

# Promoting Fiscal Discipline

Manmohan S. Kumar  
Teresa Ter-Minassian  
Editors



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Production: IMF Multimedia Services Division  
Cover art: Lael Henderson/Images.com/Corbis  
Cover design: Will Hoffman  
Figures: Bob Lunsford  
Typesetting: Alicia Etchebarne-Bourdin

### Cataloging-in-Publication Data

Promoting fiscal discipline/Manmohan S. Kumar, Teresa Ter-Minassian, editors—  
[Washington, D.C.]: International Monetary Fund, 2007.

p. cm.

Includes bibliographical references.

ISBN 978-1-58906-609-0

1. Fiscal policy. 2. Finance, public. 3. Economic policy. I. Kumar, Manmohan S.  
II. Ter-Minassian, Teresa. III. International Monetary Fund.  
HJ192.5.P766 2007

Price: \$25.00

Please send orders to:

International Monetary Fund, Publication Services  
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Telephone: (202) 623-7430      Telefax: (202) 623-7201  
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The following conventions are used in this publication:

- In tables, a blank cell indicates “not applicable,” ellipsis points (. . .) indicate “not available,” and 0 or 0.0 indicates “zero” or “negligible.” Minor discrepancies between sums of constituent figures and totals are due to rounding.
- An en dash (–) between years or months (for example, 2005–06 or January–June) indicates the years or months covered, including the beginning and ending years or months; a slash or virgule (/) between years or months (for example, 2005/06) indicates a fiscal or financial year, as does the abbreviation FY (for example, FY2006).
- “Billion” means a thousand million; “trillion” means a thousand billion.
- “Basis points” refer to hundredths of 1 percentage point (for example, 25 basis points are equivalent to  $\frac{1}{4}$  of 1 percentage point).

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

# Preface

In recent years, there has been a growing recognition of the budgetary challenges looming ahead for many industrial, emerging market, and developing economies. These arise from a variety of sources: for instance, demographic developments entailing the aging of populations will have profound implications for pensions and health care spending as well as economic growth; the ongoing process of globalization—while bringing significant benefits—can create potentially large uncertainties for public revenues by affecting the taxing power of national governments; and global climate change is likely to adversely affect economic performance and the public finances of many countries. These challenges require the pursuit of prudent fiscal policies to create budgetary resources to respond to them. Prudent policies are also an important prerequisite for macroeconomic as well as financial stability, and for providing flexibility to respond to adverse shocks. Moreover, the need for fiscal discipline is underlined by the increasing role played by financial markets, and by the open capital accounts since benefits from a free flow of capital are contingent on sound policies.

There is no doubt that the budgetary positions of many industrial and emerging market countries have improved over the past two–three years: many countries have taken steps to strengthen their underlying fiscal positions, but, more important, stronger economic activity has boosted tax revenues and reduced spending on unemployment benefits. Despite this improvement, long-term fiscal sustainability has yet to be secured in many countries. Moreover, it will remain elusive if an expectation of continued benign economic conditions leads to complacency. The current good times should be used to provide an opportunity to direct the focus of fiscal policy to the challenges that lie ahead, but it is precisely during good times that there is generally the most resistance to further implementing measures to put public finances on a sustainable footing for the long term.

There are a variety of political economy and institutional factors that can give rise to fiscal indiscipline, and this book explores measures that can help deal with them. Fiscal indiscipline manifests itself in a number of different ways: it is reflected in unrealistic macroeconomic assumptions, most commonly for economic growth, that underlie budgetary policy. The unduly optimistic projections regarding revenues that this gives rise to are often used to respond to unrealistic political demands on the budget. The dif-

difficulties in maintaining fiscal discipline arise in part because of inadequate transparency, but the main underlying cause stems from the injudicious use of discretion. In particular, in the context of competing electoral constituencies and political and distributive conflicts, the availability and exercise of discretion, interacting with budgetary institutions, leads to the use of available resources without regard to the overall budgetary situation. The result is a tendency to spend revenue windfalls and incur excessive deficits. Such fiscal expansion in good times leads to procyclicality in the short run. But, in addition, given that the windfalls are not used to improve the underlying position, and that the fiscal position worsens during bad times, such policy often leads to a rising trend in public debt in the long run. The adverse effects of injudicious discretionary spending are particularly notable during economic upturns when there are revenue windfalls and access to market finance is plentiful.

This book addresses some of the key issues involved in promoting fiscal discipline, with a particular emphasis on output stabilization and the cyclicity of fiscal policy, and on ways to avoid procyclicality in good times. It examines the role and determinants of fiscal discipline, the extent, consequences, and causes of procyclicality, and “mechanisms” that could help reduce procyclicality and strengthen fiscal discipline—targeting cyclically adjusted fiscal balances, the introduction of fiscal responsibility laws, and the creation of nonpartisan fiscal agencies.

The chapters in this book have benefited significantly from the advice and expertise of many of our colleagues in the Fiscal Affairs Department. We are particularly grateful to Richard Hemming for his comments and suggestions on earlier drafts of the chapters. In addition, helpful comments were received from Mark De Broeck, Dennis Botman, Jiri Jonas, and Graciela Kaminsky. Giovanni Ganelli and Emanuele Baldacci provided valuable inputs to the earlier versions of Chapters 3 and 5, respectively. We are also grateful to Annette Kyobe and Jamal Ismayilov for excellent research assistance, and Veronique Catany, Claudia Nobre, and Laura Cabello for secretarial and administrative assistance. Esha Ray of the External Relations Department ably edited the manuscript and coordinated production. Views and errors are entirely the responsibility of the authors, and should not be attributed to the International Monetary Fund, its Executive Board, or its management.

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# Abbreviations

BSL	Budgetary Stability Law
CAB	Cyclically adjusted fiscal balance
CBO	Congressional Budget Office
CPB	Central Planning Bureau
EMU	Economic and Monetary Union
EU	European Union
FC	Fiscal council
FMRA	Fiscal Management Responsibility Act
FPB	Federal Planning Bureau
FRA	Fiscal Responsibility Act
FRBMA	Fiscal Responsibility and Budget Management Act
FRDD	Fiscal Responsibility and Debt Delimitation Act
FRL	Fiscal responsibility law
GAAP	Generally Accepted Accounting Practice
GDP	Gross domestic product
IFA	Independent fiscal authority
IFI	International financial institution
IMF	International Monetary Fund
NFPS	Nonfinancial public sector
OECD	Organization for Economic Cooperation and Development
PAYGO	Pay-as-you-go
PFM	Public financial management
SGP	Stability and Growth Pact

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# 1

## Fiscal Discipline: Key Issues and Overview

MANMOHAN S. KUMAR AND TERESA TER-MINASSIAN

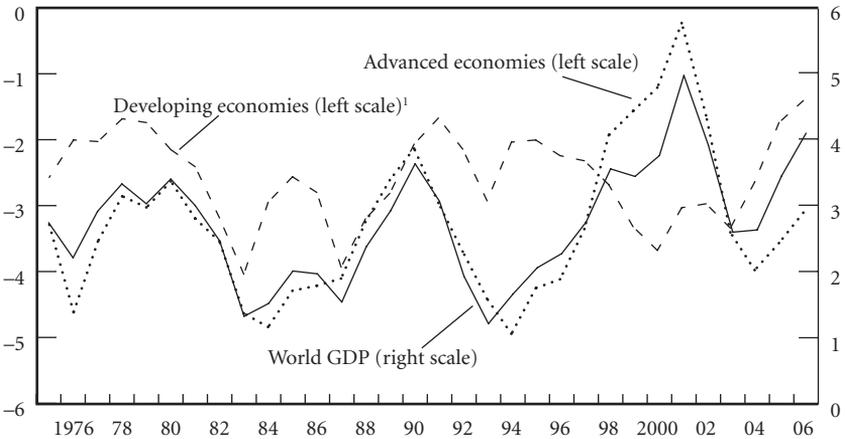
Since the early 1970s, fiscal deficits and rising public debt have been ubiquitous features of government budgetary positions. Indeed, in aggregate, fiscal balances of both industrial and developing economies have been negative in *each* of the past 30 years, with an average deficit of about 3 percent of GDP a year for both groups (Figure 1.1). In recent years, an improvement in the overall fiscal positions in the industrial economies during the economic and financial market boom in the 1990s was quickly reversed thereafter. In many developing economies, although there has been a welcome turnaround in budgetary positions over the last 4 years, this reflects in large part cyclical factors, higher commodity prices, and a benign global financial market environment.<sup>1</sup>

Fiscal deficits often indicate a variety of adverse domestic and external shocks that affect budgets directly as well as through their impact on the economic environment. In addition to the pace of economic activity, these can include terms of trade shocks, financial market turbulence, as well as political instability and natural disasters. However, the persistence of deficits, as well as the inexorable rise in public sector indebtedness, over the past three decades in so many countries suggests that some fundamental factors are likely to have played a key role. Both theoretical and empirical literature suggest that preeminent among these factors are inadequate fiscal discipline and weak fiscal management.

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<sup>1</sup>See, for instance, IMF (2005) and Hauner and Kumar (2005).

**Figure 1.1. General Government Overall Balance**  
(In percent of GDP)



Source: IMF staff calculations; averages weighted with GDP at purchasing power parity.

<sup>1</sup>Excluding large oil exporters.

Fiscal discipline requires that governments maintain fiscal positions that are consistent with macroeconomic stability and sustained economic growth. To this end, it warrants avoiding excessive borrowing and debt accumulation. At the same time, policy needs to be judicious in pursuing resource allocation and distributional objectives, and in smoothing output fluctuations. Moreover, it is prudent to create budgetary cushions to allow for the possibility of a response to both adverse shocks and to deal with predictable fiscal pressures, such as those arising from population aging.

The record of fiscal management in seeking to meet these different objectives has been mixed. Reflecting deficit and debt sustainability problems, weak fiscal discipline has often compromised stability and growth, and in the worst cases has led to economic and financial crises. Moreover, while output stabilization would warrant countercyclical fiscal policy, governments tend to favor procyclical discretionary spending increases and tax cuts in “good times,” when the economy is doing well. In “bad times,” although countercyclical fiscal policy could be useful, pressing deficit and debt sustainability problems make such policy difficult if not impossible. Procyclicality in good times thus becomes an important underlying cause of poor fiscal discipline.

Maintaining fiscal discipline is essential to maintaining macroeconomic stability, reducing vulnerabilities, and improving aggregate economic performance. This is especially important if countries are to successfully meet the challenges, and reap the benefits, of economic and financial globalization. Fiscal discipline is essential if countries are to avail themselves of the opportunities offered by increasingly free trade and open capital markets, to enhance their longer-term economic prospects (see Hemming, Kell, and Mahfouz, 2002). But it is also necessary to reduce their exposure to changes in market sentiment and volatility in capital flows, and in the process contain the risk of debt crises.

The lack of fiscal discipline generally stems from the injudicious use of discretion in formulating and implementing budgetary policies. The benefits of such discretion are well known in helping policymakers respond to unexpected shocks to reduce disruptive consequences. Discretion also allows elected political representatives to fulfill their mandates through tax and spending decisions.<sup>2</sup> But, as is generally acknowledged, discretion can be misused, which results in deficit bias and procyclical policies. These, in turn, lead to weak fiscal positions, rising debt levels, and over time, a loss in policy credibility.

The underlying reasons for the deficit bias and procyclical policies are well known: policymakers tend to focus primarily on the consequences of their discretionary actions in the short term and pay insufficient attention to the medium and the long term. There may also be political and distributive conflicts, which entails the “common pool” problem: that is, the basic tendency for any given political constituency or group to use the available resources for specific distributive purposes without regard to the overall budgetary position. In addition, deficit bias reflects time inconsistency, whereby policies that were agreed to *ex ante* are not adhered to *ex post*. For instance, it is often difficult for governments credibly to commit to saving revenue windfalls in good times because of strong spending pressures that inevitably arise during these times. The role of political budget cycles can also be important (see Rogoff, 1990).

A number of different instruments and approaches have the potential to improve the incentives for policymakers to use discretion responsibly, reduce deficit bias, and improve fiscal outcomes. These include various types of fiscal rules, fiscal responsibility laws, and fiscal agencies. The experience with them suggests that their design and implementation, as well as political commitment, are crucial if they are to be effective in strengthen-

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<sup>2</sup>With regard to effects of fiscal policy, see Botman and Kumar (2006).

ing fiscal discipline. The chapters in this book discuss both analytical and policy issues relating to them and provide systematic empirical evidence from industrial as well as developing countries.

Chapter 2 by Debrun, Hauner, and Kumar begins by exploring the role of discretion in fiscal policy. The debate in this area has generally been presented as entailing a trade-off between discretion on the one hand, and rules on the other, each with its advantages and disadvantages. The chapter suggests that while such an approach has its merits, it is more instructive to examine how *distorted* incentives may undermine a *judicious* use of fiscal discretion. The chapter reviews the key distortions, and discusses why fiscal policymakers may become complacent in the face of high deficits and rising debt—deficit bias—and why they find it difficult to resist fiscal expansions in good times, leading to systematic procyclicality. The role of distorted incentives in explaining these phenomena is corroborated by peripheral issues such as frequent attempts to reduce fiscal transparency and undermine democratic accountability. It argues that while financial markets could be expected to respond to the deficit bias and procyclicality in a way that promotes greater fiscal discipline by raising interest rates, and widening of credit spreads, evidence suggests that markets penalize fiscal profligacy often in a discontinuous fashion, and generally only with considerable lags. Institutional reforms aimed at reshaping policymakers' incentives thus appear essential to ensure that fiscal policy choices remain consistent with the intertemporal budget constraint and macroeconomic stabilization.

The chapter argues that the challenge in designing fiscal institutions is to discourage the undesirable manifestations of fiscal discretion while retaining policymakers' flexibility to respond to unexpected developments and to fulfill their democratic mandate. It discusses the various forms that these institutional arrangements can take, including in particular, fiscal rules. It notes that there are relative advantages and disadvantages of the deficit, debt, and expenditure rules, and the design of rules has to be country specific, taking into account existing economic and political institutions. In general, automatic and transparent rules tend to bring policy credibility, albeit at a cost in terms of forgone flexibility. Fiscal rules can be useful, but they are not a panacea, and their effectiveness depends on a political commitment to fiscal discipline.<sup>3</sup>

Chapter 3 by Balassone and Kumar explores the extent, consequences, and causes of procyclicality. It shows that there is clear evidence that discre-

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<sup>3</sup>For a detailed discussion of the issues, see also Debrun and Kumar (2006).

tionary fiscal policy tends to be markedly procyclical in good times in both industrial and developing countries. The evidence is consistent with the notion that in the boom phase, buoyant revenues are often accompanied by an even greater exuberance in government expenditures.

A variety of economic, financial, and political economy factors can lead to procyclicality, including lags in the formulation and implementation of policy and the availability of financing. However, the evidence that procyclicality tends to be asymmetric over the cycle—expansionary policies in the upswing, but neutral or mildly expansionary policies also in the downswings—suggests that political economy and institutional considerations play a preponderant role.

The chapter argues that procyclical fiscal policy exacerbates economic fluctuations, which, in turn, has adverse consequences for savings, investment, economic growth, and welfare. It also argues that, since the procyclical bias appears to be stronger in the upturn, deficits and debt built up during bad times are in general not offset during good times. This leads to the result noted above that fiscal positions deteriorate over time.

Chapter 4 by Balassone and Kumar examines a number of approaches to reducing procyclicality, and more broadly strengthening fiscal discipline. It focuses specifically on the role that automatic stabilizers and cyclically adjusted fiscal balances can play in this regard. Where countercyclical fiscal policy is warranted, and to avoid procyclicality there are merits in implementing it through automatic stabilizers that do not have identification and implementation lags, and are self-reversing. However, the use of automatic stabilizers is generally likely to have limitations, since their size often reflects factors unrelated to macroeconomic management, and in many developing countries they are small due to low tax progressivity and limited reliance on income-related transfers, as well as relatively small size of government.

With regard to the cyclically adjusted fiscal balances (CABs), there is agreement that targeting such balances can assist in principle in promoting discipline in good times. However, there are a range of issues that arise in calculating CABs, including the estimation of output gaps and the output elasticity of the budget, and forecasting errors and data revisions, that can limit their usefulness as fiscal targets in many countries. In these cases, the main role played by CABs could be to inform the choice of appropriate nominal deficit and/or debt targets. But the chapter also explores a variety of measures that can be taken to make CABs a more robust reference for policy. These include taking into account changes in the composition of output, estimating elasticities directly from tax and expenditure laws, and focusing on *changes* in output and budget balances rather than their

levels. Moreover, the chapter points out that for many countries even relatively unsophisticated CAB calculations would represent a significant step forward.

The chapter also examines the role of expenditure targeting as a facilitating instrument in the implementation of countercyclical policy. Committing to a predetermined rate of growth of expenditure can curb the tendency to increase public spending in good times while leaving the automatic stabilizers on the revenue side free to operate. The issues arising in the implementation of this apparently simple framework, including the need for an anchor, are discussed. Finally, the chapter examines the role that a variety of market-related measures could play in helping reduce the procyclicality of policy in emerging markets.

Chapter 5 by Corbacho and Schwartz examines the contribution that fiscal responsibility laws (FRLs) can make in enhancing fiscal discipline. The design features of these laws differ significantly from country to country, with a key distinction being the relative emphasis placed on procedural and numerical rules. Well-designed procedural rules in FRLs can be instrumental in improving fiscal management. While numerical rules embedded in FRLs have some potential advantages, including helping to contain a deficit bias and addressing time inconsistency issues, they often lack flexibility and have faced implementation problems in some cases.

FRLs hold promise for strengthening fiscal management but cannot by themselves buy credibility or substitute for a commitment to prudent fiscal policy. Effective FRLs should cover all relevant fiscal and quasifiscal operations of the public sector, include comprehensive procedural and transparency requirements, and follow best practices in the design of rules and escape clauses. In addition, public expenditure management systems need to be sufficiently developed to monitor and enforce FRL requirements. There is a need to integrate FRL provisions with budget framework laws over time, with numerical rules best incorporated in medium-term budget frameworks and annual budget laws. The use of FRLs should be explored where the institutional environment is conducive. The chapter also provides detailed evidence on FRLs for a broad range of industrial and developing economies.

Chapter 6 by Debrun, Hauner, and Kumar examines the rationale for fiscal agencies, explores issues relating to their implementation, and reviews country experiences. The rationale depends on the extent to which they could help reduce the injudicious use of discretion. Reforms in this direction could entail some measure of delegation of a policy mandate or of activities supporting such a mandate. Theory has identified various factors, including a consensus on what constitutes sound policy, which suggest

that, in practice, delegation of some activities relating to fiscal policy could be beneficial.<sup>4</sup>

The chapter identifies two types of fiscal agencies. First, independent fiscal authorities (IFAs) that mimic independent central banks on the fiscal side: these could be mandated to set and enforce a short-term fiscal balance target consistent with debt sustainability, and/or output stabilization. Second, fiscal councils (FCs), which would not receive any authority over policy, but would provide independent analysis and assessment of fiscal developments. They could also issue normative judgments on the appropriateness of the government's policies, possibly involving formal procedures.<sup>5</sup>

The chapter notes that to date there are no IFAs in operation in any country, likely reflecting serious issues of democratic accountability. It then reviews proposals for, and experiences with, FCs. The latter suggests that the establishment of an FC has contributed to fiscal discipline in a number of countries, and that FCs providing normative assessments appear to have been more effective than those limited to analysis. The effectiveness of either type hinges on the government's commitment to fiscal soundness. The desirable form of an FC should be country specific and depend on the nature and severity of the fiscal problems, the existence of fiscal rules, and the role of the legislature in the budget process. Well-designed fiscal agencies are likely to complement existing institutions and enhance their effectiveness.

The chapter concludes that fiscal agencies can usefully contribute to improving the conduct of fiscal policy. But they are no panacea. First, as for all policymaking institutions, their effectiveness ultimately rests on a government's commitment to the formal mandate assigned to them. Second, fiscal agencies by themselves cannot be a cure for potentially deep-rooted fiscal problems requiring more encompassing reforms.

A key message that emerges from the analyses in Chapters 3 to 6 is that the benefits to be obtained from each of the different approaches to fostering fiscal discipline depend crucially on their respective design and implementation. Moreover, a combination of approaches, as part of a concerted strategy to promote fiscal discipline, is likely to be more effective. The effectiveness of such a strategy will still depend crucially on the soundness of each approach and will require in addition political commitment and effective fiscal management. At the same time, such a strategy can bolster

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<sup>4</sup>Castellani and Debrun (2005) provide a formal framework for assessing monetary and fiscal delegation.

<sup>5</sup>For an early analysis of these agencies, see Eichengreen, Hausmann, and von Hagen (1999).

political commitment by highlighting self-imposed restraints on government and raising the costs of failing to respect them.

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# 2

## Discretion, Institutions, and Fiscal Discipline

XAVIER DEBRUN, DAVID HAUNER, AND MANMOHAN S. KUMAR

Economic analysis has long recognized that policymakers, particularly in the fiscal domain, act quite rationally according to specific incentives, including reelection concerns, pressures from interest groups and constituencies, and the need to honor specific pledges or commitments. Growing evidence of fiscal indiscipline and procyclicality has prompted a debate on the likely distortions causing and arising from such behavior, and on effective ways to correct policymakers' incentives in a socially beneficial way. This chapter examines how distorted incentives may undermine a judicious use of fiscal discretion, and explores how fiscal frameworks could improve fiscal behavior and outcomes.

### Fiscal Discretion and Distorted Incentives

#### Discretion: A Precondition for Democratic Accountability

Discretion means that policymakers are able to determine freely instruments at their disposal to serve a number of objectives under well-defined constraints. Hence, discretion would appear to be a precondition for holding any elected government accountable for the democratic mandate received by it from the electorate. But irrespective of the specific spending priorities and financing strategies reflecting that mandate, policymakers cannot persistently ignore the fiscal preconditions for macroeconomic

stability. There are three aspects of this: first, fiscal policy should remain consistent with government solvency (public debt sustainability); second, public finances should be resilient in the face of unexpected shocks (contained fiscal risk); and third, the fiscal stance should contribute to macroeconomic stabilization (countercyclicality), which could occur in part by implementing measures that insure liquidity constrained individuals against adverse macroeconomic shocks.

In an ideal world, if the above preconditions were to be met, fiscal policy would never result in sustained increases in the public debt-to-GDP ratio, the budget would not be exposed to unmanageable implicit liabilities, and the fiscal stance would play a significant part in dampening the business cycle, or at least it would not aggravate the cycle. To the extent that voters clearly understand these desirable macroeconomic aspects of fiscal policy, a rational and democratically accountable government would have clear incentives not to deviate from such policies.

In practice, however, fiscal policy often turns out to be inconsistent with the requirements for macroeconomic stability. As noted in Chapter 1, the past three decades have witnessed a persistent tendency for countries to run large fiscal deficits, and a near universal tendency to procyclicality. This has led to sustained public debt increases in many countries, repeated debt crises in developing countries, mounting implicit liabilities worldwide, and often an aggravation of countries' cyclical conditions.

Admittedly, debt financing and procyclical policies are at times optimal. Debt can finance valuable investment projects that pay for themselves in the long run so that solvency is not at risk. It can also prevent transitory expenditure variations to result in undesirably frequent modifications to the tax system. Likewise, unavoidable fiscal adjustments may have to take place in bad times. The problem lies in the very persistent nature of debt buildups and in repeated procyclical expansions. In the face of such evidence, the notion that there exist significant distortions in fiscal policy-making can hardly be rejected.

It is often tempting to attribute these unsatisfactory outcomes to discretion itself, so that suppressing it might appear acceptable. However, as the experience with monetary policy reforms shows, the underlying problem does not lie with discretion as such, but with the incentives shaping the behavior of those who exercise it. This would suggest that rather than remove discretion and put policy on automatic pilots, institutional reforms aimed at correcting incentives would be preferable. Indeed, in this respect, the analogy with monetary policy is instructive: central bank reforms have, in general, not eliminated discretion—official dollarization and currency boards remain exceptions. Instead, they have sought to create a framework,

and to provide clear institutional guarantees that discretion would not be misused.

The effectiveness of an institutional framework in improving policy outcomes ultimately rests on how it affects the perceived (electoral or reputational) costs for policymakers to deviate from desirable policies. Before discussing available options for institutional fiscal reform, it is useful to review the key distortions underlying fiscal behavior. These suggest that fiscal policymakers may be subject to excessive complacency in the face of high deficits and rising debt—the so-called deficit bias—and that they find it difficult to resist fiscal expansions in good times, leading to systematic procyclicality. Of course, procyclicality may also be due to factors not directly related to policymakers' incentives such as lags in decision making and in implementing policy measures after a shock has been identified.<sup>1</sup> But these do not raise deep political economy issues, as the reforms needed to allow for a swift response to changing macroeconomic conditions are generally likely to be of a procedural nature.<sup>2</sup>

The role of distorted incentives in explaining these phenomena is corroborated by peripheral issues such as frequent attempts to reduce fiscal transparency and undermine democratic accountability. Specifically, unduly optimistic projections are often used to hide *ex ante* the adverse effects of unrealistic political demands on the budget (Stein, 1994), whereas “creative accounting” produces the *ex post* illusion of more favorable outturns.

### **Possible Causes for Deficit Bias**

At the most basic level, voters themselves may be unable to appreciate fully the macroeconomic features of optimal fiscal policy. Specifically, an apparently insatiable appetite for additional public goods or transfers may result in pressures to spend revenue windfalls in good times, which then may leave no option but to retrench in bad times, leading to procyclicality. Also, Ricardian equivalence notwithstanding, voters may not grasp fully the mechanics of the intertemporal budget constraint by which today's deficits are inevitably linked to tomorrow's taxes and noninterest spending capacity. This lack of understanding has two effects. First, a rational policymaker may find it useful to use fiscal expansions as a way to increase reelection chances, resulting in a political business cycle (Calmfors, 2005). Second, voters' myopia and an incumbent's willingness to stay in office may cause undue delays in much needed fiscal adjustments. Overall, deficits will

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<sup>1</sup>See Chapter 3.

<sup>2</sup>See Chapter 4.

tend to be higher, and the cyclical response of fiscal policy will be asymmetric, as discretionary policy will tend to undermine automatic stabilizers in good times only, further contributing to deficit bias.

The fact that voters' preferences may be the root cause of deficit bias and procyclicality might appear potentially problematic for the design of fiscal frameworks aimed at enhancing fiscal discipline. First, it is unclear how such reforms would receive the support of the majority. Second, even if adopted, the credibility of a given fiscal framework would be in doubt, as respecting it could entail electoral costs, whereas flouting it could bring about gains, at least in the near term. However, increasing empirical evidence indicates that the situation is likely to be more hopeful, in that voters' awareness of the government's intertemporal budget constraint is generally greater than that of elected officials. In particular, a higher degree of direct democracy seems associated with better fiscal outcomes, suggesting that policymakers' willingness to spend exceeds voters' demand for public goods and services. The rest of this chapter focuses on distortions emanating from the policymaking process itself, which in principle can be addressed through institutional reform.

A key distortion underlying inadequate fiscal discipline arises from the tendency of governments to have shorter time horizons than voters. The reason for policymakers' myopia lies in the electoral uncertainty inherent in the democratic process. As elected officials focus primarily on the consequences of their own (discretionary) actions while in office, their interest for future policies is lessened due to the risk of losing the next election. Myopia implies a relative neglect for the future tax hikes and primary expenditure cuts inevitably attached to present deficits. A rational government that balances the perceived marginal cost of deficits with the marginal gains will thus opt for deficits above those desired by voters (Alesina and Tabellini, 1990; and Rogoff, 1990). For similar reasons, fiscal adjustments tend to be delayed or backloaded, and revenue windfalls in good times are less likely to be saved, pointing once again to an asymmetric cyclical pattern in deficits.

In addition to myopia, discretionary policies can be "time inconsistent" when a government finds it desirable *ex post* to deviate from policies that were deemed optimal *ex ante*. One manifestation of time inconsistency is the tendency to try to alleviate the symptoms of structural problems through macroeconomic (monetary or fiscal) stimulus (Kydland and Prescott, 1977). While a low deficit is *ex ante* optimal, consumers understand that the corresponding expectation of low inflation (reflected in nominal wage contracts) would increase the effectiveness of a fiscal stimulus. Hence, even though there is broad agreement on the desirability of a low deficit policy, the latter would turn out not to be credible. While

time inconsistency was a key argument behind the reform of monetary institutions (Rogoff, 1985), those very reforms may have aggravated the time-inconsistency problem of fiscal policy.

Another manifestation of time inconsistency is the difficulty for liquidity constrained governments (particularly in developing economies) not to spend revenue windfalls in good times. Although the lack of financing in bad times makes it optimal to save revenue windfalls in good times, the very realization of such windfalls triggers spending pressures that prove hard to resist. This, in turn, undermines the country's repayment capacity and encourages financial markets to ration credit in bad times, perpetuating the liquidity constraint at the origin of the problem (Eichengreen, Hausmann, and von Hagen, 1999). Overall, time inconsistency results in excessive average deficits and debt accumulation. It can also be related to the procyclicality of fiscal policy in countries with only intermittent access to financial markets, which in turn rationalizes the procyclical nature of access to financing.

The political and distributive conflicts among different interest groups that result in "common pool" problems similar to the "tragedy of the commons" also give rise to distortions. Special interest groups and constituencies view government revenue as a "common pool" of resources open to competing demands. These groups have a basic tendency to use the available resources for specific distributive purposes without regard to the overall budgetary situation (Eichengreen, Hausmann, and von Hagen, 1999). Faced with such pressures, the government has an incentive to spend revenue windfalls and incur excessive deficits. Such fiscal expansion in good times directly contributes to procyclicality in the short run. But, once again, the cyclical asymmetry of such pressures implies that the windfalls are not used to improve the underlying position whereas the fiscal position worsens during bad times, leading to a rising trend in public debt.

In the particular case of monetary unions, the centralization of monetary policy can reduce individual countries' incentives for fiscal discipline. Normally, the unpleasant prospect that excessive public debt may ultimately increase future inflation and interest rates is likely to impose some self-restraint on governments. In a monetary union, however, this effect is likely to be diluted, particularly for small countries, and could lead to excessive debt accumulation (Beetsma and Bovenberg, 1999). In addition, monetary unions can entail a moral hazard related to the greater likelihood of a bailout by other member states or by the common central bank.

These fiscal policy biases can, in turn, affect monetary policy. Left unchecked, excessive deficits and rapid debt accumulation could undermine the capacity of monetary institutions to fulfill their mandates. On the one hand, the pressure to raise the inflation tax may become hard to

resist in the face of high public debt, resulting in fiscal dominance. On the other hand, to the extent that governments use fiscal policy to influence aggregate demand, conflicts between monetary and fiscal authorities could reduce the benefits of central bank independence (Debrun, 2000; and Dixit and Lambertini, 2003).

### **Inadequacy of Market Discipline**

Financial markets could be expected to respond to the deficit bias and procyclicality in a way that promotes greater fiscal discipline. This could be the result of three effects. First, higher deficits could raise the level of interest rates as national savings decline, and inflation expectations rise if there is a perceived possibility of future debt monetization. Second, higher deficits could lead to a widening of credit spreads on public debt and potentially on the external borrowing of the economy due to a higher country risk premium even in the absence of an impact on the level of interest rates. Both these effects would tend to impose costs on policymakers: they would raise the budgetary cost of public borrowing and thus reduce the room for politically more attractive spending or require tax increases, and they would burden the economy at large with potential negative repercussions on growth and employment. Third, as debt rises, at some point the government could face borrowing constraints that would require politically painful fiscal adjustment and could be accompanied by a broader economic crisis.

