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Fiscal responsibility framework

International experience and implications for Hungary

In many countries around world, discretionary fiscal policymaking has been beset by both time inconsistency and common pool problems. In democratic societies, fiscal performance may reflect not only the economic cycle but also the political cycle, as a result of dynamic inconsistency. The common pool problem is prevalent especially where decentralized fiscal entities, including lower-level governments, engage in free-rider behavior neglecting its adverse impact on the general government balance. Similarly, interest groups may exhibit such behavior through their representatives within collegial or coalition governments.

As a consequence of time inconsistency and free-rider behavior, trends in public finances have been characterized by deficit bias, procyclicality, and structural distortions. Over time, these developments, often in combination with structural rigidities and demographic pressures, have given rise to problems of public debt sustainability. Moreover, they have contributed to poor macroeconomic performance, and in some cases, to financial crises.

Although untouched by a financial crisis, Hungary is no exception to these trends. Over the past decade and a half, the above problems have intensified, culminating last year in the largest government deficit (expressed in terms of GDP) in the European Union, and in a concomitant sharp rise in public sector indebtedness. Such fiscal profligacy has adverse macroeconomic consequences in the short run and is not sustainable over the long run.

Inspired by New Zealand's Fiscal Responsibility Act of 1994, an increasing number of countries have adopted a rules-based fiscal responsibility framework (FRF) to tackle the problems mentioned above. FRF is a generic term that encompasses policy rules, procedural rules, transparency standards, and monitoring and enforcement mechanisms.[1] Faced with a worrisome fiscal trend, Hungary can benefit from the experience of other countries in the design and implementation of such a framework.

This article begins with a discussion of major fiscal problems associated with discretion-based policies and their implications for macroeconomic performance. Next, it examines key features of the rules-based FRF introduced in selected countries. Although the experience with the framework has been rather

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recent, the article seeks to derive a tentative assessment of its effects. To conclude, an attempt is made to draw lessons of possible relevance for Hungary.

FISCAL PROBLEMS

Since around the middle of the past century, many democratic societies have indulged in *time-inconsistent* fiscal policy.[2] Typically, rhetorical commitment to fiscal discipline made by a government at the beginning of its mandate was abandoned in the run-up to the next election, as politicians felt compelled to step up expenditures or cut taxes to be reelected. This was reflected in a fiscal stance dominated largely by the electoral cycle, especially in emerging markets, including in some post-socialist economies.

By the same token, interest-group pressures bear irresistibly on every government, without regard to the overall budget constraint, creating a *common-pool problem*.[3] This problem can be particularly acute in a decentralized fiscal system where lower-level governments pursue an expansionary fiscal stance without regard for its ultimate impact on the overall budgetary outcome. Implicitly, such free-rider behavior assumes that the central government and other lower-level governments will adopt a compensatory policy course, or that the central government will bail out subnational governments as they run into financial trouble. Extreme cases of such behavior could be observed through the nineties in Argentina, Brazil, and India.

Time inconsistency, often compounded by the common-pool problem, leads to deficit bias, to procyclicality, and to expenditure distortions. Instead of following the Keynesian prescription of a fiscal expansion (contraction) during economic downswings (upswings), essentially in a symmetric manner, many governments responded to economic fluctuations by restricting the operation of built-in fiscal stabilizers through discretionary action that amplified the destabilizing effect of these fluctuations.[4] In fact, they allowed for tax cuts and/or boosted expenditure during good times, and reined in expenditures or introduced tax hikes in bad times.

Over time, many industrial economies sought to build a generous welfare state, not always matched with a rise in tax revenue, resulting in widening deficits.[5] This trend, in turn, contributed to a buildup in public sector indebtedness relative to economic activity. Containment of the rising debt-GDP ratio proved difficult given the increasing share of mandatory expenditures on social entitlements, driven in part by aging demographic pressures.[6] In some countries, notably Sweden, an untenable fiscal situation, along with weaknesses in the banking sector, led to a major financial crisis in the first half of the nineties.

In emerging market economies, especially in Latin America, procyclical fiscal policy was exacerbated by exposure to pronounced economic fluctuations – due to real shocks stemming from sharp changes in the terms of trade, reinforced by the ebb and flow in foreign investment.[7] In this region as well, expenditure composition became increasingly distorted as economic booms encouraged the rise in social transfers and government payrolls. During recessions, fiscal adjustments were often frontloaded with sharp cuts in investment spending on infrastructure projects.

Instead of offsetting cyclical shocks and contributing to growth, discretionary fiscal policy actually contributed to macroeconomic volatility, to dampened growth,[8] and even to financial crises. In general, fiscal vulnerability has been on the rise, thanks to the combination of debt sustainability problems (compounded in some cases by fiscal decentralization) and a fragile domestic banking system, in the context

of unprecedented external liberalization and a pegged exchange rate regime.[9] Not surprisingly, during the nineties, a number of countries suffered debt crises, often in tandem with banking crises and currency crises. Although hitting primarily emerging markets in Latin America, Asia, and post-socialist Europe, such crises did not spare some advanced economies (Sweden).

FISCAL RESPONSIBILITY FRAMEWORK

Faced with these problems, an increasing number of advanced economies as well as emerging market economies have adopted a rules-based FRF. More immediately, introduction of the FRF was prompted by a looming financial crisis (Argentina), or by the experience of a recent crisis (Bulgaria, Sweden), in an environment of high capital mobility. In many countries, the FRF was implemented in tandem with a rules-based monetary policy regime, mostly in the form of inflation targeting, or in some instances, anchored by a hard exchange rate peg.

