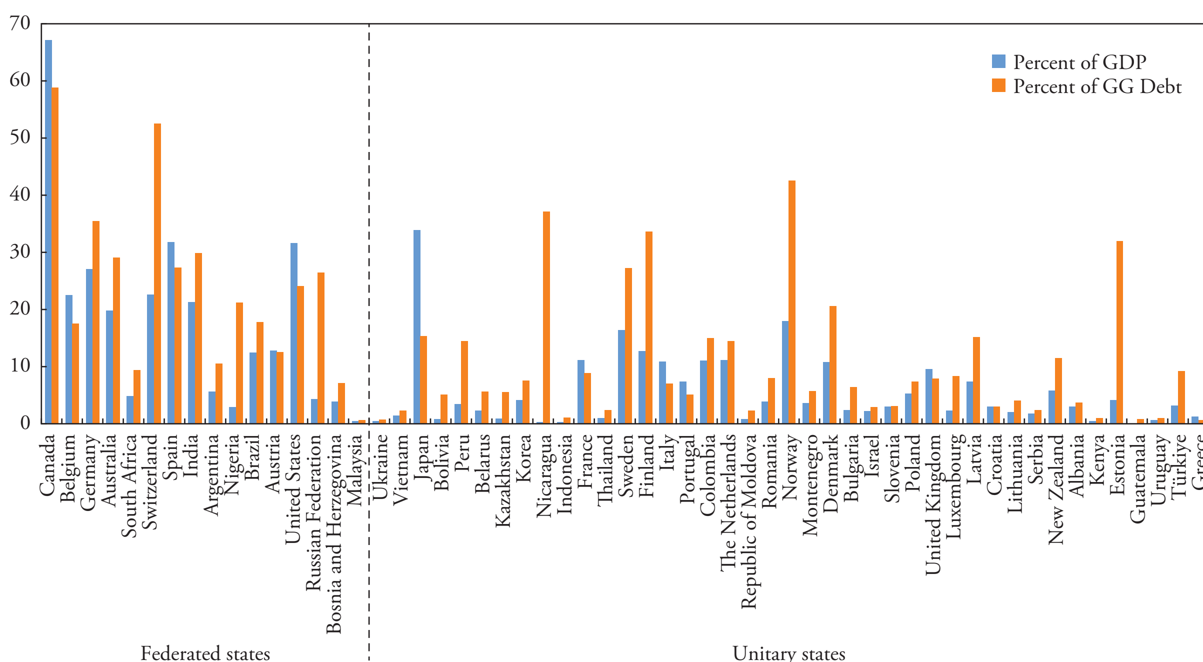
An analysis of country practices, however, points to the relative lack of attention to this important source of fiscal risk. For example, nearly one-half of the 33 countries that received a Fiscal Transparency Evaluation during 2013–21 did not have a direct control in place on subnational borrowing and had no or limited information on subnational finances (Figure 1).

Figure 1. Central Control and Monitoring of Subnational Government Risks



Source: IMF Fiscal Transparency Evaluations.
Note: SNG = subnational government.

Figure 2. Subnational Debt, Selected Countries, 2016



Source: World Observatory on Subnational Government Finance and Investment (SNG-WOFI).
Note: GG = general government.

II. Sources of Subnational Fiscal Risks

The impetus toward fiscal decentralization in many countries has resulted in increased spending responsibilities for subnational governments, together with powers to raise revenues and authority to contract debt. In many cases, subnational governments deliver services on behalf of the central government; undertake large investments, especially in urban infrastructure; and have their own social spending programs. There is often a mismatch between resources and spending responsibilities. Reliance on central government transfers to bridge the resource gap can lead to a deficit bias, particularly in the absence of a "hard" budget constraint (Singh and Plekhanov 2005), resulting in a tendency among subnational governments to overspend and run excessive deficits to attract greater central transfers.

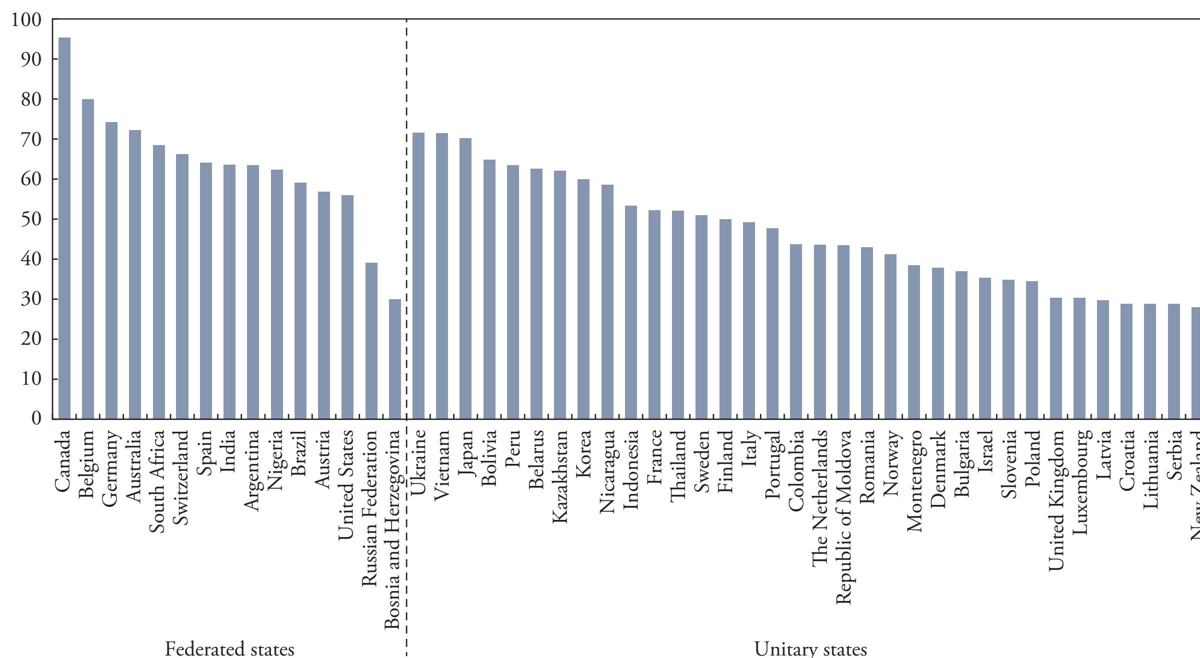
Where subnational governments are authorized to finance deficits by borrowing, the perception of a central government guarantee of such borrowings, both by the financial markets and the subnational governments themselves, can create incentives for a deficit bias. In some countries, the quality of subnational spending, and the size of their resource gap, may not be subject to adequate scrutiny, particularly if subnational governments finance such gaps by issuing debt. Central governments may be more focused on controlling the borrowing and less focused on reviewing the deficit. Subnational governments are unlikely to be subject to market discipline in countries where credit ratings and bond markets are not well developed.[2] Accordingly, both the size and quality of debt may become unsustainable.

The size of subnational debt varies considerably across countries (Figure 2). According to the Organisation for Economic Co-operation and Development—United Cities and Local Government (OECD-UCLG) database,[3] subnational debt ranged from zero and near zero in countries such as Bangladesh, Rwanda, and Tanzania, to as high as 67 percent of GDP in Canada in 2016. In Canada and Switzerland, the subnational debt exceeds the national government debt; in China and Norway, this debt is more than 40 percent of the general government debt. On average, federated countries tend to have more subnational debt than unitary countries. However, subnational debt in several unitary

[2]Lane (1993) identifies prerequisites for financial markets to be effective in enforcing financial discipline on subnational governments.

[3]See the World Observatory on Subnational Government Finance and Investment (SNG-WOFI). https://www.sng-wofi.org/.

Figure 3. Share of Subnational Government in General Government Capital Expenditure, Selected Countries, 2016
(Percent)



Source: World Observatory on Subnational Government Finance and Investment (SNG-WOFI).

