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Benczes, Istvan

Corvinus University of Budapest

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Rules-based economic governance in the European Union: A reappraisal of national fiscal rules

by
István Benczes
Associate Professor
Faculty of Economics
Corvinus University of Budapest
Fővám tér 8.
1093 Budapest
Hungary
istvan.benczes@uni-corvinus.hu

The economic and financial crisis of 2007/2009 has posed unexpected challenges on both the global and the regional level. Besides the US, the EU has been the most severely hit by the current economic crisis. The financial and banking crisis on the one hand and the sovereign debt crisis on the other hand have clearly shown that without a bold, constructive and systematic change of the economic governance structure of the Union, not just the sustainability of the monetary zone but also the viability of the whole European integration process can be seriously undermined. The current crisis is, however, only a symptom, which made all those contradictions overt that were already heavily embedded in the system.

Right from the very beginning, the deficit and the debt rules of the Maastricht Treaty and the Stability and Growth Pact have proved to be controversial cornerstones in the fiscal governance framework of the European Economic and Monetary Union (EMU). Yet, member states of the EU (both within and outside of the EMU) have shown an immense interest in adopting numerical constraints on the domestic level without hesitation. The main argument for the introduction of national fiscal rules was mostly to strengthen the accountability and credibility of national fiscal policy-making. The paper, however, claims that a relatively large portion of national rules were adopted only after the start of deceleration of the debt-to-GDP ratios. Accordingly, national rules were hardly the sole triggering factors of maintaining fiscal discipline; rather, they served as the key elements of a comprehensive reform package of public budgeting. It can be safely argued, therefore, that countries decide to adopt fiscal rules because they want to explicitly signal their strong commitment to fiscal discipline. In other words, it is not fiscal rules per se what matter in delivering fiscal stability but a strong political commitment.¹

Journal of Economic Literature (JEL) codes: E62, H50, H60

Keywords: fiscal consolidation, fiscal rules, European Union

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Introduction

The Maastricht modification of the Rome Treaty made it undeniably clear that the euro project could become a successful endeavour only if member states were willing to refrain from fiscal laxity and non-sustainable debt accumulation. First, the Maastricht convergence criteria, and some years later the Stability and Growth Pact, aimed explicitly at achieving fiscal discipline by limiting both the deficit and the debt ratios of the general government (i.e., the annual deficit could not be higher than 3 per cent of the GDP, and the debt ratio should be below 60 per cent or declining towards the target ratio).² Although the community-level numerical fiscal rules triggered continuous and tough debates in the European Union from the very beginning, member states became heavily engaged in adopting fiscal rules on the national level – that is, without any explicit or formal binding requirement induced by the Community itself. The motives for introducing national fiscal rules were numerous. Perhaps the most important one was the recognition that the obedience of the EU's 3 and 60 per cent limits could be achieved only if it was supported by some other restricting national forces. In federal states it was the state/regional level where politicians wanted to induce fiscal discipline, whereas other member countries decided to adopt rules in order to find a solution to the permanent disequilibrium in social security systems, a problem that would cause even more trouble in the future due to the ageing of the population. Furthermore, there was a clear intention to scale down certain types of public expenditures, especially the ones paid to welfare provisions.

The spread of adoption of national fiscal rules induced the Community to acknowledge this process explicitly in 2005, when a comprehensive reform of the Stability and Growth Pact was implemented. Accordingly, the Pact asked national rules to be in line with community-level disciplining forces. The Council of Economic and Finance Ministers (ECOFIN) went even further by endorsing national fiscal rules and asked member states to evaluate the effectiveness of their rules in their stability and convergence programmes, focusing especially on the adequateness of such national rules with Community-level goals (ECOFIN, 2005).

One year later, national fiscal rules were discussed in depth in the annual report of the European Commission on public finances (EC, 2006). The report claimed that national rules were able to bolster fiscal discipline significantly and called for the adoption of rules in those

² The Stability and Growth Pact, however, also claimed that member states must have achieved a close to balance or surplus position in their general budget in the medium run.

countries, too, where no such rules had previously existed.³ The Council, however, warned member states that the *one-size-fits-all* approach might have been harmful with regard to national rules; that is, every member state must have found the most appropriate disciplinary forces which could address the particular needs and problems of the specific country (ECOFIN, 2006).

The 2007/2009 financial and economic crisis, however, has posed serious challenges for the whole architecture of the euro-zone. Besides the US, the EU has been the most severely hit by the current economic crisis. The financial and banking crisis on the one hand and the sovereign debt crisis on the other hand have clearly shown that without a bold, constructive and systematic change of the economic governance structure of the Union, not just the sustainability of the monetary zone but also the viability of the whole European integration process can be seriously undermined.

At the start of the crisis, the European Union concentrated on crisis management almost exclusively and left the issue of crisis prevention untouched. It was only in 2010 when policymakers admitted that an *ad hoc* crisis management alone cannot guarantee the long-term sustainability of the euro-zone. As a corollary, policy-makers, along with the European Commission, started working on a renewed crisis prevention pillar of the Union. The EU has embarked on a wide-scale reform with regard to its economic governance structures and policies. The need to strengthen rules-based fiscal policy has emerged as a widely shared consensus amongst policy-makers. One of the most important aims of the EU has become to increase the efficiency of governance. By now, member states do not seem to be reluctant anymore to give teeth to the Stability and Growth Pact by endorsing a more rigorous monitoring and sanctioning system. Importantly, sanctions would be imposed on countries that violate the rules automatically; that is, discretionary and politically motivated decisions would be reduced to a minimum in the future.