Formally, the FRF can be enshrined in various types of statutes *(see Table 1)*: a constitutional provision or high-level legislation (Brazil), ordinary legislation (India), or an international treaty (European Union) that applies to all governments over successive electoral cycles. Alternatively, the framework may consist of a (in some cases implicit) policy guideline, or agreement among coalition partners, assumed by a given government and presumably – but not necessarily – binding on future governments (Bulgaria, Chile, Estonia, United Kingdom), or a combination of a legal statute and a policy guideline (Sweden). The statute may be very detailed (Brazil) specifying design features as well as every aspect of implementation. At the other end of the spectrum, it may define a broad outline (New Zealand, India), to be accompanied by regulations issued by the government in charge.

Typically, the FRF consists of a combination (though not necessarily in equal proportions) of policy rules, procedural rules, transparency standards, and a monitoring and enforcement mechanism. The following survey is limited to cases where a critical mass of these elements can be found, in the tradition of the New Zealand approach. Excluded, however, are policy rules of an earlier vintage which lack most other elements, especially transparency.[10]

Neither the legal format nor the degree of detail of the statute lends itself to generalization as best practice. In fact, the FRF must be tailored to country-specific circumstances, including legal precedents and cultural traditions. Compliance with an implicit policy guideline in some countries might be far stronger than with a constitutional clause in another country. Whereas in Latin American countries there is a preference to cast the FRF in an elaborate legislation, in Anglo-Saxon countries the framework is spelled out as an outline, with considerable emphasis placed on transparency. Effectiveness is determined by the credibility of the FRF, whatever its statutory form.[11] Ideally, at an initial stage, the FRF should operate as an implicit policy guideline, and then later, it should be formalized but only after successful implementation during a learning period. This is perhaps best illustrated by Chile's recent legislative enactment of the FRF, after applying and perfecting an informal rules-based framework over five years.

Policy rules

A fiscal policy rule consists of a permanent constraint on a broad performance indicator, usually expressed in terms of stock (public debt) or flow aggregates (government balance, borrowing, expenditures, or some component

Table 1

SELECTED COUNTRIES: FISCAL RESPONSIBILITY FRAMEWORK

Country, Effective date	Policy rules [1]	Coverage[2]	Statute[3]	Authority[4]	Sanction[5]
New Zealand (1994)	MT overall balance, debt limit	GG	L		R
Sweden (1997–98)	structural surplus, primary expenditure limit	GG	P, L	M	R
Bulgaria (1998)	deficit limit, stabilization fund, total expenditure limit	GG	P	M	R
Estonia (1998)	overall balance, stabilization fund	GG	P		R
Poland (1998)	debt limit	GG, SG	C		J
United Kingdom (1998)	MT current balance, debt limit	GG	P	M	R
Euro Area (1998)[6]	MT overall balance, deficit limit, debt limit	GG	T	M	F
Argentina (2000)	overall balance, deficit limit, stabilization fund, primary expenditure limit	NG, SG[7]	L	M	R
Chile (2000)	structural surplus, stabilization funds	NG	P, L[8]	M	R
Peru (2000)	overall balance, deficit limit, stabilization fund, primary expenditure limit	NG	L	M	J
Brazil (2001)	current balance, debt reduction, wage bill limit	NG, SG	C, L		J
Colombia (2001)	current balance, debt reduction, wage bill limit, interest bill limit	NG, SG	L		J, F
Ecuador (2003)	non-oil balance, deficit limit, debt limit, stabilization fund, primary expenditure limit	NG	L		J
India (2004)	current balance, deficit limit	NG, SG [7]	L		R
Venezuela (2004)	MT current balance, stabilization fund, total expenditure limit	NG	C, L	M	R
Nigeria (pending)	current balance, debt limit, saving fund	NG, SG	L	E	J, F

[1] All rules are applied on an annual basis, unless specified on a multiyear (MT) basis.
[2] General government (GG), national (central, federal) government (NG) or subnational governments (SG).
[3] Constitution (C), law (L), international treaty (T), or policy guideline or agreement (P).
[4] Independent monitoring (M) or executive (E) authority.
[5] Sanctions for noncompliance: reputational (R), judicial (J), or financial (F).
[6] Although the SGP applies to all EU members, financial sanctions are in principle levied for noncompliance only in the euro area. Several euro members impose additional policy rules at the subnational level or as part of convergence programs.
[7] Adopted by a number of subnational governments.
[8] Enacted into law in 2006.

thereof). Policy rules are also known as numerical rules often set in proportion of GDP. In a decentralized fiscal system, policy rules may need to be applied to subnational jurisdictions as well. Likewise, countries that belong to a cooperative arrangement, including a monetary union, may assume uniform rules applied to each member government.

In general, the *stock* of public sector liabilities (or net worth) is seen as a key summary indicator 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 on the liabilities of the rest of the public sector.[12] More generally, to maintain or restore fiscal sustainability, a number of countries have introduced policy rules, first to reduce public debt, and then to stabilize it at a prudent ratio to GDP.[13] In New Zealand and the United Kingdom, the government is required to set a medium-term target or ceiling for the debt ratio, as well as an adequate floor

for public net worth. In addition, to avoid free-rider behavior, in Brazil, a target debt ratio is set at each level of government. For similar reason, in the European Union, member governments are obliged to reduce the gross debt ratio to 60 percent of GDP. Convergence to the debt ratio ceiling usually requires complying, either implicitly or explicitly (Brazil), with a minimum primary surplus as an operational target *(see Appendix)*.