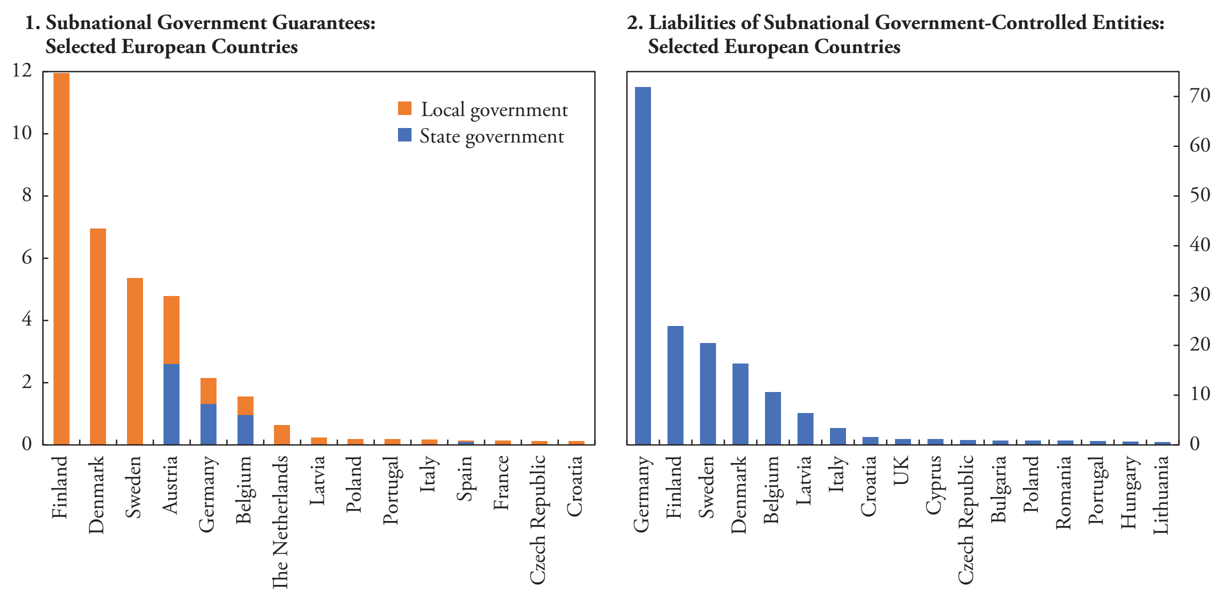
states—predominantly among advanced economies but also in a few emerging markets—is higher than that in many federated states.

Even where the stock of debt may be controlled at prudent levels, the composition of debt, if not right, may expose subnational governments to significant market, liquidity, and currency risks (where foreign currency borrowing is allowed). For example, the short maturity of subnational debt, combined with floating interest rates, was one of the factors behind the Mexican debt crisis in the mid-1990s. Currency risks played their part in Brazil's debt crisis in the 1980s and Russia's financial crisis in 1998. In Pakistan, a sharp currency depreciation in 2019 led to a year-over-year increase in the debt stock of the provinces of Punjab, Sindh, and Khyber Pakhtunkhwa by 38 percent, 25 percent, and 20 percent, respectively (Melecky 2021). The adequacy of the risk management framework is, therefore, important even for countries where subnational indebtedness levels are relatively controlled.

The debt stocks reported by governments typically do not include their other financial liabilities, which are equally pertinent from a fiscal risk perspective. Among these, pension liabilities, including those related to employee pensions, are often quite sizable. Much like central governments, subnational governments in many countries have their own pension programs—both funded and unfunded—that cover their employees as well as the general population. The amount of such liabilities can be sizable. For example, an IMF study found significant underfunding in the US state and local government pension funds, with the highest observed shortfall of 27 percent of the state GDP in Illinois (IMF 2018). Unfunded pension programs and underfunding of pension funds can be a major source of fiscal stress for subnational governments and a risk for the central government.

Subnational governments often carry out a substantial share of public investment (Figure 3) and may be exposed to significant investment-related risks. The challenges facing subnational governments in this respect are not too different from those experienced by central governments; they may be accentuated if there is limited capacity at the local level for managing investment projects. Project delays and overspending, typically associated with large public investment, could put additional strains on the finances of subnational

Figure 4. Subnational Contingent Liabilities in Selected European Union Countries, 2018
(Percent of GDP)



Source: Eurostat.

governments.[4] Where governments land-finance infrastructure—using land as the main collateral for borrowing—there is a possibility of overspending and unsustainable borrowing during times of inflated asset prices[5] and if the lending is against projected future land values (as was the case in China prior to 2003).

Subnational governments may also be exposed to significant contingent liabilities (Figure 4). They may be borrowing—on and off budget—to finance their infrastructure projects. As in the case of central governments, it is not uncommon for subnational governments to borrow off budget through their public enterprises and special purpose vehicles, often in partnership with private financiers and operators through, for example, projects funded on a public-private partnership (PPP) basis. A World Bank study finds that low-income countries show increasing reliance on off-budget borrowing, using state-owned enterprises (SOEs), special purpose vehicles, and PPPs (Rivetti 2021). At times, countries resort to borrowing through extrabudgetary arrangements in order to circumvent established debt limits. SOEs and extrabudgetary units may not always operate in a transparent manner, exposing the subnational governments to significant contingent liabilities—explicit and implicit—and risks. In India, for example, the liabilities of subnational SOEs (8 percent of GDP in 2017) and the sector's annual losses (0.6 percent of GDP) have been major sources of strain on subnational finances (Melecky 2021).

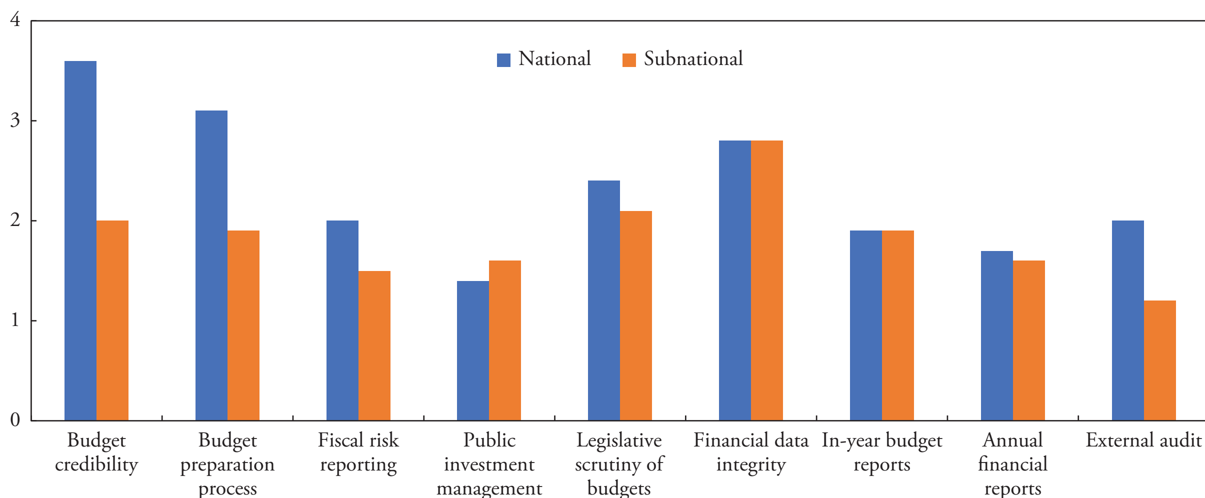
By their very nature and size, subnational governments may be more exposed to macroeconomic shocks than the central government; subnational governments may have stronger ties to local economic activity and their local economies may be highly specialized (for example, Detroit, Michigan, in the US). Similarly, because the extent of their territory is limited and given the nature of their competencies, subnational governments may be more exposed to risks from climate change, particularly if access to risk-sharing mechanisms is limited.

Finally, institutional weaknesses, relatively poor capacity, and underdeveloped public financial management (PFM) and local taxation systems exacerbate risks and give rise to risk management challenges. Complex financing relationships between different levels of

[4]For example, in the US, the financial troubles of Jefferson County, Alabama (2011), and Harrisburg, Pennsylvania (2011), are largely attributed to mismanagement of large infrastructure projects.

[5] Hong Kong SAR, for example, successfully used its land-leasing model for several years to generate substantial revenues. However, land valuation fell dramatically at the onset of the Asian financial crisis (almost 50 percent during 1998–2002), causing a steep decline in government revenues and a consequent rise in deficits (Peterson 2006).

Figure 5. PEFA Scores, Selected Countries



Source: Public Expenditure and Financial Accountability (PEFA): Albania, Cameroon, Ethiopia, Georgia, Jordan, Kenya, Serbia, Tanzania, and Ukraine.

subnational governments may blur the accountability chain; this accountability chain may be further affected if there is a lack of timely information on the financial position and operations moving from the central government to the lower levels of government. PFM capacity at the subnational level can be a concern for some countries. Even where information is available, traditional indicators may not capture off-budget and quasi-fiscal operations, and expenditure arrears may not be disclosed in predominantly cash-based reporting. Limited local tax autonomy and an underdeveloped local tax administration system can, similarly, limit the scope for dealing with fiscal challenges at the local level.

