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Fiscal Rules: Useful Policy Framework or Unnecessary Ornament?

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Fiscal Rules: Useful Policy Framework or Unnecessary Ornament?[1]

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Abstract

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With the primary objective of conferring credibility on macroeconomic policies, an increasing number of advanced and emerging market economies have adopted various forms of fiscal rules (mainly balanced-budget requirements and debt limits). In contrast to previous fiscal rules, many of which lacked transparency, recently introduced rules have the potential of serving as a useful depoliticized policy framework, and over time, can contribute to stability and growth. To this end, they need to be well designed and supported by an appropriate institutional infrastructure.

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Contents

Page

I. Introduction 3

II. Evolution of Fiscal Policy Rules 4

III. Unnecessary Ornament? 6

IV. Useful Policy Framework? 8

V. Designing a Useful Framework 10
A. Rules at the National Level 10
B. Rules at the Subnational Level 12

VI. Implementing a Useful Framework 15
A. Transparency 15
B. Budget Process 15
C. Statutes, Surveillance, and Sanctions 16
D. Preconditions and Convergence 16

VII. Concluding Remarks 19

Table
1. Selected Countries: Summary of Fiscal Policy Rules 18

References 20

Appendix I
Simple Arithmetic of Fiscal Rules 22

The budget should be balanced,
the treasury should be refilled,
public debt should be reduced...

M. T. CICERO (63 B.C.)

I. Introduction

Rules-based macroeconomic policies are in fashion. In the monetary area, since the early nineties, an increasing number of countries have adopted inflation targeting. The latter has displaced the targeting of monetary aggregates, or of the exchange rate, as the rule of choice in advanced economies. In the fiscal area, a parallel trend is under way, as rules to eliminate or to contain budget deficits and to reduce the public debt are gaining considerable popularity in various parts of the world.[2]

All these rules share at least one feature in common: they seek to confer credibility on the conduct of macroeconomic policies by removing discretionary intervention. Their goal is to achieve trust by guaranteeing that fundamentals will remain predictable and robust regardless of the government in charge. There are, however, obvious differences; for one thing, credibility is not built at a uniform speed. Whereas an exchange rate rule may provide immediate credibility following its introduction—and equally, may be vulnerable to a sharp and sudden loss in credibility in the event of an erosion in competitiveness or perception of misaligned fundamentals—inflation targeting may take longer to establish credibility, and balanced-budget rules usually become credible only after an extended track record.

Perhaps partly because of the long gestation period and partly because of the particular experience of some countries, occasionally fiscal rules are characterized as a fig leaf. According to this view, governments either do not need rules since they apply discipline on a discretionary basis anyway, or alternatively, if they adopt rules, they are not likely to follow them seriously.

The purpose of this paper is to examine the merits of these arguments, though without attempting to refute the truism that some governments do in fact follow prudent countercyclical fiscal policy on a discretionary basis, in a manner that is observationally equivalent to a well-designed set of fiscal rules. This point applies equally to prudent discretionary monetary policy that obviates reliance on inflation targeting. Specifically, an attempt is made here to find support for a rules-based fiscal policy framework. As part of this endeavor, much of the paper is devoted—drawing on international experience—to a

[2] Following the definition in Kopits and Symansky (1998), a fiscal policy rule is a permanent constraint on fiscal policy, expressed in terms of a summary indicator of fiscal performance, such as the government budget deficit, borrowing, debt, or a major component thereof.

discussion of the attributes that such a framework must have in order to maximize its usefulness.

In weighing the pros and cons of fiscal policy rules, the paper encompasses both advanced and emerging market economies, as they seek to establish credibility in financial markets. Also, wherever relevant, the discussion is cast in the broader setting of rules-based macroeconomic policies, that is, including references to monetary rules as well.

II. Evolution of Fiscal Policy Rules

The virtue of fiscal discipline has been heralded for a long time—during at least two millennia, as attested by the opening citation. However, occasionally, departures from discipline have been justified politically and conferred analytical respectability—most notably, in the aftermath of the Great Depression. In many advanced economies, discretionary demand management, instead of remaining broadly neutral or of offsetting the effect of the cycle, has led to a nearly continuous increase in government spending that outpaced revenue capacity. In other words, fiscal policy exhibited a procyclical stance and a deficit bias.[3] A similar process can be detected in some less developed countries, where the deficit bias emerged with the pursuit of developmental objectives, against the background of swings in capital flows and primary commodity prices.[4] Starting in the 1980s, recognition of this bias and its contribution to public indebtedness, as well as of its potential adverse repercussions on private investment, prompted some governments to introduce medium-term fiscal consolidation programs to restore macroeconomic stability and fiscal sustainability. More recently, this was increasingly followed by a shift to fiscal policy rules.

Formal attempts at casting the virtue of fiscal discipline into permanent rules, through constitutional or legal provisions, at various levels of government, span over a century and a half. During this period, we can identify three fairly distinct waves. In the first wave, subnational governments in some federal systems adopted autonomously the golden rule. Under this rule, most states in the U.S. since the mid-19th century and several cantons in Switzerland since the 1920s assumed an obligation to maintain current budget balance. In essence, their goal was to gain access to market-based financing of capital expenditure, absent a precedent of bailouts by the national government.

