Fiscal Rules for Ireland

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I. Introduction

The government of Ireland is planning to introduce fiscal rules to steer fiscal policy. This plan responds to three sources of pressure. The first is Ireland's obligations as a signatory to the Euro Pact Plus that, among other things, commits members to introduce legislation that translates the Stability and Growth Pact's (SGP) fiscal provisions into national fiscal rules that can ensure full compliance.¹ The second is the *prima facie* evidence that Ireland, as elsewhere, can be prone to undisciplined fiscal policy, and that some form of institutional constraint on policymakers and legislators could help restore prudent policy. After years of fiscal surpluses, chronic deficits prevail, and sustained consolidation will be needed to bring the deficit under the SGP's 3 per cent of GDP reference value. Third, the 2008 decision by the government to provide massive support to the Irish banking system immediately erased a sizeable portion of the progress achieved during two decades in reducing the share of public debt in GDP. In turn, stabilizing public debt and then putting it on a viable path to achieve the SGP's 60 per cent of GDP reference value has become urgent. To this effect, the adoption of national fiscal rules would bind policymakers to disciplined fiscal choices.

In the Spring of 2011, the government elaborated draft fiscal rules as part of a broader reform of Ireland's fiscal framework and budgetary procedures (DoF, 2011). As the government aims to incorporate formal fiscal rules in the Fiscal Responsibility Bill (FRB) soon to be submitted to Parliament, it is timely for the Irish Fiscal Advisory Council (IFAC) to offer an assessment of the proposed rules and any recommendations aimed at improving their design. The present paper has been prepared as background for the Council's analysis.

The paper is organized as follows. Section II provides a brief history of Irish fiscal performance during the past 20 years to provide some perspective on the fiscal challenges going forward. Section III provides an overview of the broad classes of rules that prevail, noting their strengths and weaknesses with respect to key criteria for prudent fiscal policy. The section also provides a brief overview of the evidence pertaining to the effectiveness of rules in practice. Section IV turns to the proposed draft rules, while Section V provides summary remarks.

II. The fiscal challenge in historical context: Déjà vu?

A. A brief historical overview of fiscal developments

There is a certain "déjà vu" in the current fiscal situation in Ireland. During the 1970s and much of the 1980s, public finances deteriorated; the general government budget deficit reached over 8 per cent of GDP in 1987, pushing public debt to just under 112 per cent of GDP (OECD 2000). A fundamental shift in economic policy followed, with an emphasis on structural reforms to lower the weight of government in the economy. This policy shift, together with a generally buoyant international economic environment during the 1990s that contributed to strong export growth, set in motion a sustained fiscal consolidation of unprecedented success in Ireland. The combination of rapid growth of real GDP and spending restraint during the 1990s led to a

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¹ http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/120296.pdf

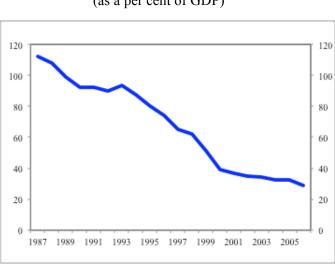


Figure 1. General Government Debt (as a per cent of GDP)

Source: OECD Economic Outlook, various issues.

After close to a decade of fiscal prudence, the fiscal stance loosened during the 2000s. Although debt continued to decline, policy developments set in motion a deterioration of the underlying structural health of public finances. Whereas the growth of public spending remained well below GDP growth while revenues grew strongly during the 1990s, the 2000s witnessed a relaxation of the previous spending restraint (Figure 2, Panel A). Social transfers and public sector compensation grew especially rapidly. Spending on transfers and public sector compensation as a share of GDP increased by 75 per cent and 54 per cent, respectively, during 2000-2009. The boost to spending was in large part based on expectations of sustained revenue buoyancy, which had spiked due to unsustainable construction and real estate activity. Despite some tightening of the stance from 2003, fiscal policy remained overly relaxed in light of the widening positive output gap and the increasing external current account deficit. As spending growth remained high even in the face of the collapse of revenue following the bursting of the real-estate bubble and the declines in GDP at the end of the decade. In turn, public debt surged, reaching 50 per cent of GDP in 2008. The revenue collapse and the ill-timed increase in spending opened a sizeable structural gap in the general government's fiscal balance (Figure 2, Panel B). With the added effects of the deep recession and its cyclical impacts on the budget, the overall balance reached deficit levels not seen since the 1980s. These developments alone pointed to the need for structural fiscal reforms to address an inherent deficit bias in policy formulation.

The government's 2008 decision to provide massive bank support measures added to the gloomy fiscal outlook. During 2009 and 2010, bank support measures of 2¹/₂ per cent and 20 per cent of GDP, respectively, pushed the share of general government gross debt to over 96 per cent of GDP in 2010. With international economic and financial turmoil unfolding at the same time, the weak fiscal position and risks of contagion from other stressed countries in Europe caused bond yields to rise sharply, and Ireland was effectively shut out of the sovereign debt market. This forced Ireland to seek financial support from the international community in late 2010. The joint EU/IMF/ECB (the "Troika") programme of financial support is aimed at providing "bridge" financing while Ireland adopts and implements policies to improve the medium-term fiscal outlook, including through fiscal and other structural reforms. In the meantime, however, debt dynamics are expected to cause public debt to continue to rise until 2013. Under the Government's

stability programme, public debt is expected to peak at 118 per cent of GDP (a level not seen since 1987) before beginning to recede, on expectations of significant improvements in the fiscal balance (Figure 3).

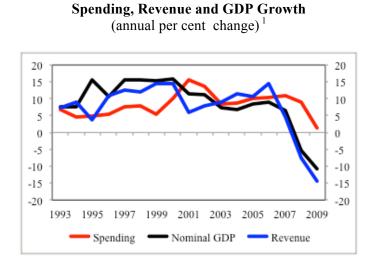
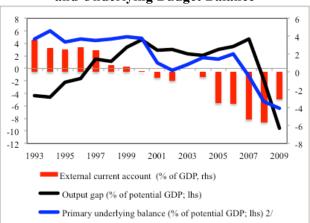


Figure 2. From Tight to Loose Fiscal Policy: Contrasting Decades

Panel A:

Panel B: The Output Gap, Current Account, and Underlying Budget Balance



¹ Fiscal variables are on a general government basis. ² The underlying balance is the fiscal balance adjusted for cyclical factors and one-off effects on the budget. Source: Department of Finance.

B. Differing contexts for consolidation

The economic environment going forward will differ markedly from the one prevailing during the previous consolidation. During the 20-year period from 1987, real GDP growth averaged close to 6 per cent per year. By contrast, growth prospects are significantly weaker in the Government's, the EC's and the IMF's medium-term scenarios (Figure 4), making the needed fiscal consolidation even more challenging. In effect, the medium-term growth outlook puts a

premium on discretionary policies to achieve fiscal consolidation in the first instance, and on structural reforms that are favourable to enhancing competitiveness and improving the economy's underlying potential.

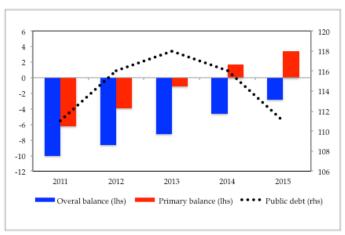
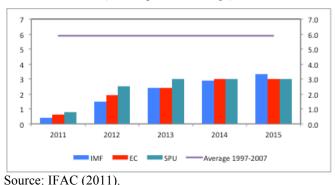


Figure 3. Stability Programme and Fiscal Projections (as a per cent of GDP)

Source: Stability Programme Update, April 2011.

Figure 4. Projected Growth Rates of Real GDP (annual per cent change)



An additional headwind is the forthcoming gradual onset of population ageing and the ensuing upward pressures on pension and health spending. Reflecting a later baby boom than elsewhere, ageing-related pressures will not begin to mount and accelerate until the middle of the next decade. Notwithstanding, the deteriorated fiscal position as of 2009 and projected spending pressures combine to yield an estimated sustainability gap—the immediate and sustained increase in the primary budget balance needed to restore debt to a sustainable level—of over 15 per cent of GDP, more than double the average in the EU (EC, 2009), and 12.1 percentage points higher than just three years earlier.² A sustained effort to reduce debt in the meanwhile would prepare Ireland for the pressures that will begin to mount in 10-20 years.

² Several factors contribute to the difference in estimates: (i) the 2009 estimate is based on expenditure projections to 2060, ten years beyond the 2006 report; (ii) the long-term impacts of policies adopted since 2006; (iii) different economic assumptions; and (iv) the different initial budgetary positions in each report. Most (11.6 percentage points) of the increase in the sustainability gap was due to the substantially weaker initial budgetary position.