A more common rule is defined in reference to a comprehensive *flow* indicator of fiscal performance, such as the budget balance. There is wide variety of budget balance rules: maintenance of overall balance, current balance, primary balance, or non-oil balance. Alternatively, a numerical limit is set on the overall deficit (European Union, Peru, India) or a floor for the overall surplus (Chile, Sweden). The current balance rule, also called the 'golden rule' (Brazil, India, Venezuela), is commonly used to prevent crowding out much-needed public investment. The actual target or numerical limit (or floor) is specified by the circumstances of the given country,[14] including the need for simplicity, transparency, and ease of technical implementation.

In some countries, the budget balance rule is accompanied by additional limits on total government expenditures (Bulgaria, Venezuela), primary outlays (Argentina, Ecuador, Peru, Sweden), interest payments (Colombia) and/or the wage bill (Brazil, Colombia) in order to contain the fastest growing components of fiscal imbalance and the ensuing distortions in the composition of the budget. Further, setting expenditure targets in line with potential GDP growth (Ecuador) can help support a neutral stance with respect to the cycle.

Similarly, to ensure cyclical neutrality, the budget balance rule can be defined in terms of structural or cyclically-adjusted balance (Chile, Sweden, United Kingdom) that allows for the operation of automatic stabilizers. A similar function is performed by a balanced budget requirement specified in a multiyear or medium-term context (New Zealand, Estonia, European Union) with scope not only for the operation of automatic stabilizers, but also for active countercyclical discretionary action.[15] An alternative approach to encourage countercyclical action (or to support the structural or medium-term balance rule) *requires* depositing contingency reserves in a stabilization fund, generated from fiscal surpluses during economic booms, and *allows* withdrawals to finance deficits during recessions (Argentina, Chile, Ecuador, Estonia, Peru).

The institutional coverage of rules depends mainly on the degree of fiscal decentralization and autonomy of various levels of government or government agencies. As indicated earlier, in decentralized systems, rules are usually established separately at the national and subnational levels of government. The case for subnational rules is particularly strong in Argentina, Brazil, or India, which are confronted with a major fiscal adjustment task that cannot be met by the central government alone. More generally, the larger the share of lower-level governments in the general government, the greater is the need for applying subnational rules to avert free-rider behavior among subnational governments. This argument is equally relevant for national governments within a broad multinational space such as the EU.

The fundamental principle underlying these arguments is that rules, and more broadly, the FRF-need to be imposed at the *locus of accountability* for policymaking. Stated differently, whereas in a centralized (or unitary) system policy formulation and decisions take place only at the national or central level, in a decentralized system (federation or confederation) they are dispersed among the national and subnational levels of government. In any case, a well-functioning subnational rules requires a stable assignment of revenue sources and

expenditure responsibilities among various jurisdictions, as well as a transparent mechanism of intergovernmental transfers to broadly offset underlying vertical (regional) imbalances.[16] In general, there are two alternative approaches to designing policy rules at the subnational level: the autonomous and the coordinated approach.[17]

- Under the *autonomous approach*, the initiative for establishing rules rests with 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,[18] while others retained discretionary policymaking. By and large, in these countries, subnational governments face directly the financial markets to meet their borrowing requirements, and there is rarely a precedent of bailouts of insolvent subnational governments by the national government.
- According to the *coordinated approach*, all subnational governments are subject to uniform rules 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 or several government on the collective risk premium of the federation. It is for this reason that all Brazilian states and German *Länder* are required to follow the golden rule. Similarly, lacking a credible EU-wide no-bailout clause, each EU member country is required by the Stability and Growth Pact to keep its general government accounts close to balance or in surplus over the medium run, subject to the deficit limit of 3% of GDP.[19]

Procedural rules

Procedural rules encompass the myriad regulations spanning the entire budgeting process from preparation to execution and audit. They can be viewed as underpinning the institutional infrastructure for the operation of a rules-based FRF – though they are just as necessary for discretion-based policymaking. Besides the regulations that normally govern budget practices, key procedural rules include: medium-term budget programming; self-financing requirement for each additional spending or tax cut proposal; end-year closure of unspent appropriations.[20]

Over the past decade, an increasing number of countries have introduced multiyear budget programming as the context for the annual budget process. Although actual practices (in terms of the degree of detail, realism of underlying macroeconomic forecasts and policy assumptions, etc.) tend to vary among countries, medium-term programming is recognized as a prerequisite for well-informed policymaking and debate.[21]

More important, a rolling multiyear macro-budgetary program is an essential ingredient for the FRF since it alerts the authorities and financial markets as to the policy adjustments or reform measures that may be necessary for compliance with the framework. Also, it disciplines policymakers and ensures that they are accountable for adhering to budget targets. For these reasons, the preparation of medium-term budget forecasts has become an integral part of fiscal policy rules and of associated reporting requirements in Brazil, New Zealand, Peru, and EU member countries. Specifically, within the euro area, member governments must submit periodic stability programs, and outside the area, they must prepare medium-term convergence programs.

In addition, for compliance with a policy rule, it is useful to establish a mechanism of

mid-course correction for unanticipated deviations from target, unless they stem from cyclical fluctuations covered by escape clauses or can be offset with recourse to a contingency fund. Furthermore, under the so-called pay-go principle–popularized by the US Budget Enforcement Act of 1990 – any budget proposal involving a revenue loss or expenditure increase must contain an appropriate offset of the budgetary cost, so as to leave the overall budget forecast unchanged (Brazil, New Zealand and several EU members).