In the second wave, after World War II, several industrial countries (Germany, Italy, Japan, Netherlands) introduced balanced-budget rules that underpinned their stabilization programs, following monetary reform. Most of these were of the golden rule type. Other rules, limiting or prohibiting the financing of budget deficits from specified domestic sources (mainly

[3] For evidence of a procyclical fiscal stance since the 1970s in the euro area, see European Commission (2000). Similarly, Taylor (2000) found that during much of the last four decades the U.S. has followed a procyclical (or at best ineffective) discretionary fiscal policy.

[4] Procyclical fiscal policy has been documented for Latin America in 1970-95, in Gavin and others (1996).

central banks), were assumed in the 1960s, including in some developing countries (Indonesia, CFA franc zone). Under all these rules, considerable scope remained for creative accounting and other nontransparent practices that could undermine compliance.

The current wave, starting with New Zealand's Fiscal Responsibility Act of 1994—shortly after the pioneering introduction of inflation targeting in that country—has seen an increasing number of industrial and emerging market economies introduce fiscal rules (Table 1). These rules encompass a range of balanced-budget obligations, debt limits, and expenditure limits, at various levels of government. In contrast to the previous waves, a common denominator of the recent rules is that they are supported by more or less strict transparency standards consisting of appropriate accounting conventions, timely and regular reporting requirements, and a medium-term macro-budgetary framework. Generally, all these elements are enshrined in broad legislation or international treaty, with carefully spelled out accountability obligations. By analogy, inflation targeting is usually set in an institutional context characterized by transparency, central bank independence, and accountability.

Present fiscal policy rules are fairly diverse in both design and implementation. Whereas Anglo-Saxon countries place primary emphasis on transparency (Australia, Canadian provinces, New Zealand, United Kingdom), in continental Europe (EMU Stability and Growth Pact, Switzerland's proposal) and emerging market economies (Argentina, Brazil, Colombia, Peru, India's proposal) rely far more on a set of numerical reference values (targets, limits) on performance indicators. In federal systems with strong subnational autonomy, the rules are assumed only by the central government (Argentina, India's proposal); in other federal systems with concern about potential bailouts and external spillovers of fiscal misbehavior across jurisdictions, the rules are imposed on each government level in a coordinated fashion (Brazil, EMU).

Most rules allow for escape clauses in the event of unforeseen exogenous shocks. Objectively determined escape clauses may take various forms: simply a medium-term target balance or surplus, without explicit margins around it (New Zealand); explicit margins around a target balanced-budget or surplus requirement, calibrated on cyclical deviations in output growth (EMU, Swiss proposal); or alternatively, operation of a contingency fund (Argentina, Peru). In other cases, the escape clause is to be invoked in a discretionary manner, in the event of an international crisis, a national calamity, or other loosely defined shocks (Brazil, India's proposal, U.S. proposal).

An independent arbitration authority is clearly defined in some countries (Brazil, EMU), while at most a monitoring agency has been appointed in others (Argentina). In some instances, the government is subject to financial or judicial sanctions for noncompliance with the rules (Brazil, Canadian provinces, EMU, CFA franc zone). For the most part, the authorities are exposed to loss of reputation upon noncompliance.

III. Unnecessary Ornament?

Skepticism about the usefulness or effectiveness of fiscal rules is grounded on several arguments, ranging from theoretical to practical ones. From a theoretical perspective, neither traditional macroeconomic analysis, nor any principles of public finance are predicated on a rules-based fiscal policy. Indeed, a discretionary approach has been widely viewed as instrumental for the achievement of conventional fiscal goals or functions—namely, stabilization, distributional fairness, and allocative efficiency. Likewise, monetary rules were not deemed to be superior to discretionary monetary policy. In all, the main virtue of discretionary demand management was that it afforded short-run flexibility to offset large exogenous disturbances, especially those that could lead to a prolonged and significant unemployment. In the postwar period very few authors (Friedman, 1948) questioned this conventional wisdom.[5]

Another source of skepticism (or at least agnosticism) about rules is that a government can commit credibly to fiscal discipline without any permanent rules. This observation finds support in a few practical illustrations. In this regard, U.S. fiscal and monetary discipline in recent years has been viewed as an example of prudent discretionary policymaking. Since the mid-1990s, high growth and low inflation, accompanied by budget surpluses, can be taken as evidence of the redundancy of formal balanced-budget requirements and inflation targeting.[6] In a similar vein, it has been argued that rules do not really matter in the conduct of fiscal policy, and further, that policy credibility is formed regardless of actual adherence to rules. The example of Germany suggests that public confidence (at home or abroad) in policy management has not been altered by the authorities' more than occasional failure to meet, since the 1970s, the golden rule or the M3 target. Likewise, in Japan, suspension of the rule since 1975 has had no effect in this regard. An alternative interpretation of these examples is that a reputation of prudent macroeconomic management acquired through a prolonged period of good performance, often in a rules-based context, obviates further adherence to fiscal rules. Of course, conversely, absence of such reputation would argue for the adoption of rules.[7]

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[5] In a departure from the mainstream, Friedman (1948) recommended a cyclically-adjusted balanced-budget rule as a long-run policy guideline, with the purpose of eliminating the uncertainty and undesirable political implications of discretionary action, including a procyclical fiscal stance. However, he qualified the proposal with the caveat that such a rule may be insufficient to offset stubborn and strong cyclical fluctuations, which would warrant discretionary intervention.

[6] Incidentally, the extended application of the Budget Enforcement Act of 1990 can be characterized as a procedural rule—to support the discretionary approach—rather than a policy rule.

[7] Drazen (2000) indicates that policy credibility is built through two alternative routes: reputation or rules.