Two conclusions pertaining to the need for and design of fiscal rules in Ireland would seem to emerge from this brief review. First, even without the surge in the stock of gross debt due to the government's bank rescue commitments and operations, fiscal policy became substantially more relaxed during the past decade. It is increasingly believed that institutional reforms, including strengthened medium-term fiscal frameworks, numerical fiscal rules, independent fiscal councils and fiscal responsibility legislation, can help to minimize deficit bias in fiscal policy (Kumar and Ter-Minassian, 2007; Debrun and Kumar, 2008; and Hagemann, 2011). Second, the explosion of the stock of public debt places debt stabilization and reduction at the center of the fiscal strategy going forward, with implications for the choice and design of fiscal rules.

III. Fiscal Rules

The past several decades have witnessed a rapid spread of fiscal rules of various types. In 1990, only 7 countries operated under some sort of fiscal rule; by 2009, the number had grown to 80 (IMF, 2009). Reflecting the co-existence of several rules in many countries, there were as many as 63 separate rules among EU members in 2009 (EC, 2009). Against this background, the accumulated experience has helped observers to gain a sense of the relative effectiveness of different rules in assisting governments to achieve various objectives assigned to fiscal policy, such as macroeconomic stabilization and restoring sustainable debt. This experience, reviewed briefly below, can help inform the design of appropriate rules in the Irish context.

A. Rationale for and types of rules

The principal purpose of introducing a fiscal rule, or a set of rules, is to constrain the government to deliver disciplined fiscal policy. Disciplined fiscal policy is one that contributes to macroeconomic stability and ensures the sustainability of public debt. It calls for counter-cyclical fiscal stances to help smooth output fluctuations, calibrated to ensure symmetric budgetary impacts to avoid an excessive accumulation of public debt, except for debt that is linked to public investment that boosts potential output growth. Due to a number of now widely acknowledged factors, notably electoral pressures (which give rise to policymakers' short-sightedness, common-pool problems, and risks of time-inconsistent behaviour), fiscal policy in many countries has tended to suffer from severe deficit bias, as reflected in the secular rise in public debt during much of the past 40 years and throughout much of the industrialized world. Fiscal rules are increasingly seen as an effective institutional means of addressing such bias. A widely accepted definition of a fiscal rule is a "... constraint on fiscal policy—expressed as a numerical ceiling or target—in terms of summary indicators of overall fiscal performance." (Kopits and Symansky, 1998).

Several considerations are pertinent to the decision to adopt fiscal rules, and to their design. First, the effectiveness of the rule will in part depend on whether or not there is a strong and consensus-based political commitment to them, since circumvention is possible in the case of most rules. While empirical evidence points to the effectiveness of fiscal rules (EC, 2006 and 2009; Debrun and Kumar, 2008; Guichard *et. al*, 2007; and IMF, 2009), there remains some uncertainty about the direction of causation; some rules may be adopted to consolidate hard-won credibility for fiscal rectitude rather than the other way around. Second, a poorly designed rule can be more harmful than helpful. Numerical rules can suffer from a number of weaknesses: (i) they can be pro-cyclical if not carefully constructed; (ii) they can be harmful to the quality of public finances through inadvisable compositional effects (Blanchard and Giavazzi, 2004); and (iii) where political will is lacking, they can motivate creative accounting and off-budget operations, undermining transparency and, ultimately, democratic control over the budget (von Hagen and Wolff, 2006).

There are an increasing number of fiscal rules in place worldwide, all of which fit more or less into four categories. The most prevalent rules (Figure 5) are those that place a constraint on either the budget balance or on the stock of debt, in both cases as a proportion of GDP. The prevalence of budget balance and debt rules largely reflects widespread concern about fiscal sustainability. The third most frequent rules place constraints on the growth of expenditures, reflecting both the desire to limit or reduce the size of government and the accumulating evidence of the effectiveness of such rules. Finally, some countries have adopted rules affecting revenues, often designed to place limits on or prescribe use of unexpectedly buoyant revenues during an upswing.

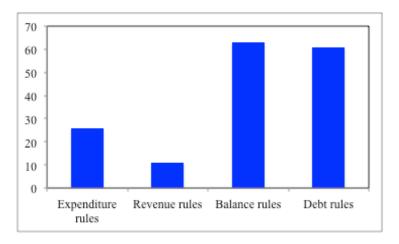


Figure 5. Number of Countries with at Least One Fiscal Rule, by Type of Rule, 2009

Source: IMF (2009).

While constraining policymakers is the key commonality of rules, the effectiveness of each type of rule varies in addressing different proximate policy objectives. There are three main objectives against which each rule can be judged. (i) Enhancing the macro stabilization role of fiscal policy, that is, improving the effectiveness of counter-cyclical policy; (ii) Restoring and maintaining the sustainability of public debt; and (iii) Improving expenditure efficiency (i.e., ensuring, or at least not harming, allocative and productive efficiency of government programmes).

Budget balance rules (BBR) typically set a target for (limit on) the overall balance, the current balance, or the operating balance during a particular year or over the medium-term. BBRs that are set in nominal terms or as a share of GDP are simple to monitor and to explain to the public, but tend to impart pro-cyclical bias to fiscal policy by tying the hands of policymakers when cyclical movements in the economy in excess of anticipated effects require offsetting measures to respect the target. By contrast, while less easily understood by the public, BBRs that target a cyclically adjusted or structural budget balance can theoretically allow automatic stabilizers to operate over the cycle if the duration and the shape of the cycle can be accurately forecasted. Constraining the overall balance can help to achieve convergence of the debt-GDP ratio to a desired level. A BBR based on the primary balance is also focused on debt reduction, but unexpected increases or decreases in interest spending (due to higher interest rates) can weaken the link. BBRs, especially those based on the noncyclically-adjusted balance, can have adverse effects on expenditure efficiency, such as when otherwise desirable but conveniently lumpy investment outlays are cut not for cost-benefit reasons but instead solely to achieve the target (Blanchard and Giavazzi, 2004).

- **Debt rules** (DR) specify an explicit limit or target for the public debt as a per cent of GDP. Since the target is operationally reached via the budget balance, the rule has to be designed carefully to avoid pro-cyclicality. Stand-alone debt rules tend to be ineffective constraints at low levels of the debt-GDP ratio, however.
- **Expenditure rules** (ER) take many shapes, but all are designed to constrain the growth of public outlays, notably during cyclical upswings when the buoyancy of revenues can easily lead to pro-cyclical and structural increases in spending. With a ceiling on expenditures set in advance, both the budgeted level for the coming fiscal year and indicative levels for the subsequent years of a medium-term framework, cyclically sensitive revenues are allowed to play a stabilization role. A key issue in the design of an ER is the coverage. It is important to consider excluding some highly sensitive spending items such as unemployment benefits, but allowing too many carve-outs is an invitation to excessive reclassification.³ Expenditure rules can be weakened if tax expenditures are not constrained as well.
- **Revenue rules** (RR) are relatively less prevalent than other types of rules. RRs set a ceiling (to limit the burden) or a floor, or specify *ex ante* the uses to which above-forecasted receipts can be put. Caps can introduce pro-cyclicality if, in a boom, rates are lowered to respect the cap (and symmetrically for a floor during a downturn). Pre-specified uses of above-forecasted revenues can prevent pro-cyclicality by ensuring that they are not used to finance large discretionary spending initiatives or to raise structural spending. In a number of countries, the RR requires that excess revenues be used to reduce the deficit or be placed in a "rainy-day" fund for future use.

Tables 1 and 2 summarize the potential relative effectiveness of each type of rule in addressing different fiscal objectives.

	Objectives									
Type of fiscal rule	Debt sustainability	Economic stabilization	Expenditure efficiency							
Overall balance	++	-	-							
Primary balance	+	-	+							
Cyclically-adjusted balance 2/	++	+++	+							
Public debt-GDP ratio	+++	-	-							
Expenditure	+	++	++							
Revenue	-	+	-							

Table 1. Performance of Different Types of Fiscal Rules Against Key Objectives 1/

1/ A positive sign (+) indicates stronger performance, and a negative (-) sign indicates weaker performance.
2/ The stabilization effectiveness of these rules depends on the ability to forecast the duration and shape of the cycle.
Source: IMF (2009).

³ See Anderson and Minarik (2006) and Ljungman (2008) for thorough discussions of expenditure rules.

Table 2. Properties of various "families" of numerical fiscal rules with respect to different economic objectives.