Transparency

It is widely recognized that transparency in government structure and operations is essential for effective fiscal policymaking,[22] whether rules- or discretion-based.[23] Yet the need for transparency is strengthened in the case of fiscal policy rules, since constraints on policymaking generates pressures for engaging in creative accounting and operating procedures to comply formally, but not in fact, with preset performance indicators-as predicted by *Goodhart's* Law in reference to monetary targeting.[24]

The benefits from the FRF hinge particularly on the timely availability of reliable, understandable and comprehensive information on the public sector and its intentions. This includes transparency in institutional structure and functions, that is, in the relations within the public sector, as well as the relations between the government and the private sector. Transparency serves to contain or reduce quasi-fiscal activities that are provided through covert subsidies at below-cost pricing, outsourcing, or implicit government guarantees, as a means of circumventing public oversight of explicit budgetary operations.

Equally important is clear and frequent government reporting, as mandated for compliance with fiscal rules in New Zealand, Brazil, UK, and EU.[25] In turn, reports should be prepared not only on a cash basis, but also on the basis of accrual-based conventions which tend to be less prone to creative accounting practices. By the same token, transparency also requires that budget projections, including those in medium-term programs, be supported by realistic macroeconomic assumptions, especially as regards future productivity growth and interest rates.[26]

Surveillance and enforcement

Compliance with fiscal policy rules and procedural rules, along with observance of transparency standards, must be subject to continuous monitoring preferably by an independent authority, in addition to the ordinary oversight and reporting exercised by the media. Beyond traditional auditing of accounts and of legal observance, monitoring the FRF involves real-time surveillance with a broader reach, including assessment of the realism of macro-fiscal projections as well as of the fiscal risks and sustainability over the medium to long run.

A key institutional issue is the nature of the authority responsible for surveillance and enforcement, including the associated transparency requirements. In many cases, this responsibility is exercised by the national audit office (United Kingdom) that reports to the legislature and the public, 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 programming, etc.). To ensure such competence and independence, for example, in Peru, the surveillance function has been assigned to the central bank. More focused, however, is the approach of specialized institutions (Chile and some EU members) responsible for technical oversight of implementation of

the FRF.[27] A less usual alternative is to entrust this role to an office of experts attached to, and responsible to, the legislature. Though without fiscal rules, the US Congressional Budget Office is regarded as a model of this approach – emulated unsuccessfully in Venezuela.

Some authors have proposed outsourcing of fiscal policy-making to an independent fiscal council.[28] However, unlike monetary policy which can be outsourced to an independent monetary council, such a fiscal council is nonviable because of the difficulty of defining unambiguously a principal-agent relationship at arm's-length for the conduct of fiscal policy. In fact, nowhere has the proposal of a fiscal council, endowed with policymaking powers, been adopted.[29]

In decentralized systems, the surveillance function is determined by the approach selected for establishing the policy rule. Whereas under the autonomous approach, this function is exercised by the subnational authority, under the coordinated approach it is assumed by a central (national or supranational) authority. In the EU, Ecofin (Council of Ministers for Economy and Finance) is entrusted with the surveillance function, with the support of the Commission and with specialized monitoring (of compliance with accounting standards) by Eurostat (the statistical agency).

Part of the dissuasive function in the enforcement of the FRF concerns the nature and the extent of sanctions for noncompliance with the rules. For the national government or the autonomous subnational government, sanctions usually consist of loss in reputation with the electorate or with financial markets. In a few cases, violation of rules may entail a judicial process which eventually could lead to criminal prosecution of the finance minister or other responsible government officials (Brazil).

In principle, especially in coordinated decentralized systems, financial sanctions are levied on the delinquent government, for instance, in the form of non-interest-earning deposits by EU euro members (to be retained in the budget if the excess deficit is not corrected within a prescribed period), outright fines in Canada and Colombia, or suspension of budgetary transfers in Brazil and the EU (Cohesion Funds in the case of non-euro members). However, in practice, such fines are rarely applied. Apart from the ultimate threat of imposing financial sanctions, the independent authority is responsible for assessing or forecasting the extent of the violation, and for formulating or approving corrective action to be undertaken by the authorities.

PRELIMINARY RESULTS

Experience with FRFs has been rather brief, shorter than a decade in most countries. In general, as with any macroeconomic policy rule, including in the monetary area, an FRF needs to be implemented at least over an entire economic cycle and an entire electoral cycle before its effectiveness can fully be assessed. Thus the accumulated experience is only amenable for an initial evaluation of the broad macroeconomic consequences of FRFs and of their possible side effects. In particular, such an assessment may help address occasional claims that rules-based frameworks tend to restrain growth, aggravate fiscal procyclicality, and enhance distortions in the public sector.

The countries that adopted a FRF can be separated into four groups, in accordance with the extent of compliance.

- In the first group, consecutive governments have implemented fully the framework since its introduction. This group includes Brazil, Bulgaria, Chile, Estonia, New Zealand, Peru, and Sweden. Also, a few euro members, notably, Finland, Ireland, and Luxembourg, which comply strictly with the EU Stability and Growth Pact, can be classified in this group as well. All governments in this group adhere to well-

designed policy rules, sound procedural rules, and high transparency standards.

- In the second group, compliance with the framework has been mixed in one or several respects: revision or loose interpretation of rules; rules are not binding by design; partial compliance; significant recourse to creative accounting; or suspension of sanctions in case of noncompliance. This group includes the majority of EU members and most other listed countries.
- The third group is comprised of countries, such as Argentina and Venezuela, where the framework has been substantially diluted or abandoned soon after introduction.
- The fourth group includes countries with insufficient or no track record at all: in India the FRF has been introduced very recently at the union and state levels, and in Nigeria, enabling legislation is still pending.