The size of these effects is likely to depend particularly on the degree of economic openness and financial development, and the credibility of policies and institutions. Greater economic openness could, on the one hand, tend to weaken the effect of profligate fiscal policy on domestic interest rates both in the short run and the medium run. On the other hand, freer movement of capital could increase the penalty imposed by an increase in credit risk. Limited financial depth, in turn, would tend to magnify crowding out. And credit spreads are likely to react more harshly to fiscal profligacy for countries that defaulted in the past or whose policies and institutions have low credibility, as reflected by a history of high inflation or opaque public finances. These considerations suggest that market discipline is likely to be more stringent for developing than industrial countries. Moreover, market discipline is likely to be weakened in a monetary union. Similarly, it is possible that financial globalization could weaken the effect of fiscal policy on domestic interest rates (see Hauner and Kumar, 2006).

A large empirical literature suggests that markets are unlikely to effectively constrain a deficit bias. If anything, the market seems to penalize fis-

cal profligacy in a discontinuous fashion only at a late stage. For industrial countries, most studies of the determinants of real interest rates in industrial countries found effects that seem too small to impose a significant political cost on governments.<sup>3</sup> Credit spreads and ratings do not seem to substantially penalize fiscal profligacy of industrial countries either (Balassone, Franco, and Zotteri, 2006). Less evidence is available on the determinants of interest rates in developing countries, but there is some indication that the effects of fiscal policy are stronger than in industrial countries, possibly due to some of the above considerations. However, the large literature on the determinants of emerging market country spreads and ratings yields conflicting results as to whether there is a substantial impact of fiscal variables. In any case, experience suggests that market discipline is certainly not a sufficient deterrent against unsustainable fiscal policies in developing countries either.

## Improving Incentives Through Institutional Reform

As discussed above, the evidence of significant biases in fiscal policy points to persistent distortions in policymakers' incentives. Moreover, the response of financial markets to weak fiscal performance appears insufficient to alleviate those distortions. Institutional reforms aimed at reshaping policymakers' incentives could thus help ensure that fiscal policy choices remain consistent with the intertemporal budget constraint, and the maintenance of macroeconomic stabilization.

The challenge in designing fiscal institutions arises from the need to discourage the undesirable manifestations of fiscal discretion while retaining policymakers' flexibility to respond to unexpected developments and to fulfill their democratic mandate. One practical difficulty in doing so is the thin line between ways to discourage the misuse of discretion and outright limitations to it. There has been an extensive literature rationalizing "fiscal frameworks" that could help meet this challenge. These frameworks can often help improve policy outcomes and stabilize expectations regarding fiscal behavior, reducing uncertainty and volatility, and have a positive impact on investment and growth.

An array of institutional arrangements can potentially improve fiscal outcomes, but they all have in common two essential components: (1) an explicit and transparent characterization of what the government

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<sup>3</sup>See, for example, Huner and Kumar (2006) and Kinoshita (2006).

views as a desirable (unbiased) fiscal policy, and (2) ways to enhance the (political or reputational) costs of deviations from unbiased policy. The choice among available options would reflect the nature of the underlying distortions to fiscal behavior, the extent of the resulting fiscal bias, and the broader political and institutional landscape of a country.

At one end of the institutional spectrum, one could consider explicit political commitments supported by strong mechanisms of democratic accountability. This is perhaps the most natural way in a democracy to contain distortions arising from the political decision-making process. By publicly exposing broken promises, errors, or biases, the framework simply seeks to maximize the costs of breaching commitments, without formally impinging on discretion. Medium-term expenditure frameworks and transparency requirements will typically be part of such fiscal frameworks.

However, formal commitment as such may be seen as insufficient, and there could be a need to directly increase the costs to policymakers of biased policies. The most common channel for doing so is to define *ex ante* explicit boundaries of acceptable fiscal outcomes. Fiscal rules—on deficits, debts, expenditure, or revenues—are widely used. Yet evidence of their effectiveness is mixed, reflecting mainly how governments perceive the costs of breaching them. Fiscal rules can be embedded in the more comprehensive setup of a fiscal responsibility law, which also provides for transparency requirements, and accountability mechanisms aimed at further increasing the political costs of breaching the rule.

One important issue in the ongoing debate on fiscal rules is whether they are conceived as instruments to curtail discretion (hard rules), or as mere guideposts to enhance the public debate on fiscal policy (soft rules). It is common in the literature to retain the hard-rule interpretation. In that sense, a rules-based framework seeks to restrain flexibility, and is bound to prevent an appropriate fiscal response in at least some circumstance. Although the ideal would be to adopt rules that allow for the highest credibility while limiting reduction in flexibility, this is far from straightforward. Simple and transparent rules entailing automatic sanctions tend to bring policy credibility only at potentially high cost in terms of forgone flexibility.

It is for this reason that other institutional reforms are favored by some because they could effectively contribute to reducing fiscal policy biases without excluding flexible policy response when needed. They include nonpartisan fiscal agencies mandated to monitor and assess fiscal policy, and “procedural” fiscal responsibility laws establishing strict reporting and transparency requirements. These institutions primarily aim at maximizing the (reputational or electoral) costs of deviations from desirable poli-

cies. At the same time, they preserve policy flexibility when it is needed because discretion itself is not curtailed. Given that fiscal rules have often been undermined by their rigidity under unfavorable circumstances, an improvement in flexibility as provided by institutional reform might also be more effective in raising policy credibility.

As emphasized above, the effectiveness of these mechanisms ultimately rests on their ability to discourage the misuse of discretion. Even hard rules can only succeed if the political costs of removing them, changing them, or breaching them openly would be unacceptable. Their self-imposed nature makes it difficult to believe that they could as such limit an elected official from exercising discretion.

Fiscal rules and institutional innovations could potentially complement each other. This can be seen considering the example of the fiscal agencies discussed in Chapter 6. On the one hand, these institutions can strengthen the enforcement of rules by increasing the political cost of breaching them, but also by making their implementation more flexible under exceptional circumstances that may merit a deviation from the rules in the short term—without undermining their credibility in the long term: for example, such an institution could determine when exceptions from rules would be warranted, similar to the role played by the constitutional court in Germany in implementing its Golden Rule. On the other hand, the existence of rules established through the democratic process can provide clear benchmarks against which institutions such as fiscal agencies could assess the performance of fiscal policy, such as envisaged in the proposals by the Committee on Stabilization Policy (2002) of Sweden and the European Commission (2004). Similarly, the effect of rules could be strengthened by giving the judiciary a role in their implementation, such as envisaged in the proposals by De Haan, Berger, and Jansen (2004) and Inman and Rubinfeld (1996).

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# 3

## Cyclicalities of Fiscal Policy

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Although some debate on the feasibility and effectiveness of fiscal policy in stabilizing output fluctuations continues, there is little disagreement that, as a rule, policy should not be procyclical. The standard Keynesian approach suggests that fiscal policy should act in a stabilizing manner, while within the neoclassical paradigm, tax-smoothing models imply that fiscal policy should remain neutral over the business cycle. Even in a Ricardian framework, where a reduction in taxes or an increase in spending leads to an equivalent rise in private sector saving, policy would not be expected to be procyclical.

Nonetheless, procyclical policies may sometimes be warranted by the need to preserve the sustainability of public finances. Sustainability considerations can become overriding during economic downturns if public debt is not at prudent levels initially. This can be especially relevant for emerging market and developing countries facing an intrinsically more volatile macroeconomic environment and uncertain access to international capital markets. In the absence of adequate financial buffers, and constraints on borrowing, expenditure retrenchment in the downturn may be necessary.

Yet there is no room for complacency regarding chronic procyclicalities—and, in particular, systematically exuberant spending in good times—as this exacerbates volatility and damages fiscal sustainability. Although economic theory is ambiguous with regard to the impact of volatility on growth, most empirical studies find an inverse relationship, reflecting in part the adverse effect of volatility on capital investment and human capital formation. While weaker growth itself can jeopardize fiscal sustainability, a policy that

is procyclical in good times can directly fuel debt accumulation as deficits incurred in downturns are not compensated for by surpluses during the rebound.

However, there is empirical evidence that fiscal policy is frequently procyclical, especially in upturns. This reflects a variety of economic, financial, and political factors. One explanation hinges on lags in the formulation and implementation of policy and difficulties concerning the assessment of the state of the cycle; another is based on the interaction between budgetary decisions and political economy factors, and emphasizes the political dimension of spending pressures arising in good times, with fiscal expansion in the upswing reducing room for countercyclical policy in the downturn. In developing countries, this effect is compounded by financial constraints and limited access to international capital markets. In these countries the need to make up for the compression in spending during downturns can in turn add to spending pressures in good times, resulting in a vicious cycle of procyclical policies.

This chapter examines the cyclical properties of fiscal policy and explores three issues: the extent of procyclicality in both industrial and developing countries; the factors underlying the observed pattern of procyclicality; and the consequences of procyclicality, including the impact on countries' debt ratios. The analysis finds that discretionary fiscal policy has generally been procyclical in good times in both industrial and developing countries, and that it has adversely affected both economic growth and budgetary sustainability.

## Evidence on Procyclicality

Movements in the ratio of nominal fiscal balance to GDP are the net result of the automatic reaction of the budget to cyclical developments and discretionary policy. Hence, movements in nominal balance, while providing important indications regarding the cyclical nature of the budget and budgetary sustainability, do not show the policy stance. For instance, an improvement of the fiscal balance in a cyclical upturn may yet entail a procyclical (expansionary) stance if there are sufficiently large automatic stabilizers.

There is significant evidence that discretionary policy tends to be procyclical in both industrial and developing countries. In industrial countries, movements in the ratio of overall fiscal balance to GDP are seen to be mildly countercyclical (see, e.g., Méltz, 2002). In developing countries, the sensitivity of the fiscal balance to the economic cycle is generally low (IMF,

2003). But there are considerable differences across regions, with the sensitivity being lowest for the Latin American countries. In both industrial and developing countries, the cyclical sensitivity of nominal balances appears lower than would be expected based on the effect of automatic stabilizers alone, suggesting that discretionary policy exerts an offsetting impact.

Recent, more systematic, analysis undertaken by the authors corroborates the above evidence. For industrial countries the results indicate that on average a 1 percentage point increase in the output gap results in an improvement of around 0.3 percentage point of GDP in the overall fiscal balance (Figure 3.1 and Table 3.1).<sup>1</sup> Since the available estimates suggest that the effect of automatic stabilizers averages around ½ percent of GDP (van den Noord, 2000; Bouthevillain and others, 2001; and IMF, 2004), discretionary policy is seen to be procyclical. For developing countries our estimates indicate that the sensitivity of the overall balance to the output gap is close to zero. While the size of automatic stabilizers is certainly smaller in developing countries, it is unlikely to be zero or negative, again indicating procyclicality of discretionary policy.

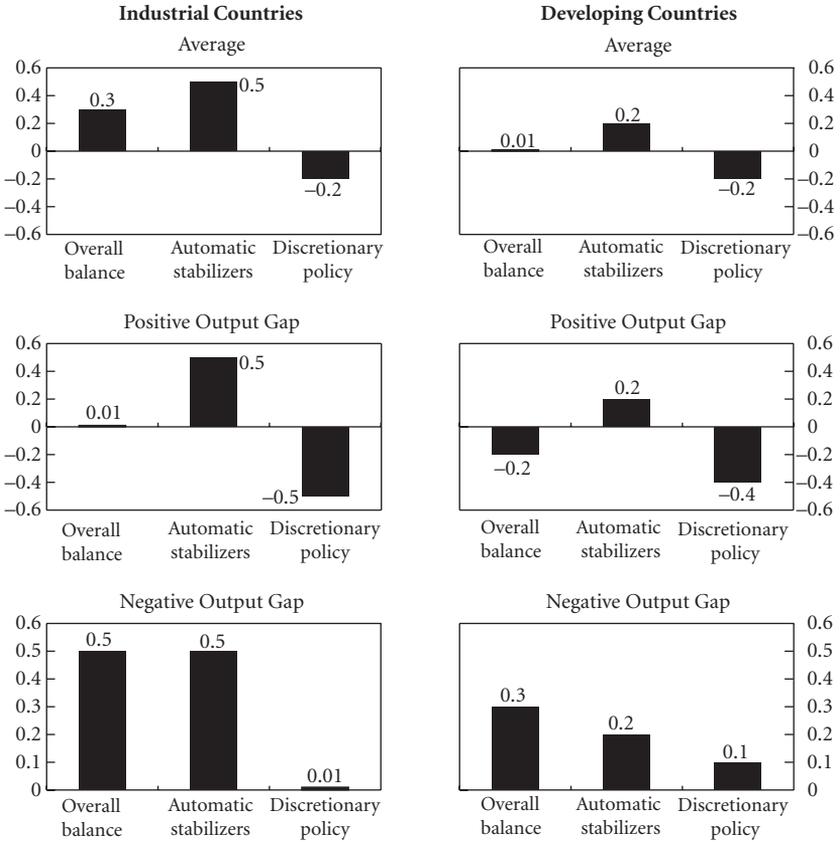
There is also evidence for both industrial and developing countries that discretionary policy is asymmetric, with procyclicality mainly occurring in good times. It has often been remarked that in member countries of the European Union during 1970–2000, deficits increased in downturns, but did not fall in periods of high growth, with the countries offsetting the effects of automatic stabilizers via tax cuts or, more often, expenditure increases (see European Commission, 2001). The procyclicality of fiscal policy in good times is also a stylized fact in emerging market countries and, specifically, in Latin American countries. For the latter, there is considerable evidence that procyclical fiscal policy partly reflects procyclical capital flows (Kaminsky, Reinhart, and Vegh, 2004). Such policy is also evident during recessions, when access to markets dries up, interest rates rise, and currencies weaken (Gavin and others, 1996; and Budnevich, 2002).

Our analysis illustrates that in good times the effect of automatic stabilizers is generally offset by discretionary action, while, in general, this is not the case during downturns. In industrial countries, when output is above potential, changes in the output gap are generally seen to have no effect on the ratio of the overall fiscal balance to GDP, indicating that procyclical discretionary policy fully offsets automatic stabilizers. However, when output is below potential, a 1 percentage point worsening in the output gap results in a deterioration of ½ percentage points of GDP in the overall

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<sup>1</sup>The output gap is defined in the conventional manner: (actual output – potential output) / potential output.

**Figure 3.1. Sensitivity of the Fiscal Balance to the Output Gap<sup>1</sup>**



Source: IMF staff calculations.

<sup>1</sup>Budgetary response to a 1 percent change in the output gap. For details on the sample and estimation see footnotes to Table 3.1. The estimate of the size of automatic stabilizers for developing countries is based on average values of expenditure and revenue ratios to GDP.

fiscal balance, in line with available estimates of the effect of automatic stabilizers (Balassone and Francese, 2004). For developing countries, the asymmetry is even more striking: the fiscal balance moves procyclically in good times, when procyclical discretionary policy appears to be stronger than the automatic stabilizers, and countercyclically in bad times. The analysis does not appear to suggest that, on average, discretionary policy is procyclical in bad times in emerging market countries. However, this

**Table 3.1. Cyclicity of Fiscal Policy<sup>1</sup>**

Dependent Variable	Industrial Countries			Developing Countries		
	Overall balance	Overall balance	Expenditure	Overall balance	Overall balance	Expenditure
Constant	-3.08** (0.40)	-2.72** (0.45)	7.80** (1.43)	-1.02** (0.18)	-0.44 (0.25)	9.83** (1.43)
Lagged dependent variable	0.70** (0.05)	-0.71** (0.05)	0.84** (0.03)	0.52** (0.04)	0.51** (0.04)	0.51** (0.06)
Lagged debt	0.03** (0.006)	0.03** (0.006)	0.02** (0.005)			
Output gap <sup>2</sup>	0.30** (0.06)			0.07 (0.04)		
Positive output gap		0.09 (0.13)	0.06 (0.11)		-0.16* (0.08)	0.29* (0.14)
Negative output gap		0.52** (0.13)	0.40** (0.12)		0.29** (0.08)	-0.52** (0.15)
R <sup>2</sup> within	0.631	0.637	0.779	0.300	0.321	0.314
Between	0.912	0.913	0.993	0.984	0.969	0.995
Overall	0.775	0.780	0.965	0.579	0.579	0.730
Number of observations	221	221	218	370	370	195
Number of countries	12	12	12	21	21	13

Source: IMF staff calculations.

<sup>1</sup>Methods of estimation: Ordinary least squares, fixed effects; standard errors in parentheses; \* and \*\* indicate significance at 5 percent and 1 percent levels, respectively. Estimation period: 1975–97. Industrial countries: Australia, Austria, Belgium, Canada, Denmark, France, Italy, Japan, the Netherlands, Norway, Spain, Sweden, and the United Kingdom. Developing countries: Argentina, Brazil, Chile, China, Czech Republic, Hungary, India, Indonesia, Kenya, Malawi, Malaysia, Mexico, Nigeria, the Philippines, Poland, Singapore, South Africa, Thailand, Turkey, Uruguay, and República Bolivariana de Venezuela.

<sup>2</sup>Hodrick-Prescott filtered real GDP ( $\lambda = 30$ ), sample 1970–2002.

result masks significant cross-country variation: countries that were not financially constrained tended to pursue countercyclical policy, while in others financial constraints led to a procyclical tightening.

Expenditures appear to play a preponderant role in determining the cyclical asymmetry of fiscal policy. In industrial countries, the procyclical behavior of spending in good times is taken to be a “stylized fact” (European Commission, 2001; Buti, Franco, and Ongena, 1998; and Buti and Sapir, 1998). The empirical evidence, however, is not consistent, with some studies finding procyclicality while others show zero or negative effect. In contrast, the literature on comovements between public expenditures and GDP growth in emerging market and developing countries consistently suggests that expenditures are procyclical (see Akitoby and others, 2004).

More recent estimates also corroborate the existing evidence on the cyclicity of expenditure. In industrial countries, in response to a 1 percentage point widening in the negative output gap, the expenditure ratio increases by 0.4 percentage point. When the output gap is positive, however, there is no symmetric decrease in the ratio following an increase in the output gap. In emerging market countries and developing countries, due to data limitations, the evidence is more tentative. It nevertheless suggests that the ratio of expenditures to GDP tends to increase in good times.

### **Causes of Procyclicality**

A variety of economic, financial, and political economy factors can lead to fiscal policy being procyclical and asymmetric. These include the well-identified lags in the formulation and implementation of policy, political economy and institutional considerations, and factors related to the availability of financing. These factors can reinforce each other. It has been suggested, for instance, that procyclical fiscal policy in many Latin American countries has been part of a vicious cycle, in which political factors preventing savings in upturns limited creditworthiness in bad times and made fiscal consolidation during recessions unavoidable.

### **Difficulties in Assessing the Economic Cycle**

One explanation of procyclicality stems from the premise that, while the government has the means to engage in countercyclical policy, it ends up not doing so because of an inaccurate assessment of the economic cycle. The presumption is that the policymakers are unable to gauge accurately the stage of the cycle: there may be difficulties in estimating the underlying or potential growth of the economy; there may be problems regarding the assessment of the output gap and the economy's momentum; and there may be substantial lags in the availability of data. These difficulties are then compounded by lags in the implementation of policy.

The problems of estimating the underlying potential of the economy are likely to be particularly acute in emerging market and developing countries. These economies are subject to substantial and frequent shocks, for both endogenous and exogenous reasons. With regard to the former, many of the economies have embarked on major reforms that can change the structural characteristics and performance of the economy, making it difficult to assess whether buoyant activity reflects temporary or permanent

factors. The exogenous factors can be equally important: exports are often concentrated in a relatively small number of sectors and a sustained shock in the terms of trade can have a significant impact. Furthermore, as emerging market crises over the past decade highlight, these economies have also been prone to sudden shifts in market sentiment.

Even in the case of industrial countries, there are many instances where the economic turning points were inaccurately assessed and policy ended up being procyclical. In the face of significant changes emanating from the introduction of new technologies, globalization, and financial market innovation, it is difficult to assess the cyclical status of even major economies, and delineate, *ex ante*, turning points accurately. These difficulties have been compounded by the impact of sharp changes in asset prices on consumption, as well as on investment and on the overall pace of activity (see, e.g., IMF, 2004).

While the above considerations are important in many cases, it is unclear whether they can provide a general explanation for procyclicality. Decision and implementation lags can certainly play a role in leading to policy procyclicality. But this cannot be the sole explanation given the above evidence that procyclicality tends to be asymmetric. Moreover, the evidence of systematic bias toward optimism in official forecasts of output growth is at odds with the notion of procyclicality arising from inadequate information about the state of the cycle (Danninger, Cangiano, and Kyobe, 2005).

### **Political Economy Factors**

A second explanation, based on the interaction between budgetary decisions and political economy factors, emphasizes the dynamics of spending pressures arising in good times. The evidence concerning the asymmetry of procyclicality and the role played by expenditure suggest that political economy factors often play a key role in shaping the cyclicity of fiscal policy.<sup>2</sup> The roots of this lie in policy discretion, and the importance of competing electoral constituencies. Indeed, as Buchanan and Wagner (1977) noted, political pressures lead to stimulative policies regardless of the economic environment. A key argument is that constituencies and lobbies compete for their share of public resources, and a “common pool” problem arises. The good times whet the appetites of various powerful groups with access to government resources. The incentives for fiscal prudence are low

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<sup>2</sup>See Chapter 4.

because even if specific interest groups do not push for a larger share of spending for themselves, they will still have to suffer the consequences of overspending: since budgetary competition increases in good times, spending grows more than proportionally relative to the increase in revenue (Lane and Tornell, 1999).

Political economy factors reflect the role of checks and balances. There is evidence that political constraints can help reduce the common pool problem, and hence procyclicality. This is in part because political constraints, including, for instance, the executive's veto power on expenditures, can limit the scope for discretionary policy changes. Conversely, a lack of veto power may be expected to be associated with more volatile spending—particularly high spending during boom times, and a sharp retrenchment during downturns. Political constraints based on the number of veto points among various branches of government, as well as on the ideological alignment across branches, are seen to explain considerable variation in policy volatility (Fatás and Mihov, 2004).

Countries with good institutions tend to have countercyclical policies in good times. Good institutions—defined in terms of the quality of bureaucracy, rule of law, absence of corruption, and democratic accountability—allow policymakers to use windfalls in good times to build up cushions of reserves for the inevitable downturn. In the process, they also help stabilize the economy. On the other hand, in countries with weak institutions, the competition for the “common pool” resources leads to a dissipation of the windfalls during good times. Changes in fiscal policy made by governments seeking reelections can be an augmenting factor. However, unless the electoral and business cycles are synchronized, vote seeking cannot explain systematic procyclicality.

Exuberant spending in good times may exacerbate the debt situation, necessitating procyclical correction in the downturn. This effect can be compounded by rigid fiscal rules. For instance, if inadequate attention is paid to building safety margins in good times, balanced budget rules may lead procyclical discretionary action to offset the automatic stabilizers during the ensuing downturn. However, in practice, balanced budget rules are seldom binding. When they are especially tight there are usually escape clauses. In any case, the responsibility lies with policy, rather than with the rules. If policy leads to excessive debt levels, a procyclical correction in downturns may be necessary, independently of what fiscal rules prescribe. This phenomenon has been observed in both developing and industrial countries. In the latter, with specific reference to the European countries, frequent procyclical tightening has been noted over 1970–2000 (European Commission, 2001), and there is little evidence that the introduction of a

nominal deficit ceiling with the 1992 Maastricht Treaty changed this pre-existing pattern (Galí and Perotti, 2003; and Balassone and Francese, 2004).

### **Financial Constraints and Market Access**

A third explanation is related to financial constraints and the limits on access to international capital markets. The precarious nature of access to international financial markets during downturns, particularly by emerging market economies, provides an important explanation as to why discretionary policy is not countercyclical during recessions.<sup>3</sup> There is significant evidence that external funding weakens when it is most needed to finance countercyclical policy. The investors' loss of confidence in the prospects of these economies means that oftentimes in the midst of recessions countries end up having to implement strongly contractionary policies. This can then create a vicious cycle by deepening the recession, reducing tax revenues further, and warranting further expenditure cuts. Such response, although destabilizing, may be the only way to service existing obligations and signal the government's commitment to deal with unsustainable policies.

Restricted financing in bad times may also reflect capital market imperfections. Even where the budgetary situation is sustainable, the inability to borrow contingent on the economic situation constrains the options available to policymakers and reduces the economy's flexibility. This is particularly so given the higher propensity of emerging market countries to be subject to exogenous shocks. Moreover, the ensuing uncertainty regarding the duration of the boom and the associated revenue windfalls impels competing constituencies to push for higher spending in an upturn, rather than building up buffers for the downturn, raising the need to borrow during the period of weak activity (Emre and Kumar, 2005).

The impact of financial constraints is exacerbated in bad times if economies are characterized by high public debt. During a sharp downturn, the underlying fiscal adjustment needed to stabilize debt dynamics can be so large as to raise doubts about the government's ability to undertake it. This can adversely affect sentiment, prompting investors to sell assets indiscriminately at the onset of a decline in activity, compounding the absence of fresh financing. This underlies the evidence that in these economies the capital flow cycle and the policy cycle reinforce each other (Kaminsky, Reinhart, and Vegh, 2004).

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<sup>3</sup>On investors' shifting risk appetite, see Kumar and Persaud (2002).

The currency composition of debt is also an important factor leading to procyclicality in emerging market and developing countries. Since until recently almost all external borrowing by emerging market countries has been in foreign currency, the external debt service payments and the budgetary situation in these countries are affected by movements in the exchange rate. The volatility in the latter is often greater than volatility in output, particularly during bad times (Eichengreen and Hausmann, 2005). The effect of exchange rate on debt servicing is muted for industrial countries that can borrow in domestic currency. By contrast, in emerging market countries exchange rate depreciation can significantly increase the debt-to-GDP ratio and the interest burden on that debt.

The term structure of debt is also relevant. Whether borrowing in foreign or in domestic currency, the maturity of outstanding debt in emerging market countries tends to be weighed toward the short term. This means that movements in the real interest rates, often quite marked, have a substantial impact on debt service. Unlike in most industrial countries, real interest rates in emerging market countries, reflecting in part higher risk premia, are often inversely related to the business cycle. Thus the burden of servicing the debt is least when resources are plentiful, and onerous when they are not.

The combination of movements in real exchange rates and real interest rates with the economic cycle can exacerbate the impact of debt on procyclicality. In bad times, both the exchange rate depreciates and interest rates rise, tending to increase debt and debt service payments. This in turn further increases the borrowing requirement at a time when the availability of finance is most constrained, resulting in procyclicality of policy.

## **Consequences of Procyclicality**

### **Procyclicality and Growth**

Procyclical fiscal policy exacerbates economic fluctuations. In both industrial and developing economies there is evidence that by boosting activity in upturns and failing to sustain it or even injecting a contractionary impulse in downturns, procyclical policy increases the amplitude of the economic cycle. A significant link between policy volatility and macroeconomic instability has been highlighted in a number of studies. In particular, estimates suggest that a 1 percent reduction in policy volatility (defined as the standard deviation of cyclically adjusted government spending) leads to a decline in output volatility of a similar magnitude (Fatás and Mihov,

2003). There is particularly striking evidence that in Latin America procyclicality of fiscal policy has contributed to output volatility. Taking as a benchmark industrial and East Asian countries, it is estimated that about 15 percent of the excess output volatility in Latin American countries has been due to volatility in fiscal policies (De Ferranti and others, 2000). Output volatility reinforces volatility in government revenues, which during the 1990s was four times higher in developing than in industrial countries (Eichengreen and Hausmann, 2005).

Output volatility has significant short-term adverse effects that are especially marked in developing countries. In these countries, social insurance mechanisms, such as unemployment benefits, are less developed than in the industrial countries. Moreover, income distribution is often such that those in the low- and middle-income brackets are at greater risk of falling into poverty if hit by a shock (Braun and Di Gresia, 2003). In addition, the low-income groups have less human capital to adapt to downturns in labor markets, and fewer physical assets and access to credit to allow them to tide over adverse times.

These effects can also have long-term welfare implications. Poverty levels appear to increase sharply in steep downturns in economic activity and do not recede to previous levels as output recovers (World Bank, 2000). Recent empirical research confirms that volatility has a significantly negative impact on poverty (Laurson and Mahajan, 2005). Further, there is evidence that there may be irreversible losses in health and education because of inadequate nutrition and schooling (Perry, 2003). The inability of governments to support economic activity in a downturn, in large part because of the absence of cushions built up during good times, can thus have broad and sustained welfare consequences for low-income groups in developing economies.

It is difficult to obtain from economic theory unambiguous indications regarding the impact of volatility on output growth. Some models suggest that volatility may not worsen growth, reflecting the notion that it may be associated with the adoption of riskier technologies that are also characterized by higher expected returns and, therefore, higher growth (see, e.g., Black, 1987). A positive relationship between volatility and growth may also result from Schumpeterian “creative destruction” (Caballero and Hammour, 1994). However, a considerable literature suggests that by increasing uncertainty, high volatility, whether from procyclical policies or other sources, adversely affects investment and growth. To the extent that investment decisions are costly to reverse, higher volatility can increase risk and risk aversion, thereby discouraging new investment (Bernanke, 1983). In a volatile environment short-run considerations are also likely to be

given greater weight and could lead to suboptimal allocation of resources to investment (Servén, 1998). In addition, excess volatility can cause irreversible losses in human capital—including through the effect of more frequent spells of unemployment on learning-by-doing opportunities—compounding the negative effect on growth (Martin and Rogers, 1997).

Most empirical studies find an inverse relationship between volatility and growth. This is so for both industrial and developing economies, with particularly clear evidence accumulated in recent years (IMF, 2005; and Aizenman and Pinto, 2005). It has been estimated that a 1 percent increase in output volatility (as measured by the standard deviation of output growth) can lower economic growth by about the same amount (Kose, Prasad, and Terrones, 2005). Specifically, volatility associated with discretionary fiscal policy has been seen to distort savings and investment decisions with adverse effects on economic growth.

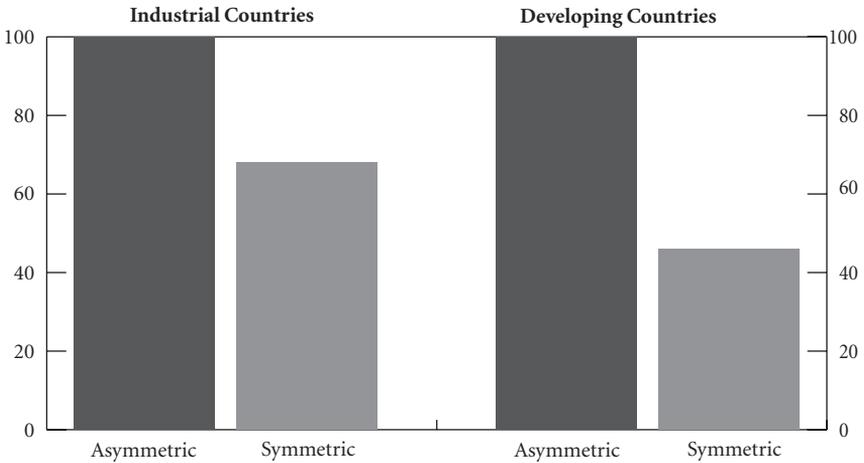
The relationship between volatility and growth also depends on country-specific characteristics and on the source of volatility. Developing countries with weaker institutions and less mature financial markets are likely to be more affected. Market imperfections associated with credit constraints and imperfect access to world financial markets can magnify the negative impact of short-term volatility on the pace of activity, exacerbating the amplitude of the cycle. Periods of high volatility associated with financial crises seem to have a more harmful and prolonged effect on economic growth than volatility stemming from normal macroeconomic fluctuations (IMF, 2005).