	Effects on the deficit bias 1/	Effects on macroeconomic stabilization	Effects on quality of government finances	Other properties		
Budget balance rules	Direct and positive	Possibly negative depends on design	Positive or negative, depending on design			
	Effectiveness in addressing the deficit bias depends on the degree of ambition of the numerical targets and on the design (time-horizon, definition of the objective, coverage) and characteristics of the rule (in particular monitoring and enforcement procedures).	Budget balance rules defined in nominal terms (in levels and as a per cent of GDP) introduce a pro- cyclical bias in fiscal policy. The bias is reduced in case the rule has a multi-annual perspective. Budget balance rules targeting a cyclically adjusted balance, or that need to be respected over the cycle, do not have such a bias (subject to uncertainties on the quality of the cyclical adjustment).	Positive effect in case selected 'productive' items are subject to less strict constraints or excluded from the scope of the rule. This may, however, imply risks of inefficient allocation of public resources. Additionally, exclusion of selected items can raise monitoring difficulties and facilitate circumvention of the rule. A negative effect is possible in case no item is excluded from the coverage of the rule, due to the political temptation to cut expenditure categories that are less politically sensitive, including 'productive' expenditure (expenditure on R & D, infrastructure and education).	Such rules are frequently applie at regional and local levels of government. They are subject to a trade-off between, on the one hand, simplicity and straightforward monitoring of the rule and, on the other hand, stabilisation/quality aspects.		
Expenditure rules	Indirect and positive	Likely positive, but depends on the design of the rule	Positive or negative, depending on design,			
	Effectiveness in addressing the deficit bias depends on the degree of ambition of the numerical targets, on the design and characteristics of the rule, but also on tax developments.	Expenditure rules contribute to macroeconomic stabilisation if the aggregate targeted by the rule is defined in level or growth rate of expenditure. Counter-cyclical contribution is maximal when the rule is defined in nominal terms (larger-than- expected budgetary adjustment in case of demand- pull inflation) and when the coverage excludes cyclically sensitive items. Expenditure rules can, however, entail a pro-cyclical bias if they are defined in terms of an expenditure-to-GDP ratio (This is rarely observed in practice).	Same as for budget balance rules.	Such rules are relatively rare at local government level and frequent at central government level. They may help to contain the size of the public sector. High accountability of the government for respecting the rule since such rules directly target the part of the budget that the government controls most directly. Accountability is maximal if specific items not fully under the control of the government are excluded from the coverage of the rule (e.g. interest payments, unemployment benefits).		

1/ Positive (negative) effect on the deficit means a decreasing (increasing) effect.

Source: European Commission (2006).

Effects on the deficit bias 1/		Effects on macroeconomic stabilization	Effects on quality of government finances	Other properties		
Revenue rules	Positive or negative	Positive or negative	Uncertain			
	Positive or negativePositive or negativeRules imposing limits on revenues (e.g. aiming at stabilising or reducing the tax burden) may have a negative impact on the deficit bias if they are not coupled with other rules, e.g. budget balance or expenditure rules. Indeed, stringent tax limits may have a negative impact on borrowing costs (markets might consider that the risk of default becomes higher if constraints are imposed on the capacity of the authority to increase taxes). On the contrary, rules pre-defining the allocation of higher-than-expected revenues generally help lessen the deficit bias by avoiding a relaxation of the fiscal stance in good times (depends on the allocation rule).Positive or negative regative Such rules can be slightly pro-cyclical in case the rule targets a given revenue-to-GDP ratio (due to the progressivity of the tax systems). They can be strongly pro-cyclical if the rule targets a given amount of revenues in nominal terms (such rules are rare). Revenue rules pre-defining the allocation of higher-than-expected revenues are allocated to deficit reduction).		No evident influence on the quality of government finances. However, in case only some categories of taxes are covered by the rule there can be an impact on the structure of the tax system.	Revenue rules pursue a wide variety of objectives. Rules imposing limits on revenues may contribute to contain the size of the public sector.		
Debt rules	Direct and positive	Possibly negative depending on design	Possibly negative depending on design			
	Effectiveness in addressing the deficit bias depends on the degree of ambition of the numerical targets and on the design and characteristics of the rule (in particular monitoring and enforcement procedures).		Same as for budget balance rules.	Borrowing constraints are generally applied at sub-central levels of government. However, in some countries, debt limits for the general government sector are enshrined in the law or constitution.		

Table 2 (continued). Properties of various "families" of numerical fiscal rules with respect to different economic objectives.

1/ Positive (negative) effect on the deficit means a decreasing (increasing) effect.

Source: European Commission (2006).

B. Desirable characteristics of rules

Promising and successful fiscal rules have a number of characteristics in common. These include being well-defined, backed up by transparency, adequacy, consistency, simplicity, flexibility, enforceability, and efficiency (Kopits and Symanksy, 1998). A well-designed fiscal rule, or set of fiscal rules, will reflect a careful balancing of the relative importance of each desirable characteristic to achieve the policy objective in the country's institutional and political context.

- Well-defined: The rule should be clear regarding the indicator (fiscal balance, debt, expenditure) on the basis of which performance is to be judged, including its institutional coverage and specific escape clauses. For instance, the rule should be clear whether the indicator applies to the whole of the public sector or to only the central government.
- A rule will only be credible if it is implemented in a context of full transparency of government operations (accounting, forecasting and institutional coverage and relationships). Skepticism about the statistical underpinnings and intra-governmental relationships that can affect the veracity of the indicator will undermine the rule's credibility.
- A well-designed rule is consistent with other macroeconomic policies or rules. For instance, in the absence of a monetary policy lever for counter-cyclical policies, a fiscal rule ought to ensure that fiscal policy can play its stabilization role insofar as possible.
- The adequacy of a rule relates to its relevance to the proximate goal of fiscal policy for the country at inception of the rule. Thus, if chronic expenditure growth is the root cause of ballooning deficits, a constraint on expenditure growth—accompanied or not by a budget balance rule—would be more promising than other rules.
- There is a trade-off between simplicity and some other desirable characteristics of rules. For instance, while a cyclically adjusted budget balance is better suited to avoiding the pro-cyclicality inherent in a headline deficit rule, it is also more complicated to calculate, can be subject to dispute even among experts, and is not easily understood by the general public.
- A flexible rule allows for the absorption of shocks that are beyond the control of the government. The most obvious of these is an unpredictable cyclical downturn, which, at a minimum, would call for automatic stabilizers to operate.
- A rule needs to be enforceable. Consequences for the failure of authorities to respect the provisions of the rules-based framework need to be explicit. Whether the sanctions are financial, judicial, reputational, or, in the limit, political, holding officials accountable for the degree of non-adherence to the rule is essential for the rule's credibility and eventual success, other things equal.
- Finally, a rule should be designed in a manner that protects or improves efficiency. For instance, it could be more harmful than helpful to rely on an expenditure rule that sets a ceiling on total government spending while allowing the rule to be met solely through cuts in public investment otherwise favourable to growth.

C. Assessment of the effectiveness of fiscal rules

The spread of fiscal rules, together with the accumulation of years of experience in a number of countries, has facilitated increased empirical investigation into the effectiveness of rules. Empirical

	Year when public debt-to- GDP ratio first dropped	First year of - sign of improvement in CAPB 2/	Change in public debt to-GDP ratio	Length of episode (no. of years)	Year of adoption of fiscal rule	Fiscal rule at start?	Fiscal rules adopted/re vised during adjustment	Fiscal rules adopted later?	<u>Type and coverage of fiscal rules</u>			
							period		ER	RR	BBR	DR
Ireland	1994	1993	-69.6	13	2004	No	No	No			LG	
Bulgaria	2001	2000	-60.4	8	2003	No	Yes	No	GG			GG
Denmark	1994	1997	-57.7	15	1992	Yes	Yes	No	GG		GG	
Belgium	1994	1993	-53.0	14	1993	Yes	Yes	No	CG, SSS	CG	RG, LG, SS	S
New Zealand	1993	1993	-44.2	16	1994	No	No	No	-		GG	GG
Turkey	2002	2001	-38.1	6	-	No	No	No				
Spain	1997	1996	-31.3	11	2002	No	Yes	No			GG	RG. LG
Netherlands	1996	1996	-25.6	7	1994	Yes	Yes	No	GG	GG		
Mexico	1991	1995	-25.2	3	2006	No	No	Yes				
Australia	1995	1995	-24.2	14	1998	No	Yes	No		CG	CG	CG
Brazil	2003	2003	-21.0	4	2000	Yes	No	No	GG			GG
Iceland	2002	2004	-20.5	4	2004	No	Yes	No	CG			
Sweden	1997	1994	-19.7	4	1996	Yes	Yes	Yes	CG, SSS			
Canada	1997	1995	-19.6	4	1998	No	Yes	No	CG		CG	CG
Sweden	2002	na	-18.6	7	2000	Yes	No	No	CG, SSS		GG. LG	
United States	1994	1994	-16.9	7	1990	Yes	No	No	CG		CG	
United Kingdom	1985	1988	-15.7	7	1997	No	No	Yes				
Finland	1995	1996	-15.4	8	1995	Yes	Yes	Yes			LG	CG
Iceland	1996	1995	-15.4	5	2004	No	Yes	Yes				
Korea	1983	na	-14.6	12	-	No	No	No				
Switzerland	2004	2005	-13.5	5	2003	Yes	No	No			CG	
United Kingdom	1998	1995	-12.0	5	1997	Yes	No	No			GG	GG
Finland	2004	na	-11.0	5	1999	Yes	No	No	CG	SSS	CG, LG	
South Africa	2004	na	-10.0	5	-	No	Yes	No				

Table 3. Types and Coverage of National Fiscal Rules and Large Fiscal Adjustments Since 1980 1/

ER = Expenditure rule; RR = Revenue rule; BBR = Budget balance rule; DR = Debt rule.