In general, the experience of these countries confirms the truism that a rules-based FRF alone, without the political will to enforce it, is doomed to failure. Perhaps this is best illustrated by the case of Argentina, where enactment of fiscal responsibility legislation was not sufficient by itself to prevent fiscal indulgence and thus to avert the crisis of 2001.[30] Stated differently, the FRF can be regarded as a formal expression of the political will to maintain fiscal discipline. In sum, the FRF statute is not a magic wand that guarantees responsible fiscal policy.

An initial evaluation of the effects of the FRF must focus on the first group, namely, where compliance with a well-designed framework has been satisfactory. All countries that belong to this group were successful in eliminating the deficit bias and in reducing the public debt-GDP ratio since the introduction of the FRF. With improved debt sustainability, investor confidence was restored, and inflation and real interest rates abated. In these countries, growth rate was higher and volatility was lower than in comparable regions *(see Table 2)*. On the other hand, external performance was uneven, reflecting the combined contribution

Table 2

SELECTED COUNTRIES:
GROWTH AND VOLATILITY UNDER FISCAL RESPONSIBILITY FRAMEWORK
(statistics for comparator regions in parentheses)

Country, Effective date	GDP growth rate[1] (geometric mean)	GDP growth volatility[1] (coefficient of variation)
New Zealand (1994)[2]	3.6 (2.7)	0.2 (0.3)
Sweden (1997–98)	3.0 (2.1)	0.4 (0.5)
Euro Area: Finland (1998)	3.3 (2.1)	0.4 (0.5)
Euro Area: Ireland (1998)	6.8 (2.1)	0.4 (0.5)
Euro Area: Luxembourg (1998)	5.0 (2.1)	0.5 (0.5)
Bulgaria (1998)	4.6 (3.8)	0.2 (0.6)
Estonia (1998)[2]	7.2 (3.8)	0.2 (0.6)
Chile (2000)	4.4 (2.9)	0.4 (0.8)
Peru (2000)	4.0 (2.9)	0.6 (0.8)
Brazil (2001)	2.2 (2.6)	0.8 (0.9)

Source: International Monetary Fund

[1] Calculated since effective date of FRF through 2005. Mean and coefficient of variation corresponding to comparator regions are shown in parentheses: advanced economies for New Zealand; EU euro area for Finland, Ireland, Luxembourg, and Sweden; Central and Eastern Europe for Bulgaria and Estonia; and Western Hemisphere for Chile, Peru, and Brazil.

[2] For New Zealand and Estonia, calculations exclude observations of zero growth in 1998 and 1999, respectively, in the wake of the Asian and the Russian crises.

of the public sector balance and private sector (dis)saving to the current account balance.

As a major exception among complying countries, in Brazil, growth remained lackluster owing mainly to unfinished structural reforms. However, following a spike during the 2002 presidential election campaign, Brazil has enjoyed a significant decline in risk premium on sovereign borrowing, once investors felt reassured that the center-left government would abide by the FRF.[31] Arguably, Brazil's success must be gauged by the ability to stave off a potential financial crisis rather than simply by growth performance.

In addition to the vanishing deficit bias, by and large, compliance with FRF did not entail procyclicality and added budget distortions. Yet not all countries have been equally successful on this score. Some highly-indebted emerging market economies, with only a brief experience with the FRF, had failed to convince investors that a downturn in activity warranted a fiscal expansion – even absent a deterioration in the structural budget balance. In these countries, application of the FRF is likely to remain procyclical (that is, disallowing budget deficits) during recessions until credibility has been fully restored.[32]

By the same token, in some countries, especially during downturns, compliance with the FRF was achieved with some budget distortions (including through suspension or abandonment of infrastructure projects), though to a lesser extent where rules were specifically designed to prevent these distortions. In Brazil, for instance, limits on wage and pension expenditures are intended to contain such expenditures in proportion with other outlays. Further, the current balance requirement (the golden rule) is meant to protect investment spending from budget reductions.

More generally, a number of countries attempted to meet the FRF by relying on stopgap measures (one-off expenditure cuts or tax hikes) while postponing key structural reform steps in social security and taxation. These countries include, besides Brazil, many EU members, including those in the second group that, as a result, were able to comply only for a short period or failed altogether. At the other of the spectrum, Chile, Finland and Sweden stand out as examples where a major overhaul of public finances paved the way to strict compliance with the FRF.

Admittedly, any assessment of the effects of rules-based FRFs can only be tentative and incomplete at this time. Various limitations include sample selection and identification.[33] As mentioned, in some countries, the FRF is an integral component of a broader rules-based macroeconomic policy framework that incorporates a hard exchange rate peg or inflation-targeting as well. Such a change in fiscal and monetary policies – in a few cases accompanied or preceded by major structural reforms – can be viewed as a comprehensive regime shift. In all, a definitive evaluation of FRFs must await a longer historical record, possibly along with a larger set of comparable country observations and against a counterfactual baseline scenario. All caveats notwithstanding, experience accumulated thus far suggests that the FRF can contribute significantly to restoring policy credibility and placing the economy on a higher and sustained growth path.

LESSONS FOR HUNGARY

Hungary faces an extraordinary challenge in its public finances. In 2006, the general government deficit had reached nearly 10 % of GDP, the highest imbalance in the European Union. Public debt is rising well above 60 % of GDP. Even under relatively optimistic macroeconomic assumptions, medium- and long-term scenarios point to a fiscal sustainability problem.[34]

In the past decade and a half, Hungary has experienced all the fiscal problems enumerated

above.[35] The dominance of the political cycle over the economic cycle is evident in any time series data on government finances. Fiscal deficit peaks since the beginning of the post-socialist transition coincide with election years (1994, 1998, 2002, 2006).[36] The deficit bias has intensified in recent years. Furthermore, time inconsistency is illustrated by the widening gap between medium-term deficit targets and actual outcomes in the official pre-accession and convergence programs submitted to the EU authorities *(see Figure 1)*.[37]

In addition to time inconsistency, the common-pool problem has been manifest within the central government, as spending ministries tend to represent competing claims of various interest groups (farmers, teachers, health-care employees) on public resources. Consequently, the deficit bias, driven mainly by the rise in social transfers and runaway personnel costs, is felt along with procyclicality and expenditure distortions.