### **Procyclicality and Sustainability**

The asymmetric reaction of fiscal balances to positive and negative cyclical conditions has an adverse effect on debt dynamics. Assuming that economic fluctuations are broadly symmetric, this simply reflects the fact that deficits incurred in downturns are not compensated for by surpluses during the rebound in economic activity. Estimates by IMF staff indicate that, over the 1980s and 1990s, average deficit-to-GDP ratios would have been 30 percent lower in industrial countries and almost 50 percent lower in emerging market and developing economies if policy had been symmetric over the economic cycle (Figure 3.2).

The average contribution of cyclical asymmetry in fiscal policy to debt accumulation is significant. In industrial countries it has been estimated to be about 8 percentage points of GDP over 1970–2000, about one-third of the average increase in debt ratios over the same period (Balassone and Francese, 2004). The degree of asymmetry estimated for emerging market

**Figure 3.2. Difference in Average Deficit Under Symmetric and Asymmetric Fiscal Policy<sup>1</sup>**



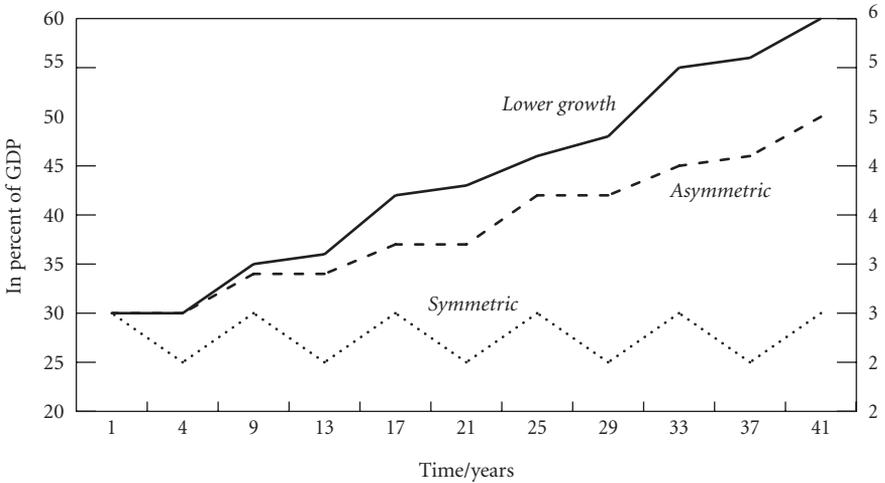
Source: IMF staff calculations.

<sup>1</sup>Average deficit under asymmetric policy = 100. For details on the sample and estimation, see footnotes to Table 3.1.

and developing countries suggests a similar contribution to debt accumulation. Simulations for individual countries for the past two decades suggest that the debt-to-GDP ratio would have been up to 10 percentage points lower had policy been symmetric.

Hence, procyclicality and asymmetry can damage fiscal sustainability by negatively affecting both debt and output growth. The extent to which the path under asymmetric policy departs from the symmetric one is illustrated in Figure 3.3. The dotted line depicts the debt-to-GDP ratio under symmetric countercyclical policy (budgetary elasticity is assumed to be 0.5) for a country with an initial debt-to-GDP ratio of 30 percent (it is assumed that the economic cycle is of eight years, during which output gap is positive (2 percent) in the first four years and negative (-2 percent) in the subsequent four (around a constant potential output)). In this scenario, the debt ratio fluctuates close to its original value. The segmented line shows that when policy becomes asymmetric an upward bias is introduced in debt accumulation. In the figure it is assumed that asymmetry results from the budget balance not reacting to positive output gaps. Over a period of 20 years, the debt-to-GDP ratio increases by 10 percentage points of GDP. Finally, the solid line depicts the evolution of the debt ratio under the assumption that procyclicality also lowers GDP: this further raises the debt ratio, especially in the outer years.

Figure 3.3. Procyclical Asymmetry in Fiscal Policy and Debt Dynamics



Source: IMF staff calculations.

## Conclusions

This chapter has analyzed a number of issues relating to the procyclicality of fiscal policies in industrial and developing countries, and provided systematic empirical evidence. The main findings are as follows:

- There is clear evidence that discretionary fiscal policy tends to be procyclical in both industrial and developing countries, offsetting the impact of automatic stabilizers, particularly in good times. Policy tends to be acyclical or mildly countercyclical in bad times, although there is evidence that for many emerging market countries in particular, policy is procyclical in bad times as well.
- The evidence is consistent with the notion that in the boom phase of an economic cycle, buoyant revenues are accompanied, often for political economy reasons, by an even greater exuberance in government expenditures. Procyclicality may also reflect an inaccurate assessment of the cycle, as well as financial market constraints, particularly for emerging market countries in the downturn.
- Procyclical fiscal policy exacerbates economic fluctuations, which in turn has near-term adverse effects on welfare that are especially marked for low-income groups in developing countries. Economic volatility also has adverse effects on savings, investment, and economic growth.

Furthermore, since the procyclical bias appears to be stronger in the upturn, deficits and debt built up during bad times are in general not offset, and in many cases are in fact added to, during good times, with the result that the fiscal position deteriorates over time.

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# 4

## Addressing the Procyclical Bias

FABRIZIO BALASSONE AND MANMOHAN S. KUMAR

Since political economy factors are an important determinant of procyclicality of policies, measures to contain the misuse of fiscal policy discretion can be beneficial. The scope of fiscal frameworks designed to attain this varies widely across countries. In some countries, economic, political, and legal factors will be more conducive to rules-based arrangements, putting explicit constraints on policy choices. In others, institutions may more effectively transmit public pressure to decision makers through a system of checks and balances. History may also play a role, with countries that have experienced fiscal crises possibly more inclined to opt for hard rules. Overall, there is a range of options to constrain discretion: from broadly defined good practices leaving ample room for interpretation to tighter setups, based on hard numerical rules or even delegation of policy-related mandates.<sup>1</sup>

### Fiscal Rules

Evidence suggests that in the design and implementation of fiscal frameworks concern for cyclicity has been secondary, with the primary focus generally on long-term sustainability. When dealing with cyclicity issues, most frameworks appear to take for granted the policymaker's *intent* to run a countercyclical policy and overlook the *actual* tendency to asymmetric procyclicality. These frameworks often rely on nominal deficit ceilings or posit fiscal targets over the medium term. This means that effectively they play little role in correcting the policymakers' incentives in good times (Box 4.1).

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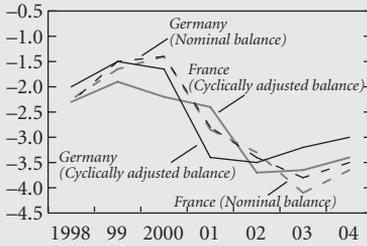
<sup>1</sup>Institutional frameworks supporting fiscal prudence are discussed in Chapters 5 and 6.

**Box 4.1. Cyclical Asymmetry in Fiscal Policy and Fiscal Targets  
“Over the Cycle”**

By overlooking the tendency of policy toward asymmetric cyclicality, fiscal frameworks based on targets defined as averages over the cycle may carry the seeds of their own demise.<sup>1</sup> Reference to average budgetary outcomes allows the conduct of relatively loose policies and the postponement of adjustment towards the end of the reference period (or the postponement of the end of the reference period itself, if this is not tightly specified). The likely result is that the fiscal framework will come under strain as soon as it requires a procyclical adjustment in bad times. The unchecked deficit bias in good times will ultimately undermine the credibility of the framework because its prescriptions will be seen as lacking economic rationale; it will be either de facto disregarded or repudiated outright.

Recent developments in the European Union provide a clear example of this type of problem. The difficulties of several member states in keeping their deficits within the limit set by the Maastricht Treaty arose after 2001, in an adverse macroeconomic environment. However, their origins are rooted in insufficiently ambitious policies over 1999–2000, when conditions were favorable (see figure).

**France and Germany:  
Cyclically Adjusted and Nominal  
Balances, 1998–2003**  
(In percent of GDP)



Source: European Commission (2005).

In this case, the different status of the 3 percent of GDP ceiling set for the annual nominal deficit and of the medium-term objective of close to balance or in surplus may have been an augmenting factor. While the former is defined in the Maastricht Treaty and sanctions are foreseen in case of noncompliance, the latter is defined in the Stability and Growth Pact and is not backed by similar incentives. This asymmetry has allowed attention to focus on the nominal deficit ceiling at both the policy and the monitoring levels, thus reducing

<sup>1</sup>This box draws on the discussions in Balassone (2005).

**Box 4.1 (concluded)**

pressure against the adoption of procyclical policies in good times. Significantly, most of the reforms proposed by policymakers aim at relaxing the nominal deficit ceiling in bad times, while little attention is paid to how to induce countercyclical behavior in good times. This tendency is also reflected in the reform proposals recently agreed upon, as described in European Council (2005); see also Annett, Decressin, and Deppler (2005).

The experience with the Stability and Growth Pact (SGP) adopted by member countries of the European Economic and Monetary Union (EMU) illustrates the difficulties arising when tackling both sustainability and cyclical issues in a “rules-oriented” framework. Despite the intent to avoid procyclical policies, the SGP’s initial focus, as enshrined in the Maastricht convergence criteria, has been on sustainability. The “hard-law” clauses are focused on sustainability (the 3 percent deficit ceiling), while the cyclical issue is addressed by provisions more akin to “soft law” (the close-to-balance or in surplus position to be observed over the medium term). While in several countries this framework was successful in reconciling fiscal discipline and flexibility, in others it was not able to reduce procyclicality in good times. This mixed record likely reflects differences in the degree to which the SGP rules feed through to the national fiscal framework. A “medium-term objective of a budgetary position close to balance or in surplus” as such provides little guidance concerning yearly targets, and the nominal deficit ceiling is unlikely to be binding in periods of high growth. Therefore such a framework may not be effective where it is not backed by political commitment (e.g., in the form of a multiannual fiscal program announced at the beginning of a government’s term), and by transparency in both the definition and the execution of the budget to facilitate monitoring and promote accountability (Hallerberg, Strauch, and von Hagen, 2001 and 2004).

Similar problems can arise in less rules-oriented frameworks, which rely more on public scrutiny and democratic accountability to ensure the credibility of commitment to sound policies. For instance, the fiscal frameworks introduced in Australia, New Zealand, and the United Kingdom all feature a reference to medium-term objectives for the budget balance, where medium term is usually interpreted as referring to the length of the economic cycle. The intention is to allow policy to respond countercyclically to changing macroeconomic circumstances. But the definition of a medium-term objective does not effectively prevent slippages associated

with asymmetric procyclicality. This is in part because of the temptation to take some leeway in the short term and count on correction at the end of the cycle.

In developing economies, low market tolerance for high debt has in general produced an even greater emphasis on sustainability. However, as economic development has continued apace, there has been an increasing realization of the role fiscal policy can play in influencing economic fluctuations, with a corresponding increase in the attention paid to the cycle. A clear example of this is Chile, where a fiscal rule explicitly targeting a cyclically adjusted surplus on a yearly basis was introduced in 2001. The rule has been operated through both a downturn and the ensuing rebound. While the Chilean economic environment may be considered to be particularly favorable, given its low public debt and high policy credibility, the fiscal framework has been seen to be successful.

Several options are available to improve the balance between sustainability and cyclicity concerns in the design of fiscal frameworks. In frameworks based on “broad guidelines” and assuming sustainable budgetary positions, an explicit requirement that reaction of fiscal balances to changes in output gap be proportionate and symmetric could be adopted.<sup>2</sup> In rules-based fiscal frameworks, an option would be to introduce yearly targets in terms of cyclically adjusted fiscal balances. In this context, rules concerning the evolution of expenditures can be an important complementary instrument.

Regardless of the precise option, an assessment of the economic cycle and its impact on the budget is critical to the pursuit of countercyclical policies. In the absence of a reasonably reliable gauge of the state of the cycle and its implications for revenues and expenditures, policy cannot be implemented effectively. Indeed, in these circumstances, it is likely to end up being counterproductive, amplifying the cycle. This raises a number of analytical and operational issues, including the role of automatic stabilizers, which are explored in the following two sections.

## Cyclically Adjusted Fiscal Balances

A reliable indicator of the cyclical position of the economy and of its impact on the budget is a precondition to promoting countercyclical fiscal policy in good times. It is essential for the design of policy in the first

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<sup>2</sup>Specifically, this assumes that debt is not so high or financing constraints are not so binding as to preclude countercyclical policies during the downturn.

place, but also necessary to monitor outcomes and to hold policymakers accountable. Targeting cyclically adjusted fiscal balances can, in principle, assist in the design and monitoring of policy by focusing on the discretionary component of the budget.

The cyclically adjusted fiscal balance (CAB) is obtained by removing the cyclical component of the budget from the nominal fiscal balance. The cyclical component, in turn, depends on two factors: the size of the output gap; and the output elasticity of the budget, which is determined by the extent to which individual budgetary items react to fluctuations in output, as well as by the size of the budget (Box 4.2).

However, while CABs are regularly used by international organizations and national institutions, budgetary targets are seldom framed in cyclically adjusted terms. This reflects in part the relative complexity of the techniques used for the estimation of output gaps and budgetary elasticities. There are two main issues: (1) different methods for estimating CABs can yield different results; and (2) forecasts and outturns of CABs can be subject to, respectively, large errors and significant revisions, regardless of the specific method used. These issues are examined below.

## Estimation Method and Accuracy of Estimates

Concerns over the accuracy with which CABs measure the impact of economic environment on the budget arise from a variety of sources: first, different methods of estimation of trend output and output gap produce different results; second, accurate estimation of budgetary elasticities is not always feasible given the informational requirements; and third, gauging the impact of the economic environment on the budget by means of the output gap alone may be insufficient.

The estimates of output gap are known to vary considerably depending on the method used. The results obtained with different methods display strong short-term comovements, although the range of level estimates is wide (see Orphanides and van Norden, 2002). A comparison of estimates prepared between 1999 and 2002 by major international organizations for the euro area reveals substantial dispersion (European Central Bank, 2005). Estimates published by the European Commission, the Organization for Economic Cooperation and Development, and the IMF—both real time and the latest available—span over a range often wider than 1 percent of GDP with averages of a similar order of magnitude. Given the structural shifts occurring in developing countries noted earlier, these problems are likely to be even more acute in those economies.

**Box 4.2. The Budget: Cyclical Component and Discretionary Policy**

The output (semi-) elasticity of the budget,  $\varepsilon$ , indicates the responsiveness of the budget balance to output ratio,  $b$ , to a change in output,  $Y$ . It can be expressed as

$$\varepsilon = \Delta b / (\Delta y / y) = (\eta_R R/Y - \eta_G G/Y - b) \quad (1)$$

where  $\eta_R$  and  $\eta_G$  are the output elasticities of revenue,  $R$ , and expenditure,  $G$ , indicating the responsiveness of revenue and expenditure to a change in output.

The above shows that the output (semi) elasticity of the budget depends on two factors: (1) “automatic stabilizers,” that is, the automatic response of fiscal variables to changes in economic conditions, as measured by the elasticities  $\eta_R$  and  $\eta_G$ ; and (2) the size of government ( $G/Y = R/Y - b$ ).

If  $\eta_R = 1$  and  $\eta_G = 0$ , since  $b = R/Y - G/Y$ , equation (1) becomes

$$\varepsilon = G/Y \quad (2)$$

and the output elasticity of the budget is equal to the size of government.

The importance of this can be seen by considering that average values of elasticities for European countries are 0.9 for revenue and  $-0.2$  for expenditure (Bouthevillain and others, 2001). Developing countries generally have lower output elasticities of expenditure and revenue. On the revenue side, the share of indirect taxes is larger while the degree of progressivity in direct taxes is lower, with both tending to reduce the degree of automatic stabilization. On the expenditure side, unemployment and other social protection insurance programs are generally less developed, again reducing the elasticity of the budget.

It should be noted that

- the size of  $\varepsilon$  is not a measure of the stabilizing effect of the budget as the latter also depends on fiscal multipliers; and
- the change in CAB in a given period reflects the impact of both past and current policies; that is, it is not an indicator of the effects only of current policy measures.

The accurate estimation of budgetary elasticities can be data intensive and require detailed institutional knowledge. In the absence of the requisite information, elasticities are often estimated econometrically using macroeconomic variables. A key drawback of this method is that its accuracy depends on adequately controlling for discretionary policy, while information on discretionary policy is often an output rather than an input to the computation of CAB. Moreover, econometric estimates may not distinguish between automatic and discretionary, albeit systematic, responses of

budgetary items to cyclical conditions. Given these considerations, reliable estimates of budget elasticities may not be available for many countries.

Composition effects, which are often not captured in the CABs, can also matter. It is often the case that cyclical movements of various components of demand and national income are not synchronized. The resulting changes in the composition of output (for instance, the extent to which it reflects domestic or foreign demand) can have a substantial impact on the assessment of the cyclical component of the budget. A clear illustration is provided by developments during the 1990s in Europe where composition effects have been noticeable in a wide range of countries, with particularly marked effects in Belgium, Italy, and the Netherlands, reaching a peak of between ½ and 1 percent of GDP (Bouthevillain and others, 2001).

Factors other than output also affect the budget. While attention is usually restricted to GDP and employment movements, other factors—including interest rates, inflation, international commodity prices, exchange rates, and asset prices—can automatically have an impact on government budgets. These variables affect the budget directly—interest rates affect outlays; commodity and asset prices affect revenues—as well as indirectly through their impact on output and unemployment. In many emerging market and developing countries, the impact of these factors may indeed be dominant. Hence, any systematic evaluation of the impact of “environment” needs to take them into account (see Box 4.3).

### **Errors in Forecasts and Revisions of Outturns**

In assessing how reliable and usable is a CAB as an indicator, one benchmark would be the nominal balance itself. The latter is readily available and requires minimal elaboration. It is also the standard reference for policy design, implementation, and assessment. The simplicity of the nominal balance is a key attraction.

Nonetheless, despite the relative complexity of CABs, the magnitude of errors in forecasts for these need not be very different from those for nominal balances. While forecasts for the actual nominal fiscal balance depend on estimates of actual GDP, forecasts for CAB depend on estimates of trend GDP. In general terms, it is not possible to say a priori which of the two estimates is subject to greater error. The order of magnitude is likely to be the same under most circumstances because, by design, forecasts of trend GDP are based on forecasts of actual GDP.

In an analysis undertaken by IMF staff, a comparison of errors in forecasts of actual output and trend output does indicate similar orders of

### Box 4.3. Other Factors Affecting the Budget: Exchange Rates and Commodity Prices

The fiscal balance reflects the current implications of past policies, “environmental” conditions, and new legislation. In the computation of cyclically adjusted fiscal balances, the impact of policy is obtained residually, after estimating the effect of environmental conditions, which are identified with deviations of output from potential. However, the arbitrary restriction of the set of relevant environmental variables to the output gap can result in biased estimates of the impact of policy.

**A case study of the Asian crisis.** IMF (1998) presents a decomposition of year-on-year changes in the fiscal balance by underlying factor in four countries (Indonesia, Korea, the Philippines, and Thailand) during the Asian crisis of the late 1990s. The factors considered include three “environmental” variables (the exchange rate, oil prices, and growth) and “new” policy actions. In all countries, the deterioration of the economic environment is found to contribute substantially to the deterioration of fiscal balances. The most relevant factor is the massive depreciation in exchange rates. Oil prices significantly affect the fiscal balance of only Indonesia.

	Indonesia		Korea		Thailand		Philippines
	1997/98	1998/99	1997	1998	1996/97	1997/98	1997
Change in fiscal balance	-2.2	-9.2	-4.0	-4.0	-3.5	-0.4	-1.2
Change due to environment	-4.2	-11.1	-1.5	-0.3	-3.1	0.7	-1.5
Exchange rate	-3.5	-6.4	-0.9	-0.2	-2.0		-0.9
GDP growth	-0.5	-4.0	-0.6	-0.1	-0.9	0.6	-0.6
Oil price	-0.2	-0.7					
Change due to policy	2.7	1.7	-2.5	-2.6	-0.6	-0.6	1.6
Residual (unexplained)	-0.7	0.2		-1.1	0.1	-0.5	-1.3

Source: IMF (1998); these data reflect information available during or in the immediate aftermath of the crises and do not incorporate subsequent revisions.

A significant part of observed changes in fiscal balances remains unexplained. This partly reflects the effect of past policies and of other environmental factors. However, it is also a consequence of the judgmental nature of the assessment of what is a “new” policy action. Such judgment can also affect the partition between environmental and policy effects. In the case of Indonesia, for instance, the large environmental effect of exchange rate movements reflects the increase in commodity subsidies as a consequence of the failure to fully adjust the local price of imported goods. This could equally be seen as the result of a deliberate policy decision to expand social spending.

**Box 4.3 (concluded)**

**Adjusting for the price of oil in Russia.** IMF staff analysis of the direct impact of oil prices on energy taxes in Russia suggests that at current prices, a \$1 increase in the oil price would raise revenue by 0.4 percent of GDP. While estimates of the impact of the economic cycle on Russia's government budget are hampered by the lack of any normal economic cycle during most of the transition period so far, staff uses an oil-price-adjusted fiscal balance to have an indication of the cyclically adjusted fiscal position. The sensitivity of revenues to changes in oil prices is estimated by category of taxes.

**Adjusting for the price of copper in Chile.** Starting in 2001, Chile began targeting a 1 percent of GDP structural budget surplus. This is not enshrined in legislation; rather, it is a commitment of the current government. All the adjustments to get the structural balance affect the revenue side of the budget as no expenditure item is judged to have a significant automatic cyclical component. The adjustments are made against a benchmark when both the economy is operating at full potential and copper price is at its long-term (10 years) level. (Copper is Chile's leading export; about 4 percent of total government revenues come directly from copper, but copper feeds through the entire economy.) Two separate panels of up to 14 experts each are assigned the task of computing potential output and long-term copper price, as well as the implication for the budget of deviations from such values. Each expert submits her or his estimate, the two extreme on each side are disregarded, and the simple average of the remaining 12 is used as a benchmark forecast.

magnitude. Forecasts for trend output in a given year, as computed in that year, were compared with the outturn estimated in the following year for a sample of industrial and developing countries over the 1990s.<sup>3</sup> Differences were generally substantial, but they were markedly lower for industrial countries than for developing countries (around 1 percent and 2.6 percent, respectively). However, for the same sample, errors in forecasts of actual output (based on the IMF's World Economic Outlook database) had an absolute average of 0.95 percent in industrial countries and of 3.31 percent in developing economies (Table 4.1).<sup>4</sup>

The above suggests that forecasts of CABs in general need not be subject to larger errors than those concerning nominal balances. Indeed, for coun-

<sup>3</sup>The analysis is based on the most commonly used method using the Hodrick-Prescott filter. The sample includes a wide variety of industrial and emerging market economies.

<sup>4</sup>The output elasticity of the budget is generally significantly lower than one. Therefore, other things being equal, the errors in budgetary forecasts (both nominal and cyclically adjusted) tend to be smaller than the corresponding errors in output forecasts.

**Table 4.1. Errors in Forecasts in Actual and Trend Output ( $t$  Versus  $t+1$ )<sup>1</sup>**

	Actual Output		Trend Output	
	Mean	Standard deviation	Mean	Standard deviation
Full sample	2.39	1.42	2.01	1.07
Industrial countries <sup>2</sup>	0.95	0.16	0.97	0.19
Developing economies <sup>3</sup>	3.31	1.04	2.64	0.87

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

<sup>1</sup>In percent of GDP.

<sup>2</sup>These included Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

<sup>3</sup>These included Argentina, Bangladesh, Brazil, Cambodia, Chile, China, Côte d'Ivoire, the Czech Republic, Egypt, Ghana, Hong Kong SAR, Hungary, India, Indonesia, Jordan, Kenya, Korea, Latvia, Lebanon, Lithuania, Malawi, Malaysia, Mexico, Nigeria, Pakistan, Peru, the Philippines, Poland, Russia, Singapore, the Slovak Republic, South Africa, Thailand, Turkey, Uruguay, and República Bolivariana de Venezuela.

tries in the euro area, the average absolute difference between forecasts and outturns for CABs over 1999–2002—as computed by the European Commission—was in fact very close to the corresponding figure for nominal balances, 0.99 percent and 0.85 percent of GDP, respectively (Table 4.2).

The situation is different with regard to the stability of initial assessment of outturns. The computation of the nominal balance for a given period only requires data for that period. Subsequent computation can only lead to different results if data for *that period* are revised. In contrast, the computation of the corresponding CAB requires also output forecasts for subsequent time periods. This is so since, regardless of the method used, estimates of trend GDP are essentially weighted averages of realized data and forecasts of actual output for a number of periods ahead. This means that subsequent computation of CAB outturns for a given period can give different results simply because forecasts of actual GDP for subsequent periods are revised. This problem may be more significant in developing than in industrial countries, since the former are subject to greater and more frequent shocks and structural breaks.

Revisions to initial assessment of outturns are generally smaller than errors in forecasts, but there is a high likelihood that they are significant at economic turning points. IMF staff analysis suggests that revisions to initial assessment of outturns are about half the size of errors in forecasts (as measured by the difference between the forecast and the initial assessment of trend output for any given year; Table 4.3). For industrial countries the average revision of trend output outturns after one year is about ½ percent. As budget elasticity averages around ½ percent for industrial countries, this

**Table 4.2. Revisions in Cyclically Adjusted Balances and Nominal Balances in the Euro Area, 1999–2002<sup>1</sup>**

	<i>t</i> Versus <i>t</i> + 1		<i>t</i> + 1 Versus <i>t</i> + 2	
	Mean	Standard deviation	Mean	Standard deviation
Nominal fiscal balances	0.85	0.48	0.34	0.26
Cyclically adjusted fiscal balances	0.99	0.57	0.89	0.62

Sources: European Commission, Spring Forecasts; and IMF staff calculations.

<sup>1</sup>In percent of GDP.

**Table 4.3. Errors in Forecasts and Revisions of Outturns for Trend Output<sup>1</sup>**

	Errors in Forecasts <i>t</i> Versus <i>t</i> + 1		Revisions of Outturns <i>t</i> + 1 Versus <i>t</i> + 2		Revisions of Outturns <i>t</i> + 2 Versus <i>t</i> + 3	
	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
Full sample	2.01	1.07	0.53	0.67	0.80	0.35
Industrial countries <sup>2</sup>	0.97	0.19	0.52	0.10	0.24	0.04
Emerging markets <sup>2</sup>	2.64	0.87	1.53	0.57	1.14	0.34

Source: IMF staff calculations.

<sup>1</sup>In percent of GDP.

<sup>2</sup>See footnotes to Table 4.1.

would in turn imply an average revision of CAB outturns after one year of  $\frac{1}{4}$  percent of GDP. However, this average hides a considerable diversity of experience. In the case of turning points, the revisions can be quite large. A vivid example is provided by revisions in the assessment of recent budgetary developments in some European countries: the 2001 nominal deficit for France and Germany was estimated in 2002 at  $1\frac{1}{2}$  percent and  $2\frac{3}{4}$  percent of GDP, respectively. The corresponding CAB estimates were  $1\frac{3}{4}$  percent and  $2\frac{1}{2}$  percent (European Commission, 2002). Nevertheless, a year later (in 2003) while estimates of nominal deficits were essentially unchanged, CAB estimates were revised to  $2\frac{1}{2}$  percent and 3 percent, respectively (European Commission, 2003). This mainly reflected sharply lower than expected growth in 2002, leading to a downward revision of the estimated trend output for 2001, and a reduction of the corresponding negative output gap.

Large revisions are less likely in changes in CABs. This is primarily because the revisions of forecasts of actual output generally affect estimates of trend output for contiguous years in a roughly similar manner, leaving the change in trend output between years relatively unaffected. This suggests that revisions to changes in CABs are also likely to be smaller than revisions in their *levels*. Indeed, a recent study based on simulation analysis

suggests that, for the EU countries, a revision in CABs of up to ½ percent of GDP only causes a revision of the change *in* CABs of up to 0.1 percent of GDP (González-Mínguez, Hernández de Cos, and del Río, 2003). The data revisions for France and Germany discussed above provide a concrete illustration in this respect. The change in the cyclically adjusted deficit from 2000 to 2001—as seen in 2002—was 0.9 percent of GDP for Germany, with no change for France; in 2003 these estimates were unchanged for Germany and only slightly changed (to 0.1 percent) for France.

The above discussion suggests that while the computation of CABs raises a number of issues, a variety of measures can be undertaken to make them a more robust reference for policy design and implementation. These include taking into account changes in the composition of output when estimating the output gap, as well as relying on estimates of elasticities derived from tax and expenditure laws. These estimates should be updated periodically and the impact of any new legislation should be assessed in a timely manner. The stability of policy assessment based on CAB estimates could be enhanced if attention focused more on the dynamics of output and budget balances rather than their levels, and particular attention is paid to the assessments around likely turning points. Further gains could be obtained by reference to medium-term estimates of trend output in order to make CAB estimates less influenced by the volatility of forecasts for output two or more periods ahead.

Moreover, for many countries even relatively unsophisticated CAB calculations would represent a significant step forward. Most of the improvements suggested above may be challenging in emerging market countries because of higher output volatility and inadequate data. However, even CAB calculations based on deviations from a simple measure of trend output, and on plausible values of the output elasticity of revenue and expenditure, can be more useful than nominal balances for assessing past or proposed fiscal measures. As noted above, reference to changes in trend output (and CABs) would reduce the consequences of an imprecise estimation of the level of potential output. Concerning budget elasticity, plausible benchmark values, taking into account stylized facts regarding revenue and expenditure elasticities, can be computed (Box 4.2). Controlling for the most significant changes in the composition of output (i.e., large shifts from domestic to foreign demand and vice versa) should also be feasible.<sup>5</sup>

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<sup>5</sup>The introduction of systematic references to CABs in the policy debate can also be expected to induce efforts to gradually improve its quality—for example, by developing detailed data on capital and labor stock as well as higher quality GDP measures—with positive spillovers in terms of better guidance for policy in general.

In order to maximize the gains in terms of accountability expected from a sharper focus on the cyclical policy, care should be taken to reduce room for subjective interpretation of data. A transparent implementation of CAB targeting could be aided by delegating to an independent fiscal agency the macroeconomic assumptions underlying budgetary plans (in some countries trend output is presented as a policy objective), as well as the estimation of the nominal balance necessary to attain the desired CAB.

## Targeting Expenditure

Targeting government expenditure can facilitate the implementation of countercyclical policy. Committing to a predetermined rate of growth of expenditure can curb the tendency to increase public spending in good times while leaving the automatic stabilizers on the revenue side free to operate.<sup>6</sup> An expenditure rule of this type can be relatively easily disseminated to the public, and clearly monitored, provided that the control aggregates are clearly specified. Largely reflecting these factors, expenditure targeting—whether formally incorporated in a rule or not—has been playing a role in the fiscal framework of an increasing number of countries (Box 4.4). Nonetheless, a number of important issues arise in the implementation of an expenditure targeting framework. It should also be stressed that, even if implemented effectively, expenditure targeting as such does not preclude procyclical policies that may arise from the revenue side nor does it ensure budgetary sustainability.