The available data are not sufficient to draw conclusions, but they do point to somewhat weaker PFM systems at subnational levels. For the nine countries[6] for which Public Expenditure and Financial Accountability (PEFA) Assessments are available for both the national and subnational levels, the average scores for the subnational systems tend to be inferior to the national level scores (Figure 5). Weaknesses are particularly noticeable in upstream budget formulation and fiscal risk management areas; the accounting and reporting functions seem to be on par with the national systems in their development.

[6]Albania, Cameroon, Ethiopia, Georgia, Jordan, Kenya, Serbia, Tanzania, and Ukraine. The sample comprised countries with at least one subnational PEFA.

III. Managing Fiscal Risks from Subnational Governments

A framework for fiscal risk management involves four steps: identification and assessment, mitigation, provision for residual risks, and accommodation and disclosure (IMF 2016).

A. Assessing Risk

Identifying Risky Entities

Risk assessment and quantification are the first step in understanding and managing risks. This step involves identifying the main sources of risks and analyzing their probability of occurrence and magnitude of impact. In the context of risk analysis, it would mean identifying subnational governments that are most likely to present increased claims on the financial resources of central governments. Risk assessment must look at the sustainability of subnational finances to avoid negative surprises. The focus of analysis should be on identifying distressed or potentially distressed entities.

A quantitative risk assessment framework can be built around five analytical dimensions:

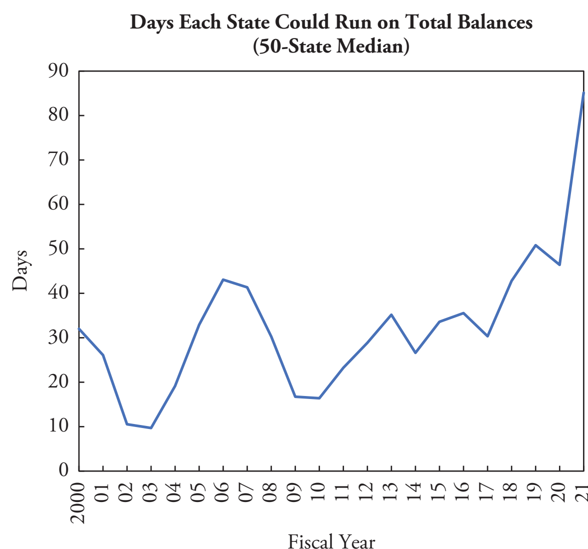
- **Fiscal capacity and flexibility**: A subnational government's capacity to manage its fiscal position sustainably and its flexibility to adjust future revenues and expenditures through increased revenues, either by raising taxes or increasing the tax base, and by containing expenditure

- **Operating performance**: a subnational government's ability to generate sufficient revenues to cover operating expenditures
- **Liquidity management**: a subnational government's ability to meet its short-term obligations efficiently
- **Debt capacity**: a subnational government's level of indebtedness and its capacity to take on additional debt
- **Asset management**: a subnational government's capacity to manage its assets

A suite of financial indicators can be developed to assess each of these dimensions (see Annex 1).

Countries such as the UK and the US use the **financial reserves**[7] of subnational governments as indicators of their financial health; the size of the reserves demonstrates both financial soundness and prudence. The fundamental purpose of a reserves policy is to serve the core mandate of subnational governments to deliver public services while maintaining financial stability. The financial operations of subnational governments should not result in the accumulation of unused funds or in cash shortfalls that would threaten the continuity of services. In the UK, for example, a reserves policy is part of the legal and regulatory framework of local governments. Local governments are expected to have balanced budgets over a period of years, borrow only for capital spending, and maintain reserves at safe levels. Their annual financial statements must include a Statement of Movements in Reserves. In the US, there is no strict norm or standard, but on average, the reserves of states cover about 48 days of operating costs (Figure 6). Analytical studies have used reserves to represent the resilience of state finances under fiscal stress (see Moody's 2020 and Pew Charitable Trusts, "Fiscal 50" [pewtrusts.org]).[8] Falling reserves levels, particularly those persistently below the specified norms, can indicate weakening financial health and a subnational government's reduced ability to absorb shocks—raising

Figure 6. US: Evolution of Financial Reserves of States, 2000–21



Source: Pew Charitable Trusts, "Fiscal 50: State Trends and Analysis."

the likelihood that shocks will spill over to the central government.

Where the legal framework allows, in addition to an ex post analysis of financial soundness, central governments could consider instituting a process for reviewing the budgets and financing plans of subnational governments before those are committed or adopted. This will broaden the focus of analysis to the level and composition of the budget deficit and its sustainability over the medium term.

Categorization into Risk Baskets

It should be possible to categorize subnational governments in accordance with their risk characteristics. The Treasury of Türkiye, for example, groups local governments (as well as SOEs) into six risk categories, following an assessment based on a weighted set of financial ratios and their past track record. This grouping guides the applicable Treasury repayment guarantee and onlending limits, as well as the monitoring and reporting requirements of local governments. A similar approach is followed in countries such as China, Colombia, Iceland, and Mexico, which have developed indicator-based early warning systems to monitor the financial health of subnational governments (Box 2).

The thresholds used for such a categorization are generally country-, context-, and time-specific. There are no internationally available benchmarks that can

[7]In the US, for example, the "total balance" concept is based on consideration of ending balances (both reserved and unreserved) and the amounts in budget stabilization or rainy-day funds.

[8]For example, the Pew Trusts October 2021 update estimates the total balance (general fund plus rainy-day funds) aggregated for all 50 states at the end of fiscal 2021 at $126.4 billion, enough to run state government operations for a median of 55.1 days, equivalent to 15.1 percent of spending. According to these estimates, seven states have balances sufficient to cover less than one month of their operations, and two—Illinois and Pennsylvania—sufficient to cover less than one week of operations. On average, balances saw a rebound after a dip in 2020 (pewtrusts.org).

Box 2. Mexico: Early Warning System

The early warning system established by the Mexican Secretaría de Hacienda y Crédito Público (SHCP) requires each state to provide quarterly information to a public registry on three key financial indicators:

- Ratio of debt and other financial obligations to non-earmarked revenues
- Ratio of debt service and other financial obligations to non-earmarked revenues
- Ratio of short-term obligations to total revenues

Based on an analysis of this information, the SHCP classifies states into three broad categories: (1) stable (green); (2) under surveillance (yellow); and (3) high level of indebtedness (red) that may require remedial action. The borrowing limits are linked to the level of indebtedness. For classification in the green zone, the debt ratio must be low; at least one of the other two ratios should be low; and the third ratio must be either low or medium. Entities with a low debt ratio but with the other two ratios in the medium range, or one medium and one high, are classified in the yellow zone. The remaining states are in the red zone. Box Table 2.1 shows the respective thresholds used for this categorization. Entities that have defaulted on their financing obligations are automatically put in the red zone.

The requirement to maintain a public registry of subnational debt data and to publish the SHCP's analysis on its website are other prominent features of the system.

Box Table 2.1. Mexico: Thresholds for Subnational Government Risk Categorization

	Low	Medium	High
Debt ratio	<100	100–200	>200
Debt service ratio	<7.5	7.5–15	>15
ST obligations ratio	<8	8–12.5	>12.5

Note: ST = short term

Source: Government of Mexico (2017).

be readily adopted. Further, the thresholds for different levels of government can vary, and differences occur in the revenue base and types of resource transfers from higher levels of government. For example, the revenue bases of urban and rural local bodies may vary considerably, which would imply different benchmarks. Another consideration is whether the indicators should be measured on an annual basis or as an average over several years. For certain ratios, it may be useful to calculate a rolling two- or three-year average to discount the impact of one-off events.

A possible approach—used in some academic studies—is to develop a composite score based on the scores for each financial soundness dimension or indicator (See Box 3 for an example). Turley, Robbins, and McNena (2015) used this approach to index local governments in Ireland. They computed seven different financial ratios for each of the 34 Irish local governments and scored them on a five-point scale (–2 to 2) in accordance with the quintile in which they fell. These seven individual scores were then aggregated for an overall score (possible range –14 to 14). The composite score thus derived reflected an entity's financial soundness relative to others in the sample. A further enhancement would be to assign weights to the indicators. For example, in its credit profiling of non-US subnational governments, Standard & Poor's assesses seven factors, each on a scale of five, and it then combines them into a weighted credit profile (S&P 2014).[9] Determination of weights, however, could be complex

[9]The seven factors and their respective weights are as follows: economy (20 percent), financial management (20 percent), budgetary flexibility (10 percent), budgetary performance (10 percent), liquidity (20 percent), debt burden (10 percent), and contingent liabilities (10 percent). Standard & Poor's combines individual credit profiles with the result of its countrywide assessment of the overall institutional framework for each level of government. The credit rating is determined by adjusting the matrix score derived in this way for any overriding factors and sovereign-related considerations.