GG = General government; CG = Central government; RG = Regional government; LG = Local government; SSS = Social security system; na = non-available.

1/ Includes episodes in G-20, OECD and European Union member states (except oil exporters) in which the public debt-to-GDP ratio dropped continuously over at least three year by at least 10 percent of GDP and at least 20 percent of the initial public debt stock; and this reduction was primarily driven by primary surpluses (i.e., accounting in principal for more than 25 percent of the reduction, with the other three factors being inflation, real growth, and stock flow adjustments).

2/ Changes in the cyclically adjusted primary balance (CAPB). Improvement of at least 1 percent of GDP. Source: IMF (2009).

investigation has been undertaken at the EC (2006, 2009), IMF (2009), and OECD (Guichard et. al, 2007). The evidence is broadly reinforcing, and positive, but not conclusive. A general conclusion is that, while not a panacea, fiscal rules can play a strengthening role in both sustaining a consolidation effort and in maintaining fiscal discipline (Table 3). Early debt reduction appears greater, and improvements in the deficit more sustained, in countries with rules than in those without (Figure 6). Moreover, combined budget balance and expenditure rules appear to be more effective than others. Indeed, expenditure rules were more prevalent among large fiscal adjusters than across the full sample of adjusting countries (Figure 7). The effectiveness of expenditure rules in helping to restore fiscal soundness is likely related to the already high level of spending in many consolidating countries and to the fact that deadweight losses increase by the square of the tax rate, and are therefore harmful. More generally, however, expenditure rules explicitly exclude volatile revenues, thereby allowing them to act as automatic stabilizers. When properly designed, expenditure ceilings can also allow cyclically sensitive spending to rise during a downturn, and prevent the use of windfall revenues in the upturn (Anderson and Minarik, 2006). While most fiscal rules included in the IMF (2009) investigation were already in place at the outset of consolidations, many countries introduced national rules specifically with a view to reversing serious fiscal imbalances. This was particularly the case in Sweden and Finland in the early 1990s following their banking and economic crises at the time.

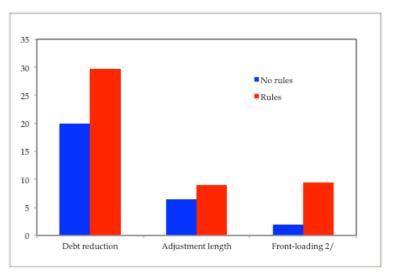


Figure 6. Features of Large Adjustments in Countries With and Without Fiscal Rules 1/

1/ Includes 24 episodes in G-20 OECD and European Union member states since 1980.
2/ Cumulative change in the cyclically adjusted primary balance in the first three years relative to the reduction in public debt-GDP ratio over the whole adjustment period.
Source: IMF (2009).

Contrasting the experiences of countries relying solely on budget balance rules with the experiences of countries relying on an expenditure rule, either alone or in combination with other rules, is instructive. As noted by Guichard *et. al* (2007), the experience in the U.S. stands out. The budget balance rule known as the Graham-Rudman-Hollings (GRH) Act of 1985, which targeted a balanced budget within six years, was unsuccessful in reining in federal deficits. By contrast, the Budget Enforcement Act of 1990, which capped nominal discretionary spending and required offsetting spending cuts or tax increases for new spending initiatives or tax cuts (known as pay-as-you-go) eventually delivered a

succession of budget surpluses for several years prior to expiration of the legislation in 2002.⁴ In the EU, where the SGP has been largely ineffective in containing deficits and debt, several countries— Netherlands, Sweden, Finland and the Czech Republic—were successful in restoring or maintaining fiscal discipline by supplementing SGP supranational rules with national rules consisting of expenditure ceilings.

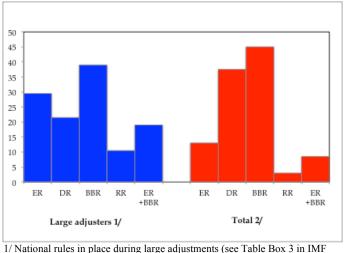


Figure 7. Types of Rules During Large Adjustments

1/ National rules in place during large adjustments (see Table Box 3 in IMF (2009)).
 2/ Rules in place in a sample of 80 countries around the world during 1985-2009;

2/ Rules in place in a sample of 80 countries around the world during 1985-2009 includes supranational rules. Source: IMF (2009).

The strength of a fiscal rule is an important determinant of its likely effectiveness (Debrun *et.* al, 2008; EC, 2006, 2009; and Guichard *et. al*, 2007). The EC has developed an index of the strength of fiscal rules (EC, 2006). The strongest rules are deemed to be those with objectives that cannot be easily changed, are monitored and enforced by independent fiscal institutions, include automatic sanctions for non-compliance, and are closely monitored by the media. Using estimates of the fiscal index updated to 2008, the EC (2009) finds a statistically significant positive relationship between the strength of fiscal rules and improvements in the cyclically adjusted primary budget balance.

A number of caveats apply to the mounting evidence, however. As previously mentioned, there is some uncertainty regarding direction of causation. For instance, countries that supplement a strong commitment to fiscal consolidation with rules may in the first place be generally more committed to pursuing disciplined fiscal policy. Or a country adopting and enforcing a rule may be motivated by other considerations, such as, for instance, a goal of early membership in the Economic and Monetary Union in Europe (Guichard *et. al*, 2007). In this regard, ample research shows that, notwithstanding the measurable positive impact of fiscal rules and independent fiscal councils on Belgium's consolidation efforts during the 1990s, much of the strength of the fiscal effort can be traced to the strong desire for entry into EMU (Debrun and Kumar, 2008; Lebrun, 2006); and Coene, 2010).

⁴ The success of the BEA was also facilitated by the "peace dividend" following the end of the Cold War, which enabled the United States to reduce military spending considerably.

IV. EU rules and the government's proposed national counterparts

The Government has proposed for consideration a number of rules to steer fiscal policy under different circumstances. Before considering the proposed rules, it is useful to elaborate on the SGP and the recent amendments to the fiscal governance framework.

A. The revised EU framework

The fiscal provisions of the SGP have undergone several revisions since their inception and entry into force in 1997. The original pact introduced several formal numerical constraints on EU members, most visible among which were ceilings of 3 per cent of GDP on the general government deficit and 60 per cent of GDP on general government public debt. The deficit ceiling applies in good and in bad times, and thus countries are expected to run structural budget policies that leave ample room for adverse cyclical and other shocks to impact the deficit without breaching the ceiling. For countries in breach of the deficit reference value, concrete plans need to be adopted to credibly reduce the deficit to below 3 per cent or eventually suffer sanctions. Countries with public debt exceeding the reference value are expected to maintain a fiscal stance that will ensure a timely decrease in the debt ratio to below the ceiling. The fiscal record following entry into force of the SGP was poor and, after breaches by France and Germany, reforms introduced in 2005 included, among others, (i) differentiated medium-term objectives that allow for country-specific characteristics, notably the debt-GDP ratio and potential growth, (ii) a requirement of a minimum of 0.5 per cent of GDP progress toward reaching the Medium-Term Objective (MTO), (iii) greater flexibility in the interpretation of exceptional circumstances in regard to breach of the deficit reference value, (iv) a positive list of "other relevant factors" in judging a breach, and (v) deadlines for correcting an excessive deficit.

Against the backdrop of the substantial deterioration in budgetary positions during the recent crisis, and the consequent surge in public debt in many countries, EU authorities took steps to strengthen economic and fiscal governance. A package of reforms—the so-called "six-pack"—entered into force in mid-December 2011.⁵ In general, the reforms aim to strengthen the framework through specific benchmarks for key fiscal obligations under the SGP and sanctions for inadequate performance:

- The preventive arm is strengthened by requiring countries to hold the growth of public expenditures in line with the medium-term rate of growth of GDP unless the MTO has been reached or the excess is covered by discretionary increases in revenue. For countries that have not yet reached their MTO, the rate of growth of spending should be held below the reference rate to ensure adequate progress. For euro Member States, significant and continuous breaches of the requirements of the preventive arm lead to financial sanctions—an interest-bearing deposit of 0.2 per cent of GDP as a rule.
- The corrective arm is reinforced through: (i) Introduction of a benchmark for progress toward satisfying the 60 per cent of GDP public debt-GDP ratio. Specifically, even if a country's deficit is below the 3 per cent of GDP deficit benchmark, if its public debt-GDP ratio exceeds 60 per cent of GDP, it is expected to adopt policies that ensure annually a three-year average reduction of the debt-GDP ratio of at least 1/20th of the excess over the benchmark. Non-compliant Member states are placed under EDP notwithstanding respect of the 3 per cent of GDP deficit benchmark. (ii) Introduction of possible financial penalties on euro Members under EDP when they fail to implement adequate corrective measures. Financial penalties include a 0.2 per cent of GDP non-interest deposit, convertible to a fine in the case of sustained non-compliance.