A variety of issues can arise in the implementation of an expenditure targeting framework that will have a bearing on its effectiveness. These include the choice of expenditure aggregate to be targeted, with respect both to the items included, the institutional coverage, and the level of disaggregation of the ceilings. In addition, specific characteristics of the framework, including the time horizon, underlying macroeconomic assumptions, and valuation criteria can have an important impact.

In general, the expenditure aggregate to be targeted should be broad based. The use of comprehensive aggregates reduces the risk that expenditure ceilings are circumvented by increasing the outlays in the categories not included in the targeted aggregate or expanding the activity of bodies outside the coverage of the target. For instance, some expenditure items

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<sup>6</sup>If automatic stabilizers are not deemed sufficient to shelter against macroeconomic fluctuations, expenditure targets may be set contingent upon the state of the economy to allow—albeit within bounds—discretionary measures.

#### Box 4.4. Use of Expenditure Ceilings in Selected Countries

**Finland.** Central government expenditure ceilings are determined annually for a period of four years. Ceilings are specified in real terms and, in the context of each annual budget, they are converted into nominal ceilings using specific cost and price deflators. Originally, the ceilings covered all central government expenditure, but recently interest and cyclically sensitive items have been excluded. Overall expenditure allowed under the ceilings is allocated to each spending ministry. Ceilings are set with a view to attaining a structural surplus.

**Netherlands.** Ceilings are specified in real terms for a four-year period at the start of a government's term of office, and are converted to annual nominal ceilings using the projected GDP deflator. Ceilings in real terms apply to expenditure net of nontax revenue, and there are separate ceilings for the central government, social security, and health. An expenditure reserve is also included to cover unforeseen spending. The ceilings are set to keep the fiscal deficit below the 3 percent of GDP Maastricht limit in the face of normal economic fluctuations. However, automatic stabilizers on the revenue side are dampened as the deficit moves toward the limit.

**Sweden.** Central government expenditure ceilings are determined annually for a period of three years. The ceilings cover primary expenditure in the state budget (including transfers to local governments) and old age pension expenditure. Overall expenditure allowed under the ceilings is allocated to 27 spending areas and to a contingency reserve. The ceilings are set with a view to achieving a general government surplus of 2 percent of GDP over the business cycle. However, there is no formal guideline to this effect and, recently, ceilings have come to be set as a constant share of potential GDP.

**Switzerland.** A federal government expenditure ceiling (excluding the unemployment insurance fund) is determined annually. Based on a forecast of trend revenue, the ceiling is set at a level to attain a balanced structural budget over the cycle, thus allowing full operation of automatic stabilizers on the revenue side.

**United Kingdom.** Nominal expenditure limits are set for central government departmental expenditure in nominal terms for three years on a two-year rolling basis. The ceilings cover most noncyclical current primary spending. The limits are set with a view to ensuring compliance with the government's "golden rule," which requires that the current budget is in balance or surplus over the economic cycle.

**United States.** Nominal caps on federal government discretionary spending were set annually under the 1990 Budget Enforcement Act. These applied only to on-budget accounts (social security and Medicare were excluded). The act also required that new expenditure and revenue measures impose no net cost (i.e., that they be financed on a pay-as-you-go (PAYGO) basis), and included sequestration procedures triggered in case of noncompliance. The spending caps were set with a view to achieving a balanced budget by 2002, which have since lapsed.

may be moved to the capital account to avoid restrictions applying exclusively to current outlays; transfers to public corporations may be channeled through capital injections; quasifiscal bodies may be set up to run outside the general government sector programs that are in fact a public responsibility; and local government spending may increase to compensate for restrictions on central government outlays. Concerning the latter, in countries where subnational governments have fiscal autonomy, expenditure targets for central government may have to be complemented by intergovernmental agreements. Finally, targeting gross expenditures, rather than net of nontax revenues, is preferable: a measure net of such revenues can be difficult to monitor, expose public spending programs to unnecessary volatility, and induce procyclicality.

It is preferable, however, for some specific items to be excluded. First, interest outlays need to be excluded since they are not a policy variable (at least in the short term). Second, spending on entitlements could also be excluded since it is generally difficult to change it in the short run; however, over the medium term, this category needs to be fully reflected in the aggregate target. Third, cyclically sensitive expenditure items (e.g., unemployment benefits) should be excluded to avoid impeding the operation of the automatic stabilizers. Fourth, since there may be a tendency to comply with the ceilings by compressing those items which are politically less costly in the short term, regardless of the long-term implication, it is often argued that investment spending should be excluded from the targeted aggregate. Interest spending and unemployment benefits may be relatively easy to identify. However, the distinction between current and capital spending can be more problematic and it should not be assumed that all public investment is productive (see, e.g., Balassone and Franco, 2000).

The level of disaggregation at which the ceilings are set has a bearing on the flexibility or rigidity of the framework. The key issue is the extent to which savings in some categories can be used to offset overruns in others. Lower than expected expenditure on some programs, whether they are the consequences of more favorable than expected cyclical developments or they result from productivity gains, should generally be saved. In the case of cyclical developments, this is necessary to let the automatic stabilizers work. However, excessively disaggregated expenditure ceilings may eliminate the needed degree of flexibility in the management of agencies that are assigned multiple tasks—as it is usually the case with the provision of public goods and services.

Setting multiyear ceilings has potential advantages. A multiyear framework makes the government's fiscal goals explicit and can help build consensus around them. Both fiscal prudence and stabilization cannot be properly

pursued outside a medium-term fiscal framework. However, the issue arises as to how to deal with the need for flexibility during the period over which the targets are fixed. In this respect, a key element is whether expenditure targets are set on a rolling basis or in advance for a given period. The former provides wider margins for flexibility as the revision of plans is allowed when macroeconomic developments deviate from the underlying assumptions. However, there is also a risk that such flexibility is misused. Ceilings set on a rolling basis may also come under pressure when there is a change in government. In this respect, the practice to fix expenditure targets at the beginning of the legislature and for its entire span, together with limited contingency provisions to revise the targets, may represent a more transparent solution and one conducive to a higher degree of accountability.

The macroeconomic assumptions underlying an expenditure target determine its effectiveness. In particular, the adoption of a “realistic” or a “cautious” scenario can have an important bearing. The advantage of a cautious scenario is the likelihood of a favorable surprise *ex post*, as cyclically sensitive spending (to the extent that it is included in the aggregate) is likely to turn out lower than expected (and revenues higher). Accordingly, each year there will likely be some room to finance new programs or to deal with unexpected spending overruns. However, the adoption of an excessively cautious scenario can obfuscate the true fiscal goals of the government, defeating the purpose of the multiyear fiscal framework. Moreover, with a cautious scenario automatic stabilizers would not operate correctly. A cautious scenario may also induce the spending ministries to second guess the real scope for additional fiscal relaxation, and to engage in procyclical policy when the outturn is favorable. A more transparent arrangement to allow margins for new discretionary spending would be to accompany the adoption of a realistic scenario with the introduction of a contingency reserve.

Considerations concerning both ease of monitoring and the implications for stabilization policy weigh in favor of nominal targets as compared to real ones. Nominal ceilings are simpler to implement and to monitor than real ones as the assessment of compliance does not require the computation of the relevant deflator, or introduce distortions when a general deflator (such as the GDP deflator) is used. Moreover, nominal ceilings can reinforce the response of automatic stabilizers to demand shocks as higher than expected inflation would automatically lead to lower real government spending. Similarly, nominal ceilings would help absorb permanent supply shocks. However, nominal ceilings can have drawbacks: from an administrative point of view, the cutbacks in real spending required when inflation is higher than expected do not contrib-

ute to a smooth execution of the budget; and reductions in real spending may not be the appropriate policy response to surprise inflation caused by temporary supply shocks.

Cash- and accrual-based targets can play a complementary role. Accrual measures are generally superior as a means for budgetary planning. However, within-year monitoring of fiscal developments can be impeded by the delay with which accrual figures are usually available. Moreover, since accrual and cash measures are affected differently by attempts at creative accounting to circumvent the targets, there may be synergies to be exploited by cross-checking the consistency of accounting records based on the two criteria (Balassone, Franco, and Zotteri, 2006).

Leaving aside the specifics of expenditure ceilings, it is important to ensure that the procyclical bias is not transferred to the revenue side of the budget, and that there is a long-term anchor to fiscal policy. It is of course the case that procyclicality can arise from the revenue side. During boom periods for instance, governments might be tempted to cut taxes or increase tax expenditures, even while observing expenditure ceilings. This essentially occurred in the case of a number of member countries of the European Union (EU) over 1999–2001, which later led to difficulties in complying with the EU fiscal framework. This suggests that the expenditure ceilings cannot be set in isolation from provisions regarding revenue policy.

More generally, expenditure targeting as such does not correct a structural tendency toward excessive deficits. A constant rate of growth of expenditure can be consistent with a gradual deterioration of the fiscal balance if revenues do not keep pace with expenditures. An anchor in terms of budget balance is therefore essential. In a situation in which the budget balance is deemed to be close to a sustainable level, based on an estimate of trend output growth and of the corresponding revenues, the expenditure ceiling could reasonably be set at a level consistent with keeping the balance unchanged. Where it is not, the expenditure target can be readily set to help attain sustainability. Nonetheless, as with all fiscal rules and targets, a crucial factor determining the effectiveness of expenditure ceilings is the extent to which they are backed by political commitment.

## **Procyclicality and Market Constraints**

With regard to market constraints identified in Chapter 3, a variety of measures could play a complementary role in reducing the procyclicality

of policy. There are three interrelated areas: first, measures that can help stabilize investor sentiment during downturns; second, measures to modify the structure of debt to reduce procyclical pressures; and third, instruments to help governments deal with the impact of sharp changes in economic and market environment.

A key element with regard to stabilizing investor sentiment relates to credibility of policies. Weak fiscal discipline in good times and an opaque policy framework can undermine credibility, and thereby aggravate financing difficulties during the downturn. Conversely, budgetary policies that are sustainable and transparent are likely to sustain confidence during the downturn (Corsetti, Guimarães, and Roubini, 2004). In this context, the relevance of credible medium-term budgetary frameworks, in conjunction with the types of expenditure rules noted earlier, is evident. Adapting institutions to deal with the common pool problem could also help in stabilizing market confidence. Measures that can increase social consensus on budgetary priorities may help in obtaining support for policies to deal with procyclicality, especially during the upswing, and stabilize investor confidence during the downswing.

The restoration of confidence may still require procyclical policies in the downturn to reinforce commitment to address the underlying lack of sustainability. Where fiscal correction is required, timing and quality of adjustment is crucial to reduce the degree of procyclicality. The signaling role is effective if policy measures are initiated early, and can help stabilize and support market confidence. This can lead to a significant reduction in risk premia and sovereign spreads, and maintain access during the downturn.

With regard to debt structure, debt management can be oriented to reduce the pressure to implement contractionary policies in the downturn. As credibility is attained and investor confidence stabilizes, a strategy geared to limiting the issuance of debt with short maturities, and in foreign currency, can play a particularly important role in this regard. As a number of recent cases have indicated (Turkey, for instance), given a sound policy framework, it is possible to shift gradually to longer-term debt denominated in domestic currency even as the economy is entering a downturn. This can then provide a temporary relief from immediate financing pressures since access to external finance is less critical.

There have also been a number of proposals for instruments playing a larger insurance role than the current credit instruments. These instruments could link more closely the requirements and the ability of a country to service its debt obligations. For instance, a country with substantial external debt could have a part of its liabilities converted to GDP-indexed

bonds. These bonds would be structured so that the country pays less interest when growth is low to reduce the need for rolling over debt or adjusting spending during recession (Borensztein and others, 2004). The process would be symmetrical: if the economy performs well, interest payments are increased. In this way, the government's ability to use the surge in revenues due to the upswing in activity is curtailed. Thus, while these instruments cannot remedy unsustainable policies, they can help reduce procyclicality.

GDP-indexed bonds are not used extensively.<sup>7</sup> This suggests that financial market participants see constraints in their development and trading. While markets tend to be cautious in adopting new instruments (e.g., the adoption of collective action clauses), in this case, a number of specific issues arise. These relate to the initial fixed cost entailed in launching the instruments, adequate liquidity, the extent of standardization, the measurement of GDP and its trend growth, and uncertainty about the payoffs. None of this is unusual, nor is it unusual that a socially desirable instrument may not be forthcoming.

In such cases, international financial institutions can play a catalytic role. They could help, for instance, in the standardization of the instruments. They could also assist by encouraging the independence of statistical agencies and providing technical assistance to improve the quality of national income statistics, and assuring markets about their reliability. These institutions could also play a greater role in the issuance of bonds denominated in domestic currency and with longer maturities, in part by helping countries identify and deal with policy distortions that provide disincentives to issue debt with these characteristics.

## Conclusions

This chapter has explored the role that cyclically adjusted fiscal balances and expenditure targets can play in ameliorating procyclicality of fiscal policies. In addition, for emerging market countries in particular, it considered measures to stabilize investor confidence and maintain market access to avoid procyclicality during economic downturns. The discussion points to the following conclusions:

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<sup>7</sup>A few countries, including Bosnia and Herzegovina, Bulgaria, and Costa Rica, have issued these bonds as part of Brady restructuring agreements. More recently, Argentina introduced GDP-linked securities in the context of its debt restructuring.

- The availability of a reliable indicator to gauge the degree of procyclicality of policy is a key precondition for any attempt at correcting the procyclical bias. While cyclically adjusted fiscal balances represent a natural candidate, international experience with fiscal frameworks confirms a certain degree of diffidence toward them. Moreover, while frameworks for fiscal responsibility have become increasingly alert to cyclical issues, CABs have generally not had a significant formal role in the design and implementation of fiscal rules.
- While there are a number of difficulties regarding the computation of CABs, a variety of measures can be undertaken to address them and CABs can play a useful role as a reference for policy design and implementation. The accuracy of CAB estimates can be improved by taking into account changes in the composition of output, and by increasing reliance on estimates of elasticities derived from tax and expenditure laws. Policy assessment based on CABs can be improved by focusing on changes in output and budget balances rather than their levels, and a reference to medium-term estimates of trend output can make CAB estimates less susceptible to volatility of forecasts for output.
- Nonetheless, CABs need to be used judiciously. This is especially so in emerging market and developing economies where structural breaks and output volatility complicate the task of estimating the trend output. Given the factors entailed in the computation of the measure, it is particularly important to have transparency in the estimation procedures. In any case, giving consideration to a more formal role to CABs in fiscal frameworks should not reduce the importance attached to the monitoring of nominal balances and debt dynamics.
- A multifaceted approach to dealing with the issue of procyclicality may be necessary. Since direct CAB targeting is likely to remain a challenge in many countries, targeting government expenditure can support the implementation of countercyclical policy in the context of deficit or debt targets. In the choice of expenditure aggregates, a balance needs to be struck between comprehensiveness and ease of monitoring.
- For emerging market economies in particular, a variety of market-related measures could play a complementary role in reducing policy procyclicality. Measures that can help external investor sentiment during downturns are likely to be helpful. At the same time, the structure of debt can be modified to reduce procyclical

elements, and financial instruments can be developed to reduce the budgetary impact of sharp changes in the economic and market environment.

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# 5

## Fiscal Responsibility Laws

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The search for more comprehensive institutional arrangements to improve fiscal policy outcomes intensified during the last decade. Analogous to the monetary policy debate, while discussions initially centered on the general issue of rules versus discretion, more recently they have turned into a search for broader institutional arrangements that would help ensure the desired fiscal policy outcomes. Recognizing the limited scope for improvement that stand-alone fiscal rules can provide, and the frequent lack of immediate results from enhanced transparency alone, fiscal responsibility laws (FRLs) have been enacted in many countries as permanent institutional devices aiming to promote fiscal discipline in a credible, predictable, and transparent manner. New Zealand was at the forefront of these reforms, adopting an FRL in 1994. More recently, FRLs have been implemented in several countries in Latin America, Europe, and Asia.

This chapter discusses the main advantages and disadvantages of FRLs based on experiences in selected countries (up to 2005). As noted below, the content of FRLs varies greatly from country to country, and some countries that do not have an FRL, in fact legislate typical FRL provisions in other pieces of legislation. This chapter, however, concentrates on cases where FRL provisions are contained in a single law and does not cover other public finance legislation, such as budget laws or stand-alone legislated fiscal rules.<sup>1</sup> It mainly

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<sup>1</sup>See, for instance, OECD (2004) on legal systems for budget frameworks in OECD member countries, and Kopits (2001 and 2004) and Dabán and others (2003) for a survey on fiscal rules.

focuses on factors and preconditions that can increase the chances of success of FRLs. The success of FRLs is analyzed along several dimensions, including fiscal outcomes, the degree of compliance with its requirements, and whether they have led to changes in fiscal policy design and implementation.

The chapter first discusses general characteristics, advantages, and disadvantages of FRLs. It then reviews the experience with FRLs in selected countries. Next, it draws some policy lessons, particularly with respect to the conditions that emerge as favorable to the effective implementation of FRLs and best practices regarding their design. The last section of the chapter offers some concluding remarks.

## **Characteristics, Advantages, and Disadvantages of Fiscal Responsibility Laws**

FRLs aim to improve fiscal discipline by requiring governments to declare and commit to a monitorable fiscal policy objective and strategy. Often, a driving force behind FRLs is the wish to make fiscal policies more predictable and credible, by establishing rules and procedures the government must follow in the design and implementation of fiscal policy, and by setting up transparent mechanisms by which others can judge if the government is complying with established goals and priorities. While a well-designed FRL can achieve this goal, it is not obvious that the mere introduction of an FRL will be sufficient, nor that the absence of an FRL will make it impossible to do so. By reviewing the experience with FRLs in different countries, this chapter aims to identify those design characteristics and preconditions that may contribute to the success of FRLs.

The introduction of an FRL is one approach governments have used to try to alleviate problems in fiscal management. As noted earlier, policy discretion may be beneficial under a number of circumstances,<sup>2</sup> but there is growing evidence that discretion can be misused, leading to deficit bias,<sup>3</sup> or the implementation of procyclical fiscal policies. Recognizing that stand-alone fiscal rules may provide limited scope for improvement, and the frequent lack of immediate results from enhanced transparency alone, governments have increasingly enacted FRLs as permanent institutional devices

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<sup>2</sup>Policy discretion would be useful, for instance, in the presence of unexpected shocks that require speedy policy action, or under rigid monetary frameworks that do not allow monetary policy to play a stabilizing role in macroeconomic management.

<sup>3</sup>A deficit bias is a tendency to run fiscal deficits that are not consistent with medium-term fiscal sustainability.

aiming to promote fiscal discipline in a credible, predictable, and transparent manner.

FRLs can be classified according to a number of different characteristics. A first distinction can be made between FRLs that emphasize procedural and transparency issues, and those that focus more on numerical fiscal rules. Other distinctions can be made according to the jurisdictional scope, the extent of sanctions, the applicability of escape clauses, and the inclusion of cyclical considerations. These will be discussed in turn.

### Procedural Rules Versus Numerical Rules

Both procedural rules and numerical rules are common features of FRLs. Procedural rules define the attributes and interaction of participants in the budget process, aiming to enhance transparency, accountability, and fiscal management.<sup>4</sup> FRLs typically require the government to commit up-front to a monitorable fiscal policy strategy, usually for a multiyear period, and to report and publish fiscal outcomes and strategy changes on a routine basis.<sup>5</sup> In contrast, numerical fiscal rules are a permanent constraint on fiscal policy generally defined in terms of an indicator of overall fiscal performance. There are four main types of numerical fiscal rules: deficit rules (e.g., balanced budget); debt rules (e.g., debt ceilings); borrowing rules (e.g., prohibition of central bank financing); and expenditure rules (e.g., ceilings on some types of public expenditure or public expenditure growth).

There are significant cross-country differences in the emphasis placed on procedural and numerical rules. The FRLs in Australia, New Zealand, and the United Kingdom place great emphasis on procedures, outlining principles of responsible and transparent fiscal management, reporting requirements, and accountability. Australia's FRL, the Charter of Budget

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<sup>4</sup>The IMF's Fiscal Transparency Code (IMF, 2001b) emphasizes four general transparency principles: (1) clarity of roles and responsibilities with respect to the structure and functions of different levels of government, and the relationship of government and the rest of the economy; (2) public availability of information, with comprehensive and periodic reporting; (3) open budget preparation, execution, and reporting, requiring disclosure of information about the budget process; and (4) assurances of integrity regarding the quality of fiscal data and independent scrutiny of fiscal information.

<sup>5</sup>A recent study by the International Budget Project (2004) on developing and transition countries concludes that, while in most surveyed countries documents related to the executive's budget are routinely released to the public, serious shortcomings in the information provided are not uncommon. In addition, governments typically fall short of international best practices regarding publishing intra-year and final budget implementation reports. Finally, most countries surveyed fail to provide information to the public and to legislatures that can help make the budget (and the policies it embodies) more understandable.

Honesty Act, does not specify any numerical rule. New Zealand's Fiscal Responsibility Act aims at maintaining public debt at "prudent" levels by running appropriate operating balances. The U.K. Code for Fiscal Stability is supported by two numerical rules that are not part of the code itself.<sup>6</sup> In contrast to FRLs that emphasize procedures, Panama's FRL focuses almost exclusively on numerical fiscal targets. Most FRLs typically incorporate both elements. For example, Brazil's FRL sets a comprehensive framework for budgetary planning, execution, and reporting and also includes numerical fiscal limits for selected indicators. The FRLs of India and Sri Lanka provide for a broad framework for fiscal policy design and reporting, with numerical targets set in a multiyear context. Other FRLs (e.g., Argentina and Peru) also contain procedural and transparency provisions, with numerical targets set in an annual context. Table 5.1 presents a summary of the key components of FRLs in different countries. Further details on the content of the laws can be found in Appendix 1, while Appendix 2 describes the experience with the implementation of FRL provisions.<sup>7</sup>

Procedural and transparency rules in FRLs can be instrumental in improving fiscal management. While they may be insufficient to strengthen fiscal policies in and by themselves, they may help by making the budget process more "hierarchical,"<sup>8</sup> concentrating power in the hands of those who have incentives to deliver fiscal discipline, identifying weaknesses in fiscal institutions and procedures, and limiting agency problems by increasing accountability to voters. Thus, in addition to improving governance and transparency, these rules can play an important role in creating consensus for fiscal reforms.<sup>9</sup>

Numerical fiscal rules embedded in FRLs have several potential advantages. First, they may help contain a deficit bias and address problems of time

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<sup>6</sup>The rules followed by the United Kingdom, set in the Finance Act (1998), are (1) the "golden rule," stating that over the economic cycle, the government should borrow only to invest and not to fund current spending; and (2) the "sustainable investment rule," stating that the public sector's net debt-to-GDP ratio be maintained at a prudent and stable level over the economic cycle (currently interpreted as under 40 percent of GDP).

<sup>7</sup>It should be noted that some FRLs currently in existence mandate certain provisions that are still to be fully implemented (e.g., anticyclical funds in Argentina; adjusting the primary balance by the cycle in Colombia).

<sup>8</sup>At the drafting stage of the budget, more hierarchical rules are those that give more power to the finance minister rather than the spending ministries; at the approval stage, they limit the power of the legislative body to modify the size of the budget; and at the execution stage they restrict the legislative body's initiative to amend the budget once it has been approved.

<sup>9</sup>For instance, Wallack (2004) argues that more accurate and transparent public information is associated with faster fiscal reform. Inaccurate or missing economic statistics affect both the mean and the variance among policymakers' assessments of the correct policy. Governments, responding to distorted perceptions of a situation, may implement the wrong policy even if driven by good intentions.

**Table 5.1. Summary of Characteristics of Fiscal Responsibility Laws (FRLs) in Selected Countries**

Country and Current Law	Original Laws	Procedural Rules	Numerical Rules <sup>1</sup>	Scope <sup>2</sup>	Sanctions <sup>3</sup>	Escape Clauses
Argentina: Federal Regime of Fiscal Responsibility, 2004	1999, 2001	Yes	E; D	NG <sup>4</sup>	I	Social and economic emergencies
Australia: Charter of Budget Honesty, 1998		Yes		NG	R	No
Brazil: Fiscal Responsibility Law, 2000		Yes	E; D	PS	P; I	Several
Colombia: Organic Law on Fiscal Transparency and Responsibility, 2003	1997, 2000	Yes	PB; E; D	NFPS	P; I	No
Ecuador: Fiscal Responsibility Law, 2005	2002	Yes	NOB; D; E	PS	P; I	No
India: Fiscal Responsibility and Budget Management Act, 2003		Yes	CB (MY)	NG <sup>5</sup>	R	National security or calamity; or such other exceptional grounds
New Zealand: Public Finance (State Sector Management) Bill, 2005	1994 <sup>6</sup>	Yes	OPB (MY)	GG	R	No
Pakistan: Fiscal Responsibility and Debt Limitation Act, 2005		Yes	CB; D (MY)	NG	R	National security or calamity; low levels of social spending
Panama: Law No. 2 on Economic Activity Promotion and Fiscal Responsibility, 2002		No <sup>7</sup>	OB; D (MY)	NFPS	R	No
Peru: Fiscal Prudence and Transparency Law, 2003	1999	Yes	OB; E; D	NFPS	I	Several
Spain: Budget Stability Law, 2001		Yes	OB	NFPS	I	Exceptional circumstances
Sri Lanka: Fiscal Management Responsibility Act, 2003		Yes	OB; D (MY)	NG	R	Exceptional circumstances
United Kingdom: Code for Fiscal Stability, 1998		Yes	CB (MY) <sup>8</sup>	GG	R	No

Source: National fiscal responsibility laws; and various IMF staff studies. Based on information up to 2005.

<sup>1</sup>CB = current balance; D = debt; E = expenditures; NOB = non-oil balance; OB = overall balance; OPB = operating balance; and PB = primary balance. MY = rule set in a multiyear period.

<sup>2</sup>GG = general government; NFPS = nonfinancial public sector; NG = national government; and PS = public sector.

<sup>3</sup>I = institutional; P = personal; and R = reputational.

<sup>4</sup>Also adopted by 18 provinces (out of 23) and the city of Buenos Aires.

<sup>5</sup>Also adopted by 18 states (out of 29).

<sup>6</sup>Fiscal Responsibility Act, 1994 (and Fiscal Responsibility Amendment Act, 1998).

<sup>7</sup>The FRL states that the ministry of finance is accountable for implementing the provisions in the law.

<sup>8</sup>Numerical rule not specified in the FRL.

inconsistency; second, they can help address the expenditure bias, in particular in highly fragmented political systems and in highly decentralized countries;<sup>10</sup> third, if targeting cyclically adjusted indicators, they may reduce the procyclicality of fiscal policy; fourth, they could serve as a useful market signal in countries vulnerable to contagion and sudden shifts in investor confidence; and, finally, they can help reduce borrowing costs and output variability.<sup>11</sup>

Potential disadvantages of numerical fiscal rules include lack of flexibility in fiscal policy and incentives to rely on low-quality measures to meet the targets. It has been suggested that numerical fiscal rules can limit the scope for countercyclical policies. Although this is a valid claim, this may not be a specific feature of countries that follow fiscal rules. Other factors beyond the direct control of the authorities may dictate the fiscal policy stance, because of limited financing availability, high borrowing costs, or other macroeconomic reasons (e.g., large current account imbalances and high inflation). However, numerical fiscal rules may contribute little to improving the quality of fiscal adjustment<sup>12</sup> and could even foster the adoption of creative accounting and low-quality measures. Practices to circumvent numerical rules have included reclassifying expenditures from current to capital items to escape current balance budget rules; using off-budget public entities to perform government operations; using debt instruments not covered in debt limits; fiddling with cash-accrual adjustments to meet targets defined in accrual terms; accumulating arrears to suppliers to meet targets monitored on a cash basis; and reclassifying expenditure as acquisition of financial assets to circumvent rules based on net lending indicators.<sup>13</sup>

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<sup>10</sup>Rules-based fiscal policy is supposed to be effective in decentralized countries to the extent that it creates incentives to reduce profligacy at the subnational level caused by inadequate resource-sharing schemes and principal-agent problems. Theoretical models show that the success of these rules in large part depends on the degree of cooperation among government levels.

<sup>11</sup>For instance, Fatás and Mihov (2003) argue that restrictions on fiscal policy can be justified on the grounds that discretionary changes in taxes and spending can lead to unnecessary volatility and lower economic growth.

<sup>12</sup>For instance, despite important strengthening of fiscal performance in Brazil after the adoption of the FRL, the quality of fiscal adjustment has been fairly poor, also reflecting significant budgetary rigidities.

<sup>13</sup>In Indonesia, the rule preventing domestic borrowing to finance the deficit was bypassed by relying on external financing and nontransparent operations such as creating contingent liabilities with off-budget entities. In Panama, the numerical fiscal rules did not specify whether they would be monitored on a cash or accrual basis, providing incentives to accumulate arrears to meet the targets. In Denmark and Hungary, local governments used sale-and-lease-back operations to circumvent borrowing restrictions (Pedersen, 2002). Also, von Hagen and Wolff (2004) provide empirical evidence of creative accounting in the European Union to meet rules under the Stability and Growth Pact.

## Other Distinguishing Features of Fiscal Responsibility Laws

### *Jurisdictional Scope*

The application of FRLs can be limited to the national government (e.g., Australia, Pakistan, and Sri Lanka) or can also include other levels of government and public enterprises (e.g., Brazil, Peru, and Spain). When subnational governments are included, provisions can be adopted either with a top-down or a bottom-up approach. In a top-down approach, FRLs are national laws that also apply to subnational levels of government. In a bottom-up approach, the national government passes an FRL only for itself, setting incentives for subnational governments to follow.<sup>14</sup> Brazil, Colombia, and Peru are examples of a top-down approach, while India and Argentina have followed a bottom-up approach. The differences in the approach typically reflect varying federal institutional and constitutional settings.

### *Sanctions*

Some FRLs contain well-defined sanctions for noncompliance; others rely only on reputation as a commitment device. There are two broad types of sanctions: (1) “institutional,” applying to the noncomplying jurisdiction (e.g., withholding of transfers, credit restrictions, and fines); and (2) “personal,” applying to the responsible official (e.g., fines, dismissal, and penal prosecution). For example, the FRL in Brazil specifies comprehensive institutional sanctions and is complemented by the Fiscal Crimes Law, which outlines stringent personal sanctions that can escalate up to penal prosecution. The FRLs in Colombia and Ecuador also contain both types of sanctions, while the FRLs in Peru and Argentina only rely on institutional sanctions.<sup>15</sup> Spain’s FRL does not specify sanctions per se, but if the general government deficit were to exceed 3 percent of GDP, lead-

<sup>14</sup>Ter-Minassian and Craig (1997) argue that top-down control is necessary for subnational fiscal discipline in developing countries. More recently, Ter-Minassian, Albino-War, and Singh (2004) propose imposing fiscal rules for subnational governments, accompanied by a comprehensive definition of debt, reduction of state intervention in financial markets, introduction of common standards of financial reporting and budgeting, strong resistance to providing bailouts, tight control over external borrowing, and cooperation of all tiers of government in formulating fiscal adjustment programs under a clear leadership of the central government. Rodden and Eskeland (2003) see prospects for combining hierarchical control with market discipline, gradually letting the latter take on more importance.