Box 3. Financial Sustainability Ratings, New South Wales, Australia

A 2013 study by the New South Wales (NSW) Treasury Corporation assessed the financial sustainability of 152 local governments in that state.[1] The analytical framework used for the study included a suite of 10 financial performance indicators, under four broad categories, with benchmarks and weights assigned in accordance with their relative importance to arrive at a composite score—the financial sustainability rating (FSR)—for each local government (Box Table 3.1). In addition, each council was allocated a positive, neutral, or negative outlook based on an assessment of potential developments—forecast performance, risks, and opportunities—over the following three years. Based on this assessment, councils were grouped into seven categories: very strong, strong, sound, moderate, weak, very weak, and distressed.

Box Table 3.1. NSW FSR Analytical Framework

Ratio	Benchmark	Weighting (%)	Subtotals (%)
Financial Flexibility			
Operating Ratio	>(4.0%)	17.5	35.0
Own source operating revenue ratio	>60.0%	17.5	
Liquidity			
Cash expense ratio	>3.0 months	10.0	20.0
Unrestricted current ratio	>1.5x	10.0	
Debt Servicing			
Debt service cover ratio (DSCR)	>2.0x	7.5	10.0
Interest cover ratio	>4.0x	2.5	
Asset Renewal and Capital Works			
Infrastructure backlog ratio	<0.02x	10.0	35.0
Asset maintenance ratio	>1.0x	7.5	
Building and infrastructure asset renewal ratio	>1.0x	7.5	
Capital expenditure ratio	>1.1x	10.0	
Total			100.0

Note: FSR = financial stability rating; NSW = New South Wales.

Source: New South Wales Treasury Corporation 2013.

[1]The NSW Audit Office does an annual financial audit of local councils. The audit report invariably comments on the internal control and governance risk and asset management, in addition to a host of other pertinent issues (New South Wales Audit Office 2021).

and involve judgment; ideally, it should be based on an analysis of the factors' relative significance, which would require a rich time series of historical data.

Quantifying Risk

Quantification of risk typically involves a probability-weighted estimation of exposure.[10] It may, however, suffice in most cases simply to record the maximum exposure the central government has from its subnational governments. Recording this exposure requires a measure of the following: (1) the debt and other financial liabilities of subnational governments that the central government may be required to assume; and (2) any other likely unanticipated financial outflows from the central to the subnational governments if the financial position of a subnational government weakens significantly. In accounting terms, these risks are contingent liabilities (explicit or implicit) of the central government. It should suffice to measure the total

[10]Risks are typically assessed in terms of "expected value"—which represents the most likely payment the government may be required to make as a result of risk materialization. The expected value is the sum of likely payments weighted by their respective probabilities and is expressed in present value terms.

Box 4. Reporting of Subnational Finances in Selected Countries

Finland

Each municipality publishes accrual-based annual financial statements—operating statement, cash-flow statement, and balance sheet, as well as notes—following standards akin to those applicable to Finnish firms. In addition to the information for the municipality, the statements also present a consolidated view that includes any enterprises controlled by the municipality. A summary of this information is published on the Statistics Finland website. This agency also publishes quarterly data on the consolidated finances of the entire local-government sector, including revenue, expenditure, a financial balance sheet, and Maastricht debt and deficit.[1]

Peru

Information on subnational government finances is disclosed in several documents. Subnational governments' primary spending and investment execution, as well as regional and municipal debt stocks, are reported monthly; more detailed fiscal performance is reported quarterly and annually. Information on the operations of municipal enterprises is reported annually.

The Philippines

The Commission on Audit publishes an annual compilation of local government financial statements with their income and expenditure, balance sheets, and cash flows, presented on both an aggregated and individual basis. The coverage of this document extends to all three layers of local government—provinces, municipalities, and cities. The statements are accompanied by a summary of the financial position of the local government sector, as well as the highlights from each entity's audit findings. The Bureau of Local Government Finance publishes a quarterly report on the aggregate outstanding bank loans for the local government sector.

Russia

The Ministry of Finance publishes data on the debt of regions and municipalities on a monthly basis, aggregated by region. The federal Treasury publishes monthly information on budget execution, including consolidated receipts and expenditure by subnational governments. Individual regional and municipal governments are required to publish financial information in compliance with national standards on an annual basis, at a minimum.

Sources: IMF (2014b; 2015a,b,c).

[1] The Maastricht Treaty, signed in 1992, organized the architecture of multilateral fiscal surveillance in the European Union. It requires the member states to observe budgetary discipline by complying with a deficit-to-GDP ratio and a debt-to-GDP ratio not exceeding reference values of 3 percent and 60 percent, respectively. The framework is currently under review, including the reference values for deficits and debts.

exposure under each risk category, with a breakdown into short- and long-term obligations to help separate potential outflows in the immediate future that might merit consideration in the budget.

Lack of timely and comprehensive information on subnational direct and contingent obligations often poses a challenge in measuring the size of the exposure. Central governments are often hampered by inadequate information on subnational finances. Blöchliger and Kim (2016) identify diverse subnational fiscal reporting practices among OECD countries and weaknesses relating to timeliness, periodicity, reliability, and comparability of subnational financial data. They also point to a relative lack of information on off-budget subnational funds and local public enterprises and autonomous bodies. Irwin and Moretti (2020) report that some of those weaknesses persist. According to a recent World Bank study of global debt transparency practices, only 18 percent of low-income countries publish debt statistics consistent with their legal framework and borrowing practices, and data on subnational debt are not available for 60 percent of these countries (Rivetti 2021). For an improved understanding of risks posed by subnational governments and their monitoring, countries should develop reporting systems that at a minimum span the entire general government sector.

Governments should aim to develop consolidated annual financial statements and high-frequency fiscal reports, both covering the entire general government sector (Box 4). Central agencies (typically the finance ministry) should be tasked with the consolidation and publication of in-year fiscal reports and statistics, as well as annual accounts and financial statements for the general government sector. For those countries

that lack this capacity, a good starting point will be to develop a database of subnational debt and contingent liabilities, if these are not otherwise readily and publicly available. The database should include, for each subnational government, its debt, other financial liabilities, contingent liabilities (including guaranteed and unguaranteed debt of their SOEs), revenues from and expenditure on off-budget operations, and size of the PPP program. The database should be updated at least every quarter. A web-based interface could facilitate data updates made directly by the subnational governments. Central finance ministries should make use of this reporting framework to actively monitor subnational fiscal performance.

B. Mitigating Risks

Governments can deploy a combination of direct and indirect controls and risk mitigation measures. **Direct controls** are designed to limit the size of the risk—for example, ceilings or restrictions on subnational borrowing; **indirect controls** are designed to influence the risk-taking behavior of subnational governments. The choice of measures is guided by a country's legal and administrative framework—in many cases, by the constitution—and the degree of financial autonomy available to the subnational level. Attention should also be paid to addressing institutional weaknesses, both at the subnational and central levels.

Controls on Subnational Borrowing[11]

Ahmad, Albino-War, and Singh (2005) argue for central government control over subnational borrowing, in view of the former's responsibility for macroeconomic stability, to safeguard local public finances and to prevent the spillover effects of excessive borrowing on other jurisdictions or future generations. Although the revenue-expenditure imbalance may be the factor causing subnational fiscal stress, it is primarily the availability of financing that leads to the accumulation of deficits (Liu and Waibel 2008). Accordingly, the strength of the regulatory framework for subnational borrowing is critical to fiscal sustainability.

Ter-Minnasian and Craig (1997) and Singh and Plekhanov (2005) delineate four main approaches to controlling subnational government borrowing, ranging from strict central controls and discretion to a regime of complete borrowing flexibility for subnational governments, constrained only by market-enforced discipline.

Administrative controls are imposed by many central governments to directly regulate subnational borrowing. A range of country practices exists and generally has the following features:

- **Borrowing only with central government approval**: Hungary,[12] Spain, and Thailand, for example, require prior central government approval of subnational borrowing on a case-by-case basis. In Peru, subnational governments may borrow only with the national government's agreement, and the financing must be channeled to capital projects. In Argentina, provinces must have explicit authorization by the federal government, which observes compliance of the provincial government with the debt rule enshrined in the fiscal responsibility law. In Kenya, long-term borrowing of subnational governments requires both the approval of and a guarantee from the national government, and thereafter the approval of the Parliament. Ethiopia's states may borrow short term, with the approval of the federal government, but loans must be repaid in the following fiscal year. Bangladesh requires the central approval of subnational annual budgets and financing plans. In India, a state that is in default on a loan taken from the central government may not borrow without the approval of the central government. In Türkiye, central government approval is required if a subnational government seeks to borrow more than a specified percentage of its annual revenues.
- **Borrowing only from the central government**: In Malaysia, states may borrow long term only from the central government; they may borrow short term from approved financial institutions with the approval of the central bank.[13] In the UK, the Public Works Loan Board, a lending facility managed by the UK Debt Management Office, centralizes all loans to local authorities.
- **No or restricted external borrowing**: Many countries (for example, India, Mexico, New Zealand,

[11]This section draws on Ahmad, Albino-War, and Singh (2005) and Singh and Plekhanov (2005).