⁵ http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/898

A Directive requires EU members to adopt national budgetary frameworks that enhance each Member's ability to comply with provisions of the SGP. National budgetary frameworks are understood to comprise accounting systems, statistics, forecasting, numerical rules, independent fiscal institutions, budgetary procedures, and medium-term budgetary frameworks.

B. The proposed Irish rules

The set of numerical fiscal rules proposed in 2011 have been crafted to ensure consistency with obligations under the SGP. To this effect, the proposed framework would comprise three rules (DoF, 2011):

- > The Public Finances Correction Rule (PFCR)
 - A minimum annual improvement in the general government primary budget balance of 1.5 per cent of GDP would be targeted if either (i) the deficit exceeds its reference value of 3 per cent of GDP; or (ii) the debt-GDP ratio exceeds 90 per cent of GDP, even in the presence of an overall deficit below the 3 per cent of GDP threshold.
 - If the deficit is in compliance with the 3 per cent of GDP threshold and the public debt ratio is above the 60 per cent of GDP ceiling but below 90 per cent, the minimum annual required improvement in the primary budget balance would be halved, to 0.75 per cent of GDP.
- The Prudent Budget Rule (PBR)
 - If both the deficit and debt-GDP ratio are under their respective thresholds but the government has not yet reached its medium-term objective (currently set at -1 per cent of GDP), a minimum improvement of 0.5 per cent of GDP in the cyclically adjusted primary balance would be targeted.
 - At no time should the primary balance exceed 4 per cent of GDP.
- The Sustainable Expenditure Growth Rule (SEGR)
 - When all SGP criteria are satisfied (including the MTO), public expenditure growth should be held in line with the underlying rate of growth of the economy.

Figure 8 provides a schematic of the proposed rules.

C. Assessing the proposed rules

The key objective guiding fiscal policy in Ireland's present circumstances is restoring sustainability. Although fiscal policy through 2013 will be primarily determined in the context of the macroeconomic and structural reform programme supported by the Troika, a viable and credible fiscal framework is needed for the period beyond. Experience demonstrates that large fiscal adjustments such as those needed in Ireland are more likely to succeed if buttressed by rules. At the same time, poorly designed rules can be more harmful than helpful through a variety of channels, such as when, for instance, the rule undermines macro stabilization by not allowing flexibility to absorb shocks, inadvertently promotes non-transparent budgetary transactions, or results in reduced efficiency.

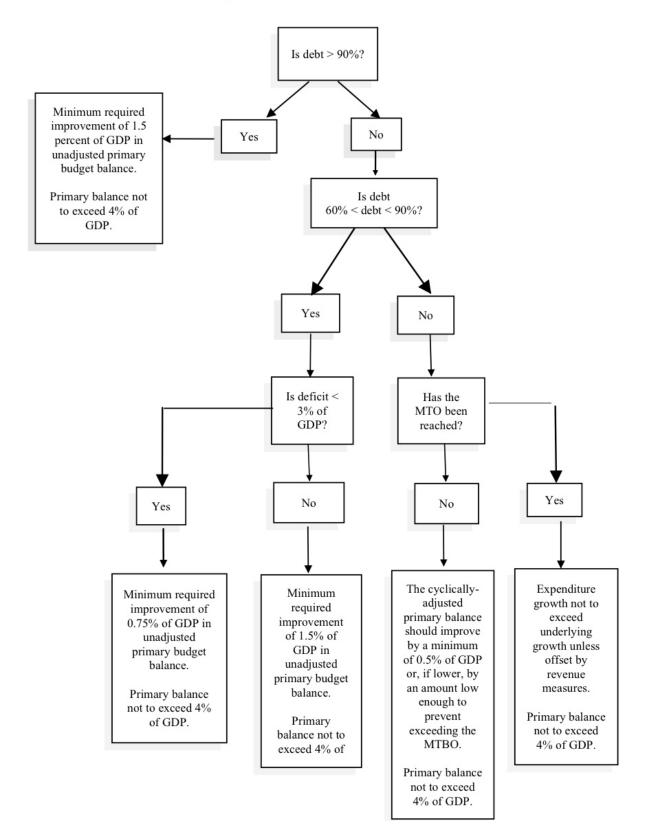


Figure 8. The Fiscal Rules Framework

This section provides an assessment of the rules proposed for adoption in Ireland based largely on the characteristics of sound fiscal rules elaborated earlier. The credibility of a fiscal rule ultimately hinges on the extent to which it satisfies a critical mass of sound features.

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(i) The number of rules

The first question that needs to be addressed is whether there is a need for multiple rules as conceived at present. A rules-based framework comprising multiple, situation-contingent rules imparts a complexity that risks undermining credibility. Multiple rules can be helpful when they are mutually reinforcing, such as when a budget balance or debt rule is buttressed by an expenditure rule. For instance, Finland, the Netherlands and Sweden combined expenditure rules with either national or supranational (i.e., SGP) budget balance rules with evident success (Box 1). The proposed rules are, by design, generally mutually exclusive, the SEGR being invoked to reinforce the PBR only once the MTO has been reached. Their multiplicity creates unnecessary complexity.

(ii) Different fiscal aggregates

Different aggregate fiscal indicators are to be constrained without apparent or convincing technical or conceptual reasons. This undermines the principle of simplicity, and raises questions about the adequacy and flexibility of the rules framework. The transition from the PFCR to the PBR when Ireland is no longer in breach of either the deficit or the debt reference values (including the pace of decline in the debt-GDP ratio) would entail a shift in target from a non-cyclically-adjusted primary balance to one that is adjusted.

This is clearly related to the desire for conceptual consistency with the EU's MTO requirements to improve the cyclically adjusted balance by 0.5 percentage points of GDP until the MTO is achieved. However, this risks raising doubts among legislators and the public as to why the added flexibility of a cyclically adjusted aggregate is not also justified during a fiscal correction. There is an inevitable trade-off between flexibility on the one hand and simplicity on the other in choosing between a cyclically adjusted and a non-adjusted aggregate. Relying on a headline balance has the merit of simplicity and transparency, but has the indisputable downside of inflexibility with respect to shocks, since strict adherence to the balance target inevitably requires pro-cyclical policy responses. Such built-in pro-cyclicality poses several risks. First, offsetting the operation of the automatic stabilizers to respect the target could increase the amplitude of cyclical swings rather than help smooth output over the cycle. Second, if markets perceive such pro-cyclicality as a serious threat to the social and political viability of the rule, the framework could fail to gain the credibility it is designed to obtain in the first place. To be sure, cyclical adjustment raises complex methodological questions surrounding (i) estimation of potential output to derive output gaps, which unavoidably complicates operationalization and monitoring of the rule, and (ii) budget elasticities (revenue and spending). Notwithstanding, the calculation of cyclically adjusted balances is routine in the context of MTO monitoring. But, alternative fiscal rules could be constructed that avoid the calculation of the output gap.⁶

(iii) Numerical constraints

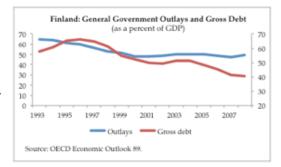
With an aim to provide assurances of the government's commitment to sustaining the consolidation effort, the PFCR and the PBR both specify minimum fiscal adjustments. The PFCR specifies that a minimum annual improvement in the primary balance of $1\frac{1}{2}$ percent of GDP would be required when debt exceeds 90 per cent of GDP. When debt falls below 90 per cent of GDP and the deficit has fallen below the reference value, the required annual minimum improvement in the primary balance would be halved. The implied slowing of the pace of debt reduction is given little justification by the government

⁶ See Fletcher and Benelli (2010).

Box 1. Countries relying on effective expenditure rules

Finland

Finland introduced expenditure ceilings to help consolidate public finances following the banking crisis of the early 1990s. Revisions were made in 2003 to strengthen weaknesses in the previous rules (narrow coverage, short time horizon, and frequent revisions). The explicit objective of the reform was to limit the growth of government spending as a direct contribution to the overall goal of reducing the share of public debt in GDP. The spending ceilings are set in real terms for a four-year period that is synchronized with the political cycle so that they do not bind the next government. The real spending targets are converted to nominal envelopes using a



central government price index as the deflator. The ceiling covers approximately ³/₄ of central government spending, and is insulated from a number of cyclically sensitive items, including interest payments, unemployment benefits, old-age pension payments, and expenditures that are matched by EU transfers. Although such exclusions add complexity to the calculation of the ceilings and make outside verification difficult, the government is able to avoid many of the adverse effects associated with medium-term expenditure ceilings. Experience with the framework has generally been positive, and pro-cyclical spending was avoided during the cyclical upswing of the mid-2000s.