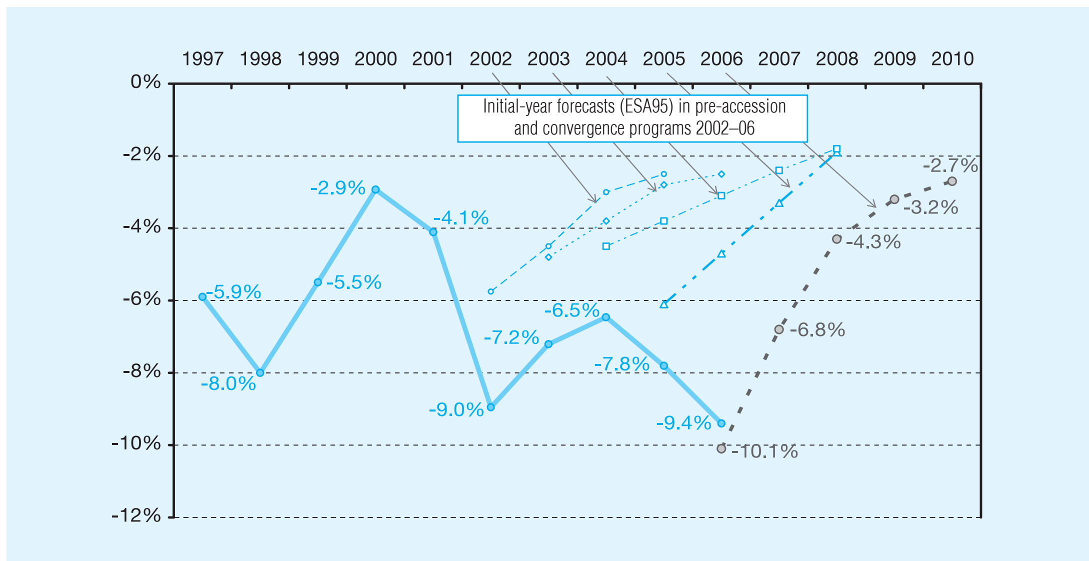
Clearly, Hungary needs to address these fiscal problems urgently, above all in order to restore credibility and sustainability, and thus to reduce its vulnerability to a financial crisis. Besides, by virtue of EU membership, the government has been under obligation to comply with the excess deficit procedure under the SGP by preparing and updating periodic medium-term convergence programs. As part of the current program, the government is committed to reducing significantly the budget deficit, albeit initially by relying mainly on stop-gap measures. To support this effort, the government is required by law to generate a primary balance or surplus by 2008.[38]

Although laudable, these steps may not be sufficient by themselves to correct any time soon the underlying fiscal problems and to reverse the erosion in the credibility attributable to the wide budgetary overruns in the past. Therefore, besides observance of the Pact, Hungary should consider adopting – as many other EU members do –[39] a strict but realistic national rules-based FRF within the broader

Figure 1

HUNGARY: GENERAL GOVERNMENT BALANCE, ACTUAL AND FORECASTS, 1997–2010

(in percent of GDP)



Sources: Ministry of Finance and Central Statistical Office.

envelope of the Pact. In this regard, there are five relevant lessons that can be distilled from the international experience.

■ The first lesson is to *extend the institutional coverage of the rules-based framework to the entire public sector,* including all off-budget operations and decentralized entities of the central government, along with real-time recognition of the losses of state-owned enterprises. Further steps for enhancing transparency would include *proper accounting of expenditure programs that give rise to contingent liabilities*-including public-private-partnership projects. Also indispensable is the *preparation of fiscal forecasts based on prudent macroeconomic assumptions and reliable parameters* linking them to fiscal variables.

■ The second lesson is *to strengthen procedural rules,* including strict interpretation and enforcement of the pay-go principle in budget legislation. A major innovation, consistent with the obligation to prepare and implement the convergence program under Pact, would consist of the *introduction of a three-year budgetary plan.* The latter would operate as a rolling (eliminating the earliest year and adding a new future year in each consecutive year) indicative plan to guide annual budgetary decisions. Also, it would serve as the basis for setting an annual *limit on nominal primary expenditures over the medium term.* Eventually, observance of this limit should permit cutting high statutory tax rates on personal income, payroll, and value added-all excessively high in Hungary in comparison to neighboring countries.

■ The third lesson, in view of the need to accelerate the debt reduction process, is to introduce a *structural primary surplus rule* – along the lines of Brazil's main policy rule – calibrated to reduce the public debt ratio to, say, below 50% of GDP or less, by 2015 at the latest.[40] (This rule would be a logical extension of the primary balance target after 2008.) After reaching the debt ratio target, the government would simply be bound by the medium-term overall balance obligation under the Pact. In combination with the primary expenditure limit, the primary surplus rule would facilitate countercyclical behavior.

■The fourth lesson involves the adoption of a *subnational current balance rule* applicable to all local self-governments. Such a rule, common in many fiscally decentralized countries, would impose some discipline at the subnational level but without undue constraint on borrowing for much-needed public investment at that level. A critical condition for such a rule is an intergovernmental agreement on a transparent (possibly formula-based) allocation of revenue and spending responsibilities, as well as of compensatory transfers. The need for a subnational rule is likely to increase due to the fiscal stress from compliance with primary surplus and expenditure rules by the central government.