[12]In Hungary, exceptions to this general rule include liquidity loans expiring within a year and reorganization loans and borrowing to cover cofinancing for international funds (for example, European Union).

[13]The Malaysian states of Sabah and Sarawak are exceptions to this rule. They enjoy greater constitutional autonomy that includes freedom to borrow in the market.

Table 1. Thresholds Used for Subnational Borrowing Regulation: Selected Examples

Country		Indicator	Threshold
Argentina		Debt service/net current revenue	15%
Brazil	States	Debt/net current revenue	200%
	Municipalities	Debt/net current revenue	120%
China		Debt/GDP	60%
		Debt/revenue	100%
Czech Republic		Debt/revenue	60%
		Debt service/revenue	30%
Colombia		Interest/operating balance	40%
		Debt/revenue	80%
France		Debt/annual operating balance	9–12 times
Greece		Debt/revenue	100%
		Debt service/revenue	20%
Iceland		Debt/revenue	150%
Poland		Deb/revenue	60%
		Debt service/revenue	15%
Türkiye	Metropolitan	Debt/Revenue	150%
	Other Municipalities	Debt/Revenue	100%

Source: Author's compilation.

Slovenia) prohibit external borrowing by subnational governments. In most of these, the external borrowing is channeled through the center by way of onlending.[14] Countries such as China prohibit their subnational governments from external borrowing without the approval of the central government.[15]

Administrative controls, which provide central governments with a direct way of controlling subnational borrowing, can be quite effective. Administrative controls, however, can create the perception of implicit central government support, even in the absence of an explicit sovereign guarantee, and can lead to moral hazard. As a result, administrative controls do not tend to combine well with a no-bailout policy. There are, arguably, clear advantages to direct central control over external borrowing for reasons of macroeconomic stability, cost efficiency, and foreign lenders' frequent desire for sovereign guarantees. The applicability of this approach depends on the constitutional and legal underpinnings, which may make it unavailable to some countries. Also, countries seeking to go down the fiscal decentralization path may see it conflicting with their decentralization goals.

Rules-based constraints are applied through the imposition of fiscal rules. Rules may be centrally imposed or self-imposed, specified in central or subnational legislation (as in Argentina, Brazil, Bulgaria, Colombia, Hungary, India, and the Philippines). Rules may constrain fiscal policy by placing restrictions on the overall budget deficit, the operating budget deficit, indicators of debt-servicing capacity, or the stock of debt or level of spending. Limits or thresholds for the rules-based indicators vary significantly from country to country (Table 1) and reflect the respective country's context and fiscal policy considerations. Some OECD countries, such as Denmark, Italy, Spain, and Türkiye, have imposed ceilings on expenditure or expenditure growth.

Constraints may also be imposed on the purpose of subnational borrowing. For example, many OECD countries (including Canada, Denmark, France, Germany, Luxembourg, New Zealand, UK) have, or have in the past, limited subnational borrowing to investment purposes. France, after its experience in the 2000s with "toxic loans," prohibited its local councils from such high-risk products. In the Philippines, in addition to placing restrictions on the ratio of debt service to revenue, the legal and regulatory framework requires that borrowing by local government units (LGUs) be used to finance long-term investments. LGUs may not incur operating deficits and must

[14]External subnational government borrowing often requires sovereign guarantees. Onlending, in some cases, may be more cost-efficient, in addition to protecting subnational governments from exchange rate fluctuations if the central government retains the currency risk.

[15]In China, the 2014 budget law, which went into effect in 2015, opened doors for borrowing by local governments, but it is subject to conditions and preapproval by the State Council. The law also mandated establishing an early warning system for local government debt (see Table 3). The implementing orders that followed reinforced the center's "no bailout" policy, established an accountability regime, and sought to improve transparency around local government indebtedness.

appropriate to their annual budget amounts sufficient to cover debt obligations.

Rules can also require procedural improvements, such as the establishment of a medium-term fiscal framework (as in Colombia) and an orderly and transparent budget process (as in China). Eyraud and others (2020) provide guidance on designing and calibrating subnational fiscal rules.

Regulatory regimes may also provide for penal or corrective actions in the event of breach of a rule. Financial penalties—such as fixed fines (in the Slovak Republic), reduced central government transfers (in the Czech Republic), or cuts in the share of taxes (in Austria)—in proportion to the size of the breach may be imposed. Countries such as Colombia and Spain require the development and adoption of a fiscal consolidation plan. Some countries may have tighter monitoring and enhanced reporting requirements. In extreme cases, there may be administrative sanctions on the subnational government (as in Spain) and sanctions on local officials (as in Türkiye), including on elected officials (as in Poland).

Rules-based constraints have the benefit of being transparent, as well as easy to understand and monitor, but they can bring about rigidity, if not appropriately designed; in addition, they may lead to unintended consequences if the governments decide to circumvent them. For example, a "golden rule" that allows borrowing for investment purposes only is prone to circumvention by reclassification of expenditure from recurrent to capital and borrowing through local government-owned enterprises. Similarly, recourse to off-budget borrowing can render the rules ineffective. Fiscal transparency and well-developed fiscal reporting at the subnational level are, therefore, critical for the successful implementation of a rules-based approach.

Cooperative arrangements, as practiced in some countries (for example, Austria and Denmark, and earlier in Australia[16]), involve a negotiated agreement between the central and subnational governments on the overall fiscal constraints for the entire general government sector. The goals and ceilings are determined through a consultative process between the central and local governments and are not prescribed by law. Compliance is generally voluntary. A shared commitment and responsiveness to fiscal responsibility and a culture of cooperation are, therefore, vital for the success of this approach. To be effective, such arrangements may need to be complemented by independent enforcement mechanisms. For these reasons, there are fewer examples of the successful adoption of this approach, particularly among developing economies.

Market discipline, or a no-controls approach—as in Canada, South Africa,[17] and the US—relies on market mechanisms and is typically complemented by a no-bailout policy by the central government. It is implicit that lenders will be expected to bear the entire risk of a subnational default. In some cases, the subnational government may decide to adopt a fiscal rule as an additional measure of fiscal prudence (for example, Australia, Canada, Switzerland, US) to enhance its credit standing.

The approach presumes a well-functioning financial market for subnational borrowing, which may not be the case in many countries, reducing its appeal to developing economies. Sola and Palomba (2015) find that the disciplining role of markets varies across countries; transfer dependency tends to negate the effect of larger budget deficits and debt. High transfer dependency could give rise to the perception of an implicit sovereign guarantee and may lead markets to put less weight on subnational governments' fiscal fundamentals when pricing their debt. Beck and others (2017) similarly conclude that subnational debt and deficit levels are important drivers of subsovereign spreads, but their weight diminishes when the institutional framework allows for bailouts by the federal government.

Table 2 summarizes these four approaches and their respective advantages and preconditions.

There is little empirical evidence of the superiority of any of these approaches or of their suitability under a given set of conditions. Ter-Minassian and Craig (1997) consider a rules-based approach more transparent and objective, compared with administrative controls. Ahmad, Albino-War, and Singh (2005) find that unitary jurisdictions tend to be more directive, while federal and federated countries lean toward cooperative and self-imposed restrictions. Singh and Plekhanov

[16]Australia no longer engages in active coordination of fiscal positions. The central government prefers using its control over expenditure to influence the behavior of subnational governments, as necessary, and horizontal equalization mechanisms to some extent reward and reinforce good fiscal management by subnational governments.

[17]The South African Constitution requires subnational governments to adopt a cooperative approach to determining limits on subnational borrowing, but in practice the subnational governments enjoy considerable freedom.

Table 2. Approaches to Controlling Subnational Borrowing

	Direct Controls	Rules-Based Constraints	Cooperation	Market Discipline
Approach	Prior central government approval for borrowing and/or limits	Fiscal rules and/or limits set through legislation	Limits set through negotiated agreement	No direct control on borrowing
Advantages	High degree of central control	Transparency; avoids bargaining	Promotes dialogue; enhances responsibility of subnational policymakers	Emphasizes self-control; external monitoring
Preconditions	Constitutional/ legal underpinning; ability of central government to effectively monitor and implement controls	Credible rules; transparency; monitoring and enforcement mechanisms	Culture of fiscal discipline; constitutional underpinnings; cooperative decision-making institutions	Reliable information; developed capital markets; transparency; track record of no bailouts

Source: Adapted from IMF (2009).