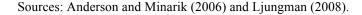
The Netherlands

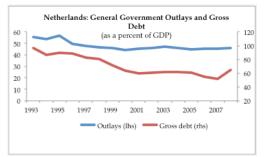
The Netherlands adopted a new fiscal framework in 1994 following a deep and prolonged deterioration of the public finances. A central pillar of the reform was the adoption of multi-year real expenditure ceilings. The expenditure coverage is comprehensive, but operationally sub-ceilings are set for each of three subsectors: (i) the core government

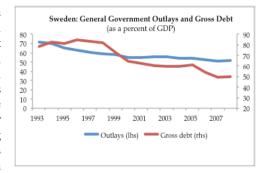
sector; (ii) the health care sector; and (iii) the social security sector. Transfers are permitted between sectors and among sub-caps of the core government sector. The inclusion of sectors sensitive to demographic developments assures that the sensitivity of the budget to population ageing remains under government scrutiny and incorporated into a medium-term framework. Budget over-runs must be offset within each sector with the excess, and there are firm firewalls between revenue and expenditure. More favourable revenue outturns than forecasted can be used only for tax cuts, depending on the size of the deficit. By and large, the framework has been effective in restraining expenditure growth.

Sweden

In the aftermath of the serious recession of the early 1990s, Sweden undertook a reform of its budget process. The introduction of nominal expenditure ceilings for the central government was an important part of the reform. Binding annual ceilings are set three years in advance, with coverage encompassing central government primary spending, including transfers and grants to local governments and expenditures by the old-age pensions system outside the central government. The ceilings include a margin over projected spending to make room for some flexibility and for increases in cyclically sensitive spending during a downturn. Since the introduction of the expenditure ceilings in 1997, the expenditure ceiling system has been an effective tool in helping to anchor fiscal policy and stabilize public finances.







other than that 90 per cent of GDP is "...viewed by many market participants as a key benchmark of ongoing sustainability." (DoF, 2011, p. 12) The argument is presumably founded on the research of Reinhart and Rogoff (2009) that suggests that debt above 90 per cent is harmful to growth. Whether or not a slowing of the pace of consolidation at this threshold is justifiable *ex ante* would depend on a number of circumstances *ex post*, including the interest rate-growth rate gap, the cyclical position of the economy, the preceding pace of debt reduction, etc. Absent a stated medium-term target for the pace of debt reduction as part of the rules-based framework, the rule provides no intrinsic information about the desired pace of debt reduction, policymakers would determine a viable pace in light of prospects for interest and growth rates, the output gap, and the political and social feasibility of the planned effort.

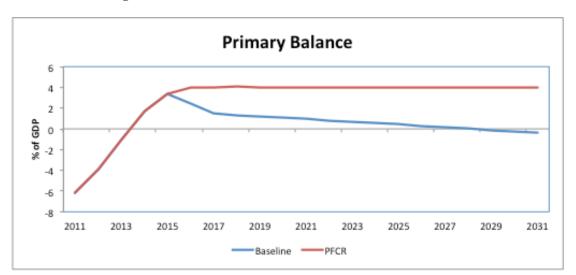
The proposed cap on the primary surplus adds uncertainty to the government's desired pace of consolidation. In the simplest setting, the annual pace of decline in the debt-GDP ratio is determined by the difference between, on the one hand, (i) the product of the initial debt-GDP ratio and the gap between the nominal interest rate on government debt and the rate of growth of nominal GDP, and, on the other hand, (ii) the primary budget balance as a share of GDP.⁷ Given an initial level of the debt-GDP ratio, the greater the excess of the nominal interest rate on government debt over the nominal rate of growth of nominal GDP, the greater must be the ratio of the primary balance to GDP to avoid an increase in the debt-GDP ratio, or to secure a decline. Thus, with a cap of 4 per cent of GDP on the primary balance, the rule raises the possibility of an *unchanging* or even *increasing* debt-GDP ratio in the event of a substantial increase in the interest rate relative to the nominal rate of GDP growth. The proposal to leave "...open to the Government to target a higher primary surplus if it considered this appropriate..." (DoF, 2011, p. 12) provides limited guidance to market observers of the government's presumptive "calculus" in pursuing fiscal consolidation.

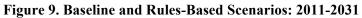
One way of gaining a sense of the implications of the minimum adjustments and the cap on the primary surplus for the pace of debt reduction spelled out in the proposed framework is to simulate the rules over an extended period. To this effect, Figure 9 illustrates the impact of applying the applicable fiscal rule over the period 2011-2031. The baseline takes as a starting point the medium-term scenario under the EU/IMF programme (IMF, 2011) to 2015. Thereafter, fiscal variables are simulated based on the following assumptions:

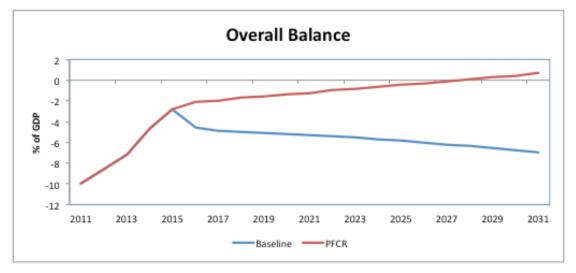
- Real GDP growth: 3.3 per cent per annum
- **GDP deflator**: 1.5 per cent
- Nominal interest rate: 5.8 per cent
- Non-age, non-interest outlays: Percent of GDP in 2015 held constant
- Revenue: Percent of GDP held constant
- Age-related costs: Projected increases in EC's 2009 Stability Report
- Capital spending: Percent of GDP held constant

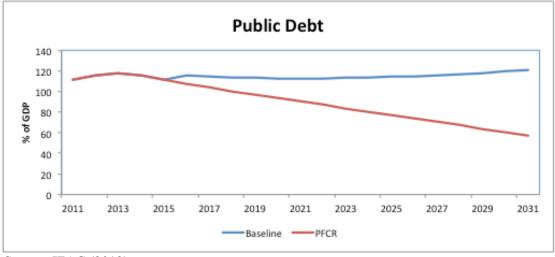
Under the baseline "constant policy" scenario (i.e., without fiscal rule), public debt remains high and well over 100 per cent of GDP. The growth of ageing-related spending does not accelerate substantially until the middle of the fourth decade, but its impact is nonetheless noticeable in sustaining the high debt level. In the "policy rule" scenario, the minimum adjustment to the primary balance is applied throughout the simulation period, with the adjustment allocated arbitrarily 2/3 to spending cuts and 1/3 to revenue increases. The minimum adjustment is thus $1\frac{1}{2}$ per cent of GDP until debt has fallen below 90 per cent of GDP, or until the primary balance reaches the 4 per cent of GDP ceiling. As is evident in Figure 9, abiding

⁷ In the simplest formulation, the dynamics of public debt is given by the equation $\Delta d_t = (i - g)d_{t-1} - pb_t$, where d is the ratio of public debt to GDP, i is the nominal interest rate on public debt, g is the rate of growth of nominal GDP, pb is the primary balance as a share of GDP, and the subscript t is the budget year. For an extensive elaboration of debt dynamics, see Escolano (2010).









Source: IFAC (2012)

blindly to the rule would have a substantial impact, the primary balance rising rapidly to the proposed 4 per cent ceiling in 2016. The debt ratio would decline relatively rapidly, piercing the 90 per cent threshold of the rule early in the next decade, and reaching the 60 per cent SGP threshold ten years later. As in the case of the EU requirement of debt reduction, the rule would deliver a very front-loaded consolidation.⁸

The cap on the primary balance of course sets an upper bound on the pace of debt reduction, other things equal. While a sustained primary surplus of 4 per cent of GDP or more is the exception rather than the rule among EU Member states and OECD countries, Ireland's past fiscal performance demonstrates the feasibility of sustained large surpluses. During the period 1987-2000, the general government primary balance averaged 4.3 per cent of GDP, and 4.6 during 1995-2000. Admittedly, strong GDP growth was instrumental in achieving strong fiscal performance, and growth prospects are less favourable in the current environment. This speaks to the risks (to sustaining debt reduction) of setting ex ante a cap on the primary surplus. As stressed earlier, debt dynamics depend on a number of factors, including the gap between the nominal interest and GDP growth rates. A widening of the gap, whether due to higher interest rates, a lower rate of output growth, or a combination of the two, would have a substantial impact on the pace of consolidation; with a sustained gap of 2 percentage points, public debt would remain above the 90 per cent threshold at the end of the simulation period. This is illustrated in Figure 10, which shows the possible path of the debt-GDP ratio under the initial assumption for the gap (Figure 9), and under the alternatives of permanently higher gaps of 1 per cent and 2 per cent. In each case, it is assumed that the primary budget surplus is capped at 4 per cent of GDP. These mechanistic simulations naturally abstract from a host of "general equilibrium" effects of such prospective fiscal developments, and ignore likely policy responses by the government when confronted by such debt dynamics. Still, they serve to illustrate the potency of the interest rate-growth rate gap, and the potential brake on fiscal consolidation of capping the primary surplus.