Occasionally, rules are criticized for imposing unnecessary bureaucratic requirements. Why not, instead, just let the market forces exert discipline on misbehaving governments? [8] There is, however, considerable evidence that financial markets—as typified by credit rating agencies—tend to react with considerable lag to either a deterioration or an improvement in fundamentals. It can be argued that, if well designed, fiscal rules can mimic market pressures in a more rapid and efficient manner, and, above all, without the heavy penalty (namely, sudden capital outflow, high risk premium) imposed by perceptions of fiscal misbehavior.

A much more common objection to fiscal rules is that, by their very nature, they invite abuse and are doomed to be ineffective. Typically, they induce nontransparent behavior, largely through creative accounting practices to circumvent the rules. Perhaps the most graphic illustration is the rule embodied in Article 81 of the Italian Constitution, which is wide open to interpretation to the point of rendering it meaningless.[9] Also, creative accounting and other forms of opaque application of fiscal rules have been found, for example, in some U.S. states and the Netherlands.[10] A similar criticism has been leveled at medium-term fiscal adjustment plans adopted in a number of industrial countries in the 1980s, most notably, under the Gramm-Rudman-Hollings Act in the United States. These cases simply demonstrate that fiscal targets, whether set in the context of permanent rules or of medium-term adjustment programs (including Fund-supported programs) heighten the temptation to resort to nontransparent practices, much like with monetary targeting. [11]

However, far from being an inherent flaw that invalidates rules, the proliferation of loopholes must be recognized and dealt with through appropriate design and implementation—as discussed below. These episodes underscore the overarching importance of strict transparency requirements not only for discretionary policymaking, but more important, as an integral component of any set of rules. It is for this reason, that, unlike in the previous historical waves, practically all recently established rules include standards of transparency and other features—often under so-called fiscal responsibility legislation—intended to strengthen the effectiveness of the rules.

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[8] Most recently, this criticism was leveled at Brazil's rules by the outgoing Finance Secretary of the State of Sao Paulo.

[9] According to Article 81, no new taxes or expenditures can be introduced through the annual budget law, and legislation on new or increased outlays must indicate their sources of financing. It is probably against the background of this experience that Italian economists (Alberto Alesina, Franco Reviglio, Vito Tanzi, to name a few) tend to be particularly critical of fiscal rules.

[10] Nontransparent application of fiscal rules has been documented in Suits and Fisher (1985) for the states of Michigan and New York; and in Wellink (1996) for the Netherlands.

[11] Charles Goodhart's observation (made in connection with targeting monetary aggregates) that a statistical or accounting measure ceases to be a reliable performance indicator once it is declared an official target provides a strong argument for transparency in the application of fiscal rules.

IV. Useful Policy Framework?

The strongest case for rules is rooted in political economy. In a democratic society, rules are necessary to restrain politically rational policymakers who conduct discretionary policies with a deficit bias when facing an electorate that fails to understand, or is indifferent to, the intertemporal budget constraint (Buchanan and Wagner, 1977). More formally, it has been demonstrated that rules-based policies are superior to a discretionary approach, since the latter is time inconsistent, given a democratic government's tendency to abandon previously announced policy commitments (Kydland and Prescott, 1977).

From a somewhat different angle, it can be shown that rational governments are prone to use suboptimal discretionary policies to enhance their chances for re-election, rather than maximize social welfare, by exploiting an information advantage vis-à-vis the electorate (Cukierman and Meltzer, 1986). This observation underscores that rules can prevent such an outcome if they are accompanied by transparency requirements to reduce or eliminate information asymmetry.

Following these arguments, the primary usefulness of a well-designed and appropriately implemented set of permanent fiscal rules, that prevents a deficit bias, consists of establishing a depoliticized framework for fiscal policy—much like the depoliticization of monetary policy under successful inflation targeting. Accordingly, with widely available information about macroeconomic developments and prospects, only the relative spending priorities and the tax structure are subject to legislative and public debate, but not the budget balance or the level of expenditures which are predetermined by rules.

At a practical level, the above case for rules-*cum*-transparency is probably strongest for emerging market economies; at the other end of the spectrum, the argument tends to vanish for advanced economies with a solid reputation of fiscal rectitude, as noted above. This spectrum can be viewed in a dynamic sense: over a prolonged period of time, as a country successfully applies fiscal rules, it gradually gains an ever stronger reputation that eventually permits abandonment of the rules, without loss of credibility (Germany and Japan).

However, even governments enjoying a solid reputation may want to refrain from pursuing discretionary countercyclical fiscal policy in view of the associated implementation lags, irreversibility, and political constraints. Accumulated evidence on the ineffectiveness of discretionary activism suggests adoption of a simple budget balance rule that allows for the operation of automatic stabilizers; discretionary action should be applied, though much less frequently, only for longer-term structural objectives—such as social security reform or tax reform, aimed at fiscal sustainability, intergenerational equity, or efficiency (Taylor, 2000).

For emerging market economies, including for those that have reached the last stage of post-socialist transition, the potential usefulness of rules cannot be overstated. As they open up, while experiencing fiscal stress, these economies are exposed to considerable and rapid shifts in capital movements that can result in a currency crisis. This is reflected in a relatively high risk premium that raises the cost of capital, with a depressing effect on much-needed

investment. Thus, as part of an effort to reduce vulnerability to speculative attacks (including from contagion or other exogenous shocks) and to promote stability and growth, these countries are well advised in considering the adoption of fiscal rules (Kopits, 2000).