(2005) conclude that the success or failure of the chosen approach depends on the institutional characteristics, the degree of vertical imbalances, the existence of a bailout precedent, and the quality of fiscal reporting. They suggest that centrally imposed rules would be the preferred option for countries with large vertical fiscal imbalances. Administrative controls may provide even tighter control over subnational fiscal outcomes, but they tend to undermine fiscal discipline in the long run. Martinez-Vazquez and Civelek (2019) find a "definite predilection" among non-Asian emerging market economies for centrally imposed rules-based constraints.

In summary, the approaches themselves are, to a large extent, influenced by the political-legal setting in the respective countries. In practice, examples of each one of the four approaches discussed can be found in both unitary and federated states. Some countries use a selective combination of these approaches. In addition, in countries such as Colombia (Box 5) and Mexico, the regulatory framework imposes restrictions on lenders.

A Holistic Fiscal Management Framework

An integrated fiscal management framework that takes a holistic view of public finances is necessary to address the vulnerabilities in its subcomponents. The impact of fiscal policy in terms of sustainability and macroeconomic stability should be considered at the general government level. General government should be the unit for fiscal planning, objective setting, and reporting. Fiscal rules should harmoniously apply to the entire general government sector. For federations, where this may be administratively challenging, strong intergovernmental coordination mechanisms should be developed to achieve this objective. Fiscal reporting should, at a minimum, cover general government. A wider coverage of reporting brings to light any attempts to circumvent controls through off-budget borrowing and through SOEs.

Adequate Resourcing of Subnational Spending Mandate

Inadequate resourcing of subnational spending mandates is one of the primary causes of distressed subnational finances and must be addressed through a well-designed fiscal decentralization framework. There should be clarity in the legal framework on the spending assignments at each level of government (IMF 2009). Clarity in spending assignments avoids duplication of effort, prevents wasteful expenditure, and facilitates the establishment of accountability for resourcing and delivery of services. A basic principle is that the expenditure responsibilities assigned to subnational governments should be exclusive, and assignments based on efficiency considerations. Countries should aim to achieve an optimal vertical fiscal gap and vertical fiscal balance by appropriately designing the mix of subnational revenue authority, central transfers, and subnational borrowing (Boadway and Eyraud 2018).[18] The devolution of expenditure and revenue authorities should proceed in a harmonious manner, together with the establishment of a transparent and predictable system of central transfers to bridge any resource imbalance. The extent and pace of devolution should also consider the subnational PFM capacity and

[18]"Vertical fiscal gap" refers to the financing structure of the decentralized system—specifically the shortfall between a subnational government's own revenues and spending. Vertical gaps, if too large or too small, can lead to poor-quality service delivery or subnational fiscal profligacy. "Vertical fiscal balance" refers to the adequacy of central transfers, given the respective spending responsibilities of the central and subnational governments and their capacities to raise revenues efficiently.

Box 5. Framework for Regulating Subnational Borrowing in Colombia

Following problems of overborrowing and excessive expenditure growth during the 1990s, Colombia established a framework to ensure subnational fiscal sustainability. Law 358 of 1997 established the famous "traffic light" system to regulate subnational borrowing. Subnational governments were assigned a rating based on their ratios of debt-to-payment capacity and placed in one of the three baskets of red, green, or yellow. Subnational governments rated in the red basket were prohibited from borrowing; those in the green zone were permitted to borrow up to limits based on debt sustainability calculations; and intermediate cases (the yellow zone) required prior central government permission to borrow. Law 795 of 2003 (the Fiscal Responsibility Law, FRL) eliminated the yellow zone. In addition, departments and large municipalities are required to obtain a satisfactory credit rating from rating agencies before they borrow. Subnational governments were brought within the ambit of the fiscal responsibility law and had to adhere to the requirements of medium-term financial planning and budget management. Other features of the legal framework include the following: quantitative limits for operating expenses (Law 617 of 2000); rules for dealing with financial insolvency (Law 550 of 1999); provisions relating to financial planning, budgeting, and accountability (Law 819 of 2003); and prohibition against the national government guarantee for subnational government domestic debt.

The FRL imposes strict sanctions on subnational governments for their noncompliance with national legislation. If subnational governments breach the limits imposed by the FRL, they are prohibited from borrowing. They also must adopt an adjustment plan to regain viability over the following two years. In extreme cases, the national government may take over the administration of the finances of a subnational government or step in to support services in areas such as education and health (by directing resources earmarked for transfer to subnational governments). The law also prohibits lending by the national government to a subnational government or guaranteeing the debt of a subnational government (1) if the entity is in violation of Law 617 or Law 358, or (2) if it has debt service arrears to the government. In cases of noncompliance, the credit contract is deemed invalid, and borrowed funds must be restituted promptly (Article 21 of the FRL).

Source: Liu and Webb (2011).

be contingent on the acquisition of fundamental PFM capabilities (see Annex 2 for core PFM capacity).

Central Government Oversight of Subnational Finances

Monitoring of subnational finances is one of the most effective ways to contain financial distress at the local level (Pew Charitable Trusts 2013).[19] Early detection of stress facilitates timely and decisive actions to prevent crises before they arise.

Countries seeking to build up institutional capacity could invest in establishing an intergovernmental relations unit in the central Ministry of Finance. The unit could be tasked with the overall responsibility of fiscal coordination with subnational governments. Key functions of such a unit would be the following: (1) manage the repository of data on subnational finances; (2) track early warning indicators; (3) prepare and publish reports on the fiscal performance of the consolidated subnational sector; (4) prepare periodic (at least quarterly) reports for the finance ministry management on the analysis of fiscal risks from subnational governments; (5) provide input for the annual fiscal risk statement; and potentially (6) design and oversee the implementation of subnational bailout programs.

In Kenya, for example, the Public Finance Management Act of 2012 mandates that the national Treasury strengthen financial and fiscal relations between the national government and county governments and support county governments in developing their capacity for efficient, effective, and transparent financial management. As a focal point in fulfilling the national government's mandate, the Intergovernmental Fiscal Relations Department in the national Treasury is tasked with coordination and oversight of county governments in all financial matters. In South Africa, the Inter-governmental Relations Framework Act of 2005 mandates setting up intergovernmental coordination

[19]According to Pew Charitable Trusts 2013 (page 1) the state of North Carolina "managed to escape serious local government budget problems in part because of its strong centralized system of monitoring and oversight."

Box 6. Subnational PFM Architecture in New Zealand

New Zealand has two levels of subnational administration—districts (rural and urban areas) provide infrastructure, recreation, cultural and sporting activities, and local planning; regional councils deal mainly with environmental issues (such as water management and air quality). In some areas, these are combined into one entity (for example, Auckland). The size of the subnational sector is relatively small at about 4 percent of GDP. The sector is regulated by the Local Government Act, which delegates significant own-source revenue authority, in addition to providing for central subventions (mainly for infrastructure). Local governments enjoy significant operational and financial autonomy. The main features of the local PFM architecture are as follows:

- Ten-year plans and budgets must be prepared and made available to the public for comment before their adoption; in addition, the auditor general should review them for reasonableness of assumptions.
- The annual operating budget—prepared on an accrual basis—should be balanced.
- Annual reports—including audited annual financial statements—comparing actual and intended performance must be produced and adopted within four months of the end of the financial year, and they should be made public within one month of adoption.
- Local governments may borrow in domestic markets with credit rating or through the central agency for local government borrowing. The central government imposes no administrative controls—beyond the prudential limits set in central government regulations—and the law prohibits central government guarantees of subnational debt.
- The Office of the Auditor General is the main oversight body. It comments each year on any local government that does not appear to be operating in a prudent financial manner. The central government's Office of Local Government provides limited oversight.

Source: Government of New Zealand (2002).

mechanisms across the three tiers of government for coordinated service delivery, poverty alleviation, and development. The Intergovernmental Relations Division in the national Treasury coordinates fiscal relations between the national, provincial, and municipal levels and promotes sound subnational financial planning, reporting, and management.[20]

Where needed, such a unit could serve as the interface for liaison with subnational governments on all fiscal management issues, and it could potentially administer the subnational transfer and revenue sharing arrangements. In some countries, oversight of subnational governments is allocated to entities other than the finance ministry (for example, the Ministry of the Interior or Local Government). In such cases, a protocol should be in place for the oversight unit to provide information to the finance ministry unit responsible for fiscal risk management.