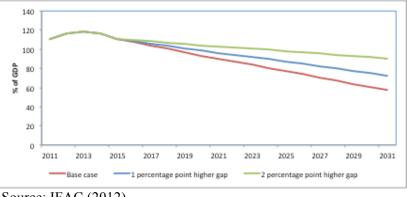


Figure 10. Sensitivity of Debt Reduction to Interest Rate-Growth Rate Gap

Notably absent from the rules is any clarity regarding the operation of the rules in the event of negative or positive shocks. Since the PFCR is based on improvements in the non-cyclically-adjusted primary balance, the impacts of a negative shock are presumably to be offset (at least up to the required minimum adjustment), with attendant pro-cyclical effects. Symmetrically, without a constraint on the use of revenue buoyancy in excess of forecasted revenues during an upswing, the improvement in the primary

Source: IFAC (2012)

⁸ Barnes and Davidsson (forthcoming, 2011) stress and illustrate the fact that, under the new fiscal provisions of the SGP, the debt reduction requirements will, in the presence of high debt ratios and, thus, high interest bills, impose a front-loading of consolidation that, in current circumstances, would be pro-cyclical.

balance could be held to the minimum, injecting a pro-cyclical fiscal impulse. This speaks to the importance of considering defining targets under the PFCR in cyclically adjusted terms.

D. Some possible improvements

The proposed rules suffer from two broad weaknesses that threaten their effectiveness. First, the rules are complicated; three rules apply under different conditions without a sound analytical basis for the differentiation. The different rules are in force solely in relation to the distance of debt and deficit from the SGP reference values, and the remaining progress needed to reach the MTO. Second, the rules are anchored solely to those gaps, and not by a medium-term fiscal strategy to reach a debt-GDP ratio that is achievable at a viable pace.

A key purpose in adopting fiscal rules is to enhance the government's credibility in restoring fiscal sustainability. Restoring sustainability requires a coherent fiscal consolidation strategy. The coherence of any strategy depends on many factors, including the extent to which the time profile envisaged for restoring sustainability and the chosen fiscal instruments (i.e., spending cuts and revenue increases) are mutually reinforcing (Hagemann, 2012). The choice of instruments is in large measure centered on efficiency considerations, and a well-conceived set of instruments will help both directly through savings and boosted receipts, and indirectly through supply-side effects. In this regard, the government's concentration on spending reductions that also contribute to efficiency gains (notably the public sector wage bill and reforms to welfare programmes) and revenue measures that are less inefficient than others (e.g., increases in the VAT rate and introduction of a flat universal tax on primary residences) bodes well for an eventual successful consolidation.

At the same time, beyond fiscal commitments under the Troika programme, the government's long-run consolidation time line is neither particularly well defined nor evident from the proposed rules. The time profile of a planned consolidation will depend on, *inter alia*, the size of the output gap, the strength of fiscal multipliers, and the potential costs of delayed action (OECD, 2010). In this regard, the still large negative output gap in Ireland would argue for a moderate pace of consolidation, while the openness of the Irish economy and resulting smaller fiscal multipliers would imply a weaker drag on the economy and, hence, more rapid consolidation. The potential costs of delay will be greater the larger is the excess public debt over the level at which endogenous negative feedback effects dissipate. While the implications of these considerations are not explicit in the proposed fiscal rules, they should underpin the design of the rules in such a way that the latter convey both intent—that is, the government's target endpoint for public debt and the time frame for reaching it—and feasibility—that is, is the debt trajectory realistic?

Short of considering simpler alternatives that would both satisfy the objectives and characteristics of good fiscal rules, and reflect an explicit consolidation strategy, some changes to the proposed rules could improve their likely effectiveness.

- Introduce into the framework a policy of specifying a medium-term target for the debt-GDP ratio and the desired time line for reaching it. In the absence of such an anchor, the proposed rules, notably the PFCR, provide little clarity about the authorities' fiscal goals beyond the minimum improvements in the primary balance specified by the rules.
- The PFCR should allow for the fiscal impacts of cyclical and other shocks. Couching the rulesbased targets in cyclically adjusted terms could help to achieve this. Notwithstanding the difficulties, estimation of potential output is needed in any event for compliance with the MTO objectives under the SGP. An alternative would be to set budgetary targets using a consensusbased estimate of the long-run underlying trend GDP growth rate, which is observable and minimizes methodological controversy.

- > A corrective mechanism is needed in the event that outcomes differ from voted fiscal plans under the rules. A sound fiscal rule provides observers a clear indication of the process by which outcomes that differ from plans will be addressed. This is important at a minimum to allow for uncertainties surrounding eventual interest rate developments. Budget plans will be based on forecasts of growth and interest rates, but the impact on the debt-GDP ratio will depend on the actual levels of the interest and growth rates. Although the primary balance-the target in the proposed rules-based framework-is central to debt reduction, the eventual impact on the debt-GDP ratio depends on the total budget balance, which can be affected by unexpected interest rate and growth developments. In turn, ex post remedial actions—spread over time—are often warranted. The absence of a correction mechanism is likely related to the absence of a clear anchor for policy, such as a specific debt-GDP ratio that would be spelled out in a medium-term framework. A debt-GDP ratio target, along with projections for the interest rate and growth rate, would allow the government to identify the required primary balances needed each year to achieve the medium-term target. Since plans and outcomes often differ, pushing the aggregate off the predefined trajectory, the framework should provide for an automatic scheme for remedying the unexpected outturn. For instance, the rule could spell out operationally, and in what time frame, the correction is to occur.⁹
- Enhance the role of the Sustainable Expenditure Growth Rule. As formulated, the SEGR lies somewhat dormant in the framework since it formally becomes operational only once all SGP requirements have been fulfilled, including the MTO. Given the mounting evidence that large fiscal consolidations are more successful in the presence of expenditure rules, including when coupled with budget balance rules, a case can be made to operationalize the rule in conjunction with the PFCR. With consolidation requiring substantial spending cuts since the onset of the crisis, and more in the future under the Troika programme, this earlier "activation" might seem to be irrelevant. However, the purpose of the rules-based framework is in large part to assure markets of the government's commitment to sustain the effort beyond the programme. In turn, the rule could be statutorily invoked from the outset. To avoid strict linking of expenditure growth to underlying growth prior to reaching the MTO, a lower allowable growth rate of primary spending (e.g., 1-2 percentage points below the underlying rate of growth of the economy) could be considered.¹⁰

V. Summary remarks

This paper has attempted to provide guidance on the design of fiscal rules in Ireland. Ireland's fiscal record during the two decades leading up to the recent crisis was favourable. Although high and sustained economic growth played a key role, generally cautious discretionary policy during much of the period also contributed. Still, the 2000s witnessed slippage, with structural spending outstripping the underlying rate of growth of the economy and its potential to deliver the revenues on a sustained basis. Indeed, the revenue associated with the housing and construction boom was too quickly and easily assumed to be structural when it was in fact of a very temporary nature. The structural budget balance was therefore deteriorating in stealth. This alone would have warranted a rules-based framework to constrain policy makers to deliver greater fiscal discipline. An obvious option would have been an expenditure rule comprising cautious annual binding ceilings established over the medium term, coupled perhaps with a revenue rule to restrict uses of revenues in excess of forecasts. Typical restraints would be to restrict their use to debt reduction or to setting the extra revenue aside in a so-called "rainy-day" fund.

⁹ For a useful example of an operational debt rule and a built-in correction mechanism, developed for Hungary, see OECD (2010b), Chapter 2, Annex 1.

¹⁰ Annex 2 provides a backward-looking simulation that illustrates the potential potency of relying on a simple expenditure rule tying spending to underlying growth.

The one-off surge in the debt stock associated with the government's decision to provide massive support to the banking sector made the need for a rules-based system more acute. Having erased essentially overnight the consolidation that had been achieved during the previous two decades, the government is now faced with another debt reduction marathon that will have to be run in less propitious circumstances than during the last consolidation, given the outlook for much lower growth and, within a couple of decades, substantial spending pressures arising from the ageing of the population. Both to help regain credibility and access to the sovereign debt market, the government understandably sees potential gains to be achieved by adopting a rules-based fiscal framework. The rules that have been proposed, however, are not assured of gaining the needed credibility, due to their lack of simplicity (numerous rules for varying circumstances) and questionable adequacy (inflexibility in the face of potential shocks). This paper has offered some recommendations in this regard.