For similar reasons, in a federal system, rules can be usefully applied at the subnational level of government. Largely because of the need to build good reputation in financial markets, subnational governments may choose to adopt fiscal rules in the absence of a potential bailout (in the U.S., Switzerland, Canada). Otherwise, these governments may be subject to centrally imposed rules to prevent moral hazard (as in Brazil, or in EU member countries under EMU), particularly given a relatively small portion of fiscal activity under central (or supranational) control. In this case, adherence to rules generally helps lower the individual government's default risk premium, as well as the country risk premium faced by the entire federal (or supranational) government.[12]

In what follows, we shall examine the design and implementation characteristics that make fiscal rules a useful policy framework—thereby countering the above argument that fiscal rules are inherently flawed and thus doomed to failure. These attributes involve both technical infrastructure and institutional infrastructure. On the technical side, fiscal rules must be designed taking into account, for example, the interaction between the public sector and the economy, including estimates of the response of the fiscal position to exogenous shocks. In addition, the rules must be based on a set of institutional building blocks, including transparency standards, an arbitration authority to oversee compliance, and sanctions for noncompliance.

In the monetary area, these considerations apply in an analogous manner to inflation targeting. Technically, inflation targeting must be supported by sufficient information on the transmission mechanism and by reliable inflation forecasts. On the institutional side, it is necessary to establish an independent central bank that operates transparently, including through publication of inflation reports, and is accountable to the government and the public at large.

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[12] The decline in interest rates experienced by highly indebted EMU participant countries cannot, however, be ascribed unambiguously to the adoption of the rules. Given the identification problem arising from having simultaneously joined the currency union and adopted the fiscal rules, it is difficult to determine what proportion of the interest rate decline in Italy represents a fall in default risk or the disappearance of the currency risk.

V. Designing a Useful Framework

A. Rules at the National Level

In countries that face a large public debt burden, a major objective of fiscal policy rules is to reduce the public debt ratio and then to stabilize it at a prudent level. Whereas in Brazil and New Zealand the government of the day is required to set a target or ceiling for the debt ratio, under EMU, governments are obliged to reduce the gross debt ratio to 60 percent of GDP.

In general, the outstanding liabilities of the consolidated public sector are seen as a summary measure (among many others) of a country's vulnerability. Financial markets tend to assess default risk on the outstanding debt of the public sector as a whole, rather than just the central government, given the implicit guarantee provided by the central government to the rest of the public sector.[13] Also, a measure of gross debt, rather than net debt or net worth, is preferred since the marketability and valuation of government assets—with the notable exception of foreign exchange reserves—usually are open to question.

While a medium-term limit on the gross debt-to-GDP ratio can be interpreted as a broad gauge of fiscal rectitude and sustainability, year-to-year debt ceilings are less likely to be credible or operationally effective. Indeed, as measures of public indebtedness (especially as a proportion of GDP) may be exposed to valuation changes and other factors beyond the control of the authorities, they are difficult to treat as an annual operational target.

A more common rule is defined in reference to a comprehensive flow indicator of fiscal performance, such as the budget balance or government borrowing. To enhance its effectiveness, the indicator needs to be operationally simple, flexible, and growth-oriented—with obvious tradeoffs among these criteria. *Operational simplicity* requires that the indicator, while possibly consistent with a medium-term debt limit, be amenable to monitoring and control during budget execution. This criterion is met by the overall balanced-budget requirement in Argentina and by the overall deficit limit in Peru. It can be argued that, operationally, even more useful would be an obligation to maintain a minimum primary surplus (excluding interest expenses, beyond the immediate control of the authorities) that could be calibrated to the desired reduction in the debt ratio.[14]

Ideally, the *flexibility* criterion can be realized with carefully designed escape clauses that are triggered objectively by exogenous shocks. The preferred option—along the lines envisaged initially by Friedman—would be based on an indicator of cyclically-adjusted balance that accommodates the effect of automatic stabilizers around a trend GDP growth rate, *allowing*

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[13] Again, possible exceptions are countries without the precedent of bailouts of defaulting subnational governments by the central government. In such cases, credit rating agencies assess risk separately for each borrowing government jurisdiction.

[14] See the relationship between a primary surplus rule and the debt target in the Appendix.

for overall budget deficits during below-trend growth, but *requiring* surpluses during above-trend growth, as had been proposed for the federal government in Switzerland.[15] A more practical solution (albeit not necessarily neutral with respect to the cycle) consists of targeting overall balance or surplus over the cycle but subject to a preset deficit limit, as required under the Stability and Growth Pact, sufficient to accommodate the impact of a significant recession.[16] An alternative approach is to require balance or surplus over the cycle, as in New Zealand, without any limits, thus allowing not only for the operation of automatic stabilizers, but also for discretionary countercyclical action. An advantage of this approach is that it provides flexibility even with low output elasticities of tax revenue.

Another escape clause for mitigating the effect of exogenous shocks consists of accumulation (drawdown) of reserves in (from) a contingency fund in the event of an upturn (downturn) in activity, as envisaged under the fiscal rules recently promulgated in Argentina and Peru, much like with the "rainy day funds" in the case of some state governments in the United States. The least desirable approach would be simply to leave to the authorities discretion to interpret events, such as a national calamity or a threat to national security (as proposed, for instance, in India), for invoking the escape clause.