Oversight often requires close interdepartmental coordination and exchange of information. In the Philippines, for example, to help prevent systemic defaults, government financial institutions, the central bank, and the Local Government Unit Guarantee Corporation submit data on the local government debt to the Bureau of Local Government Finance (BLGF) under the Department of Finance. Local governments are required to submit quarterly financial statements to the BLGF. The BLGF also works closely with the Municipal Development Fund Office in tracking local government borrowing and debt service capacity. The central bank monitors loans by the government financial institutions to local governments and the purchases of local government bonds.

Subnational PFM Capacity

Building sound PFM systems and practices at the subnational level should be an important element in the risk mitigation strategy, regardless of the approach to the governance of subnational borrowing. Institutional weaknesses, by themselves, may not be a major source of macrocritical fiscal risks, but they may render risk mitigation and management ineffective if risks materialize. The elements of a sound subnational PFM system would not be substantially different from the one established at the central government level (see, for example, Box 6.). Annex 2 presents the essential ingredients of such a system.

[20]Both Kenya and South Africa follow a cooperative model of government that treats all levels of government as equal.

C. Provisioning for and Accommodating Residual Risks

Fiscal risks that remain unmitigated should be appropriately provisioned for in the budget to ensure the availability of funds to meet contingencies arising from their crystallization. An up-front budget provision helps avoid surprises later in the year if risks materialize. The size of the potential contingency needs to be estimated carefully, as both underestimation and overestimation would lead to suboptimal outcomes. A combination of two general approaches can be deployed:

- **A top-down analysis** based on historical data on support to subnational governments, particularly identifying any unplanned support that may have been provided in recent years—The horizon of such an analysis should consider at a minimum the preceding five to seven years. The main point of examination in such an analysis would be the size of the support provided and the beneficiary subnational government(s) and, where feasible, a further detailed analysis of any potential calls from those subnational governments. The approach suffers from limitations, because the past is not always a good predictor of the future.
- **A bottom-up approach** involving a risk assessment of subnational governments and identification of risks very likely to crystallize in the coming year (or over the medium term), as well as estimation of their respective sizes—This approach dovetails nicely with, and is a natural extension of, the risk assessment framework discussed earlier in this note. It entails using the results of the risk assessment—identifying financially distressed or potentially distressed subnational governments and their likely support requirements—to inform decisions on the necessary budget provisions.

In making budget provisions, care should be exercised not to explicitly identify the subnational governments that will likely call on central government resources.[21] Assigning probabilities, or any semblance of probability, to individual contingent liabilities in a published document is likely to be counterproductive, because it could give rise to moral hazard—from expectations of a bailout. Budget provisions can be under an omnibus contingency head to avoid any claims on those funds.

Together with other sources of fiscal risks, any residual risks from subnational governments should be assessed for accommodation while setting longer-term debt targets. A cushion in debt targets allows for absorption of the impact of a fiscal risk realization without the threat of debt unsustainability.

D. Disclosing Fiscal Risks from Subnational Governments

Transparency around fiscal risks promotes awareness of such risks, which in turn shapes policy debate and decision-making. Box 7 summarizes the relevant transparency requirements under the IMF's Fiscal Transparency Code. Fiscal risks from subnational governments, together with other fiscal risks, should be disclosed routinely. The disclosure should ideally be in a fiscal risk statement that accompanies or precedes the annual budget documents. Countries that do not prepare a fiscal risk statement could, as a first step, include an analysis of fiscal risks, including those from subnational governments, in their fiscal strategy or budget documents. The disclosure should provide insights into the following:

- Aggregate fiscal performance of the subnational governments, as demonstrated by key performance indicators (for example, deficits/surplus, net assets/equity, and gross firm and contingent liabilities) should be disclosed.
- Financial analysis for each subnational government that focuses on identifying those in financial distress or potential distress should be included. Such subnational governments should be analyzed in greater detail; the remainder may be aggregated. The analysis should examine the revenue sufficiency, liquidity, leverage, and solvency of each subnational government (see Annex 1).
- Relations with the central government, in terms of central transfers; debt owed; arrears of debt, if any; and outstanding central guarantees should be included.
- The main risks that have been identified, as well as any mitigating measures, should be provided, along with a discussion of the central oversight regime and regulations to promote fiscally sustainable policies.

The financial statements of the central government should enable the easy identification of financial transactions—revenue sharing, central transfers, loans, and

[21]Any bailout programs already agreed/approved should be explicitly provided for in the budget as a distinct line item for transparency and monitoring purposes.

Box 7. Reporting on Subnational Governments under the Fiscal Transparency Code

The IMF's Fiscal Transparency Code includes an indicator to assess the degree of fiscal coordination with subnational governments. Following a graduated scale, the indicator assesses transparency at three levels of practice.

- For a "Basic" rating, the Code requires annual publication of reports on the financial condition and performance of subnational governments.
- For a "Good" rating, the Code requires that limits on subnational liabilities or borrowing be in place, in addition to the "Basic" requirements.
- For an "Advanced" rating, the Code's benchmark requires the quarterly publication of reports on the financial performance and conditions of local governments.

Source: IMF (2014a).

guarantees—with each subnational government. Financial statements should also include a comment on the risks to the stock of outstanding loans and guarantees.

IV. DEALING WITH MATERIALIZED RISKS: AN INSOLVENCY FRAMEWORK

An insolvency framework, as a complement to ex ante regulations, moderates lenders' risk-taking behavior and promotes market discipline (Canuto and Liu 2013). Ex post insolvency mechanisms enhance the predictability of the consequences of insolvency in terms of likely burden sharing, and they provide a pathway for restoring the fiscal sustainability of the insolvent municipal government. Insolvency procedures can help limit moral hazard and reinforce the credibility of a no-bailout policy (Blöchliger and Kim 2016).

Liu and Waibel (2009) conducted a cross-sectional analysis of the municipality insolvency frameworks in countries—including Brazil, Hungary, South Africa, and the US—and found considerable variations in the framework design and approaches adopted by these countries. They attribute these differences to the political, economic, legal, and historical context of the reforms that led to the development of the respective frameworks. Notwithstanding these differences, some common principles can be discerned. Blöchliger and Kim (2016) discuss the subnational insolvency practices in OECD countries.

The main objective of an insolvency framework is to restore the financial health of a distressed subnational government (Liu and Waibel 2009). Liquidation is neither an objective nor feasible in most jurisdictions for two reasons. First, essential public services must be maintained, and most of the assets are likely to be unavailable for liquidation. Second, legal remedies available to creditors are often limited due to sovereignty considerations and political ownership of subnational governments. Restoration of financial health of a distressed subnational government is, therefore, in the best interest of all concerned—the subnational government itself, its creditors, and above all, its residents—and it must be based on the principle of an equitable sharing of the burden.

Accordingly, the design of an insolvency framework must address two critical requirements: (1) a debt restructuring to provide immediate relief to a distressed subnational government, and (2) a timebound fiscal adjustment program to put it back on a fiscally sustainable path. The need to continue providing essential public services during the adjustment phase should be factored in. A key question is what is a good approach to follow. There are two main models—a judicial approach and an administrative approach—and a range of hybrid possibilities (Canuto and Liu 2013). A judicial approach—where courts establish insolvency and guide the restructuring process—has the advantage of keeping the restructuring process free from any political influences. An administrative approach—where a higher-level government directs the restructuring process, often also taking over the financial management responsibilities—may be more effective in designing and implementing a fiscal adjustment program. Importantly, the chosen approach must fit within the country's political-legal structure. Herold (2018) provides guidance on the design choices of a subnational government insolvency framework.

Regardless of the chosen approach, an insolvency framework should aim to do the following:

- Define insolvency unambiguously and establish the criteria for triggering insolvency procedures; that is,

when a subnational government can be considered insolvent and the procedural steps required to activate the insolvency framework.
- Clarify who can initiate the insolvency proceedings—the subnational government, creditor(s), or any other stakeholder—including a mechanism to identify and dismiss applications not considered in good faith.
- Establish the principles and procedures for recognizing creditors and determining the superiority of claims, including, for example, those of the employees.
- Identify essential services and distinguish assets required for continued service delivery from those that can be liquidated.
- Prescribe the way debt restructuring negotiations should proceed, including a time frame for reaching an agreement and the recourse available—including to judicial proceedings—in case an agreement cannot be reached; and establish the transparency requirements of the process.
- Specify the authority of the higher-level government(s) to intervene, the scope of their intervention—which may range from issuing directives to supervising the financial affairs of the subnational government and, in extreme cases, to taking them over—and the manner in which such an intervention should be carried out.
- Establish possible elements of a fiscal adjustment plan, including any monitoring and surveillance regime that would accompany such a plan, and the reporting and transparency requirements.
- Provide protection against fresh claims while in insolvency.
- Create the required institutional structures for carrying out insolvency proceedings.