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Annex 1: A simple rules-based framework

Simpler and more transparent alternative rules could be considered that would offer greater chance of establishing credibility. One such rule is the so-called augmented growth-based balance (AGB) rule.¹¹ The AGB rule mimics a structural balance rule without requiring estimation of the output gap while still allowing automatic stabilizers to operate. The rule requires policy to be geared toward achieving the government's medium-term budgetary objective. And the rule can accommodate large budgetary shocks by anticipating a specific pace of adjustment in the event the budget deficit is moved off track by an unexpectedly large margin, such as when the debt stock experiences a spike, as in Ireland in 2008. The AGB rule can be written as:

$$d_t - d_{t-1} = (1 - b) (d_{t-1} - d^*) + a (g_t - g^*)$$
 $a > 0, 0 > b > 1$

where:

 d_t = the deficit in year t as a percent of GDP;

 d_{t-1} = the previous year's deficit as a percent of GDP;

 d^* = the government's medium-term deficit target as a percent of GDP;

- a = the semi-elasticity of the budget balance with respect to the variation of output around trend;
- g_t = the real rate of GDP growth in year t;
- g^* = the trend or long-run GDP growth rate;
- b = the pace of adjustment when the overall deficit in the previous year deviates from target.

The medium-term deficit target d^* should be set to deliver a sustainable level of the debt-GDP ratio and, for any member of the EU, one that is below the 60 per cent of GDP SGP reference value. Thus, d^* should be formulated on the basis of the primary balance required to achieve the debt target, given projected growth and interest rates. Ex post deviations of the latter would be compensated over time via the component $(1 - b) (d_{t-1} - d^*)$.

The rule emphasizes that the required minimum change in the budget balance is a function of how far the overall balance is from the medium-term budget target, and of the relative strength of growth. The former promotes medium-term adjustment, while the latter ensures counter-cyclical fiscal policy. The rule allows for a larger adjustment than otherwise in years when the actual balance is further from the medium-term target. If the parameter *a* is calibrated to capture the effects of automatic stabilizers, the structural adjustment required each year is equal to $(1 - b) (d_{t-1} - d^*)$, obtained by subtracting the term $a(g_t - g^*)$ from both sides of the equation.

In order for the rule to be binding on the government, the parameters a, b, and g^* , and the budgetary objective d^* , would be set in a fiscal responsibility law, giving them a legal foundation. The value of d^* poses some difficulty given the uncertainty about interest rates. An initial target would presumably be the MTO established in Ireland's *Stability Programme Update*. Unlike potential growth, which is model-dependent and more variable than trend growth, g^* can be determined in a fairly straightforward manner from actual historical GDP data. Periodic but infrequent changes to g^* can be made as structural reforms or endogenous structural changes (e.g., those arising from population ageing) take hold, or productivity shocks impact underlying growth. The parameter a should allow for the impact of automatic stabilizers and could, if desired, allow for some degree of discretionary policy. The more powerful the automatic stabilizers, the larger is a. The smaller is the value of b, the faster the required adjustment, and vice versa. In circumstances such as Ireland's at present, where the stock-flow impact on the debt stock has been huge and sudden, a fairly high value of b is warranted. As structural fiscal reforms begin to have positive

¹¹ See, for instance, IMF (2010) and Fletcher and Benelli (2010).

impacts on underlying growth, however, the pace of adjustment can be accelerated, and thus b lowered through legislation.

The rule has a number of attractive features. First, it is simple and easy to explain to the public and legislators. Once the key parameters and targets are set, budget policy is both determined *ex ante* and adaptable *ex post*. Importantly, the rule avoids the calculation of the output gap, problematic in a small open economy such as Ireland. Second, it is adequate for the objectives assigned to fiscal policy; it is flexible in the context of cyclical and other shocks, and is calibrated to achieve debt sustainability (given its medium-term framework). Third, the rule is transparent, providing observers clear guidance regarding the anchors of fiscal policy. Fourth, it can be made consistent with other policies, mostly structural in the case of Ireland where monetary and nominal exchange rate policies are absent. For instance, the pace of adjustment to shocks can be a function of the flexibility of labour and product markets. Fifth, compliance with the rule can be easily monitored, given the fact that core variables can be observed, and key parameters have been agreed.

The rule could be further adapted to take into account the need for the rule to guide budget policy when an external current account balance is also a concern of fiscal policy makers. This could be achieved by adding a third term:

$$d_t = d^* - a(g_t - g^*) + b (d_{t-1} - d^*) + \lambda (CA_{t-1} - CA^*)$$

where CA_{*t-1*} is the external current account deficit in the previous year as a percent of GDP and CA* is the "equilibrium" current account deficit as a percent of GDP. Admittedly, determination of CA^* poses significant challenges. Moreover, the gap $(g_t - g^*)$ is likely to be highly correlated with the current account deficit gap, posing risks of bias in setting the parameter λ .

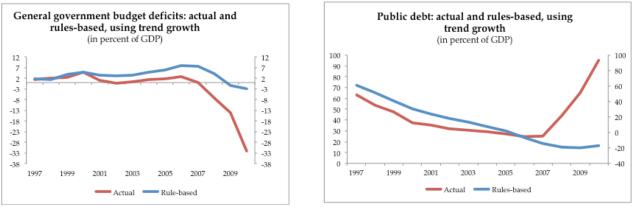
Annex 2

A Backward-Looking Simulation of the Sustainable Expenditure Growth Rule

The proposed Sustainable Expenditure Growth Rule (SEGR) would hold the rate of spending growth to the underlying growth rate of GDP. What if this rule had been in force during the past decade or so? Simulating this counterfactual should in principle be done using "real time" information available at the time policy choices were being made. In turn, one would simulate planned spending in year t+1 (and beyond in the case of a multi-year budgetary exercise) using the estimate of the underlying rate of growth available at that time. Similar "real time" data would be needed for other key variables: projected GDP growth, inflation, the unemployment rate, etc. Absent these data, it's nonetheless informative to simulate the implications this rule might have been for the fiscal balance and the debt stock had it been applied over the past decade or so on the assumption of perfect foresight. This is clearly unrealistic for most variables. However, underlying trend growth is not, and should not be assumed to be variable from year to year. Thus, a reasonable estimate of trend GDP growth at the outset of implementation of the policy would have been the average real rate of growth during the twenty or so years leading up to the start of the policy.

In the simulation depicted below, it is assumed that the SEGR is implemented beginning in 1997. Overall primary spending is assumed to grow annually at 5.1 per cent, the average rate of growth of real GDP during 1987-1996.¹² It is assumed that tax policies would have been left unchanged, such that revenue collections would have been the same as actually collected. Interest rates and inflation are also assumed to have been as observed.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Trend growth (% change)	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
GDP deflator	4.2	7.2	4.8	6.0	6.5	5.0	3.1	2.2	3.1	3.6	1.3	-2.3	-4.1	-2.4
Spending														
Current, excluding interest	19,968	22,505	24,790	27,610	30,901	34,106	36,942	39,675	42,977	46,783	49,798	51,117	51,540	52,843
Capital	2,303	2,596	2,860	3,185	3,565	3,935	4,262	4,577	4,958	5,397	5,745	5,897	5,946	6,096
Primary spending	22,271	25,101	27,650	30,795	34,465	38,041	41,204	44,252	47,935	52,180	55,542	57,014	57,486	58,939
Primary deficit	3,631	3,776	5,530	7,061	5,468	5,147	5,865	8,021	9,868	14,125	14,164	6,820	(3,371)	(5,655)
Interest cost	2,533	2,647	2,047	1,976	1,354	1,182	971	742	462	109	(479)	(810)	(1,062)	(1,065)
Total spending	24,804	27,749	29,697	32,772	35,819	39,223	42,175	44,994	48,397	52,289	55,064	56,204	56,423	57,873
Revenue	25,902	28,878	33,180	37,856	39,933	43,188	47,068	52,273	57,803	66,305	69,707	63,834	54,115	53,284
Overall deficit	1,098	1,129	3,483	5,085	4,114	3,965	4,893	7,279	9,406	14,016	14,643	7,630	(2,309)	(4,590)
% of GDP	1.6	1.4	3.8	4.8	3.5	3.0	3.5	4.8	5.8	7.9	7.7	4.2	(1.4)	(2.9)
Debt	41,968 📕	40,839 📕	37,356 🖡	32,271 📕	28,157 🖡	24,193 📕	19,299 🖡	12,021 🖡	2,615 🖡	(11,401) 🖡	(26,044) 🗖	(33,674) 🖡	(31,366) 🖡	(26,776)
% of GDP	61.2	51.5	40.9	30.5	23.8	18.4	13.7	8.0	1.6	(6.4)	(13.7)	(18.7)	(19.5)	(17.2)



Clearly, the policy would have been unsustainable in light of the rapid decline of gross debt. The simulation suggests that even under a relatively conservative rule, the discretionary intervention of policy makers is eventually warranted.

¹² The average of the rates of potential growth estimated by the OECD during 1997-2010 was around 5.3 per cent per year.