<sup>15</sup>A distinguishing feature of Argentina’s FRL is that the federal government retains discretion in the application of sanctions. Peru’s FRL does not contain personal sanctions but requires that officials comply with the FRL according to the rules and principles of the Law on Ethics of Public Service.

ing to the application of European Union (EU) sanctions, noncomplying jurisdictions would be required to contribute to the payment of fines in proportion to their contribution to the overall deficit. Other FRLs rely solely on reputational sanctions (e.g., India and Panama). While the FRLs in Australia and New Zealand do not specify sanctions either, they clearly define accountability of different actors engaged in fiscal policy.

### *Escape Clauses*

FRLs typically include explicit escape clauses that limit or suspend their application during exceptional circumstances, such as natural disasters and severe recessions. Some FRLs contain multiple escape clauses that are vaguely defined and would allow suspending the law under a variety of circumstances. For example, the application of the FRLs of Spain and Sri Lanka can be suspended in exceptional circumstances. Similarly, in India, the FRL does not apply in the presence of a natural calamity, security emergency, or “such other exceptional grounds.” In most FRLs, escape clauses can only be evoked with approval from the legislature.

### *Cyclical Considerations*

Some FRLs incorporate cyclical considerations. For example, the FRL in Peru established fiscal stabilization funds aiming to mitigate cyclical variations. Argentina’s law also envisages setting up anticyclical funds by all participating jurisdictions, but does not specify deadlines or requirements. In India and Sri Lanka, numerical targets are defined over multiyear horizons, leaving some wiggle room for setting annual fiscal targets. New Zealand’s FRL requires that operating balances be maintained “on average, over a reasonable period of time.” Australia’s FRL mandates that fiscal policy aim to moderate cyclical fluctuations, among other objectives. The escape clauses in FRLs of Brazil and Peru allow deviations from numerical rules during periods of low growth. The numerical rule in Panama’s FRL required more stringent fiscal savings during periods of high growth. Although not required in the FRL, two rules defined over the economic cycle have been followed in the United Kingdom since 1998.

## **Review of Fiscal Responsibility Laws and Fiscal Outcomes in Selected Countries**

Empirical studies frequently suggest that the strength of fiscal institutions, broadly defined, does matter for fiscal performance. For the United States, several studies in the mid-1990s found a significant and positive

correlation between the existence of balanced-budget rules at the state level and the size of state budget deficits.<sup>16</sup> Studies have also found a significant correlation between the strength of fiscal institutions and state borrowing costs.<sup>17</sup> For OECD member countries, cross-section regressions suggest that tighter budget rules are associated with lower deficits and borrowing, particularly in budget processes focused on procedures as opposed to numerical targets.<sup>18</sup> For central and eastern European countries, the strength of budget institutions was found to be correlated with fiscal performance. In particular, institutions granting strong powers to finance ministers and senior cabinet committees, and constraining the discretion of presidents and parliaments, were associated with more fiscal discipline.<sup>19</sup> For Latin America, studies also seem to support the notion that laws or binding constraints on the permissible size of fiscal deficits, top-bottom voting procedures during the budget process, and budget transparency and control are associated with greater fiscal discipline.<sup>20</sup> Recent research points to the importance of hierarchical and transparent budget procedures and the use of medium-term fiscal frameworks.<sup>21</sup>

Still, while ascertaining correlations is straightforward, it is difficult to establish causality. The adoption of good budget institutions may simply reflect society's consensus for prudent fiscal policy, leading to an endogeneity bias in empirical studies that try to relate fiscal outcomes to institutional factors. In addition, changes in budget institutions have often been accompanied by other fiscal institutional reforms that also affect fiscal policy, and it is difficult to disentangle the various different effects. For instance, in the case of the United States, Poterba and Reuben (1999) argue that estimates of the impact of balanced budget rules on fiscal outcomes turn insignificant when controlling for endogeneity: states in which voters support fiscal consolidation are more likely to adopt and enforce budget rules. Also

<sup>16</sup>See, for instance, Poterba (1994), Alt and Lowry (1994), and Bohn and Inman (1996).

<sup>17</sup>See, for instance, Lowry and Alt (2001), Poterba and Rueben (1999), and Johnson and Kriz (2005).

<sup>18</sup>See von Hagen and Harden (1995).

<sup>19</sup>Gleich (2003).

<sup>20</sup>See, for instance, Alesina and others (1999); and Stein, Talvi, and Grisanti (1999).

<sup>21</sup>Filc and Scartascini (2004) conclude that the presence of fiscal rules and budget procedures affect fiscal outcomes. In particular, the existence of medium-term fiscal frameworks and rules that allow the executive to manage cash expenditures appear to explain significant differences in primary fiscal balances. Hameed (2005) concludes that countries with more transparent budget practices, particularly those related to fiscal risk disclosure and medium-term budget frameworks, have better fiscal discipline, better credit ratings, and less corruption.

for the case of the United States, de Figueiredo (2003) highlights that the choice of budgetary institutions is endogenous to the political process.

This is supported by recent research pointing to the problems in establishing clear links between FRLs and fiscal outcomes. Using a panel of both developed and developing countries, Manasse (2006) suggests that fiscal rules and FRLs tend to reduce the deficit bias on average, but that these frameworks do not exert independent effects once the quality of institutions is accounted for. Even when causality issues are not considered, Caceres and Corbacho (forthcoming) argue that traditional econometric approaches may provide misleading conclusions regarding the link between FRLs and fiscal outcomes. A key challenge is to establish the correct timing of the potential effect of FRLs. Using high frequency time series data for Australia, Brazil, Colombia, India, Peru, and the United Kingdom, Caceres and Corbacho (forthcoming) develop a methodology to estimate consistently the appropriate timing of structural breaks in fiscal outcomes (including in the level, trend, and volatility of fiscal balances). They conclude that it is difficult to establish a clear and strong link between FRLs and improvements in fiscal outcomes.

Despite these challenges, some common patterns emerge by reviewing fiscal performance, the content of FRLs, and issues faced in selected countries.<sup>22</sup> Table 5.2 presents averages of key fiscal indicators in the five years prior to the adoption of the FRL, and in the years that followed (up to 2004). FRLs in Argentina, Colombia, and Peru have undergone substantial revisions since first introduced, and therefore the table also reports fiscal indicators for the intermediate period up to the most recent FRL. A more detailed account of events leading up to and following the adoption of the FRL in each country is presented in Appendix 2. The following patterns have been observed:

- In Australia, New Zealand, and the United Kingdom, fiscal performance, measured by the primary and overall balances and public debt, has been strong since the FRL was adopted, although the turnaround occurred already a few years prior to the FRL's implementation, suggesting that the FRL was an outcome of a change in society's preferences for tighter fiscal policies. A broadly similar conclusion also holds for Brazil, which had achieved significant fiscal adjustment prior to introducing its FRL in 2000.<sup>23</sup> The FRLs in all these countries

<sup>22</sup>This section does not draw conclusions on Pakistan's case, since the FRL was approved in June 2005, after this study was completed. Appendixes 1 and 2 contain further details on the law.

<sup>23</sup>Still, during the 2002 crisis, Brazil's net debt position increased sharply, but has continued its downward path since then, in light of continued high primary surpluses.

**Table 5.2. Fiscal Performance Before and After the Fiscal Responsibility Law (FRL)<sup>1</sup>**  
(In percent of GDP)

Country	Approval Date	Primary Balance			Overall Balance			Public Debt		
		Pre-FRL	Between FRLs	Post-FRL	Pre-FRL	Between FRLs	Post-FRL	Pre-FRL	Between FRLs	Post-FRL
Argentina <sup>2</sup>	1999, 2001, 2004	-0.3	1.6	...	-2.8	-7.0	...	41.0	111.0	...
Australia	1998	0.0		1.7	-2.0		0.9	22.0		6.0
Brazil	2000	1.1		4.1	-5.9		-4.0	43.0		58.4
Colombia <sup>3</sup>	1997, 2000, 2003	0.8	0.0	2.6	-1.7	-4.2	-2.0	21.2	42.0	51.0
Ecuador <sup>4</sup>	2002, 2005	3.8		4.8	-7.8		-4.8	73.9		46.8
India	2003	-3.7		-2.2	-9.6		-8.5	76.9		86.1
New Zealand	1994, 2005	2.1		4.5	-2.5		1.9	47.5		21.3
Pakistan	2005	2.0		...	-2.8		...	76.6		...
Panama	2002	2.2		-0.4	-1.7		-4.8	50.2		55.3
Peru	1999, 2003	0.9	-0.3	0.7	-1.6	-2.6	-1.4	47.0	46.5	46.3
Spain	2001	1.9		1.9	-1.2		-0.1	40.8		33.4
Sri Lanka	2003	-2.6		-1.3	-8.8		-7.8	98.3		98.8
United Kingdom	1998	-3.3		0.9	-5.4		-0.6	36.5		36.2

Sources: IMF, *World Economic Outlook, 2005*; and IMF staff estimates.

<sup>1</sup>Pre-FRL corresponds to the average in the five years prior to the introduction of the FRL. Post-FRL corresponds to the average up to 2004. Coverage and definitions vary by country. The table should be used to assess within country trends rather than to carry out cross-country comparisons.

<sup>2</sup>Fiscal performance has improved since 2001 at both the national and subnational levels.

<sup>3</sup>Data on fiscal balances correspond to the nonfinancial public sector. Fiscal balances of subnational governments have improved since 2000. For public debt, pre-FRL reports the average in 1995–97 only. For the rest of the indicators, pre-FRL reports the average in 1993–97.

<sup>4</sup>The table reports the non-oil overall balance. Since the introduction of the FRL in 2002, Ecuador's public finances have benefited from the upsurge in oil prices.

have a strong emphasis on procedural and transparency rules, apply to all relevant levels of government, and are supported by well-developed public expenditure management and accounting systems. Many critical reforms had occurred in advance of the adoption of the FRL. The experience in Spain is too recent to provide a full assessment, although fiscal indicators have shown an improvement since the adoption of the FRL in 2001, which came into force only in 2003. Still, the FRL was helpful in promoting a culture of fiscal stability, although clear problems remain at the subnational level. The government is attempting to address this issue in a new draft law currently before parliament.

- With the exception of Brazil, FRLs in Latin America have had a generally poor start. In Argentina, Colombia, and Peru, the FRLs were modified repeatedly since first adopted, with fiscal performance continuing to deteriorate up until the last FRL revision. Argentina's first FRL, introduced in 1999, failed to provide a comprehensive framework for fiscal policy: subnational governments were not covered by the law, despite being responsible for a large share of the consolidated fiscal deficit. Fiscal outcomes in Argentina continued to worsen notwithstanding the FRL, and the law was modified in 2001 to allow for longer convergence periods to established numerical targets. The FRL became completely unenforceable shortly after the financial crisis. With numerical targets continuously breached since 1999, the law was modified again in 2004. The revised law also followed a bottom-up approach for subnational finances, but has already been adopted by 18 (out of 23) provinces and by the city of Buenos Aires. Fiscal performance has improved in the most recent period at all levels of government. In the case of Peru, the lack of sanctions in the first law of 1999 weakened credibility, particularly as the law was not complied with immediately following its adoption, and as several ambiguous escape clauses proved ineffective for implementing fiscal adjustment. The law was subsequently strengthened and fiscal performance improved in more recent years, although the numerical target on the real growth of nonfinancial expenditures was breached in 2003 and 2004. In Colombia, the early laws aimed to improve subnational finances but failed to control growing indebtedness of local governments. An FRL applicable to all levels of government was adopted in 2003, containing both procedural and numerical rules. Fiscal outcomes at the subnational level have improved recently, but imbalances at the central government level still remain. In Panama, the numerical target on the overall

deficit was missed by a large margin already in the first year of the FRL (2003), and the law was suspended afterward. In all of these countries, fiscal performance had continued to worsen in the years preceding the adoption of the law. The early FRLs failed to substitute for political commitment and society's support for needed fiscal consolidation. Numerical targets were successively breached, undermining credibility in the fiscal framework established in the law. The experience in Ecuador is too recent to provide a complete assessment, although the government has already introduced modifications to the FRL approved in 2002.

- The FRLs in India and Sri Lanka have also not shown significant success so far. In both countries, fiscal balances improved the year after adopting the FRL, but debt continued to increase. Also, only a year after adopting their FRL, both countries postponed the requirement to meet the FRL's numerical targets. Similarly, in both India and Sri Lanka, numerical targets apply only to the central government, and have provided an incentive to engage public enterprises in quasifiscal activities not covered by the FRL.<sup>24</sup> Particularly in India, compliance with the targets by the central government may not bring about overall fiscal consolidation, as states continue to account for a large share of fiscal imbalances. Still, it is encouraging that many states have already adopted or are in the process of adopting fiscal responsibility legislation. Also, the FRLs have helped to increase transparency (not least by requiring that governments acknowledge fiscal policy was not on track to meet targets), but further efforts are still needed to conform with standards of good practice.

## **Fiscal Responsibility Laws: Some Lessons from Experience**

Since, in most countries, FRLs have not been around for more than a few years, evidence on their effectiveness is still preliminary. Recent studies suggest that it remains difficult to establish a clear empirical link between FRLs and fiscal outcomes. Still, there seems to be broad agreement that the quality of fiscal institutions does matter for fiscal performance. In this

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<sup>24</sup>Recently, this has been a critical problem for the oil companies, in light of high international oil prices and the suspension of automatic price formulas, leading to substantial losses not captured in FRL indicators.

sense, a well-designed FRL holds the potential of improving fiscal management, if supported by strong political commitment to fiscal prudence and sufficiently developed fiscal institutional frameworks. The country experiences to date offer some early lessons for timing, implementation, and design of FRLs.

FRLs require broad political consensus to be successful and are not a substitute for political commitment. In countries where FRLs have had the most success (e.g., in Australia, Brazil, New Zealand, and the United Kingdom), fiscal performance already started to improve several years before the implementation of the law, suggesting that a fair amount of consensus for the need for fiscal prudence was already at play. In countries where fiscal outcomes had been deteriorating, suggesting a lack of a broad consensus for fiscal consolidation, a fundamental change in the direction of fiscal performance has yet to be seen.

Although FRLs can potentially serve as a catalyst for meaningful reforms promoting fiscal prudence, broad support for fiscal prudence seems a precondition for their success. Designing an FRL takes time—for instance, three years in India and two years in Brazil—and should be geared toward addressing country-specific weaknesses in fiscal management that lie at the root of poor fiscal outcomes. This will generally require improving fiscal transparency and fiscal management, providing the right incentives for the different actors involved in designing and implementing fiscal policy. These requirements may not be met in countries facing large macroeconomic imbalances or political instability, as they may be forced to rush into their initial fiscal consolidation efforts. While political consensus for fiscal prudence is a precondition for a successful FRL, its effective implementation is tested only when the consensus breaks down.

The fiscal institutional framework, in particular public financial management (PFM) systems, should be sufficiently developed to support FRLs. Weak preexisting institutions and poor implementation capacity may undermine the credibility of FRLs. In particular, countries with weak PFM systems and weak budget procedures are unlikely to be able to monitor and control effectively a fiscal target. PFM systems and budget procedures should be sufficiently well advanced to help implement the procedural and numerical rules embedded in FRLs in a credible and enforceable manner; where this is not the case, improving fiscal institutions should be a precondition for introducing an FRL. The experiences of Australia, Brazil, New Zealand, and the United Kingdom highlight the importance of a sufficiently well-developed PFM framework that paved the way for introducing even higher standards of transparency and accountability in an FRL in a credible manner. Countries that are already undergoing reforms to

improve PFM may want to focus efforts in this area, rather than on introducing new legislation like an FRL. If the fiscal institutional framework is not sufficiently well developed when an FRL is introduced, it may be advisable to establish a transitional period until the full application of all FRL requirements become binding. This would give time to improve budget formulation, execution, and reporting, and strengthen accounting and statistical standards.

Following good practices in transparency and accountability is critical for the success of FRLs. Clear and open budget formulation and execution procedures, an independent audit mechanism and institution, and transparent oversight are highly desirable. Also, transparency and medium-term fiscal frameworks can enhance the strength of fiscal rules by creating a policy environment that binds future governments to sound fiscal criteria. The monitoring by public bodies that are outside the budgetary process is useful for imposing hard budget constraints on the public sector as a whole, particularly if coupled with sanctions for noncompliance. Finally, clear accountability improves the law's effectiveness and credibility. Countries that have not been successful in implementing their FRL have also, in general, failed to implement good practices in fiscal transparency.

FRLs should cover all relevant fiscal (and quasifiscal) operations of the public sector. The application of a consistent fiscal framework to all levels of government and to public entities and public enterprises that are engaged in significant fiscal activities<sup>25</sup> limits the scope for shifting fiscal policy implementation "off budget." Fiscal rules that target narrow fiscal indicators or aggregates run the risk of being overcome by moving expenditure to off-budget entities such as extrabudgetary funds, state enterprises, and/or to subnational governments. For instance, the limited coverage provided in the early FRLs in Argentina did not allow for effective control and oversight on subnational government operations not covered by the FRL, and led to the rapid accumulation of contingent liabilities for the national government. In India and Sri Lanka, incentives prevail to engage public corporations not covered by the FRL in quasifiscal activities.

In decentralized countries, FRLs cannot substitute for well-designed systems of intergovernmental fiscal relations. In countries with large vertical imbalances, reflecting mismatches between expenditure and revenue responsibilities, the introduction of an FRL is unlikely to lead to a more responsible fiscal behavior by subnational governments unless these imbalances are corrected. This is exemplified, for instance, by the early experi-

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<sup>25</sup>IMF (2005) sets out revised criteria for assessing fiscal risk from public enterprise operations.

ence of Colombia, where the institutional development lagged behind the relatively aggressive and large-scale decentralization, and subnational finances continued to deteriorate notwithstanding controls established in the early laws. Also, introducing hard budget constraints at the subnational government level can adversely affect the quality of public services if the mismatch between revenue and expenditure responsibilities persists. In cases where subnational governments have accumulated a large stock of debt, the success of an FRL can be increased by complementary fiscal adjustment or debt rescheduling programs with the national government, as suggested by the Brazilian experience. In countries where the national government does not have the constitutional authority to apply a single comprehensive FRL with top-down rules for all levels of government, the national-level law and practice must set a proper example and provide incentives for subnational governments to adopt prudent fiscal policies. In particular, the central government must credibly commit not to bail out subnational governments in difficulty, allowing market-based enforcement mechanisms to operate. High standards of transparency and accountability are also necessary for effective monitoring by citizens and for reputational sanctions to work.

Numerical fiscal rules in FRLs can undermine a fiscal consolidation effort if poorly designed, not adequately enforced, or easily reversed. Any stipulation contained in an FRL—numerical or procedural—needs to be monitorable and enforced systematically, which in many countries will require sanctions for noncompliance. In addition, however, a numerical fiscal rule that is to be included in an FRL should be (1) well defined regarding the specific fiscal indicator to be targeted, the institutional coverage, and the applicable escape clauses, if any; (2) simple and transparent, to serve as an effective instrument of communication of government policy objectives; and (3) monitorable, so that noncompliance can be easily detected and addressed. The adoption of “twin” indicators for numerical rules may reduce the scope for creative accounting, for instance by requiring compliance with both cash- and accrual-based fiscal deficit indicators, cash-based deficit and net borrowing requirements, and net borrowing and changes in the stock of debt. A clear link between numerical rules, accountability, and sanctions is necessary. Proper monitoring, in turn, requires sufficiently advanced PFM systems. Where these are not in place, focusing on procedural rules might be more beneficial.

Numerical deficit rules contained in FRLs may often either be inconsistent with the use of fiscal policy to stabilize output or lack transparency. Simple numerical rules tend to be procyclical and therefore amplify economic fluctuations. Possible improvements include defining the rule to

apply over the business cycle, or targeting a cyclically neutral balance. This, however, requires discretionary judgments, which complicate the rule and make it less easily accessible and transparent to the public. A complicated rule also creates more scope for creative accounting. Finally, in countries with poor economic statistics, cyclically adjusted indicators may be increasingly difficult to apply, owing to significant lags in access to key data (e.g., GDP) and large standard deviations from estimates and projections (e.g., on potential output). Some FRLs have incorporated escape clauses to limit the application of numerical rules during periods of low growth or in the presence of external shocks affecting key industries or commodity prices. The experience so far (e.g., in Peru's early FRL) suggests that escape clauses should only apply in truly exceptional circumstances, be clearly defined, and require objective analysis and scrutiny to invoke their application to ensure that credibility in the FRL is not undermined.

Effective enforcement mechanisms are key in FRLs. Some countries, particularly industrial countries, have relied primarily on reputational sanctions for noncompliance, supported by high transparency and accountability standards. However, in countries with a long history of noncompliance with budget targets, reputational sanctions alone may be ineffective, and additional incentives may be necessary to promote fiscal discipline. These could include institutional sanctions for noncomplying jurisdictions, or personal sanctions for noncomplying public officials. To be credible, sanctions should be applied automatically when fiscal targets are missed and/or budget procedures are not followed, and the roles, functions, and accountability of different actors involved in fiscal policy design and implementation should be clearly and transparently defined. As stressed before, independent monitoring and oversight is necessary. Political interference and governance issues may easily undermine credibility in the enforcement mechanisms.

Finally, FRL provisions should, over time, be integrated with public finance legislation. More specifically, a case can be made for consolidating all or some of FRL provisions into umbrella budget or public finance laws, since FRLs are for the most part a response to shortcomings of such laws. For example, the FRL in Sri Lanka addressed several existing shortcomings, including the lack of codified rules for the formulation and execution of the budget. As noted in the introduction, some countries that do not have an FRL legislate typical FRL provisions, especially well-functioning procedural rules, in other pieces of legislation. For instance, frameworks in many European countries follow key FRL provisions, but without a formal FRL. Incorporating the procedural rules of an FRL into a budget or public finance law certainly would be a step in the direction of streamlining and

simplifying legislation, constituting good transparency practice. New Zealand has recently done this. In general, numerical rules, and particularly precise quantitative targets that may need revisions over time (e.g., in light of changing macroeconomic conditions), are best incorporated into medium-term budget frameworks and annual budget laws.

## Concluding Remarks

FRLs potentially promise better fiscal management and policy outcomes by improving coordination and enforcement mechanisms, but they should not be considered as a magic bullet to improve fiscal performance. A well-designed FRL may help contain fiscal deficits and expenditure biases, address issues of time inconsistency, help reduce borrowing costs and output variability, and enhance transparency and accountability. However, in practice, it remains difficult to establish a clear empirical link between FRLs and fiscal outcomes. In countries where fiscal performance has remained strong, important reforms and political commitment to fiscal prudence have supported the effective implementation of FRLs. In other countries, FRLs have yet to show a substantial effect on fiscal performance. In particular, compliance with numerical fiscal rules has often been weak or achieved through low-quality policy measures or creative accounting, undermining other reform efforts that the FRL was to bring about. Also, the credibility of FRLs has been reduced in many countries by liberal escape clauses and noncredible sanction and enforcement mechanisms. Finally, weak fiscal institutional frameworks have limited effective monitoring. Lessons from experience highlight the need to cover all relevant fiscal (and quasifiscal) operations of the public sector, strengthen procedural and transparency rules, follow best practices in the design of numerical fiscal rules, and ensure that public expenditure management systems are sufficiently developed to monitor and enforce FRL requirements and sanctions. FRLs cannot buy credibility. Credibility ultimately depends on society's consensus and support for prudent fiscal policy.

## Appendix 1. Summary of Fiscal Responsibility Laws in Selected Countries

Country and Date	Procedural Rules and Transparency Requirements	Numerical Targets	Scope <sup>1</sup>	Sanctions	Escape Clauses
Argentina: 1999, 2001, and 2004	Creates a Federal Council for Fiscal Responsibility. The federal government must present to the council before end-August the macrofiscal framework for the budget year, including targets and debt limits for each level of government, wage and tax policy, and revenue projections. Describes minimum reporting requirements for the budgets of all levels of government, which have to be published on the website, along with quarterly budget execution and debt reports. Extrabudgetary funds are prohibited. Budgetary expenditures are an authorized maximum, with their implementation subject to revenue performance. Privatization revenues can only be used for capital spending. Higher expenditures can only be approved if additional revenues become available and current spending cannot increase at the expense of a reduction in capital spending. Tax policy measures resulting in lower revenues must be compensated by other higher revenues or lower expenditures. Debt guarantees must be periodically updated and disclosed.	Primary expenditures cannot grow more than nominal GDP or at most stay constant in periods of negative nominal GDP growth. Capital spending and current spending financed by international financial institutions (IFIs) are not covered by the limits. Debt service cannot exceed 15 percent of net revenues for states and the city of Buenos Aires. The federal government market debt as a ratio to GDP must decline over a three-year horizon after debt restructuring. All jurisdictions are required to balance revenue and expenditure, excluding investment in basic social and economic infrastructure and IFI-financed spending.	NG	Publication of noncompliance indicators; restriction from voting in the Federal Council of Fiscal Responsibility; restrictions on granting tax benefits; limits on guarantees and new credit operations from the national government for subnational governments; limits on voluntary transfers from the national government. The federal government has some discretion in the application of sanctions.	Higher expenditures allowed under social and economic emergencies; as determined by law.

Australia: 1998

Fiscal policy must conform to principles of sound fiscal management. The budget economic and fiscal outlook report must be released with each budget, a mid-year outlook report must be released by the end of January in each year or within six months after the last budget, whichever is later, and a final report must be presented within three months of the end of each financial year. The government is required to present fiscal strategy statements and intergenerational reports. Special provisions apply when a general election is called.

Requires setting short- and medium-term objectives and targets, consistent with sound fiscal management principles.

NG Reputational.

## Appendix 1 (continued)

Country and Date	Procedural Rules and Transparency Requirements	Numerical Targets	Scope <sup>1</sup>	Sanctions	Escape Clauses
Brazil: 2000	The law sets detailed provisions on the formulation and implementation of the budget and regulates inter-governmental relations. The law also requires transparent fiscal reporting. The government has to present a brief account of budget execution every two months and report on budget management every four months, identifying remedial policies to achieve fiscal targets if needed.	The ratio of total personnel expenditures to net revenues cannot exceed 50 percent for the federal government, 60 percent for states, and 60 percent for municipalities. There are also limits by branch within each level of government. Permanent spending mandates cannot be created without a corresponding increase in permanent revenues or cuts in other permanent spending. The ratio of net public debt-to-net revenues cannot exceed 3½ for the federal government, 2 for states, and 1.2 for municipalities. States and municipalities have 15 years to comply with the targets. While exceeding the limits, the FRL establishes strict constraints to debt operations and financing (see sanctions). Drastic changes in monetary policy as specified by the senate allow longer terms to comply with debt limits.	PS	If wage expenditures reach 95 percent of the ceiling, wage increases, overtime, and new hiring (except in health, education, or social security) are suspended. If debt limits are not complied with, members of the federation are prohibited from receiving voluntary transfers, obtaining direct or indirect guarantees from other members, and contracting credit operations except aimed at re-financing securities debt and reducing personnel expenditures. Public officials can be sanctioned for noncompliance through dismissal, fines, and even jail, according to the Fiscal Crimes Law.	Low economic growth (negative or below 1 percent in the previous four quarters), national catastrophe, state of siege.

Colombia: 1997,  
2000, and 2003

The government must present a medium-term fiscal framework before the budget, stating fiscal and macroeconomic objectives and explanations and deviations from previously set targets. A report on quasifiscal activities is required.

The ratio of primary surplus to interest rate payments has to be equal to or higher than 100 percent. The last law reinforces liquidity and solvency indicators introduced in earlier ones: a maximum 40 percent ratio of interest payment to operational savings. Primary current expenditures must be exclusively financed by nonearmarked current revenues and should not exceed a fixed percentage, depending on the state or municipality category. There are explicit limits on expenditures for state legislatures, local councils, and state and municipal comptroller offices, and caps on wages of legislators and comptroller officials. The primary surplus adjusted by the cycle cannot be lower than the structural primary surplus that stabilizes debt. The ratio of debt stock to current revenues should not exceed 80 percent.

NFPS

If one of the three rules is breached by a subnational entity, its debt level is classified as non-sustainable and any debt contraction must be approved by the ministry of finance. The subnational government has to present a medium-term macroeconomic framework including an adjustment program to seek eventual compliance with all three indicators. Official guarantees for debt refinancing purposes apply only to subnational governments undergoing adjustment programs and under a full set of requirements. In the event of failure to comply with the adjustment program, the subnational entity may be reclassified and merged with another. Personal sanctions for public officials also apply according to the Disciplinary Law.

## Appendix 1 (continued)

Country and Date	Procedural Rules and Transparency Requirements	Numerical Targets	Scope <sup>1</sup>	Sanctions	Escape Clauses
Ecuador: 2002 and 2005	The government must present a four-year plan with goals and strategies and report periodically on progress.	Yearly reduction in the non-oil deficit of the central government until a balanced position is achieved. At the subnational level, the ratio of debt service to total revenues cannot exceed 40 percent, and the ratio of total liabilities to total revenues should not exceed 100 percent. The real growth of central government current primary spending cannot exceed 3½ percent. There is an oil revenue stabilization fund financed with 20 percent of heavy crude oil revenues. Public debt must be reduced by at least 16 percentage points of GDP during a four-year period until it reaches 40 percent of GDP.	NFPS	The institution that fails to maintain updated information cannot access domestic or external credit. Failure to provide information within 15 days of the deadline imposed by the FRL will result in the suspension of the transfer of budget appropriations (in addition to other sanctions that may apply). In addition to the civil and criminal penalties that may derive from other laws, officials who violate provisions of the FRL are subject to varying administrative sanctions, depending on the official's rank.	
India: 2003	The central government has to present before both houses the Medium-Term Fiscal Policy Statement, the Fiscal Policy Strategy Statement, the Macroeconomic Framework Statement, as well as quarterly reports on fiscal development. The Medium-Term Fiscal Policy Statement must contain three-year rolling targets for key fiscal parameters that underpin the government's fiscal correction trajectory.	The central government "revenue deficit" (essentially the current balance deficit) must be eliminated by March 2009 (originally by 2008). Beginning with fiscal year 2004–05, the annual reduction in the revenue deficit must be at least ½ percent of GDP and in the fiscal deficit at least 0.3 percent of GDP. The act caps the level of guarantees and total	NG	Reputational.	On the grounds of unforeseen demands on the budget due to national security emergencies or a national calamity.

		liabilities that the government can assume each year and prohibits the government from borrowing from the Reserve Bank after April 2006.			
New Zealand: 1994 and 2005	The law sets principles of responsible fiscal management that must be adhered to in the formulation and implementation of fiscal policy. The government has to publish a budget policy statement with long-term objectives, strategic priorities, and fiscal goals for the next three years at least three months before the start of each financial year. The government must also present in May–June a Fiscal Strategy Report assessing the consistency of the budget with the budget policy statement, a 10-year outlook and 3-year economic and fiscal update, as well as half-year and current-year updates.	Once prudent levels of government debt have been achieved, they have to be maintained by ensuring that, on average, over a reasonable period of time, total general government operating expenses do not exceed total operating revenues.	GG	Reputational.	Only temporary departures, with detailed reporting of reasons.