A *growth-oriented* indicator seeks to avoid placing an undue burden of compliance with the rule on cuts in government investment spending—a damaging outcome, given generally high expected social rates of return on infrastructure projects. This can be accomplished by requiring current balance, under the so-called golden rule, applied in the majority of U.S. states, and in Germany and Brazil at both the federal and state levels. More appropriately, consistent with the golden rule, New Zealand prescribes observance of operating balance.[17]

Whereas cash-based current balance permits borrowing to finance gross investment expenditures, accrual-based operating balance allows borrowing only for investment net of depreciation. An additional rule that can buttress the growth objective is a limit on the

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[15] Assuming an annual trend growth rate of 2 percent, the Swiss proposal would require the government to generate excess revenue when actual GDP growth exceeds 1.8 percent and would allow for excess expenditure when it declines below 0.5 percent a year. The excess revenue (expenditure) was specified in reference to increments in excess (shortfall) in GDP growth. Although not strictly speaking a permanent rule, Chile's structural surplus target for the central government is a comparable approach.

[16] On the basis of historically estimated fiscal parameters, a 1 percent decline in output is estimated to result, on average, in a 0.6 percent budget deficit in the EU. Therefore, the 3 percent deficit reference value under EMU is compatible with a 5 percent below-trend deviation in GDP—which should be quite sufficient for countries on a 2 to 3 percent trend growth path.

[17] From the perspective of intergenerational equity, the golden rule should be defined in terms of the operating balance, so that taxpayers in each time period pay for the costs (depreciation plus interest), of existing capital assets from which they derive benefits in that period; see Robinson (1998). Furthermore, these costs could be reduced by capital gains accrued in that period.

proportion of a major component of current expenditures in total expenditures. Along these lines, Brazil has introduced a limit on the share of the government wage bill (including government pension payments).

However, caution is needed to prevent the leakages (by financing camouflaged current expenditure) associated with the golden rule, which have been so prevalent in Germany and in some U.S. states. Specifically, it would be necessary to follow a transparent and unambiguous, yet operationally sensible, definition of what constitutes capital expenditure. The operating balance requirement, followed in New Zealand, obviates measurement refinements and has a smoothing effect on the fiscal outcome.

Subject to these caveats, fiscal rules should preclude overidentification. Accordingly, the balanced budget rule should operate when the limit on the debt ratio has been met. Otherwise, as suggested earlier, in periods when the actual debt ratio exceeds the limit, the government would be expected to generate a primary surplus consistent with convergence to the prescribed debt ratio limit.

B. Rules at the Subnational Level

A key issue to be addressed in a decentralized system is the application of fiscal rules at the subnational levels of government. The case for subnational rules is particularly strong when a country, such as Argentina or Brazil, is confronted with a major fiscal adjustment task that cannot be met by the central government alone. In fact, the smaller the share of the central or supranational government, as in the EU, greater is the need for applying subnational rules to counter the moral hazard that may arise among subnational governments (or national governments in the EU) to incur fiscal imbalances with repercussions on the borrowing costs of the rest of the federal system. The fundamental principle underlying these arguments is that rules—and more broadly, fiscal responsibility legislation—need to be imposed on the corresponding government level, that is, the *locus of accountability* for policymaking. Stated differently, whereas in a unitary system policy formulation and decisions take place only at the national or central level, in a federal system they are dispersed among the national and subnational levels.

An additional critical condition for well-functioning subnational rules is that underlying vertical (regional) imbalances be broadly offset through an adequate mechanism of intergovernmental compensatory transfers. These transfers should be determined, if possible, by objective indicators of expenditure needs and taxing capacity in each subnational jurisdiction,[18] consistent with a clear assignment of spending functions and revenue sources. Budget or debt rules should be viewed as complementary rather than as substitutes for such a mechanism.

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[18] The determination of intergovernmental transfers in several Scandinavian countries can be regarded as exemplary in this respect; see Rattsø (1998).

In federal systems, there are two basic approaches to fiscal responsibility, and in particular, to designing fiscal rules.[19] Although usually only one of these approaches is present, in a few cases (Germany) both are followed. Under the *autonomous approach*, the initiative for establishing rules arises from individual subnational governments. Following this bottom-up approach, in Canada, Switzerland and the United States, many subnational governments have adopted the golden rule, enforced with varying degrees of stringency,[20] while others retained discretionary policymaking. By and large, in these countries, subnational governments have direct access to financial markets to meet their borrowing requirements, and there is rarely a precedent of bailouts of insolvent subnational governments by the national government; hence, their desire to maintain a favorable credit rating in the markets. More recently, in deference to subnational autonomy, Argentina sought to follow this approach—notwithstanding a trail of bailout operations—by adopting rules at the federal level and inviting provinces to follow suit on a voluntary basis.

By contrast, under the *coordinated approach*, all subnational governments are subject to uniform rules to ensure a degree of fiscal discipline under the surveillance of a central authority. For the most part, this top-down approach is introduced against the background of past bailouts or under some form of implicit or explicit guarantees to rescue subnational governments in distress. Coordination also becomes necessary in federations (or confederations) where lower levels of government are responsible for the bulk of fiscal activity, with considerable potential spillovers from the misbehavior of one government on the risk premium of another government within the federal system. Perhaps the strongest argument for this approach is the need to bring about a lasting fiscal adjustment encompassing the entire general government or consolidated public sector, in the face of a possible sustainability problem with likely repercussions on countrywide risk premium.