■ Finally, it is necessary to establish an *independent surveillance authority* to continuously monitor compliance with all elements of the FRF, especially the primary surplus and primary expenditure rules, the three-year budget plan, and the fiscal forecasts, along with the accompanying transparency standards. This institution would recommend corrective steps and sanctions in the event of slippages with respect to the FRF. Also, it would identify key reform areas to ensure viability of the framework over an extended time horizon. In view of the current political polarization, it might be difficult to envisage the creation of an impartial office within the parliament. As an alternative, the responsibilities of the State Audit Office could be strengthened and expanded to include such an enhanced surveillance role.

As elsewhere, an important prerequisite for successful implementation of the FRF in Hungary is the *phase-in of structural reforms* that ensure sustainability of the rules, in the face of rigidities in public sector employment,

demographic pressures, and regional imbalances. Indeed, progress needs to be made, as rapidly as feasible, on various fronts: public pensions, health care, taxation, and intergovernmental finances.[41] Needless to say, this effort must be underpinned with strict fulfillment of the most recent convergence program submitted to the EU authorities.

In addition, successful preparation of the rules-based FRF entails a *concerted outreach campaign,* including public education and media coverage to generate sufficient public understanding of the need for such a framework and to gain widespread support for its implementation (Brazil, New Zealand, EU). This campaign must be accompanied by a political debate that will lead to broad legislative consensus for the introduction of the FRF. Failure to engage the electorate and the legislature in the preparatory process can undermine at the very outset the credibility of any well-designed FRF.[42]

SUMMARY AND CONCLUSIONS

In an effort to correct worrisome trends in fiscal policy – deficit bias, procyclicality, and structural distortions – over the past decade, an increasing number of countries introduced a rules-based fiscal responsibility framework (FRF). The adoption of such a framework, often in tandem with a rules-based monetary policy – in the form of an inflation targeting or a fixed exchange rate regime – can be seen as best practice to mitigate the vulnerability to financial crises in an international environment characterized by high capital mobility. In some cases, notably in the EU, the FRF is intended to mitigate the adverse spillovers from free-rider fiscal behavior of EU members on the rest of the membership.

In broad terms, the FRF is characterized by (numerical) fiscal policy rules, procedural rules, transparency standards, and a surveillance and enforcement mechanism. Although these components vary widely across countries in terms of statutory basis, institutional coverage, detail, strictness, and emphasis, they impose a permanent constraint on the conduct of fiscal policy.

In spite of the brief track record, preliminary evidence suggests that compliance with a well-designed FRF contributes to building policy credibility, to reducing risk premia, and (as compared to regional averages) to boosting economic growth and to lowering output volatility. The effect on the external balance is uneven, as this reflects private saving as well. The FRF is usually implemented with a neutral or countercyclical fiscal stance, except in highly-indebted emerging-market countries where recessions have been met with a procyclical adjustment. Whereas in some countries compliance has been accompanied by public sector reforms, in others it was achieved through reliance on stop-gap measures.

After a decade and a half of persistent fiscal imbalances, along with a sharp buildup of public indebtedness, the Hungarian authorities and public opinion seem to be ready to explore the design of a FRF, drawing on a rich international experience. Much like other EU members, whether inside or outside the euro area, Hungary would greatly benefit from of the adoption of a custom-designed national rules-based framework, fully compatible with the broader envelope of the Stability and Growth Pact.

There are five major lessons from the international experience that are relevant for Hungary. First, transparency would be enhanced with extension of the coverage of the FRF to the entire public sector; full accounting for contingent liabilities; and preparation of prudent fiscal projections. Second, it is necessary to strengthen procedural rules, including implementation of the pay-go approach to budget legislation and routine preparation of a rolling three-year bud-

get program, setting an annual limit on the nominal level of primary expenditures. Third, in order to reverse the recent accumulation of public debt, the phasing in of a primary surplus rule, calibrated to the path of desired debt reduction-following fulfillment of the primary balance target set for 2008-should be seriously considered. Fourth, a current balance rule at the local self-government level would be a useful complement to fiscal rules assumed for the general government as a whole. And fifth, compliance with the FRF would need to be monitored on a continuous basis by an independent authority. The State Audit Office, if legally and technically strengthened, seems to be an appropriate candidate for this task.

Successful implementation of the FRF presupposes progress on several fronts, and in particular, a sustained effort in completing ongoing reforms in public pensions, health care taxation, and intergovernmental finances, as well as strict observance of the convergence program submitted to the European Commission. In addition, to bolster credibility and support for the FRF, the authorities need to engage in a concerted public outreach campaign and in an open political debate that would lead to broad legislative consensus.

The FRF would surely pave the way to Hungary's entry in the euro area within a reasonable time horizon. But more important, its implementation would mitigate Hungary's vulnerability to a potential financial crisis in the near term, and would contribute to a higher sustained growth and prosperity in the medium to long term.

APPENDIX

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

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

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 trend 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 cyclically-adjusted primary surplus

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

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

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

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 actual GDP and trend 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 = gdt–1,* then the target primary surplus becomes

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

which implies o*verall 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,*

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

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), following accrual-based accounting,

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

In addition, a balanced-budget 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.

Notes

[1] For a basic discussion of the issues and practices in advanced economies, see Kopits and Symansky (1998) and Banca d'Italia (2001). On practices in emerging-market economies, see Kopits (2004).