## Appendix 1 (continued)

Country and Date	Procedural Rules and Transparency Requirements	Numerical Targets	Scope <sup>1</sup>	Sanctions	Escape Clauses
Panama: 2002	Designates the ministry of finance as accountable for implementing the FRL provisions.	The nonfinancial public sector (NFPS) deficit cannot exceed 2 percent of GDP. The law also sets a portfolio of investments of the Fiduciary Fund and priority expenditures. Net public debt must be below 50 percent of GDP and net external debt below 35 percent of GDP. Targets should be reached within 15 years. A transitory regime applies until the targets are achieved: (1) if real GDP growth exceeds 1½ percent, total debt nominal growth cannot exceed 80 percent of nominal GDP growth or the 2 percent NFPS deficit rule applies, whichever delivers lower debt levels; and (2) if real GDP growth falls under 1½ percent, the 2 percent NFPS deficit rule applies.	NFPS	Reputational.	
Pakistan: 2005	The law sets principles of sound fiscal and debt management aiming to eliminate the revenue deficit and reduce the debt burden. The federal government must present to the national assembly a medium-term budgetary statement, a fiscal policy	The “revenue deficit” (essentially the current balance deficit) must be eliminated by June 2008, maintaining a surplus thereafter. Total public debt must be reduced to 60 percent of GDP by 2013, keeping debt under that	NG	If the federal government fails to meet the debt reduction target, it must take all necessary measures to return to the debt reduction path, including the curtailment of sums authorized to be paid and applied	National security or natural calamity. Fiscal policy can deviate from the rules if social and poverty-related expenditures were to fall under 4.5 percent

statement, and a debt policy statement. The medium-term budgetary statement must be presented on July 1, contain three-year rolling fiscal estimates, and specify key fiscal measures and risks. The fiscal policy statement must be presented at end-January, and contain key fiscal indicators, an explanation on how they accord with the principles of sound fiscal management and the medium-term budget statement, strategic priorities, and key measures. The debt policy statement must be presented at end-January, explaining the success or failure in meeting debt targets, borrowing strategies and costs, analysis of foreign currency exchange exposure, and information on debt and guarantees. The statements must be accompanied by a statement of responsibility and be publicly available free of charge.

ceiling thereafter. Each year debt must be reduced by no less than 2½ percent of GDP. New guarantees cannot exceed 2 percent of GDP.

from the Federal Consolidated Fund. Social and poverty reduction expenditures, and expenditures under Article 81 of the Constitution are protected from such cuts.

of GDP or education and health expenditures are not doubled in terms of GDP within 10 years.

## Appendix 1 (continued)

Country and Date	Procedural Rules and Transparency Requirements	Numerical Targets	Scope <sup>1</sup>	Sanctions	Escape Clauses
Peru: 1999 and 2003	The government must prepare a Multiannual Macroeconomic Framework, containing three-year macroeconomic assumptions, and revenue, expenditure, public investment, and public debt projections. The Council of Ministers can modify the framework, but without increasing the deficit or nonfinancial expenditures. The final version must be submitted to Congress, with the Annual Budget Law, no later than August 30. Within 60 days of the end of a semester, the government has to publish a report reevaluating the framework.	The NFPS deficit cannot exceed 1 percent of GDP and real growth of nonfinancial expenditure of the general government cannot exceed 3 percent. During the first seven months of an election year, nonfinancial expenditure of the general government cannot exceed 60 percent of the annual amount and the fiscal deficit in the first semester of an election year cannot exceed 40 percent of the annual deficit. For subnational governments, the three-year average primary balance must be positive, the total debt service-to-current revenues ratio must be below 25 percent, and the total debt-to-current revenues ratio must be below 100 percent. Subnational governments need the central government's guarantee to contract external debt, which must be allocated to finance infrastructure.	NFPS	In case of noncompliance, subnationals are restricted from access to intergovernmental funds. The National Decentralization Council can deny access for 90 days to conditional transfers to regions not complying with the fiscal rules during two consecutive years. The central government could intervene with a regional government that is placing in danger the non-financial public sector finances. There are no specific individual sanctions, but officials must comply with the FRL according to the rules and principles of the Law on Ethics of Public Service.	Three-year suspension in the application of the deficit ceiling, in case of negative economic growth (with a maximum deficit of 2½ percent of GDP), or national emergency or international crisis (with ceiling to be approved by congress).
Spain: 2001	The law sets four basic principles to guide formulation and implementation of fiscal policy and a detailed budgetary process. The government must release aggregate budgetary	All levels of government must have a balanced or in-surplus budget. In addition, fiscal targets are set for each level of government and imposes	NFPS	In cases of noncompliance, the law requires the region in question to present a financial adjustment plan. This plan must be approved by the Fiscal and	Exceptional circumstances.

objectives and distribution for each subsector with medium-term projections in the first quarter of each year. Parliamentary debate and approval report on fulfillment must follow before September 1. If, due to exceptional circumstances, the budget is not balanced, a justification and three-year correction plan are required. The law sets the foundations for multiyear program budgeting and for performance budgeting.

limits on central government expenditure for a three-year period. Surpluses realized by the central government should be used to reduce debt. Surpluses realized by the social security system should be accumulated in the reserve fund.

Financial Policy Council. If the fiscal behavior of a region were to cause Spain to breach fiscal rules under European Economic and Monetary Union, that region would have to take care of sanctions by the European Union (EU), including contributing to paying EU fines. The Council establishes, by the first quarter of every year, the borrowing limits for each region for the following three years. In addition, there are restrictions on public debt, including for example, that long-term debt may be issued only to finance capital spending.

Sri Lanka: 2003

The government must present to Parliament a statement containing four-year fiscal policy goals, short-term objectives, strategic priorities, and key fiscal measures (on the day of the second reading of the Appropriations Bill). A Mid-Year Fiscal Position Report is due at the end of June and a Final Budget Position Report is due five months after the end of the financial year.

The central government deficit must be under 5 percent of GDP by 2006 and maintain such level thereafter; no government guarantee can be given in excess of 1 percent of GDP during one financial year. Total debt of 85 percent of GDP by 2006 and 60 percent by 2013. Later dates were set in 2004.

NG Reputational.

Exceptional circumstances.

## Appendix 1 (concluded)

Country and Date	Procedural Rules and Transparency Requirements	Numerical Targets	Scope <sup>1</sup>	Sanctions	Escape Clauses
United Kingdom: 1998	The law sets principles of responsible fiscal management that must be adhered to in the formulation and implementation of fiscal policy. The government must publish (1) a Pre-Budget Report at least three months prior to the budget, including proposals for any significant changes in fiscal policy under consideration for introduction in the budget, economic and fiscal projections, and an analysis of the impact of the economic cycle on key fiscal aggregates; (2) a Financial Statement and Budget Report at the time of the budget, providing economic and fiscal projections, an explanation of key policy measures in the budget, and fiscal policy objectives and rules; and (3) an Economic and Fiscal Strategy Report, setting out the government's long-term economic and fiscal strategy, including, among other requirements, long-term objectives of key fiscal aggregates and estimates of the cyclically adjusted position. The government must also report annually on the structure of its borrowing and the cost of government debt, providing sufficient information to allow the public to scrutinize the debt management policy.	Supported by numerical rules not contained in the FRL.	GG	Reputational.	

Sources: National fiscal responsibility laws; and various IMF staff studies. Based on information up to 2005.

<sup>1</sup>GG = general government; NFPS = nonfinancial public sector; NG = national government; and PS = public sector.

## Appendix 2. Review of Country Experiences with Fiscal Responsibility Laws

This appendix describes individual country experiences with fiscal responsibility laws (FRLs), focusing primarily on the context and goals of the laws, their main content, and outcomes and events following their implementation up to 2005.

### Argentina

Argentina first adopted an FRL in 1999 to help maintain confidence in the currency board arrangement in an environment of significant fiscal pressures and poor growth prospects.

The 1999 FRL was applicable to the national government and contained both procedural and numerical rules. It adopted a three-year budget framework, set ceilings for the central government fiscal deficit in 1999–2002, capped the real growth of expenditures, and required transparent fiscal reporting. The law also created a countercyclical fund to smooth fiscal policy over the business cycle. The FRL followed a bottom-up approach, inviting subnational governments to pass their own fiscal responsibility legislation. The law was modified in 2000 to provide for a longer period of convergence to fiscal balance (by 2005 instead of 2003 as in the original law). In July 2001, congress passed a law sanctioning the government’s “zero deficit” policy, which was meant to ensure the observance of the 2001 fiscal target in the FRL by mandating a zero balance during the second semester of the year.

However, the FRL failed to provide a comprehensive framework for fiscal policy. While some provinces followed the example of the national government and adopted fiscal responsibility legislation, the largest provinces and the city of Buenos Aires, accounting for over half of Argentina’s GDP, did not pass an FRL.<sup>1</sup> Along with a mismatch between revenue assignments and expenditure responsibilities, this led to the accumulation of large liabilities for the central government and contributed to making the law less enforceable. The numerical rules established in the national FRL and in the subnational laws were never respected, and fiscal performance continued

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<sup>1</sup>Webb (2004) argues that institutions aiming to constrain subnational debt and deficits only work if the governments in question start from or are brought to a position where they do not have a debt overhang. Otherwise, fiscal adjustment or debt rescheduling programs must complement or precede the implementation of an FRL. In the case of Brazil, debt rescheduling agreements and fiscal adjustment programs for subnational governments preceded the adoption of the FRL, which in turn institutionalized the enforcement, monitoring, and sanctions for noncompliance.

to deteriorate. By the end of 2001, Argentina faced the deepest crisis in its history and the FRL became completely nonoperational.

The law was modified again in 2004 (called the Federal Regime of Fiscal Responsibility). The revised law creates a Federal Council for Fiscal Responsibility, improves expenditure management practices, and fosters harmonization of fiscal statistics. The law establishes limits on expenditures and debt service and contains some sanctions for noncompliance.<sup>2</sup> Most capital spending (and some current spending financed by international financial institutions), however, is not covered by the targets. The revised law also follows a bottom-up approach, creating a federal regime, inviting other levels of government to participate rather than directly imposing fiscal targets on subnational governments.<sup>3</sup> The success of the revised FRL will clearly depend on the adherence by subnational governments, on the ability to constrain incentives for creative accounting (given the limited coverage of the numerical targets), on appropriate monitoring of fiscal data, and on the operation of the sanctions for noncompliance. By 2005, the law had been ratified by 18 provinces (out of 23) and the city of Buenos Aires, representing around 80 percent of the population and a similar share of total provincial spending.

## Australia

Australia's Charter of Budget Honesty (the Charter) was approved in 1998, with the goal of improving fiscal policy outcomes and maintaining on-going economic prosperity. Fiscal outcomes had deteriorated in the early 1990s, but had already started to improve a few years before the introduction of the Charter. There was also growing concern about the fiscal implications of an aging population; the institutional framework was already advanced; and the budget process had traditionally worked well with a strong emphasis on transparency. Several states had also adopted fiscal responsibility legislation ahead of the Charter, which regulated the fiscal operations of the Commonwealth.<sup>4</sup>

<sup>2</sup>In contrast to Brazil's FRL, Argentina's FRL contains only institutional sanctions, which are loosely defined, and can be applied with certain discretion by the federal government.

<sup>3</sup>The law requires that provinces present balanced budgets according to a modified golden rule, but there is no explicit coordination mechanism to ensure that the sum of the provinces' individual budgets be consistent with the consolidated overall and primary balances set forth by the federal government. Compliance with targets by subnational governments has been difficult to assess in light of less than adequate fiscal reporting.

<sup>4</sup>See Brooks (1997) for further details.

The Charter has a strong focus on transparency and does not include numerical fiscal targets. It provides a framework for the conduct of fiscal policy, by requiring that the fiscal strategy be based on principles of sound fiscal management and by facilitating public scrutiny of fiscal policy and performance. The principles of sound fiscal management were modeled in line with New Zealand's FRL, but go further by requiring that fiscal policy contribute to national savings, moderate cyclical fluctuations, and take account of the financial impact on future generations. The Charter requires the government to set short- and medium-term fiscal objectives consistent with the established sound principles and specifies clearly the content and timing of government reports, including the government's fiscal strategy statement, the budget economic and fiscal outlook report, the midyear budget report, and the final budget outcome report. The Charter also requires the preparation of intergenerational reports and preelection reports. While the Charter does not specify sanctions for noncompliance, the responsibilities of involved ministries are clearly set out.

Fiscal outcomes continued to improve after the adoption of the Charter. Initially, there was a concern that the limited coverage of the Charter, excluding state operations, would provide incentives for Australia to meet its fiscal objectives by cutting support to the states. However, the high standards of transparency applied to the reporting of fiscal operations of the central government under the Charter, and the continued publication of the National Fiscal Outlook (on consolidated operations) provided for checks on such behavior.

## **Brazil**

The introduction of Brazil's FRL in May 2000 was preceded by a long process of consensus building in society and among key political actors. The law aims to consolidate gains from fiscal adjustment efforts started earlier and following important improvements in the institutional framework. These included reforms of the public financial management system and legislation governing the fiscal relations between the federal and subnational governments. In particular, the FRL was preceded by the subnational debt restructuring program launched in 1997, involving the consolidation of domestic liabilities of subnational and federal governments. The debt restructuring arrangements have reinforced the fiscal rules enshrined in the FRL, and promoted transparency in subnational government finances. Embedded in the debt restructuring contracts are provisions for the reporting of subnational fiscal data based on a common methodology, facilitating

the reporting of fiscal data by subnational governments and the monitoring of compliance of FRL requirements.

Brazil's FRL puts strong emphasis on procedural and transparency rules, and also contains numerical ceilings on selected fiscal indicators. The FRL sets a framework for budgetary planning, execution, and reporting that is applicable to all levels of government. Its 75 articles constitute a "code of behavior" for better fiscal management.<sup>5</sup> It is a complementary law, requiring a qualified (two-thirds) majority of congress to be modified. The law calls for a sustained structural adjustment of public finances and for constraining public indebtedness. The law also calls for transparent fiscal reporting and has detailed provisions on budget preparation and execution practices. It requires the preparation and dissemination of transparent fiscal reports; the presentation of a fiscal policy annex to the government's multiyear plan with multiyear fiscal targets; and the presentation of a fiscal policy annex to the Annual Budget Guidelines Law with targets for the primary balance, projections for revenues, expenditures, nominal balances and public debt, and a description of fiscal risks with an assessment of contingent fiscal liabilities. The law includes numerical fiscal limits for selected fiscal indicators; corrective institutional mechanisms in the case of noncompliance; and institutional sanctions for noncompliance. It has few escape clauses that can only be invoked with congressional approval. Also, the FRL is supported by a Fiscal Crimes Law.

Fiscal performance in Brazil remained strong after adopting the FRL, although it had already started to improve before the implementation of the law. The consolidated primary balance improved from a deficit of 1 percent of GDP in 1997 to a surplus of over 4.5 percent of GDP in 2004. However, the overall deficit has been volatile, reflecting the still poor composition of debt, which is sensitive to interest rate shocks.<sup>6</sup> In addition, several states and municipalities are still under a transitional period to comply with the numerical fiscal targets, and political pressures exist to weaken the interpretation of applicable sanctions. While the improvement in fiscal outcomes in Brazil cannot be attributed solely to the adoption of the FRL, the FRL has certainly contributed to sustaining fiscal prudence. The

<sup>5</sup>See Oliva (2001).

<sup>6</sup>The more recent period of economic stability has allowed significant progress in reducing these vulnerabilities, and Brazil's net debt, while still at about 55 percent of GDP in 2004, has been on a downward trend since end-2002. The government has also been able to improve on the composition of debt, particularly by reducing the share of domestic debt linked to the foreign exchange rate.

quality of fiscal adjustment, however, has been poor, relying on increasing an already high tax burden, while tilting the allocation of expenditures to current items at the expense of investment.

## Colombia

Colombia's early FRLs, applicable only to subnational governments, aimed to strengthen central government's control over subnational debt, within a context of increasing political decentralization accompanied by greater freedom for subnational domestic borrowing.

The first law, the so-called traffic light law, was passed in 1997, and introduced a rating system for territorial governments based on debt indicators, banning borrowing for highly indebted local governments (red light) and requiring authorization from the ministry of finance for intermediate cases (yellow light). Local entities with poor ratings were required to implement fiscal stabilization plans. The law was not effective and many red light local governments were able to incur new debt, including by presenting defective financial information.<sup>7</sup> Subnational debt still grew by 15 percent a year in 1998–2000. The 2000 law established a set of rules for subnational governments, limiting operating expenditures based on the entity's freely disposable revenues, and also requiring fiscal adjustment plans in case of noncompliance with the laws, to be monitored by the ministry of finance.

An FRL applicable to all levels of government (the Organic Law on Fiscal Transparency and Responsibility) was passed in 2003, containing both procedural and numerical rules. For instance, the government is required to present a medium-term fiscal framework before the budget, stating fiscal and macroeconomic objectives and explanations of deviations from previously set targets. Quasifiscal activities must also be reported. On numerical rules, the law reinforces liquidity and solvency indicators established in previous legislation (e.g., ceilings on debt service, debt stock, and expenditures) and requires that fiscal management at all levels of government be consistent with a medium-term macroeconomic framework. Noncomplying entities continue to be required to implement fiscal adjustment plans. Colombia also fosters market enforcement mechanisms by applying bankruptcy procedures to municipalities (Law 550) and requiring main municipalities and departments to obtain credit ratings from private companies.

Local governments ran deficits through the 1990s, but posted a small surplus in 2001 and achieved a surplus of 1.3 percent of GDP in 2004.

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<sup>7</sup>See Webb (2004) and Adenauer (2005) for further details.

However, the deficit of the central government has remained large, fluctuating around 5 percent of GDP in recent years. There is still scope for further developing the institutional framework, which has lagged behind the relatively aggressive and large-scale decentralization, and to improve the accountability and reporting of subnational finances. A certain degree of fragmentation of different levels of government remains.<sup>8</sup>

## Ecuador

Ecuador's FRL was passed in late 2002, with the main goals of establishing numerical rules limiting expenditure growth, dictating the saving of fiscal revenues from the new oil pipeline, and improving the transparency of the budget process. The fiscal position stabilized after the crisis of the late 1990s, with the non-oil fiscal deficit falling to about 5 percent of GDP in 2002, from nearly 11 percent in 1999. Despite this overall improvement, preannounced fiscal targets were not always attained.

The law is broadly applicable to the nonfinancial public sector,<sup>9</sup> and contains both procedural and transparency requirements, as well as numerical fiscal rules. In particular, the law requires the reduction of the public debt to 40 percent of GDP, sets ceilings on the real growth of expenditures, and prescribes a decline in the non-oil deficit of at least 0.2 percent of GDP a year. Procedural rules include guidelines to develop multiyear budget plans to be presented to congress at the beginning of each administration, based on consistent macroeconomic assumptions, and disclosure rules for monitoring better the implementation of the budget. The law contains sanctions for noncompliance.

Several modifications to the law were introduced in mid-2005, changing the numerical rule on expenditure growth to apply only to current primary spending rather than to overall primary spending, and eliminating the provision requiring that most of the heavy crude oil export revenues flowing to the oil stabilization fund be used to reduce public debt. There were also other changes to the oil stabilization fund, with 20 percent of heavy crude oil allocated to the revenue stabilization fund and the remainder earmarked to social spending, economic reactivation, and other purposes.

The experience in Ecuador is too recent to provide a full assessment, but developments are not encouraging. The revision of rules after only a short period since the adoption of the law weakens its credibility. The limited coverage of the numerical rule on expenditures also raises

<sup>8</sup>Based on Adenauer (2005).

<sup>9</sup>As noted in Appendix 1, different rules apply to different levels of government.

concerns regarding incentives for creative accounting. Also, since the numerical rules apply *ex ante* and not to the actual fiscal outturns, there is always room to adhere to the letter of the law while violating its spirit. So far, only the fiscal rule on public debt has been met consistently *ex post*, benefiting from the high oil revenues. In addition, after the 2005 revisions, a larger share of the oil export revenues is earmarked for several uses, including social spending and projects to “reactivate the economy,” aggravating existing budget rigidities. While the law may help reduce public indebtedness,<sup>10</sup> long-standing weaknesses in expenditure management remain in need of attention.

## India

Following over a decade of large fiscal deficits, and three years of discussion, India’s Fiscal Responsibility and Budget Management Act (FRBMA) was enacted in 2003. Its key goal is to restore and safeguard fiscal sustainability by setting a medium-term target to guide fiscal policy. The inherited institutional setup is strong and hierarchical, and the FRBMA strengthens this setup by incorporating numerical fiscal rules, improving transparency and monitoring requirements, and incorporating medium-term considerations in budget formulation.

India’s law is applicable to the national government only, but 18 (out of 29) states have also adopted FRLs that are in line with the national law.<sup>11</sup> India’s FRBMA contains both procedural rules and numerical targets set in a multiyear period. It puts emphasis on transparency, requiring for instance that the government present before both houses a Medium-Term Fiscal Policy Statement, a Fiscal Policy Strategy Statement, a Macroeconomic Framework Statement, as well as quarterly reports on fiscal developments. Central to the law is the requirement that the central government eliminate its current deficit. The FRBMA originally set the deadline to March 2008, but it has now been postponed to 2009.<sup>12</sup> The law also establishes caps on the level of guarantees and total liabilities, and prohibits borrowing by the government from the Reserve Bank after April 2006. Escape clauses are limited to national security emergencies or a national calamity.

<sup>10</sup>Zermeño (2003) argues that the law would help reduce the public debt to below 40 percent of GDP and would gradually eliminate the non-oil deficit.

<sup>11</sup>Of the 18 states, 6 adopted an FRL prior to the national FRL. By 2005, the remaining 11 states were in the process of establishing FRLs.

<sup>12</sup>In an attempt to ensure progress toward this target, the annual reduction in the current deficit is required to be at least ½ percent of GDP (and in the fiscal deficit at least 0.3 percent of GDP) starting in 2004–05.

India's FRBMA remains too recent to provide a full assessment. Still, some considerations can be offered. The law was adopted with a bottom-up approach. However, fiscal imbalances at the subnational level remain substantial, accounting for nearly half of the general government deficit. As noted in Hausmann and Purfield (2004), a sustained reduction in the overall debt burden in India will depend crucially on achieving fiscal consolidation at the subnational level. The large number of states that have already adopted an FRL or are in the process of adopting one is an encouraging development in this regard. Yet, consideration could be given to further strengthening the legal framework. For example, the FRBMA excludes state companies, which provides incentives to shift fiscal operations off the covered indicators.<sup>13</sup> Monitoring these operations closely will be important to evaluate the fiscal position in a broad sense. In addition, by establishing targets on the current balance, the FRBMA increases the incentives for creative accounting. Finally, the law relies only on reputation sanctions for noncompliance, which may prove to be too weak to ensure enforcement,<sup>14</sup> and does not guarantee consistency between FRBMA and the budget.

## New Zealand

New Zealand's FRL, the Fiscal Responsibility Act (FRA), was passed in June 1994 (with some marginal amendments in 1998), aiming to signal a policy change to address the country's history of poor fiscal performance, reduce public debt, and improve fiscal management.<sup>15</sup> The government also wanted to reassure debt holders that fiscal performance would change for the better in a long-lasting way and reduce uncertainty generated by the shift in the electoral system.<sup>16</sup> The FRA was founded on two key elements: increased transparency and greater accountability. By the end of the 1980s, the institutional framework was fairly advanced: generally accepted

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<sup>13</sup>After the automatic oil price formula was suspended in the light of high international oil prices, the quasifiscal losses of the state oil company, which are not covered by the law, have significantly increased. Therefore, while central government outcomes have complied with FRBMA targets, the consolidated position of the general government and state enterprises would not show a meaningful improvement.

<sup>14</sup>See Hausmann and Purfield (2004) for details and proposals to strengthen further India's fiscal framework.

<sup>15</sup>Gross public debt had risen from about 20 percent of GDP at the beginning of the 1980s to nearly 70 percent a decade later.

<sup>16</sup>The electoral system changed from "First Past the Post" to "Mixed Member Proportional" in 1995, following a referendum in 1993.

accounting practices were already being followed,<sup>17</sup> and budget reporting was already implemented for a three-year period, allowing appropriate monitoring of the FRA requirements. In addition, the State Sector Act 1988 and the Public Finance Act 1989 paved the way for New Zealand's output-oriented budget system.<sup>18</sup>

New Zealand's law focuses mainly on procedures. The FRA dictates that governments must follow a legislated set of principles of responsible fiscal management, announce their strategic priorities, state their short- and long-term fiscal objectives, and publicly assess fiscal policy against those principles.<sup>19</sup> Governments may temporarily depart from the principles but must do so publicly, explain why they have departed, and reveal how and when they intend to conform to the principles. One of the advantages of New Zealand's FRA is that it allows fiscal policy to be formulated in terms of its medium-term implications, although the authorities are still required to set short-term targets for a range of fiscal indicators. There is also strong support from established fiscal institutions, such as the Debt Management Office and the independent Reserve Bank.<sup>20</sup> In addition, high accounting and statistical standards are key elements. The FRA does not include any sanctions for noncompliance, but accountability rules are very precise, establishing the responsibilities of the minister of finance and the secretary of the treasury.

In December 2004, the FRA was repealed and integrated into the Public Finance Amendment Act 2004, consolidating the legislation on public finances.<sup>21</sup> The goal was to strengthen these fundamentally sound acts by improving the flexibility for the executive branch in managing public finances, while retaining and improving accountability mechanisms to par-

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<sup>17</sup>The government began producing its financial statements in compliance with Generally Accepted Accounting Practice (GAAP) in 1989. This system is accrual based but also reports on cash flows. Since 1994, the New Zealand Accounting Standards Review Board, a body independent of the government, is in charge of setting accounting standards under GAAP applying to both the public and private sectors.

<sup>18</sup>See Cangiano (1996) for a description of major reforms in public administration since the mid-1980s.

<sup>19</sup>The act requires that the government run annual operating surpluses until "prudent" levels of debt are achieved, and to maintain these levels by ensuring that "on average, over a reasonable period of time, the operating expenses do not exceed operating revenues." The act further requires the government to create a "buffer" against adverse future events, ensuring that in critical cases the government has the ability to borrow without undue risk of moving into an unsustainable net worth position, and to recognize and reduce future risks in advance, where possible, through more cohesive fiscal management and stable tax policies.

<sup>20</sup>See New Zealand Treasury (1996) for further details.

<sup>21</sup>In December 2004, the House passed the Public Finance (State Sector Management) Bill, including the Public Finance Amendment Act 2004, the State Sector Amendment Act (No. 2) 2004, the Crown Entities Act 2004, and the State-Owned Enterprises Amendment Act 2004.

liament. New reporting requirements, with the goal of enhancing transparency further, included for instance: (1) a statement on the long-term fiscal position, to ensure that issues such as the possible fiscal impact of demographic changes are reported periodically; and (2) an annual statement on new government tax decisions, to ensure that new tax expenditures are reported at the time of the budget. The lack of publication of tax expenditures had been identified as a shortcoming in New Zealand's framework.

Fiscal outcomes improved markedly after the adoption of the FRA, although they had started to improve a few years before the enactment of the law. The fiscal balance has remained in surplus since 1994, reaching nearly 3 percent of GDP in 2003, and net debt declined to 12 percent of GDP, from over 50 percent a decade earlier.

## Pakistan

Pakistan's Fiscal Responsibility and Debt Delimitation Act (FRDD) was approved in June 2005, three years after the draft law was made publicly available, inviting public comment. The law aims to achieve the elimination of revenue deficits and a reduction of public debt to prudent levels by following principles of effective public debt management, while at the same time protecting social and poverty-reducing expenditures.

The FRDD contains both numerical and procedural rules that apply to the federal government. Numerical rules include (1) lowering public debt to 60 percent of GDP by 2013; (2) reducing public debt by at least 2½ percent of GDP each year; (3) eliminating revenue (i.e., current) deficits by June 2008; and (4) limiting new guarantees to 2 percent of GDP. Fiscal rules can be suspended if social and poverty-reducing expenditures fall under 4½ percent of GDP, or health and education spending fail to double in percent of GDP in a period of 10 years. Escape clauses also comprise national security emergencies or natural calamities, to be declared by the National Assembly. Procedural rules include the presentation and publication of an annual medium-term budgetary statement, a fiscal policy statement, and a debt policy statement, containing multiyear projections of key fiscal and macroeconomic indicators, a description of policies and objectives, analysis of risks, and an evaluation of compliance with fiscal targets. These statements must be accompanied by a statement of responsibility signed by both the minister of finance and the secretary of finance. If the federal government fails to meet the debt reduction target, it must take all necessary measures to return to the debt reduction path within two years, including the curtailment of sums authorized to be paid and applied from the Federal Consolidated Fund. These constraints cannot be applied to

social and poverty reduction expenditures, which are protected from such cuts, or to expenditures under Article 81 of the Constitution. The act also mandated the establishment of a debt policy coordination office.

Pakistan's law is too recent to assess its implementation. Several of the principles in the law follow good practices of transparency. Still, existing shortcomings in fiscal management need attention. Some concerns in the design of the law include (1) the fact that intrayear reporting on fiscal outcomes is not required; (2) the arguably liberal nature of escape clauses, requiring large increases in social spending that can trigger the suspension of the rules and may not foster an efficient and appropriate targeting of such spending; and (3) the incomplete coverage of the law, excluding subnational governments (despite the expectation of increasing devolution in coming years) and public enterprises (e.g., power utilities in need of restructuring and continuing to represent significant liabilities for the federal budget).

## **Panama**

Panama's FRL (Law No. 2 on Measures on Economic Activity Promotion and Fiscal Responsibility) was approved in 2002, following several years of rising fiscal imbalances and a deceleration in economic activity. The worsening of the fiscal position reflected mainly negative cyclical factors that exacerbated existing negative structural trends in both tax revenue and the finances of the social security system. Problems with expenditure overruns also highlighted still weak expenditure control procedures.

Panama's FRL focuses almost exclusively on numerical fiscal targets. It establishes limits on net public and external debt to be complied with within a period of 15 years, and on the annual nonfinancial public sector deficit. During the transition to achieving the debt target limits, the law requires faster debt reduction during periods of high growth.

Fiscal performance had been deteriorating in the years prior to the FRL and continued to do so afterward. The nonfinancial public sector deficit reached nearly 4 percent of GDP in 2003, the first full year of application of the FRL, almost double the numerical target established in the FRL. The FRL did not specify whether deficit targets were to be monitored on an accrual basis or on a cash basis, providing incentives to interpret the law in an opportunistic way and to accumulate arrears. The FRL also lacked procedural rules, monitoring systems, and enforcement mechanisms. Fiscal imbalances remained large during the first part of 2004, leading to the suspension of the FRL by the administration that took office in September, as compliance in the short run seemed out of reach. The government is considering sending an amended FRL to congress.

## Peru

Peru's Fiscal Prudence and Transparency Law was first approved in December 1999 and came into effect in 2000. The law was passed with the aim of establishing guidelines to improve public finance management and contribute to economic stability. Fiscal performance had improved up until the mid-1990s, with the overall balance of the nonfinancial public sector reaching a surplus in 1997. However, fiscal performance deteriorated in the years prior to adopting the FRL: the overall surplus achieved in 1997 had turned into a deficit of 3 percent of GDP by 1999, with public debt rising to nearly 50 percent of GDP.

The 1999 law contained both procedural and numerical rules. It envisaged the preparation of a multiannual macrofiscal framework and established numerical targets on the overall fiscal deficit and a cap on nominal expenditure growth. The FRL also created a fiscal stabilization fund to limit the procyclical fiscal stance. The original FRL established a ceiling on the nonfinancial public sector deficit of 1 percent of GDP. The lack of sanctions weakened credibility after noncompliance immediately following the adoption of the law, and several ambiguous escape clauses proved ineffective for the implementation of fiscal adjustment.