An early example of this approach—that resulted from a major bailout episode—was the informal agreement among the Australian states, later formalized under the authority of the Loan Council, setting borrowing limits on the states.[21] Other examples where lower-level

[19] For a review of the international experience with fiscal policy rules at subnational levels of government under each approach, and lessons for Argentina and Brazil, see Kopits, Jiménez, and Manoel (2000).

[20] For example, while in some U.S. states the golden rule is applied only *ex ante*, in others it is applied on an *ex post* basis as well; a number of states do not permit carryover of unspent appropriations from year to year; some states have contingency funds; and the scope for creative accounting varies among states. In Canada, there are differences in the design of rules across provinces, including in the nature of the penalties for noncompliance; for example, in one province, the penalty consists of salary cuts for cabinet members unless the overrun in the budget deficit is caused by exogenous shocks.

[21] This arrangement, which operated in different forms during 1923-92, was increasingly circumvented through ingenious financing techniques (sales, leaseback operations, etc.); hence, it was finally replaced with transparent reporting requirements on the states' fiscal policy intentions and performance—in line with the requirements of the Charter of Budget Honesty Act of 1998.

governments are subject to statutory debt limits include Brazil, Colombia, EU members, and CFA franc zone members (the limit being set as a proportion of government revenue, or GDP, of the jurisdiction). In an interesting variant of this practice, in Brazil, consistent with an overall target debt-GDP ratio (set by the Senate, upon recommendation of the President) for the public sector as a whole, each level of government is assigned a uniform limit for its debt-revenue ratio, implying a fiscal adjustment—to be completed over a specified number of years—for state governments whose ratio exceeds the limit set for all state governments. In addition, all Brazilian states and German *Länder* are required to follow the golden rule, and EU member countries (as well as implicitly lower-level governments within the EU) are committed to maintain overall balance, subject to the deficit limit.[22]

An important distinction between the two approaches—arising mainly from the implicit or explicit bailout provision, present in the coordinated approach—[23] is that, while under the autonomous approach each subnational government seeks to gain credibility for its own fiscal policy, under the coordinated approach the goal is to establish collective credibility for overall macroeconomic policy—that is, also the monetary policy stance of the federation. Given the diffusion of effort among subnational jurisdictions to achieve collective credibility, as opposed to individual credibility for each jurisdiction, the incentive for free-rider behavior by circumventing the rules has been far stronger under the coordinated approach. Therefore, under the latter, there is greater need to introduce sanctions for noncompliance (see below) and to create a mechanism for enforcing corrective action by the delinquent government—in exchange for assistance or waiver of fines by the central or supranational authority—as envisaged in Brazil, Colombia, the EU, or the CFA franc zone.

The flexibility criterion is also relevant for the design of subnational fiscal rules, especially as regards the treatment of asymmetric shocks. Shocks that are concentrated in certain regions could be compensated with cyclically-adjusted rules and contingency funds at the subnational level, or with intergovernmental transfers. For instance, within the EU, besides the provision of waivers from the deficit reference value in case of a significant recession, Structural and Cohesion Funds are made available to member countries on the basis of regional need as well as vulnerability to shocks.

[22] Within the EU, federal governments (Austria, Germany, Italy, Spain) have already adopted or endeavor to design derivative EMU rules for subnational levels of government. For an analysis of the Italian case, see Balassone and Franco (1999).

[23] See the discussion of the relevance of an implicit bailout clause with regard to the EMU fiscal reference values, in Eichengreen and von Hagen (1995) and McKinnon (1996).

VI. Implementing a Useful Framework

A. Transparency

It is widely recognized that transparency is conducive to successful fiscal policy [24] whether in the context of rules-based or of discretionary policymaking.[25] But, as indicated, the need for transparency is exacerbated in the application of fiscal policy rules in the face of mounting pressures for engaging in creative accounting and operating procedures to comply formally, but not in fact, with preset performance indicators.

Specifically, the usefulness of fiscal rules hinges on *transparency in institutional structure and functions*, that is, in the relations within the public sector, as well as the relations between the government and private sector entities. Transparency serves to contain or reduce quasi-fiscal activities through covert subsidies at below-cost pricing or government guarantees—often used as a substitute for explicit budgetary operations. Equally important is *transparency in fiscal reporting* through comprehensive, timely, frequent, and detailed government reporting (based on appropriate accounting standards), as mandated for compliance with fiscal rules in New Zealand, Brazil, and the EU.[26]

B. Budget Process

Over the past decade, an increasing number of countries, especially developed ones, have been preparing a multiyear macro-budgetary framework as part of the annual budget exercise. Although procedures (in terms of the degree of detail, realism of underlying macroeconomic forecasts and policy assumptions, etc.) tend to vary among countries, such a medium-term process is an important prerequisite for a well-informed policy debate.[27]

In particular, a rolling multiyear macro-budgetary process is an essential ingredient of effective fiscal rules, since it alerts the authorities and financial markets alike as to the policy adjustments or reform measures that may be necessary for compliance with the rule. More generally, it disciplines policymakers and ensures that they are accountable for adhering to

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[24] See Kopits and Craig (1998), which forms the basis of the International Monetary Fund's Code of Good Practices in Fiscal Transparency.

[25] Much like in New Zealand—though without a balanced-budget rule—Australia's Charter of Budget Honesty Act 1998 requires the national authorities to publish: fiscal strategy statements; annual and mid-year reports on budget and fiscal outlook, and final budget outcome; intergenerational reports; and pre-election economic and fiscal outlook reports.