[2] See the seminal contributions of Buchanan and Wagner (1977) on the effect of electoral cycles and Kydland and Prescott (1977) on time inconsistency.

[3] See the analysis of the common pool problem in Persson and Tabellini (2000).

[4] For evidence on procyclical policies in the EU, see European Commission (2000), and the U.S., see Taylor (2000).

[5] See Tanzi and Schuknecht (2000).

[6] For recent calculations of debt sustainability in EU member countries, see Deroose and others (2006).

[7] For evidence on procyclicality, see Gavin and others (1996) and Kaminsky and others (2004).

[8] Fatás and Mihov (2003) estimated these effects for a large sample of advanced and emerging market economies.

[9] See Kopits (2000).

[10] See Kopits and Symansky (1998).

[11] See Kopits (2001).

[12] 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 the borrowing government in each jurisdiction.

[13] There is no specific debt ratio that meets this criterion. However, in practice, a debt ratio of up to 40% is usually regarded prudent for an emerging market economy. Obviously, a much higher ratio can be acceptable for an advanced economy or any economy with solid export earnings, broad tax base, strong financial or resource endowment, etc. See,

for example, International Monetary Fund (2003) and Hausmann (2004).

14 In Sweden, the structural surplus target has been set at 2% of GDP to capture the favorable effect of the operations of government-mandated pension funds, included in the general government accounts. In Chile, the target of 1% of GDP is intended to cover central bank losses.

15 According to the reform of 2005, the EU Stability and Growth Pact prescribes a medium-term position of close to balance or in surplus for high-debt members while allowing a deficit of up to 1% of GDP for high-growth low-debt members.

16 See Rattso (1998) for an analysis from the Scandinavian perspective.

17 For a comparison of the two approaches in Argentina and Brazil, see Kopits, Jiménez, and Manoel (2000).

18 For a recent review of the vast literature U.S. experience, see Besley and Case (2003).

19 Within the EU, several governments have already adopted derivative EMU rules at the national and subnational levels of government; see European Commission (2006).

20 See, for example, Poterba and von Hagen (1999).

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

22 See an early overview in Kopits and Craig (1998), which forms the basis of the International Monetary Fund's Code of Good Practices in Fiscal Transparency.

23 For example, as in New Zealand, Australia's Charter of Budget Honesty Act of 1998-albeit without a fiscal policy rule-requires the national authorities to publish fiscal strategy statements; annual and mid-year reports on fiscal outlook and outcome; intergenerational reports; and pre-election economic and fiscal assessments.

24 According to Charles Goodhart, a numerical indicator, such as a monetary aggregate, is no longer a reliable measure if it is used as a policy target or performance variable.

25 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.

26 Calculation of the cyclically-adjusted balance, to determine compliance with a structural budget rule, need to be based on transparent and realistic estimates of the output gap. For opaque practices in the Netherlands in the 1960s, see Wellink (1996). A recent discussion of measurement difficulties can be found in Kiss and Vadas (2006).

27 For a description of such institutions in EU members, see European Commission (2006).

28 See, for example, Eichengreen and others (1999) and Wyplosz (2002).

29 As a possible exception, in Nigeria, pending legislation assigns a prominent executive role to a fiscal council, including in the management of a common saving fund. The council is envisaged to be comprised of representatives of federal and state governments in order to gain the confidence and support of state governments, a necessary condition for the passage of the Fiscal Responsibility Bill.

30 See the discussion in Kopits (2001) and Schick (2004), and the cross-country evidence for Europe in Debrun (2007).

31 Measured in terms of the EMBIG index, market perceptions of Brazil improved significantly over this period. In spring 2002, the spread on government paper jumped from 600 bps to over 2,000 bps. Since then, it declined gradually to its current level of around 200 bps.

32 These findings are in line with the statistical evidence covering a wide range of countries with fiscal rules, reported by Manasse (2006).

33 In addition, for some countries, growth calculation on Table 2 may reflect some reverse causality from adherence with the framework, despite efforts to minimize this possibility by defining compliance in terms of structural fiscal balances and by covering a sufficiently long period to average out cyclical fluctuations.

34 For a recent characterization of Hungary and Italy as suffering from an endemic case of "fiscal alcoholism," see Kopits (2006b).

[35] Kopits (2006a) discusses fiscal behavior in Hungary from a political economy perspective. For an analysis of comparable conditions in other new EU members in Central Europe, see Kopits and Székely (2004) and Berger and others (2007).

[36] It should be noted that official data on the deficit are slightly overstated for 1998 and 2002, as they reflect recognition of losses accumulated by certain state-owned enterprises in previous years.

[37] The author is grateful to Gabriella Tésy for compiling the data underlying Figure 1.

[38] Under the present convergence program, the government is committed to zero primary balance for 2008, 0.9 % of GDP for 2009, and 1.1 % of GDP for 2010.

[39] Most recently, on March 22, 2007, Finance Minister Steinbrück announced an initiative to reform Germany's golden rule currently applicable at the federal and lander levels, in line with the Pact.

[40] See the derivation of the primary surplus target from the desired debt reduction path in the Appendix.

[41] In retrospect, social security reform in the initial convergence to the EMU fiscal reference values would have prevented the current difficulties faced by a number of euro members in abiding by the Pact. See an early discussion in Kopits (1997). For a broad overview and quantification of the tasks ahead in all EU members, see European Commission (2006).

[42] In Peru, the rushed enactment by the Fujimori administration, in December 1999 – following only a brief legislative debate--doomed the first version of the FRF. The resulting loss in credibility could only be restored with an extended debate and passage of an amended law by the subsequent democratically-elected congress.

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