In 2003, the law was modified to include a gradual convergence to the deficit target by 2005, a ceiling of 3 percent in real expenditure growth, and sanctions on noncompliance by subnational governments (including reduced access to intergovernmental funds). The fiscal deficit was also required not to exceed 40 percent of the projected annual deficit during the first semester of an electoral year.

While fiscal performance improved in the most recent periods, the numerical target on the real growth of nonfinancial expenditures was breached in 2003 and in 2004. However, on current policies, the FRL numerical targets are expected to be achieved.

## Spain

Spain's Budgetary Stability Law (BSL) was approved in 2001 and entered into effect in 2003. It aimed to consolidate earlier gains from fiscal adjustment, which started in the mid-1990s, and place fiscal policy within a transparent and sound framework in a context of growing fiscal decentralization. Fiscal outcomes in Spain had deteriorated up until the mid-1990s, with debt climbing to nearly 50 percent of GDP. Since 1995, however, fiscal performance has improved, aided by several years of strong economic activity.

Spain's BSL, applicable to the general government and some aspects of public enterprises, has a strong emphasis on procedural and transparency

rules, and also legislates numerical fiscal targets. The BSL replaced the earlier system of bilateral negotiations for the determination of deficit and debt ceilings of different regions, establishing a common target (budget balance or surplus) for all regions, and formalizing and regulating provisions for coordination between different levels of government attained before through domestic stability pacts. The BSL sets out four principles to guide the formulation and implementation of fiscal policy. These include (1) budgetary stability, (2) medium-term budget horizon, (3) transparency, and (4) efficiency. The BSL envisages a detailed budgetary process, requiring, among other things, a rolling three-year fiscal framework, consistent with budgetary balance or surplus at each level of government. Any region arguing for a deficit would need to present a detailed justification and a credible three-year fiscal adjustment program to bring the budget back to balance. Similar requirements are stipulated for municipalities. Surpluses realized by the central government should be used to reduce public debt, and surpluses realized by the social security system should be accumulated in the reserve fund of the system. The budgets must include a general contingency line item, equivalent to 2 percent of the annual spending ceiling, to meet unforeseen nondiscretionary spending during the execution of the budget. In the event that an (overall) deficit of over 3 percent of GDP were to be recorded, leading to the application of sanctions by the European Union, noncomplying jurisdictions would be required to contribute to the payment of fines in proportion to their contribution to the excessive deficit.

Fiscal outcomes remained strong after the introduction of the BSL. However, 11 out of the 17 regional governments ran a deficit in 2003, despite the requirement of balanced budget or surplus at the subnational government level. The consolidated regional deficit remained relatively contained in terms of national GDP, but the relatively widespread violation of the budget target in the first year of application of the law raised questions regarding the effectiveness of the framework in promoting fiscal discipline. The government is, therefore, reconsidering the present legal framework, aiming to increase ownership and observance by the regions, and to provide explicit room for countercyclical action.<sup>22</sup>

## Sri Lanka

Sri Lanka adopted the Fiscal Management Responsibility Act (FMRA) in 2003, following a long history of fiscal imbalances leading to a crisis

<sup>22</sup>See Spilimbergo (2005).

in 2001, when the central government debt-to-GDP ratio exceeded 100 percent. The FMRA addressed several existing shortcomings, including the lack of codified rules for the formulation and execution of the budget. The law aims to strengthen transparency requirements and places the budget within medium-term considerations.

As in India, Sri Lanka's law sets numerical fiscal targets for the medium term applicable to a narrow coverage of the public sector—the central government. The law also sets caps on government guarantees. The FMRA originally required the central government overall deficit not to exceed 5 percent of GDP by 2006, but the government economic statement to parliament accompanying the 2005 budget already announced that targets would not be met before 2008.

Sri Lanka's FMRA remains too recent to provide a full assessment, but the narrow coverage of the targets, and the rapid postponement of the scheduled reduction in fiscal deficits, diminishes the credibility of the law. There are significant quasifiscal activities by commercial public corporations, which are only partially monitored and have intensified in recent periods.<sup>23</sup> In addition, Sri Lanka's accounts only report operations on a cash basis. This increases incentives to move fiscal operations off the covered indicators, intensifying the reliance on quasifiscal activities, and to accumulate arrears to meet numerical fiscal targets measured on a cash basis. Also, the FMRA relies solely on reputation sanctions, which may prove ineffective, especially given the country's long history of noncompliance with budget targets. Finally, the FMRA's escape clause is loosely defined.

## United Kingdom

The U.K. Code for Fiscal Stability was approved in 1998, aiming to address weaknesses in the fiscal policy framework, which had been an important source of economic instability. As discussed in H.M. Treasury (1997), the sharp deterioration of the fiscal balance between the late 1980s and early 1990s highlighted the importance of keeping a prudent approach when making fiscal projections and of being open and transparent in the design, implementation, and monitoring of fiscal rules. The design of the code was motivated by three key considerations: (1) a stable economic environment is vital for prosperous growth and employment; (2) the con-

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<sup>23</sup>This has been particularly true for the Ceylon Petroleum Corporation and the Ceylon Electricity Board, which have been operating under administered prices for oil and electricity, respectively. See IMF (2002) for further details, including on other identified weakness in complying with the Fiscal Transparency Code.

duct of fiscal policy critically influences economic stability; and (3) the preceding fiscal framework was inadequate to deliver a stable economic environment.

The U.K. code specifies principles of fiscal management and transparency standards. The code requires the government to set out its fiscal policy objectives and the fiscal strategy it intends to implement over the life of the parliament. The government's fiscal policy and strategy must follow five principles of fiscal management set out in the code, including transparency, stability, responsibility, fairness, and efficiency. The government is also required to report on a regular basis on progress towards meeting its fiscal goals, so that Parliament and the public at large can monitor and scrutinize the government's fiscal plans. Although the code does not oblige the government to use specific fiscal rules, two have been adopted since 1998: (1) the "golden rule," stating that over the economic cycle, the government should borrow only to invest and not to fund current spending; and (2) the "sustainable investment rule," stating that the public sector net debt-to-GDP ratio be maintained at a prudent and stable level over the economic cycle (currently interpreted as under 40 percent of GDP). These rules aim to correct a possible anti-investment spending bias and to ensure fairness across generations. The fiscal framework is also supported by a regime for planning and controlling spending, requiring that three-year plans be set for all the main government departments through departmental expenditure limits.<sup>24</sup> The government must ensure that accounts be produced for the whole public sector and adopt a resource accounting and budgeting approach for planning and accounting based on Generally Accepted Accounting Practice. The code does not specify sanctions for noncompliance, but sets clear accountability. The Treasury must invite the National Audit Office to audit any changes to the key assumptions and conventions underlying the fiscal projections. The Comptroller and Auditor General must ensure that any advice is communicated to the Treasury and laid before Parliament.

The implementation of the principles set out in the code are considered to have been successful in promoting fiscal discipline. Rules were able to offset political pressures toward higher deficit levels and improve the credibility of government's commitments, while transparency allowed scope for flexibility in the conduct of fiscal policy.<sup>25</sup> For instance, Emmerson, Frayne,

<sup>24</sup>See H.M. Treasury (1997) for further details.

<sup>25</sup>Compliance with the golden rule will be critically assessed at the end of the economic cycle, which the H.M. Treasury estimates will span from 1999/2000 to 2005/2006. Koeva (2005) reports that the safety margin for meeting the rule has shrunk and the risk of breaching it has become nontrivial.

and Love (2004) conclude that the code has raised standards, particularly with respect to the disclosure of information, without causing a deterioration in those areas in which the government's current practice exceeds the code's minimum requirement. They highlight, however, that the code could be strengthened further, particularly in the area of responsibility. In particular, they suggest more emphasis should be put on accurate forecasts (rather than cautious forecasts), complemented by a discussion of the errors and uncertainty surrounding fiscal aggregates. This would allow the government to move from a rigid hit-or-miss interpretation of its fiscal rules to a softer interpretation based on probabilities without a loss of credibility. This in turn may allow for greater tax and spending smoothing. A similar proposal is put forward in Koeva (2005).

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# 6

## The Role for Fiscal Agencies

XAVIER DEBRUN, DAVID HAUNER, AND MANMOHAN S. KUMAR

There is a growing recognition that the design and implementation of economic policies depend to a considerable extent on the incentives of policymakers. It is also generally recognized that even well-intended governments may end up pursuing unsound policies. This may happen in part because incentives of policymakers change over time, with policies agreed to previously not being implemented.<sup>1</sup> It may also reflect the impact of the political environment, such as the influence of special interests or immediate electoral concerns, that generally results in short-time horizons. These factors have contributed to unsatisfactory fiscal performance in many advanced and developing economies (IMF, 2003).

The emphasis on policymakers' incentives has paved the way for institutional innovation expected to improve policy. A common objective of reform has been to reshape policymakers' incentives. One way to achieve this is to delegate activities susceptible to "government failure" to independent agencies or to establish arrangements that raise the reputational and electoral costs of distorted policies. The case for delegation has been at the core of the recent developments regarding the independence of central banks and financial regulators. The success with delegation of monetary policy has led some to argue that analogous fiscal agencies could play a useful role in reducing undesirable tendencies, such as the emergence of unsustainable debt, policy procyclicality, and inefficient tax and expenditure policies.

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<sup>1</sup>This is the familiar problem of time inconsistency.

This chapter examines the rationale for fiscal agencies, explores issues relating to their implementation, and reviews country experiences. These agencies could improve fiscal policy by exercising policy mandates explicitly delegated to them or by influencing the democratic debate through independent analysis, forecasts, or judgment. Their specific mandate and structure would depend on the nature of the fiscal policy problem and on the country's policymaking environment. Hence, unlike the structure and role of independent central banks, which is fairly uniform across countries, the characteristics of fiscal agencies would be much more country specific.

The chapter identifies two types of fiscal agencies: Independent fiscal authorities (IFAs) to some extent mimic on the fiscal side independent central banks. For instance, they could be mandated with the objective of attaining a short-term fiscal balance target consistent with debt sustainability, and/or with output stabilization. They may also be provided with some discretion over tax rates or spending.

Fiscal councils (FCs) would not receive any specific authority over fiscal policy but would undertake analysis and assessment of fiscal developments and policies. They would essentially provide independent projections and analysis and thereby affect policymakers' incentives through external scrutiny and democratic debate. They could also issue normative judgments, possibly involving formal procedures, such as a special session in parliament.

The chapter first develops an analytical framework for policy delegation in general and fiscal policy delegation in particular. Next, it discusses the potential roles of IFAs and FCs. Then it examines the experience with FCs and considers the complementary role that existing institutions—and especially the IMF—can play. The chapter ends by summarizing the main conclusions.

## Delegation and Institutional Innovation

Given the scope for institutional innovation, what role could fiscal agencies play? They could help inform, analyze, assess, and implement fiscal policy.<sup>2</sup> In one form or another their operation would entail some delegation from the elected representatives or their administration. This raises a number of issues. What are the general criteria for the delegation of policy or policy-related areas to new institutions? What do these criteria suggest

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<sup>2</sup>Several countries already have such institutions that play varying roles in helping increase the transparency and credibility of fiscal policy. The practices of these countries are examined in the section "Experience with Fiscal Councils."

specifically about the appropriateness of delegation in fiscal policy? What would be the types of institutions that could assume responsibilities in the fiscal area? These issues are examined below.

### **When Is Delegation Useful?**

The proposition that institutional reform can improve the conduct of economic policy rests on two premises. First, institutions directly shape policymakers' incentives that in turn affect policy choices; and, second, well-intended governments would be willing to adopt or modify institutions in a way that effectively improves policymaking. Nonetheless, reforms are in general likely to encounter resistance from entrenched interests: "All societies tend to see their current governing institutions as immutable, as if they were the natural order of things" (Blinder, 1997). In particular, reforms that entail delegation of policy mandates to politically independent, specialized bodies usually occur slowly and encounter stiff opposition. The evolution of institutions that are now generally taken for granted—*independent judiciaries, central banks, or (financial) regulators*—provides ample testimony in that regard.

Economic theory points to four basic criteria that should dictate whether it is desirable to delegate some or all aspects of policy (Alesina and Tabellini, 2003):

- First, there must be socially harmful distortions in policymaking undertaken by political representatives. If there are no such distortions, there would be no gain from delegation, and the policy can be designed and implemented optimally by political representatives. In such circumstances, the other three criteria noted below would also not apply.
- Second, there should be a broad consensus on what constitutes "sound policy" in any particular domain. This is essential to establish a mandate for which the independent body can be held accountable. The absence of such a consensus would indicate conflicts among social groups or constituencies. This would in turn suggest difficult policy trade-offs that only an elected body could legitimately resolve.
- Third, delegated mandates should not be primarily distributive or have major distributive consequences. Clearly, distributional decisions should reflect a popular mandate that can only be exercised legitimately by the elected representatives.
- Fourth, delegation should not give rise to major policy coordination problems. If a policy in a particular area or some aspect of it is

delegated, it should not create conflicts with policymakers in another area that is not delegated. Otherwise, the coordination difficulties could outweigh any benefit from delegation. Likewise, delegation would be undesirable if there are significant economies associated with complementarities between prerogatives to be delegated and nondelegated ones.<sup>3</sup>

The delegation of monetary policy fits in fairly well with the above analytical criteria: (1) the politicization of monetary policy is generally perceived as a key source of macroeconomic instability; (2) there is relatively little variance in opinions about what constitutes sound monetary policy; (3) monetary policy is not primarily distributive; and (4) a clear-cut assignment of responsibilities between monetary and fiscal policies is in fact one way to deliver a well-coordinated policy mix (Box 6.1; see also Dixit and Lambertini, 2003). (Rogoff, 1985 first made a case for an independent “conservative” central bank that would preserve policy discretion and still reduce the inflation bias.)

At the same time, the above framework shows why structural policies are unlikely to be delegated to an independent agency. This is despite the fact that structural policies are often characterized by biases in favor of the status quo owing to political distortions (such as the action of well-organized special interests), and reflects the following: (1) there is no consensus on an ideal economic “model”—mainly because structural policies often involve difficult trade-offs between efficiency and equity; (2) structural reforms often have deep distributive implications; and (3) they have far-reaching implications for other policy areas.

### Delegation of Fiscal Policy

With regard to fiscal policy, delegation might appear possible in some areas. The above analytical framework suggests that specific areas of fiscal policy particularly susceptible to government failure could be delegated to an independent agency. This concerns especially the overall fiscal balance, as supported by the four criteria elaborated above: deficit bias and procyclical fiscal policies constitute socially harmful distortions in policymaking; there is broad agreement that sound fiscal policy should not create

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<sup>3</sup>Some observers also point out that delegation is particularly useful in cases where policy choices involve a lot of technical expertise with respect to other dimensions of the decision process (e.g., Blinder, 1997; and Alesina and Tabellini, 2003). However, this does not appear to be a key discriminating criterion, as most well-designed economic policy decisions arguably require a significant input from highly skilled professionals.

### Box 6.1. Comparing Monetary and Fiscal Policy Delegation

Fiscal agencies raise a number of issues in comparison with independent central banks. One can compare and contrast IFAs specifically with independent central banks.

The core objective for monetary policy is broadly recognized in most countries—price stability. Indeed, the costs of high inflation are felt quickly by large parts of the population, which boosts support for institutions supposed to prevent high inflation. However, what could be called the analogous objective for fiscal policy—debt sustainability—is less clear-cut. For one thing, high debt and deficits are likely to be less easily perceived as harmful by the general public. In the short and medium run at least, the costs of high deficits can be blurred by a number of factors: (1) large groups in the population might benefit from them; (2) the costs are potentially spread over a long time period; and (3) concerns about these costs could be deflected by an expected positive impact on economic growth.

Also, defining the goals of an IFA is more complex than defining those of central banks, owing to different characteristics of fiscal and monetary policy. This is despite the fact that the mandates of the two bodies can be comparable: IFAs could be mandated with ensuring debt sustainability and contributing to economic stabilization, compared with central banks mandated with ensuring price stability and contributing to growth.

**Objective.** The objective of monetary policy is usually an inflation rate within a prespecified range (with output stabilization sometimes added as a secondary objective). For fiscal policy, however, there is no broad agreement on one single objective. Unless fiscal stabilization over the cycle would be entirely dismissed, a fiscal agency would likely have to square two potentially conflicting objectives: fiscal sustainability and economic stabilization. Even if the IFA's objective

unsustainable deficits; the fiscal balance does not have direct distributional consequences, except across generations;<sup>4</sup> and delegating the setting of the fiscal balance can reduce the problem of macroeconomic policy coordination, especially with monetary policy.

However, some other areas of fiscal policy should clearly remain under elected officials' control. Specifically, those serving primarily distributive objectives, such as the progressivity of the tax system or the size of social

<sup>4</sup>Intergenerational redistribution actually adds a political economy argument for delegation: future generations are generally not sufficiently represented by elected policymakers. Additional distributional aspects of the fiscal balance concern its financing and the implications for expenditure composition of rapid adjustment. However, these distributional repercussions are not necessarily greater than those associated with monetary policy changes.

were indeed limited to debt sustainability *ex ante*, political pressure to pursue also a stabilization objective could get severe in bad times.

**Target.** The target of monetary policy is usually a certain interest rate or money supply growth. A natural target for fiscal policy would be the fiscal balance. However, there are at least three complications compared with monetary policy: First, the measurement of the fiscal balance is more complex and susceptible to “creative accounting.” Second—in contrast to the inflation rate—there is no broad consensus on a fiscal deficit that should not be exceeded. Third, fiscal policy generally works with longer lags than monetary policy: an IFA would have to decide on the fiscal balance several months before the new fiscal year.

**Instrument.** Central banks have a number of instruments at their disposal. However, what could be called the instruments of fiscal policy—tax rates and expenditures—would tend to remain under the control of the elected government.

	Independent Central Banks	Independent Fiscal Authorities
Mandate	Price stability (and sustainable growth)	Debt sustainability (and economic stabilization through the cycle)
Objective	Restraining inflation	Debt level and/or fiscal balance through the cycle
Target	Interest rate, money supply	Fiscal balance
Instrument	Open market operations, etc.	Typically none (potentially some selected tax rates or the overall expenditure level)

transfers, are not good candidates for delegation. Even though political decisions on them might create economic inefficiencies, there is no broad consensus on what constitutes sound policy in these areas. Aspects of fiscal policy that are so highly dependent on social preferences should clearly remain under the control of the political process. (Nevertheless, there might be technical aspects of tax and expenditure policies where delegation could be considered, as discussed below.)

If delegation is deemed desirable, the following institutional arrangements need to be given specific attention:

*Mandate.* The agency needs a simple and unambiguous mandate, clearly related to the economic rationale for delegation—which is to effectively reduce fiscal policy biases. This facilitates the monitoring of the agency and enhances its accountability.

*Discretion.* The agency should be given complete discretion with regard to mandates delegated to it, and it should be able to use such discretion to fulfill its mandate.

*Accountability.* Ex post control procedures should allow elected officials to verify that the delegated prerogatives were used in accordance with the mandate. Sanctions against the agency can be envisaged if violations are detected.

*Independence.* There should be explicit guarantees against ex ante political control. That includes the prohibition for elected officials to issue instructions to the agency, specific appointment procedures for the agency's executives, and provisions for a long-term budget allowing it to hire staff commensurate to the task in terms of both numbers and qualifications.<sup>5</sup>

## Independent Fiscal Authorities

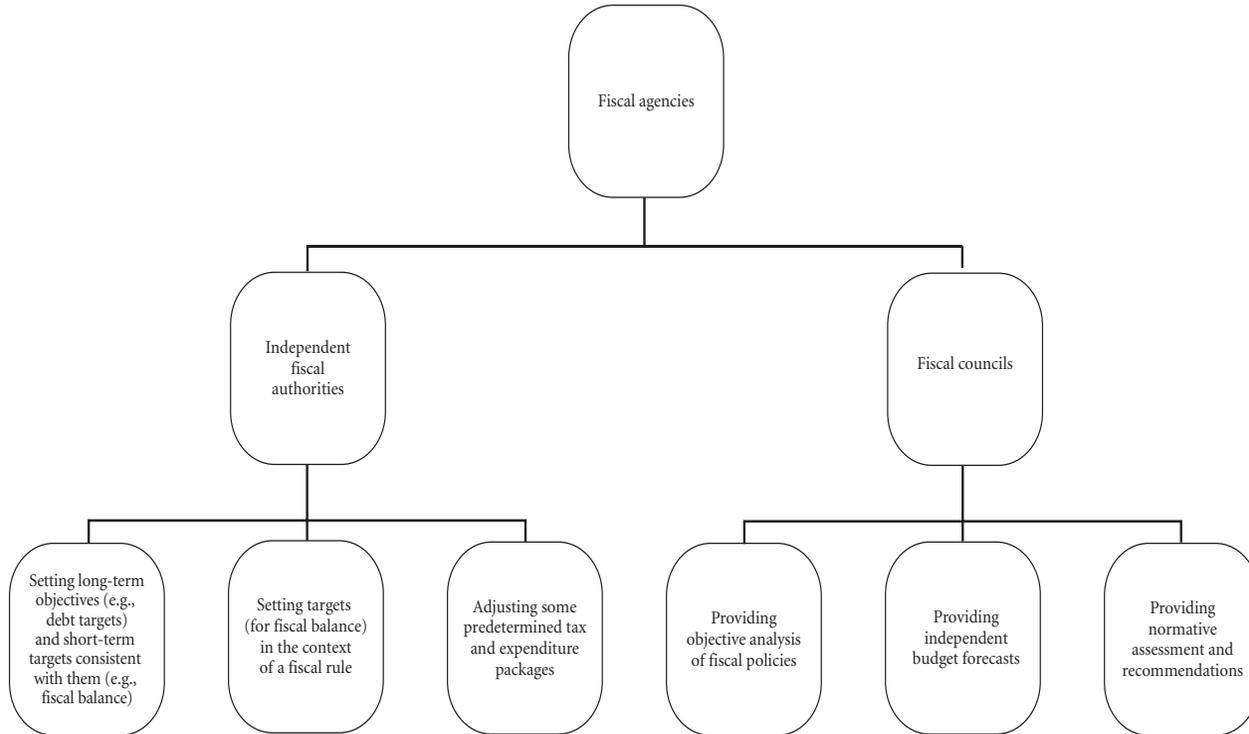
An IFA could reduce deficit bias and improve policy design and implementation. This could be achieved by providing IFAs with the mandate to decide on specific aspects of fiscal policy within a general policy framework previously defined through the political process. While no country has so far instituted a body similar to an IFA, a wide spectrum of proposals has delineated different mandates for such bodies.<sup>6</sup> Alluding to the terminology familiar in the context of central banks (see Box 6.1), the proposals mainly differ according to whether the IFA would independently set an objective (e.g., debt sustainability) and a target of fiscal policy (such as the annual budget balance), or have some jurisdiction over one or more instruments of fiscal policy (e.g., tax rates). While no proposal envisages that all three aspects would be set by the IFA, some propose the IFA's mandate to consist of a combination of targets and instruments (Figure 6.1).

At one end of the spectrum, an IFA could be mandated with setting both the long-term fiscal objectives and the annual targets for the budget balance (see Appendix 1). The IFA could, for example, be mandated to set a binding deficit target at the beginning of the budget process with a view to preserving long-term fiscal sustainability, given the economy's cyclical

<sup>5</sup>Constraints on the availability of human capital as well as other administrative limitations could nonetheless be a problem in many developing countries.

<sup>6</sup>However, similar bodies have been instituted in a number of countries under exceptional circumstances in the absence of adequately functioning domestic political institutions by the international community, not the national government; examples are Austria after World War I or, more recently, conflict areas administered by the United Nations.

Figure 6.1. A Taxonomy of Fiscal Agencies



Source: IMF staff.

position. The definition of the precise objectives, that is, a specific future debt level or the budget balance (over the cycle), would be left to the IFA (Eichengreen, Hausmann, and von Hagen, 1999). While the individual revenue and expenditure plans in the budget would continue to be decided through the political process, parliament would only be legally allowed to pass the budget if the target set by the IFA was reached.

Some more limited proposals envisage IFAs mandated to prescribe budget targets within a politically prespecified framework of fiscal policy objectives.<sup>7</sup> The IFA could be mandated to set a binding budget target with a view to reaching a future debt level or a certain budget balance over the cycle prespecified through the political process. While some proposals focus on the IFA's contribution to debt sustainability (Wyplosz, 2005), others concentrate more on the need to pursue countercyclical fiscal policy (Calmfors, 2003). Ultimately, however, an IFA would necessarily have to be concerned with both sustainability and cyclicity, as they cannot be fully separated.

In the same vein, an IFA could be instituted as the impartial enforcer of an existing fiscal rule. The IFA could, for example, be mandated to veto any budget proposal at odds with the fiscal rule. The more economic analysis the implementation of a rule requires, the more important the value added of such an IFA could be. For instance, while a balanced budget or "golden rule" is relatively clear-cut, the assessment of any rule that has to be met *over the cycle* requires considerable expertise, which can weaken implementation. In such cases, the rulings of the IFA could be particularly useful.<sup>8</sup>

Although an analytical case for IFAs can be made, their establishment appears unlikely for a number of reasons. First and foremost, the institution of an IFA raises issues of democratic accountability that are much more serious than those pertaining to independent central banks.<sup>9</sup> Second, there is a risk that conflicts between the IFA and the government could undermine policymaking: for example, in-year adjustments to the budget (due to unforeseen events) would require close cooperation between the IFA and the government; in countries with substantial fiscal decentralization, an IFA would need also close coordination with subnational governments. Third, policymakers are reluctant to delegate a significant part of their mandate (particularly given that monetary policy often is already

<sup>7</sup>A range of other potential IFAs discussed in the literature are summarized in Appendix 1.

<sup>8</sup>While the well-known technical constraints on the assessment of cyclically adjusted balances would remain, the IFA could at least remove any politically motivated interpretation of underlying economic developments.

<sup>9</sup>Some proposals suggest addressing such concerns through accountability-enhancing measures similar to those applied to independent central banks, and/or overriding rules if a qualified majority in parliament disagrees with a decision of the fiscal authority.

independent). In sum, these concerns are likely to explain why there are to date no IFAs in operation in any country. This strengthens the view that similar but less intrusive fiscal agencies could play a useful role in promoting fiscal discipline. These are discussed in the following section.

## Fiscal Councils

FCs could help reduce the deficit bias while leaving discretion to the political representatives. They could contribute to greater transparency and therefore accountability of fiscal policy and thereby raise the political cost of inappropriate uses of fiscal policy in terms of credibility of the policy-makers. A variety of FCs have been in operation in a number of countries. They range from organizations essentially mandated to provide independent projections of budgetary variables and general fiscal analysis to bodies assessing the consistency of a government's budgetary policies with its own long-term objectives or proposing specific fiscal adjustment measures in the context of fiscal rules.

### Mandate

Existing FCs can be broadly categorized into three types (Figure 6.1). The first type has a mandate to provide objective analysis of current fiscal developments, their macroeconomic context (such as the cyclical position of the economy), long-term sustainability considerations, and costing of budgetary initiatives. The second type provides independent projections and forecasts. The third type, in addition, has the mandate to provide normative assessments. This includes, for example, the appropriateness of fiscal policy in a given macroeconomic environment, or a recommendation of a particular fiscal stance for a given year within a medium-term framework previously defined through the political process.

A number of proposals in the literature describe arrangements essentially similar to those noted above (Table 6.1). Most often, they propose a strengthening of the commitment to existing fiscal rules through an FC type of institution.<sup>10</sup> Such an institution would typically assess budgetary performance relative to fiscal rules and might also be mandated to suggest adjustments if necessary. The proposals are mostly centered around debt sustainability, although some also envisage a role for the FC in stabiliza-

<sup>10</sup>For example, Committee on Stabilization Policy (2002), Fatás and others (2003), European Commission (2004), and Ubide (2004).

**Table 6.1. Selected Proposals for Fiscal Councils**

Reference	Mandate	Instrument(s)	Structure	Accountability
Inman (1996), European Union	Contribute to enforcement of Stability and Growth Pact (SGP).	European Court of Justice rulings in cases of infringement of Maastricht rules.	European Court of Justice assumes the role of a fiscal council.	Unspecified.
Committee on Stabilization Policy (2002), Sweden	Contribute to enforcement of existing fiscal rules.	Assess fiscal performance relative to the existing fiscal rules. Monitor cyclical developments and recommend fiscal stance. Analyses to be published in public reports that the government has to react upon.	Expert panel from academia and government guaranteed “a sufficient degree of independence.” Staggered tenures. Safeguards against conflicts of interest.	Unspecified.
Fatás and others (2003), European Union	Preserve debt sustainability.	Assess compatibility between national budget plans and sustainability.	EU-wide council. Same guarantees of independence as for the European Central Bank.	Appointed by and regular reports to parliament.
European Commission (2004), European Union	Contribute to enforcement of SGP by increasing national ownership.	Provide publicly available assessment of national policies relative to the stability programs.	On national level. Structure could vary by country.	Unspecified.
Ubide (2004), European Union	Contribute to enforcement of SGP by removing biases in budget forecasts.	Produce macroeconomic and fiscal forecasts against which adjustments toward the SGP limits would be assessed. Monitor budget developments.	National independent agencies.	Unspecified.
De Haan, Berger, and Jansen (2004), European Union	Contribute to enforcement of SGP.	European Commission decides on fiscal adjustment needs. Supreme Court decides on sanctions if countries fail to adjust.	European Commission and European Court of Justice together assume the role of a fiscal council.	Unspecified.
Jonung and Larch (2004), European Union	Improve transparency by eliminating bias in budget forecasts.	Prepare binding forecasts for growth and other budget variables to be used for budget.	Same arrangements as for modern central banks. Member appointed by international organizations.	Public comments on forecasts.

tion, whereby it could issue statements on the appropriateness of the fiscal stance from a cyclical perspective.<sup>11</sup>

Some proposals go a step further and suggest combining an FC's assessment of the observance of fiscal rules with sanctions imposed by the judiciary. For example, De Haan, Bergen, and Jansen (2004) propose in the context of the European Stability and Growth Pact that the European Commission should issue binding decisions on the fiscal adjustment needs for the EU member countries. Noncompliance with these rulings by the governments would entail sanctions to be imposed by the European Court of Justice.<sup>12</sup> The effectiveness of the FC, in this case the European Commission itself, would stem from the legal consequences of noncompliance with its decisions. However, the role of the FC in these proposals should not be overstated: ultimately, the idea is to make fiscal rules that were established through the political process legally binding like any other constitutional provision.

Some propose the independent preparation of fiscal and macroeconomic forecasts by an FC.<sup>13</sup> Without presuming that independent forecasts would be technically better, these proposals are motivated by the concern that policymakers may utilize biased economic forecasts underlying the budget to obfuscate policy intent and limit *ex ante* public scrutiny (see also the section below, "Can Other Institutions Play the Role of Fiscal Agencies?"). To the extent that biased forecasts contribute to excessive deficits, independent forecasts could improve fiscal performance. The FC would prepare forecasts on a continuous basis that would increase the transparency of the budget and of fiscal performance throughout the year. Different from private sector or academic forecasters, the FC would be mandated by the government and would thus have access to inside information. The forecasts could be revisited during the year to adjust the fiscal stance where needed (see the Chilean example in the section "Can Other Institutions Play the Role of Fiscal Agencies?"). While the ultimate decision on the budget forecasts could be left to the government, the impact of independent forecasts on fiscal discipline would be enhanced if their use for the budget were made mandatory. This type of FC could make a constructive contribution to promoting fiscal discipline.