[26] This is illustrated, for example, by the requirements under EMU to follow accrual-based accounting; to classify privatization receipts as financing in the calculation of the budget balance; to measure debt on a gross basis; and to expand coverage to the general government.

[27] For an overview of multiyear budgets and fiscal targets in OECD countries, see OECD (1995).

budget targets. For these reasons, the preparation of medium-term budget forecasts is an integral part of fiscal policy rules and of associated reporting requirements in Argentina, Brazil, New Zealand, Peru, and EU members.

In addition, to ensure compliance in the near term, it is useful to establish a mechanism to enforce a mid-course correction for unanticipated deviations from target, unless they stem from cyclical fluctuations covered by escape clauses or are offset with recourse to a contingency fund. Revenue shortfalls or expenditure overruns that are generated by the executive or legislative branches would have to be met with automatic measures specified to offset the budgetary effect of the deviation (Brazil).

C. Statutes, Surveillance, and Sanctions

Largely dictated by judicial precedent or tradition, the statutory basis of fiscal policy rules differs from country to country. In general, the rules are enshrined in a law or in the constitution, and in rare cases they are contained in an administrative or policy guideline. If the rules affect a group of countries (as in a currency union), they are prescribed as an international treaty obligation (Table 1).

Another key institutional element is the authority responsible for the surveillance and enforcement of the rules, as well as of the associated transparency requirements. In most cases, this responsibility is exercised by the audit office that reports to the legislature, while ultimate arbitration and judgment usually rests with the courts. The question remains, however, as to the technical competence of these entities in assessing compliance with the rules (including accounting procedures, multiyear framework, etc.). For example, in Peru, the central bank provides some technical support for this purpose. Under a more comprehensive approach, in the EU, the Council of Ministers responsible for Economy and Finance (ECOFIN) exercises the surveillance authority, with the support of the Commission and with specialized monitoring (of compliance with accounting standards) by Eurostat.

In a related matter, it is necessary to determine the nature and the extent of sanctions for noncompliance with the rules. At the national level, sanctions usually consist of loss in reputation or adverse judicial decision—in some countries, including penalties borne by the responsible elected or appointed officials. However, in federal systems, financial sanctions are levied on the delinquent government (noninterest-earning deposits under the EMU or the CFA franc zone, outright fines in Canada and Colombia, suspension of transfers in Brazil) or personal sanctions are imposed on chief financial officials (criminal proceedings in Brazil, salary cuts for cabinet members in a Canadian province).

D. Preconditions and Convergence

From the very outset, successful implementation of fiscal policy rules is predicated on three preconditions. The first is a *concerted outreach campaign*, including education and media coverage—which may take a couple of years—to generate sufficient public understanding of the need for rules and eventually support for their implementation (Argentina, Brazil, New

Zealand, EU). Second, this campaign must be accompanied by a political debate that will lead to a *broad legislative consensus* for the introduction of fiscal policy rules. Such consensus has been fundamental particularly where fiscal rules need passage of a constitutional amendment (Germany, Switzerland, and U.S.). Third, it is necessary to map out carefully a *convergence path*. This, in essence, calls for an initial medium-term adjustment program (Argentina, New Zealand, Peru, Switzerland, EU) that includes a preannounced path for key performance indicators (overall balance, current balance, etc.) in the run-up to the effective date of implementation.[28] The corresponding annual budgets are then bound by the preannounced values. The convergence path must provide, insofar as possible, for the explicit treatment of deviations from these values in the event of exogenous shocks during that period.[29] Overall, adequate preparation and convergence are likely to be more important in the implementation of fiscal rules than of monetary rules.

These preconditions, to be met in the first place with respect to fiscal rules at the central level, should be accompanied or followed by a similar effort at the subnational level. Overall, the introduction of fiscal rules is greatly facilitated by progress in a number of areas that are equally relevant for effective discretionary fiscal management. Indeed, transparency in institutional arrangements and in accounting and reporting requirements should be expedited, even without legislative action on rules. Of course, these steps need to be followed up with further technical work and an active public dialogue at all levels.

Finally, in most countries, an important prerequisite for successful implementation of fiscal rules is the phase-in of structural reforms that ensure sustainability of the rules—in the face of fragility in the financial system, rigidities in the public sector employment, demographic pressures, or regional imbalances. These reform measures often encompass a number of areas such as intergovernmental fiscal relations, tax structure, and public pensions.[30]

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[28] In the EU compliance with the EMU deficit reference value was to be achieved over a five-year period (ending in 1997) albeit without specifying the profile of the convergence. In Argentina and Peru, declining annual budget deficit limits have been specified in the fiscal responsibility laws, over a three- and two-year period, respectively, prior to full compliance with the rule. By contrast, in the Brazilian legislation, the rule entered into effect immediately following enactment.

[29] For an analysis of the importance of starting with a strong initial budgetary position, with simulations for EMU, see Eichengreen and Wyplosz (1998).

[30] See Kopits (1997) on the need for social security reform for compliance with EMU fiscal reference values.