To finance the restructuring of a distressed subnational government, some countries have established dedicated funds with capital contributions from subnational governments, as well as from the central government. Such resource pooling can allow the sharing of pain and thereby incentivize subnational governments to better manage their finances. In Portugal, for example, since the creation of the Financial Support Fund in 2014, the municipalities have reportedly reduced their debt levels (IMF 2019). Funds can be structured to function as a dedicated mechanism for designing, negotiating, implementing, and monitoring a fiscal adjustment program for distressed subnational governments, in addition to assisting them with debt restructuring. The existence of such a fund as the sole source of support can also lend credibility to a no-bailout policy by the central government.

V. CONCLUSIONS

Subnational governments can pose risks for the central government finances in a variety of ways, and the spillover of such risks to central governments is not uncommon. A framework for managing risks from subnational governments can be built on four pillars:

Central oversight of subnational finances. Stronger central oversight can help identify risks and contingent liabilities before they crystallize. A systematic analysis of subnational finances can provide early warning about stressed and potentially stressed entities. Governments could invest in developing a standardized indicator-based system of analyzing subnational financial performance and position. The analysis will be only as good and reliable as the underlying data quality, and securing such data is often a major challenge. A dedicated unit at the central Ministry of Finance should be tasked with risk analysis and monitoring on an ongoing basis, providing input for the fiscal risk statement, and contributing to the overall risk management strategy.

Regulatory framework for subnational financial management. Although such frameworks vary across countries, depending on the political-legal context and consistent with the country's constitution, there are some commonalities, notably: (1) requirements that borrowing be only for capital investment; (2) limits on key fiscal aggregates—deficit and debt parameters—including guarantees; (3) procedural requirements for an orderly and transparent budget process and adherence to accounting and auditing standards; and (4) improved fiscal reporting. Regardless of the approach, national authorities must monitor and build safeguards against attempts by subnational governments to circumvent controls and rules.

General government policy focus. The framework for subnational financial management should be developed as part of the larger fiscal management framework for the country and operated coherently with a general government focus, going beyond the budgetary central government. Intergovernmental fiscal relations should be built on sound fiscal decentralization principles that are premised on the alignment of spending responsibilities with available resources.

Subnational PFM capacity. Augmenting institutional capacity at the subnational level is important to address institutional weaknesses that can exacerbate risks but, more important, to address weaknesses that can render the mitigation measures ineffective. Fiscal reporting stands out as the most critical element for establishing accountability and bringing transparency to subnational finances; moreover, such reporting can assist the central government and other stakeholders, including the markets, in exercising their oversight. In addition to standardized reporting by individual subnational governments, there should be consolidated reporting for the subnational government sector and the general government. Fostering communities of subnational finance ministries can facilitate coordination, reinforce good practice, and build capacity across jurisdictions.

Annex 1. Suggested Financial Soundness Analysis Framework

A ratio analysis supplements financial performance measures in assessing the overall financial standing of an entity. Typically, financial standing can be measured along five dimensions—fiscal capacity and flexibility, operating performance, liquidity and debt management, debt capacity, and asset management. A range of indicators is available to measure performance on each of the five dimensions. It is important to keep the number of indicators manageable and to focus on those indicators that identify key areas of risk for the entity.

Annex Table 1.1. Suggested Ratios for Subnational Government Financial Analysis

Analytical Dimension	Ratio	Remarks
• **Fiscal capacity and flexibility**	Revenue per capita	Measures the revenue base of a government relative to its population; useful for comparison with other similar jurisdictions and changes over time.
	Expenditure per capita	Measures expenditure relative to population; useful for comparison with other similar jurisdictions and changes over time.
	Own-source revenues/total revenues	Measures a government's degree of reliance on external funding sources.
	Discretionary expenses/total expenses	Measures a government's capacity to contain its expenditure. Discretionary expenditure can be defined as nonessential expenditure; i.e., total expenditure minus essential expenditure on wages, interest, mandatory services, and important ongoing capital projects.
• **Operating performance**	Operating balance/revenues	Measures a government's operating performance in terms of its achievement in containing operating expenses within operating revenues.
• **Liquidity and debt management**	Free cash and liquid assets/current liabilities	Measures adequacy of cash resources for meeting short-term obligations.
	Short-term debt/total debt	Measures the debt structure; useful in assessing whether the entity is exposed to significant refinancing risk.
• **Debt capacity**	Debt/free own-source revenues	Measures debt burden of a government; an alternative is debt-to-subnational GDP (debt-to-GDP for national governments), if reliable estimates of subnational GDP are available.
	Operating balance before interest and depreciation/debt service	Measures debt service cover in terms of the adequacy of operating surplus to meet the annual debt service obligations. Using debt service in the current or budget year is most useful when the underlying debt is based on level repayment. If, however, debt terms include features such as bullet payments, grace periods of repayment of principal, or low initial interest rates that reset to a market rate at some future point, then it may be more useful to use the "maximum future debt service."
• **Asset Management**	Maintenance expenditure/stock of infrastructure assets	Compares maintenance expenditure to the stock of infrastructure assets. If there are set norms for maintenance, actual maintenance expenses can be compared with the norm to measure the maintenance gap.
	Asset renewals/depreciation	Measures whether existing assets are being renewed at the same rate at which they are being consumed. Considers major repairs/refurbishments to existing assets for restoring their capacity. A ratio of less than 1 would indicate a depleting stock of existing assets.
	Capital expenditure/depreciation	Measures the rate at which a government is expanding its asset base. Considers capital expenditure on both new assets and replacement/renewal of existing assets.

Annex 2. Essential Elements of a Sound Subnational PFM System

A robust budget formulation process capable of delivering credible estimates of annual resource requirements for achieving expected policy outcomes. A well-developed budget process allows resource allocation to strategic priorities in a multiyear framework within the overall fiscal constraints. It enhances the predictability of resource availability. The budget should be comprehensive, covering all public spending, and the process should be guided by transparent and consistent objectives for fiscal aggregates, based on realistic macroeconomic assumptions. A common constraint for subnational budgeting systems is the predictability (or lack of it) of central transfers. Central governments should ensure the timely availability of this information to subnational levels. Coordinating budget calendars can facilitate this goal.

A public investment management framework that integrates investment planning with budget formulation, coordinates with the central and other subnational governments, and ensures the delivery of quality investment outcomes.

A fiscal risk management function that is capable of identifying, monitoring, and reporting on major fiscal risks and suggesting appropriate risk mitigation measures, as needed. This would include building capacity for the effective oversight of subnational state-owned enterprises, and extrabudgetary entities.

An efficient budget execution process that ensures timely disbursements and efficient revenue collection, regulated by a system of internal controls to ensure compliance with the legal requirements and to guard against the risk of misappropriation. A system of cash management should be in place to support budget execution by ensuring liquidity required for payments. Consolidation of cash into a single bank account and centralization of disbursements should be sought to improve budget execution efficiency.

A financial reporting system capable of producing quality information on financial performance and position in a timely manner. Having a system with these capabilities is particularly critical for monitoring by national authorities, as well as by external economic agents. Reports should provide comprehensive coverage of revenues, expenses, and all assets and liabilities—accrued and contingent—in accordance with internationally accepted accounting principles and reporting standards. The reporting system must be capable of producing reliable in-year (monthly, quarterly) and year-end information on subnational finances. Reporting and auditing requirements should be established in legislation, with a specification of the main elements of reporting, the standards to be followed, the timelines for submission, and a clear mandate to external auditors. The legislation could also require in-year reporting—monthly budget execution reports and more comprehensive quarterly fiscal reports, including reports on debt and other financial liabilities.

A financial management information system—appropriate for the size and complexity of operations—should be considered for more efficient transaction processing, automating of selected controls, and ease of reporting consistent with the applicable standards.

An independent external audit ensures accountability for the use of resources. Audit reports should be routinely submitted to the legislature and made public. The audit could perform a useful role in monitoring and commenting on subnational financial performance and highlighting vulnerabilities.

A comprehensive legal framework, encompassing the entire budget management cycle, should be established to guide financial management and ensure its orderly conduct. The framework, preferably enshrined in legislation—national[22] or local—should clarify the respective roles and responsibilities, define the main features of the budget management process, specify the reporting requirements, and establish accountability. Sanctions for financial misconduct and breach of compliance should be built in.

[22]In India, for example, the overarching elements of financial management in the states are enshrined in the constitution. In Malaysia, the relevant provisions of the Financial Procedures Act are applicable to both the central government and the states.

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