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<sup>11</sup>For example, Committee on Stabilization Policy (2002).

<sup>12</sup>Inman (1996) makes a similar proposal.

<sup>13</sup>Jonung and Larch (2004), Ubide (2004), and Wyplosz (2005). In this vein, the IMF Code of Good Practices on Fiscal Transparency (see IMF, 2001) recommends independent expert assessments of fiscal and macroeconomic projections.

## Implementation Issues

The proposed institutional setups for FCs vary, but autonomy is a general consideration (Table 6.1). As for IFAs, most proposals envisage that FCs would consist of economic policy experts from academia and the public sector, whose autonomy could be bolstered by a number of provisions, not unlike those in place for many independent central banks.<sup>14</sup> As a special case, two proposals (Inman, 1996; and De Haan, Berger, and Jansen, 2004) envisage a role for the judiciary in strengthening compliance with fiscal rules. Accountability is less of a concern for FCs than it is for IFAs, but nonetheless it could be enhanced if FCs were instituted by parliament and required to explain recommendations in detailed public reports. Moreover, an FC's influence in the debate would depend on the credibility of its assessment.

Whether an FC is likely to make a significant contribution to policy will depend in part on the severity of the fiscal problem in a given country. A political system with a fair amount of credibility and manageable slippages may prefer a relatively limited mandate for an FC, that nonetheless still enhances public scrutiny of policies. However, countries demonstrating a serious deficit bias under discretion and low credibility might consider a more significant move with the FC given the authority to provide normative assessments that the government feels obliged to take into account.

The institutional environment in a given country is also likely to determine the shape and effectiveness of FCs. Its effectiveness will depend on the importance of accountability in a country's institutional setup, as enshrined in its constitution. When checks and balances are strong, an FC with a mandate limited to analysis could usefully lend support to the more fiscally responsible parties. But where checks and balances are weak, such an FC is more likely to be ignored in the political process.<sup>15</sup> Substantial fiscal decentralization might raise the potential gains from an FC, as it could assume the role of an independent arbitrator between the central and the subnational governments and contribute to the coordination of fiscal policies (see the Belgian example discussed in the section "Can Other

<sup>14</sup>Of course, the format of an FC would need to take country circumstances, including the scarcity of the relevant expertise, into account.

<sup>15</sup>It has been argued that a higher degree of separation of powers tends to reduce the size of deficits (Aghion, Alesina, and Trebbi, 2002; and Persson and Tabellini, 2003 and 2004), while a lower degree of internal unity in the government (typically under plurality electoral rules) tends to increase it (Balassone and Giordano, 2001; Fiorina, 1996; and Persson, 2004). These arguments are typically based, among others, on a government's degree of accountability, its susceptibility to rent-seeking, or the resistance to reform.

Institutions Play the Role of Fiscal Agencies?”). At the same time, such decentralization could complicate the FC’s mandate as it would have to monitor the fiscal policies of the local governments as well.

A number of conditions could bolster the effectiveness of an FC. Given that it would exert influence primarily through the public debate, two main conditions are crucial: (1) its mandate needs to be clearly defined and reflect a relatively broad social consensus on what constitutes sound policy;<sup>16</sup> and (2) the government must be willing to integrate the FC into its work—perhaps even by using it to bolster its case for unpopular measures or reforms. Additional conditions that could strengthen the effectiveness include (1) the existence of fiscal rules, because they provide a clear benchmark against which the government’s policies can be assessed; (2) a central role for the FC in the budget process—for example, the budget vote could require a hearing with the FC or an explanation from the government if its recommendations are ignored; and (3) legislated provisions regarding the FC, because they could bolster its position in a possibly unfavorable political environment.

## Experience with Fiscal Councils

This section reviews the experience with FCs in a number of countries. It yields four main lessons. First, the establishment of an FC is a realistic institutional reform that seems to have contributed to fiscal discipline in a number of countries. Second, FCs providing normative assessments of fiscal policy appear to have been more effective than those limited to nonnormative analysis. Third, the effectiveness of either hinges on the government’s commitment to fiscal soundness. If a certain degree of commitment exists, it can be bolstered by an FC; if not, its impact is likely to be limited. Fourth, the desirable mandate and setup of FCs should be country specific, depending on the nature of the fiscal problems, the existence of fiscal rules, the role of the legislature in the budget process, and the checks and balances existing in the political process.

There are several examples of FCs with a mandate to issue normative judgments regarding a government’s fiscal policy and assessment of whether it is consistent with its own predefined goals. In the process, these councils undertake independent analysis of fiscal developments, as well as provide forecasts and projections for macroeconomic variables.

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<sup>16</sup>The social consensus could, however, itself be shaped to some degree by increased transparency that could be provided by a fiscal council.

### Box 6.2. Belgium—The High Council of Finance

Belgium established an “independent fiscal council” in 1989 in the context of a substantial fiscal decentralization reform. The aim was to provide a coordinating mechanism for general government fiscal policy to secure macroeconomic stability. The council was officially established as the “Public Sector Borrowing Requirement Section” of the already existing “High Council of Finance.” (The other sections are “Taxation and Social Security Contributions,” “Transfer of Federal Collected Tax Revenues,” and “Financial Institutions and Markets,” and a “Study Group on Ageing.”) The council complements the role of the Federal Planning Bureau, which is a relatively independent government body and provides independent economic forecasts that must be used for official purposes, long-term forecasts, and policy analysis.

Belgium’s council has a relatively strong mandate. First, it publishes two yearly reports: (1) in March, an assessment of the implementation of the internal stability program during the previous year; and (2) in June, an analysis of the borrowing requirement of each of the local governments, as well as the budgetary policy to be adopted, including specific recommendations on the budget balances of the three levels of government. Second, the council may give its opinion, on its own initiative or upon request of the federal finance minister, regarding the advisability of restricting the borrowing requirement of governments due to considerations about short- or long-term macroeconomic stability.

However, the council is explicitly limited to commenting on the borrowing requirement. It must not comment on general fiscal policy (particularly tax and expenditure policies) or social and economic policies in a wider sense. Still, it can make reference to a broad range of issues in the context of its recommendations pertaining to fiscal sustainability, including politically sensitive issues such as expenditure pressures arising from aging. In its assessment of the fiscal stance and its recommendations, it is guided by the long-term fiscal frameworks agreed between the different levels of government.

The council is composed with a view to equal representation and independence. Its 12 members are appointed by the king upon proposal by the regional governments, the central bank, and the ministry of finance. The chairman (from its inception) is an academic. Six members each have to come from the Flemish and the francophone community, respectively. The members are appointed for renewable five-year mandates. They have to be economic experts and must not hold a political office at the same time, to ensure their

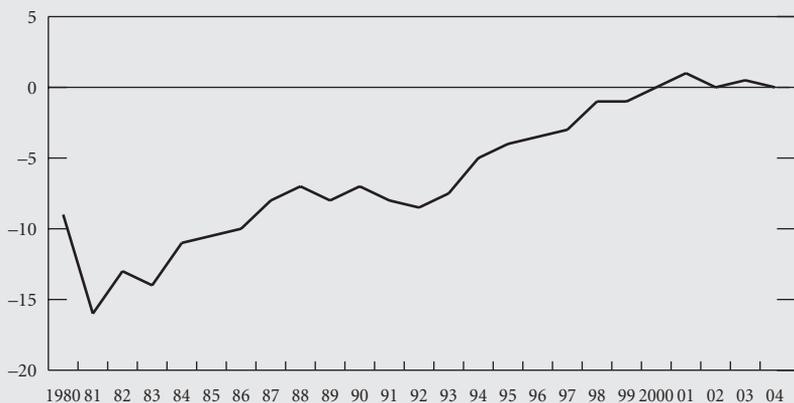
Belgium’s High Council of Finance recommends specific annual borrowing requirements for all levels of government (Box 6.2).<sup>17</sup> Each year, the

<sup>17</sup>Website: [docufin.fgov.be/websedsdd/intersalgen/hrfcsf/onzedienst/Onzedienst.htm](http://docufin.fgov.be/websedsdd/intersalgen/hrfcsf/onzedienst/Onzedienst.htm). Belgium also has a second FC-type institution, the Federal Planning Bureau (FPB). While technically part of the government, it has some independent standing. The FPB provides

independence. Recommendations by the council have to be supported by a majority of its members.

The council's recommendations were followed closely as long as its views were aligned with political priorities. During the 1990s, the council was charged with monitoring the implementation of the government's "convergence plan" that envisaged reducing the fiscal deficit to the Maastricht criterion of 3 percent of GDP by 1996. During that period, its recommendations for the deficit were closely adhered to and—according to anecdotal evidence—contributed to the substantial fiscal consolidation during that period. Since the downturn in 2001, however, the council's recommendations seem to have been followed less closely. The downturn provided the context for a downward revision of the medium-term consolidation plan for 2001–05. However, even the council's recommendation for meeting these revised targets was not fully implemented. As a consequence, the budget outcomes, adjusted both for the cycle and one-off measures, were negative at the general government level over the period 2001–04 (Van Rompuy, 2005).

**Belgium: Government Net Lending**  
(In percent of GDP)



Source: Organization for Economic Cooperation and Development.

council publishes two reports: one on the future public sector borrowing requirement and another on the implementation of the Belgian stabil-

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independent economic forecasts that must be used for official purposes, long-term forecasts, and policy analysis.

ity program. The council's mandate is explicitly limited to the borrowing requirement, but it provides recommendations on the requisite fiscal stance for all levels of government consistent with that requirement.

Denmark's Economic Council provides judgment on fiscal and structural policies and recommends changes.<sup>18</sup> Its analysis is based, among others, on its own economic forecasts for the subsequent two to three years. The council's semiannual reports are produced by its three independent chairs.

The composition of these FCs varies considerably, ranging from specific representation to loose expert panels. In Belgium, the federal finance ministry, the central bank, and the regions are represented on the agency, reflecting the council's role in policy coordination in the context of substantial fiscal decentralization. These representatives cannot hold political posts at the same time. In Denmark, in addition to independent experts, the council has 26 members representing trade unions, employers, the central bank, and the government; the three chairmen ("wise men") are generally academics.

The evidence suggests that these agencies have made an effective contribution to fiscal discipline in their respective countries. Although it is difficult to disentangle their impact from that of other factors, the recommendations of these agencies seem to have been taken seriously, with the respective governments adhering to them in many instances. These agencies have helped make the process of fiscal policy formulation and implementation transparent and contributed to a constructive public debate on budgetary issues. This, in turn, has often helped highlight the requirements for sustainable policies and strengthen the governments' ability to implement them. For instance, in Belgium, the council's recommendations on the borrowing requirement were followed particularly closely for a number of years during the 1990s, and allowed some difficult consolidation measures to be implemented. In addition, the council's recommendations have served as a useful basis for multiannual cooperation agreements between different levels of governments.

The experience with these agencies also highlights the role of political environment, and usefulness of rules. In both cases, the agencies' establishment reflected a political will and social consensus to stabilize or consolidate the fiscal position. Under such circumstances, these agencies reinforced credibility of commitment by increasing the political cost of deviating from responsible fiscal policies. In addition, there was a quite marked complementarity between "judgment" (entailing discretion) and rules.

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<sup>18</sup>Website: [www.dors.dk/english/index.htm](http://www.dors.dk/english/index.htm).

For instance, in Belgium, the agency's recommendations were adhered to by the government because the need for adjustment was enshrined in a transparent rules-based framework. This underlines the contention that a clear standard against which the government's policies can be assessed, particularly if it has been set by the government or parliament itself, may enhance the effectiveness of an FC.

A number of countries have delegated the preparation of economic assumptions and projections underlying the budget to independent bodies.<sup>19</sup> Studies have shown that, if produced by the government, these assumptions and forecasts (typically for GDP growth, inflation, interest rates, unemployment, and tax revenues) can be susceptible to systematic overestimation or underestimation.<sup>20</sup> While all forecasts—whether produced by the government or an independent body—are prone to errors (Table 6.2), independent forecasts would eliminate systematic, politically motivated biases. In the short run, such biases can make the budgetary situation look rosier than it is in fact, allowing governments to avoid making difficult choices. Over time this exacerbates fiscal vulnerabilities. Projections prepared or scrutinized by independent bodies could contribute to reducing these potential biases. For example, in Canada, a panel of independent experts from academia and the private sector is polled for macroeconomic forecasts. These experts underestimated the strength of Canada's economy since the mid-1990s, which contributed to a string of larger than expected fiscal surpluses in recent years.<sup>21</sup> In Chile, two independent expert panels help enforce a structural balance rule (Box 6.3). In the budget process, the two panels forecast copper prices and the growth of the labor force, real investment, and total factor productivity.

There are several examples of existing FCs with a mandate limited to impartial analysis of the government's policies and their consequences.

The U.S. Congressional Budget Office (CBO) advises Congress and the public on a range of fiscal issues. It analyzes the president's budget based

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<sup>19</sup>In addition to the more independent institutional arrangements in Canada and Chile, which are elaborated here, in some countries forecasts are provided by bodies separate from the government as such, but still under its scrutiny in a wider sense. Examples of such arrangements include Austria (Austrian Institute for Economic Research) and the Netherlands (Central Planning Bureau).

<sup>20</sup>Hallerberg, Strauch, and von Hagen (2001); Jonung and Larch (2004); Mühleisen and others (2005); and Strauch, Hallerberg, and von Hagen (2004) find evidence—albeit mixed—for biased budget forecasts in a number of OECD countries. In the same vein, a large proportion of governments have tended to overestimate crucial budget parameters in the past (Table 6.2), according to governments' own self-assessments.

<sup>21</sup>Mühleisen and others (2005).

**Table 6.2. Economic Assumptions in the Budget**

	Prepared Independently	Reviewed Independently	Overestimated <sup>1</sup>	
			GDP growth	Revenues
Algeria		X		
Argentina			Significantly	Significantly
Australia			Significantly	
Austria	X	X	Significantly	Significantly
Belgium	X		Slightly	
Bolivia		X	Significantly	Significantly
Cambodia		X	Slightly	
Canada		X		
Chile			Slightly	Slightly
Colombia			Slightly	
Czech Republic		X		
Denmark			Slightly	
Finland				
Germany		X	Significantly	Significantly
Greece				
Hungary		X	Slightly	
Iceland				
Indonesia		X	Slightly	Slightly
Ireland				
Israel			Significantly	Significantly
Italy			Slightly	Slightly
Japan			Slightly	Slightly
Jordan			Slightly	Slightly
Kenya			Slightly	Slightly
Korea		X	Slightly	
Mexico			Significantly	Significantly
Morocco		X		Slightly
Netherlands	X	X	Significantly	Significantly
New Zealand			Slightly	
Norway				
Portugal		X	Significantly	Significantly
Slovak Republic		X		
Slovenia	X	X	Slightly	Slightly
South Africa				
Spain				
Suriname				Significantly
Sweden			Significantly	
Turkey			Significantly	
United Kingdom		X	Slightly	Slightly
United States		X		Significantly
Uruguay				
Percent of total	9.8	41.5	63.4	46.3

Source: OECD and World Bank (2003), based on self-assessments by governments.

<sup>1</sup>Budget forecasts higher than actual performance in 2001 and 2002.

**Box 6.3. Chile: The Interaction of Fiscal Rules and a Fiscal Agency**

Recent changes in Chile's fiscal institutional setup have been consciously designed to further buttress fiscal sustainability and help dampen the effects of cyclical fluctuations. Since 2001, policy has been based on the rule of maintaining ex ante a structural surplus of 1 percent of GDP for the central government. According to the rule, fiscal expenditures follow the dynamics of structural revenue, that is, the revenue that would be achieved if the economy were operating at full potential, and the price of copper (Chile's main export) were at its long-term level.

To strengthen the implementation of the rule, the projection of the inputs into the trend GDP estimate and of copper prices was delegated to two independent expert panels. The panelists estimate individually the growth of the labor force, real investment, and total labor productivity. The estimates are then averaged eliminating the two most extreme values and used by the finance ministry to estimate trend GDP through a production function approach. Such a methodology is likely to avoid under or overestimation or underestimation of potential GDP: a downturn in the pace of activity is likely to impart a downward bias to the potential that is likely to result in a more expansive policy while a rebound is likely to go in the opposite direction. In addition, a second panel produces 10-year forecasts of the price of copper which are also averaged excluding the two most extreme values.

Despite a largely technical mandate, the panels play a key role in the budget process. The combination of the structural balance rule and the independent panel was adopted to signal policy credibility, while at the same time maintaining some policy flexibility. Together they aim to give more stability to public expenditure preventing excessive adjustments in periods of recession or unsustainable expenditures during boom years. The panel's role ensures that the underlying economic assessment is separate from other considerations in the budget preparation and implementation.

on its own assumptions, "scores" new legislative proposals, and produces a large amount of ad hoc reports. The scoring or budgetary costing of specific initiatives has played a role in the decisions on whether such initiatives were adopted (Box 6.4).

Japan's Fiscal System Council advises the finance minister on topics related to the budget and the government accounting system. It comments on the budget requests and makes proposals for the measures to be taken for the following fiscal year. Furthermore, it conducts research on and recommends measures in the areas of fiscal structural reform (such as expenditure rationalization) and the government accounting and budget systems.

In Germany, the "Working Group on Tax Estimates" publishes regular estimates of government revenues. It consists of government officials,

**Box 6.4. United States: The Congressional Budget Office**

The Congressional Budget Office (CBO) was established in 1975 to inform the U.S. Congress on fiscal issues. As part of a comprehensive reform, it was intended to contribute to compliance with the then newly created congressional budget process. Both were designed to give Congress the capacity to act independently of the president on revenue and spending matters. Its mission is “to provide the Congress with the objective, timely, nonpartisan analyses needed for budget and economic decisions and with the information and estimates required for the Congressional budget process.” In doing so, the CBO produces a large number of reports and its senior staff regularly testifies before Congress.

The CBO plays a key role in the annual budgeting process and in budget monitoring. Particularly important is the annual analysis of the president’s budget, including its reestimation using the CBO’s economic and technical assumptions. Further tasks include cost estimates of bills reported by congressional committees and estimates of unfunded federal mandates, which impose costs on state or local governments. During the dozen years that the Budget Enforcement Act was in effect, the CBO also reported to Congress on the status of spending limits and any required offsets.

As an important input into its advice on the budget, the CBO produces two macroeconomic forecasts each year. They cover GDP, unemployment, inflation, and interest rates for the next two calendar years. In preparing the economic projections, the CBO is guided by a panel of economic advisors. The CBO also produces 10-year baseline projections of macroeconomic trends and federal revenues and expenditures.

The baseline projections serve as the starting point for measuring the impact of policy changes on future budgets (“scoring”). The baseline report is updated each summer to reflect fresh estimates of economic conditions and recent policy changes. In explaining variations from the previous baseline projection, the CBO classifies changes into three categories: policy changes, such as new

academics, and representatives of the Council of Economic Experts and has a reputation of relative independence.<sup>22</sup>

The Central Planning Bureau (CPB)<sup>23</sup> of the Netherlands conducts independent analyses and provides the economic assumptions for the budget. It conducts research on a broad range of economic issues, including fiscal, labor market, and regulatory policies. The CPB also plays a role in the

<sup>22</sup>In addition, the Council of Economic Experts (see [www.sachverstaendigenrat-wirtschaft.de](http://www.sachverstaendigenrat-wirtschaft.de)) advises the government and parliament on economic policy, but does not make specific recommendations and does not analyze the budget in a comprehensive manner. The government is required to respond formally to the annual report.

<sup>23</sup>Also called “Netherlands Bureau of Economic Policy Analysis” (website: [www.cpb.nl/eng](http://www.cpb.nl/eng)).

legislation; economic changes, such as higher or lower GDP growth; and technical changes due to reestimates of future receipts or expenditures.

The “scoring” task of the CBO has tended to be one of the more important roles. This role gained prominence in the 1990s because of the rules existing then requiring mandatory spending increases and revenue reductions to be offset. The amount of the offset depended on the CBO score. If, for example, the CBO scored tax legislation as a \$10 billion reduction in revenue, Congress had to compensate for that estimated loss by raising other revenues or reducing mandatory spending by an equivalent amount.

The CBO has a reputation of independence. Its director is appointed jointly by the House of Representatives and the Senate and can be removed by either house of Congress. However, the Budget Act provides that the director and staff are to be appointed “without regard to political affiliation and solely on the basis of their fitness to perform their duties” and the operational independence of the CBO, while not enshrined in law, appears to have been generally respected. As Schick (2004) notes, the “CBO has never openly asserted its independence from Congress, for doing so would undercut its legitimacy and alienate it from its patrons. Yet it has behaved in ways that manifest its independence on the political scene. For the CBO, independence is more a matter of organizational culture than of legal status.” The CBO’s staff numbers about 230, about one-third of whom are assigned to the largest division, budget analysis. Most of the remaining staff work in the program divisions that deal with macroeconomics, taxation, microeconomics and finance, long-term models, health and human resources, and national security.<sup>1</sup>

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<sup>1</sup>For further information, see the CBO’s website ([www.cbo.gov](http://www.cbo.gov)) and, for example, Schick (2004) and Blöndal, Kraan, and Ruffner (2003).

development of the budget policy contained in the coalition agreements. All political parties use the CPB’s economic assumptions for their policy platforms, and the larger parties submit their platforms to the CPB ahead of elections for assessment. After the elections, the CBP assesses compromises negotiated for coalition agreements.

Korea’s National Assembly Budget Office<sup>24</sup> advises parliament on fiscal policy issues. It analyzes budget and economic policies, evaluates general fiscal policies and national programs, and conducts research. The budget office also produces cost estimates for bills and forecasts of fiscal and mac-

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<sup>24</sup>Website: [www.nabo.go.kr/english/index.html](http://www.nabo.go.kr/english/index.html).

roeconomic trends. The head of the budget office is advised by the Budget Policy Advisory Committee, which includes members from the financial sector, universities, and the media.

Mexico's Center for the Study of Public Finances,<sup>25</sup> modeled on the U.S. CBO, is attached to the congress. It reviews the periodical government reports on the economic situation, the public finances and public debt, as well as the budget proposal and fiscal laws. It also provides independent analyses requested by the congress or upon its own initiative.

A number of other countries have fiscal advisory bodies attached to the legislature. In addition to Korea, Mexico, and the United States, Canada, Chile, Indonesia, Japan, Jordan, the Netherlands, and Sweden have "specialized budget research organization(s) attached to the legislature (or the audit office) that conduct analyses of the budget" (OECD and World Bank, 2003). They have generally less than 10 professionals who are part of the legislature's general support staff.

FCs can have varied structures. They can range from a small group of academics to a full public agency with extensive technical and financial resources as in the U.S. (see Box 6.4). In Mexico and the United States, the council is attached to the legislature, only the respective director is appointed by congress. In Japan, the council is an organ of the ministry of finance and is composed of scholars, journalists, and business executives. In Chile, the two panels of 12–14 members each are appointed each year.

The experience with these FCs appears to suggest that their effectiveness depends even more than for those with stronger mandates on the government's commitment to fiscal prudence. Fiscal performance has varied substantially both across countries and across time despite their existence. This suggests that the political cost of ignoring the analysis of a purely advisory body is generally limited. The cost is likely to be smaller than ignoring normative assessments and recommendations, because the latter provide a benchmark against which the government's policies can be scrutinized in public forums. The more open-ended the advice, the less it is likely to have weight in the political and public debate.

### **Can Other Institutions Play the Role of Fiscal Agencies?**

A number of existing institutions—most notably central banks, private financial institutions, and regional or multilateral institutions—already help shape policymakers' incentives in ways that discourage the abuse of

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<sup>25</sup>Website: [www.cefp.gob.mx](http://www.cefp.gob.mx).

discretionary fiscal policy. However, for a variety of reasons noted below, they cannot fully substitute for fiscal agencies. In particular, they are either not independent or do not have a domestic government mandate, as an ideal FC would. Rather, FCs and the existing institutions could complement each other.

Where a nascent FC already exists, strengthening it may well be preferable to the setting up of a new institution. For example, a well-established and reputable policy institute could be provided with a formal mandate to systematically undertake analysis of budgetary issues and to issue regular reports on the government's policies. There could also then be a mandatory requirement on the part of the government to respond formally to its reports. These reports of course need not be restricted simply to analysis, but could include also normative assessments, and recommendations (for instance in the "green budget" produced by the Institute for Fiscal Studies in the United Kingdom). A prerequisite for credible operation of such an institution is the provision of a formal mandate, as well as accountability.

In many countries, national central banks could—and to a certain extent already do—act as an FC. Central banks often enjoy political independence, are granted an autonomous budget, and have a staff able to analyze and assess fiscal policy issues as well as influence the policy debate. As the government's bank, the central bank is also well placed to monitor fiscal flows and stocks. Granting the central bank a well-defined fiscal mandate could thus save the costs of creating a new institution, and make sure that the "embedded" FC is credible. However, there is a danger that a central bank will be too narrowly focused in its approach to fiscal policy. This could in turn elicit a response from the government that threatens the independence of the central bank. Moreover, the concentration of policy-related mandates in the hands of unelected representatives would magnify issues of democratic accountability.

Private financial institutions, such as commercial and investment banks, as well as rating agencies, also provide independent assessments of fiscal policy. Their influence on policy outcomes works through market pricing of government and quasi-government securities. However, there are two key reasons why these institutions are unlikely to be able to substitute for FCs. First, their motivation and incentives, based on profit considerations, and lack of democratic legitimacy, imply that they will not be guided by public policy considerations. Private sector research is arguably subject to its own bias, and distortions. Second, the transmission channel from the assessment to policy decisions is not the continuous democratic policy debate, but the discontinuous, and often sharp, delayed reaction of financial markets. Conversely, FCs can increase the flow of their information

about fiscal policy, improve policy outcomes, and stabilize expectations, leading to smoother functioning financial markets.

Regional or multilateral institutions, such as the OECD and, in particular, the IMF, also undertake tasks similar to those of fiscal agencies. The appropriate role for the IMF will depend on whether it is providing financial support to a country or is engaged in surveillance. Where it exists, a fiscal agency and the IMF could play complementary roles in the context of an IMF-supported program. In this case, an independent fiscal authority (IFA) would have a mandate that is close to that of the IMF, although even an FC could facilitate the negotiation and implementation of a program by increasing the information flow between the authorities and the Fund, and by strengthening ownership of a program at the national level by shaping the desirable preconditions in terms of consensus, fiscal rules, and budgetary framework. The basic premise would be that the fiscal agency would have a realistic and objective view of the constraints facing the economy, and the policies that need to be implemented. There is, however, always a risk that an additional actor may end up further complicating the interaction between country authorities and the IMF.

In a surveillance context, an FC and the IMF play similar roles, in that they are both involved in the analysis of fiscal developments and sustainability. In this context they can support one another, rather than duplicating each other's work. Thus, an FC should engage in a continuous assessment of fiscal developments, and undertake more detailed analysis of fiscal developments than is realistic for the IMF. The IMF, on the other hand, can provide a better perspective on the implications of broader international and global developments, as well as bring a cross-country perspective to bear on national fiscal policy.

## Conclusions

This chapter has examined a number of issues related to the rationale, mandate, and operations of fiscal agencies and analyzed country experiences. The discussion points to the following conclusions.

There are widespread difficulties in the design and implementation of fiscal policy in both industrial and developing economies. They are reflected in deficit bias, procyclicality, and conduct of unsustainable policies. These problems arise from a variety of political and economic factors, but political economy considerations, including electoral concerns, and the competing demands from various constituencies and lobbies play a key role.

A major element underlying the above problems is the inappropriate use of discretion in fiscal policymaking. In general, discretion is valuable and allows response to unexpected shocks, as well as the exercise of the demo-

cratic mandate, particularly with regard to redistribution issues. However, discretion can be misused, especially in the presence of political and distributive conflicts, and if governments have short-time horizons. The challenge is to alleviate the undesirable features of discretion while retaining flexibility.

Institutional reform is one way of meeting that challenge. Whether as a complement to existing fiscal rules, or independently of them, institutions can be set up that help in the formulation and implementation of sound fiscal policies. Reforms in this direction could in general entail some measure of delegation of a policy mandate or of activities supporting such a mandate. Theory has identified various factors, including a consensus on what constitutes sound policy, that suggest that, in practice, delegation in fiscal policy could be beneficial.

There are two main types of fiscal agencies to which some aspect of policy could be delegated and which could help improve fiscal discipline: IFAs could be mandated with setting annual targets for the budget balance, or could veto proposals at odds with a given fiscal rule. However, while an analytical case can be made for IFAs, the fact that there are no instances of IFAs to date suggests that policymakers are reluctant to delegate a significant element of their mandate and that their implementation may raise issues of democratic accountability.

FCs are likely to be more generally acceptable and could help reduce policy distortions. These councils could help improve fiscal policy by independent analysis, forecasts, or normative judgments. They could thereby affect policymakers' incentives and motivations, including through public debate and scrutiny. A number of countries have constituted FCs, and there are a variety of proposals for new ones. The evidence suggests that FCs providing assessment generally contribute more to fiscal discipline than those limited to pure analysis.

The desirable form of fiscal agencies is country specific. It would depend on the nature of the fiscal problem and on the country's political environment, including the constitutional setup, the legal tradition, and policymaking customs. Fiscal agencies can complement the role played by existing institutions, including the Fund, and enhance their effectiveness. As part of the IMF's mandate, consideration could be given to exploring the development of specific types of fiscal councils.

Both theory and experience suggest that fiscal agencies can improve the quality of fiscal policy. In particular, they can help improve fiscal discipline and policy credibility, and serve a useful signaling role conducive to more stable expectations and less uncertainty. But institutions of whatever shape are not a panacea: their effectiveness ultimately rests on a government's commitment to the mandate assigned to them.

## Appendix 1. Selected Proposals for Independent Fiscal Authorities

Reference	Mandate	Instrument(s)	Structure	Accountability
Ball (1996), New Zealand	Enhance the contribution of fiscal policy to output stabilization.	Adjust income tax rates across the board, and give instructions to the central bank.	“Macroeconomic policy committee” to include a senior civil servant of the finance ministry and the central bank governor.	Unspecified.
Blinder (1997), United States	Simplify tax code and minimize tax distortions.	Decide specific tax policy matters delegated by the legislature and/or design tax proposals to be put to up-or-down vote.	“Independent federal tax authority” staffed by nonpolitical civil servants appointed by the president for a fixed term and only removable for a cause.	Detailed explanation of decisions and public scrutiny of supporting material.
Gruen (2000), Australia	Enhance the contribution of fiscal policy to output stabilization while preserving debt sustainability.	Vary tax rates across the board (through a “fiscal parameter”), at short notice and without involvement of the legislature, but only within strict predefined bounds.	Similar to central banks.	Parliament can override decisions under certain conditions.
Seidman (2001), United States	Enhance the contribution of fiscal policy to output stabilization.	Implement periodic adjustments in taxes and spending relative to the budget enacted by the legislature. Content of adjustment package preenacted by the legislature, while the independent fiscal authority decides magnitude and timing.	Members of “fiscal policy board” would be appointed for long tenures. Alternatively, the Federal Reserve Board could also decide on fiscal adjustments.	Legislature can override the council’s decisions.
Wren-Lewis (2002), European Union	Enhance the contribution of fiscal policy to output stabilization while preserving debt sustainability.	Vary specific tax rates (value-added tax, sales tax) for a limited period of time and without involvement of the legislature.	Unspecified.	Unspecified.

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