Table 1. Selected Countries: Summary of Fiscal Policy Rules [1/]

Rule/Country	Effective Date	Coverage 2/	Basic Rules 3/	Escape Clause 3/	Additional Rule 3/	Statute 4/	Sanction 5/
Budget rule							
Argentina	2000	NG	OB/DL	CF	EL	L	J
Brazil	2001	NG, SG	CB		WL	L	J
Canada	various	SG	CB			L	J
EU members	1997	GG	OB/DL	MY		T	F
Germany	1969 6/	NG, SG	CB			C	J
New Zealand	1994	GG	PB	MY		L	R
Peru	2000	NG	OB/DL	CF	EL	L	J
Switzerland	various	SG	CB			C	J
United States	various	SG	CB	CF		C,	J
Debt rule							
Brazil	2001	NG, SG	SL			L	J
Colombia	1997	SG	PL			L	J
EU members	1997	GG	PL			T	J
New Zealand	1994	GG	SL			L	R

1/ Excluding prohibition or limits on financing from specific sources.
2/ General government (GG), national (central, federal) government (NG) or subnational (including local) government (SG).
3/ Budget rules consist of overall balance (OB), operating balance (PB), or current balance (CB), subject to a prescribed limit on deficit (DL) as a proportion of GDP, applied on an annual basis, except if specified on a multiyear (MY) basis. Also, a contingency fund (CF) is provided in some cases. Additional rules consist of limits on primary expenditure (EL) or wage bill (WL). Debt rules are specified as a limit for a given year (SL) or permanently (PL), as a proportion of GDP or of government revenue.
4/ Constitution (C), legal provision (L), or international treaty (T).
5/ Sanctions for noncompliance: reputational (R), judicial (J), or financial (F).
6/ The origins of the present rule can be traced to the Constitution of 1871, subject to modifications in 1919 and 1949.

VII. Concluding Remarks

With the primary objective of conferring credibility on macroeconomic policies, while correcting the public sector deficit bias and containing public indebtedness, an increasing number of advanced and emerging market economies have adopted various forms of fiscal rules. In contrast to previous types of fiscal rules, which were characterized by ambiguities and by overall lack of transparency, recently introduced rules have the potential of serving as a useful depoliticized policy framework. However, an examination of the arguments for and against fiscal rules, as well as the accumulated experience, confirms that rules are by no means a universal panacea.

To conclude, three broad lessons emerge. First, governments with a strong reputation of fiscal prudence do not need to be constrained by rules. Second, in countries where such a reputation is lacking, fiscal rules can provide a useful policy framework and, over time, contribute to stability and growth. Third, to enhance their usefulness, fiscal rules need to be well designed at national and subnational levels of government, combining simplicity, flexibility, and growth-oriented criteria; furthermore, they must be implemented in a transparent manner, with the support of an appropriate institutional infrastructure (especially as regards the budgetary process and surveillance mechanism), and following careful preparation and convergence.

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Simple Arithmetic of Fiscal Rules

A fiscal policy rule can be specified in terms of a gradual reduction in the public sector debt to (or maintenance at) a prudent level or as a ratio to GDP. At the same time, this objective may be sufficiently flexible to accommodate the effect of automatic stabilizers.

The intertemporal determination of public debt can be expressed as

$$d_t = [(1 + i)/(1 + g)]\, d_{t-1} - b_t$$

where (as a proportion of GDP, unless otherwise indicated)

d = stock of public sector debt

i = average nominal interest rate on public debt

g = nominal GDP growth rate

b = primary budget surplus.

In a highly indebted country, the authorities will target

$$d_{t+n}{}^* < d_t$$

which is to be met within n years, with a *minimum* annual reduction of x in the debt ratio, by means of an operational rule expressed in terms of the structural primary surplus

$$b_t{}^* = (i - g)\, d_{t-1} + x \qquad (1).$$

Further, the operational target is defined in reference to trend growth

$$b_t{}^* \equiv r_t\,(1 + \alpha GAP_t) - c_t\,(1 - \beta GAP_t) - k_t$$

where r = government revenue

c = primary current expenditure

k = capital expenditure

α = revenue elasticity with respect to GAP

β = expenditure elasticity with respect to GAP

GAP = difference between trend GDP and actual GDP.

Therefore, $b_t < b_t^*$ is *allowed* when $GAP_t > 0$

and $b_t \geq b_t^*$ is *required* when $GAP_t < 0$.

Compliance with rule (1) may be accompanied by variations in the debt ratio that reflect deviations from trend growth rate: the debt ratio falls (increases) with positive (negative) deviations and remains unchanged when the economy is on the trend growth path.

Rule (1) implies that if the targeted reduction in the debt ratio is set equal to the growth rate, $x = gd_{t-1}$, then the target primary surplus becomes

$$b_t^* = id_{t-1} \qquad (2)$$

which implies *overall balance*. In the event, the balanced-budget rule (2) leads to a fall in the debt ratio equivalent to the growth rate.

As an alternative, of particular relevance for a country in need of infrastructure expenditure with a high-expected social rate of return, the target may be reset according to the golden rule, requiring *current balance*,

$$b_t^* + k_t = id_{t-1} \qquad (3).$$

Rule (3) should be, of course, easier to meet than either (1) or (2), though it still results in a fall in the debt ratio to the extent that $k_t < gd_{t-1}$.

However, a preferable approach would be to redefine the golden rule in terms of an *operating balance* requirement (i.e., equivalence between current revenue and current expenditure, including depreciation allowances δ), following accrual-based accounting,

$$b_t^* + k_t - \delta_t = id_{t-1} \qquad (4).$$

In addition, a balanced-budget rule may be supplemented with an expenditure limit, set on primary spending or a major component thereof, such as the wage bill. To safeguard it from cyclical fluctuations in output or prices, the limit can be set in proportion to trend GDP.