Although most of the rules were suspended all over the world at the outburst of the current economic and financial crisis (IMF, 2009), the EU seems to insist on the usefulness of its national rules as one of the main devices in the exit process from Keynesian crisis management, i.e. fiscal profligacy. In its most recent report on the new economic governance structure, the European Commission claimed that national fiscal rules should have become an indispensable part of the new governing structure of the Economic and Monetary Union (EC, 2010a).

³ These findings were endorsed three years later, too, by the European Commission. See EC (2009).

The scrutiny of EU fiscal rules such as the Maastricht criteria and the Stability and Growth Pact has become the focus of many scholarly debates both within and outside the Community. The study of national fiscal rules, however, has remained a neglected part of scholarly works. This paper tries to remedy this discrepancy and thus analyzes the country-level fiscal rules of the EU. The aim is twofold: on the one hand, the paper wishes to discover the spread and significance of these rules in national legislation between 1990 and 2007; on the other hand it also attempts to clarify the role these rules played in establishing fiscal discipline. Following a short introduction, the paper starts with an overview of the major theoretical explanations of *deficit bias* (permanent and high annual budget deficit). Next, national fiscal rules are investigated in detail in a comparative perspective. The last section demonstrates how national rules can provide an exit route from fiscal profligacy, a highly characteristic phenomenon throughout the whole European Union during the heydays of the most recent economic crisis.

The political economy of deficit bias

The declared goal of adopting fiscal rules is the establishment of fiscal discipline, the curtailment of excessive and discretionary spending activities driven by political rationality.⁴ Fiscal rules are expected to constrain political decision-makers by restricting the scope for discretionary policies, thereby anchoring the expectations of not just voters but also market participants.

Originally, rules were introduced in the context of monetary policy in the late 1970s.⁵ Following the demise of Keynesian macroeconomic policy, rational expectation models claimed that it was rational for policy-makers to renege on their *ex ante* promises (i.e., low inflation) in order to bring about higher social welfare in the short run (in terms of higher inflation *cum* lower unemployment). *Kydland* and *Prescott* [1977] called this a time-inconsistent decision. Time-inconsistency, however, is attached not only to monetary policy; it is an imminent feature of fiscal policy, too.

⁴ Fiscal rules are such legal or non-legal constraints on discretionary fiscal spending which have been defined in terms of certain fiscal aggregates. (See especially *Kopits* and *Symansky*, 1998).

⁵ See especially the works of the late *Milton Friedman*, such as *Friedman* [1959].

In political economy literature it is generally assumed that there is a tendency towards excessive spending (and *deficit bias*) in democratic societies. Deficit spending can become a persistent phenomenon because elected politicians face incentives which induce them to spend more (or tax less) than the socially optimal level. One of the earliest rationalisations of deficit bias claims that voters have to live together with several structural-institutional deficiencies, which make them unable to internalise the entire costs of their extra spending; that is, voters are not fully sensitive to the intertemporal budget constraint of the state. The source of such deficiencies can be indeed the government itself, which tries to manipulate the structure of both taxes and spending so that voters would overvalue the benefits of budgetary policies and/or undervalue its real costs. Accordingly, *Buchanan and Wagner* [1977] argued that fiscal illusion existed among voters.

The costs and benefits of extra spending are, however, not necessarily distributed evenly amongst the members of a society. Transfers are paid to well-defined and targeted groups, whereas costs are burdened on the entire community of taxpayers. The discrepancy – i.e., the common resource pool problem – between costs and benefits ends up in excessive and permanent deficit (*Hagen*, 1992). A distributional conflict can evolve, however, not only amongst geographical constituencies (*Weingast et al.*, 1981) or line ministries (*Stein et al.*, 1999; *Velasco*, 1999) but also between generations: current generations can increase their consumption today by borrowing at the cost of future generations (*Cukierman and Meltzer*, 1989).

Debt can be manipulated in a strategic way, too, by the incumbent party in order to constrain the spending activities of the next government. The more likely the fall of the current government at the incoming elections, the more likely the strategic manipulation of the debt level (*Alesina and Tabellini*, 1990, and *Persson and Svensson*, 1989). Governments, however, may also find it beneficial to manipulate economic variables (including fiscal ones) in order to increase their chances of winning the next elections. Traditional political business cycle theory assumes myopic voters and adaptive expectations (*Nordhaus*, 1975), whereas rational expectations-based models assume the existence of asymmetric information with regard to the ability of the incumbents (*Rogoff*, 1990 or *Shi and Svensson*, 2002).

Asymmetric information may prevail even within a coalition government if parties cannot agree on the share of costs of a fiscal consolidation. War-of-attrition models predict that consolidation evolves only if the marginal benefit of additional waiting for one coalition member becomes equal with the marginal cost of delaying reforms further (*Alesina and Drazen*, 1991).

The European Economic and Monetary Union has created a unique coordination problem by having established a supranational institution for the conduct of monetary policy and having left fiscal decisions in the hands of national governments. While the mandate of the independent European Central Bank is clear, i.e., to maintain price stability throughout the *whole* euro-zone (TFEU Article 127.), member states can manipulate their fiscal policies in the interest of their own constituencies. As a corollary, the clash of diverging interests gives birth to common resource problems in the euro-area.

Assuming national currencies and flexible exchange rates, fiscal laxity would trigger a currency devaluation and a capital outflow. No such a disciplining force works, however, in case of a fixed exchange rate or in currency unions. The adoption of a single currency (such as the euro) strengthens the convergence of long-term interest rates (and government bond yields). Lowered interest rates in turn induce national governments to embark on further debt accumulation, thereby endangering the stability of the entire currency area. Thus, a common resource problem evolves as a consequence of cheaper deficit financing: spending governments expect other (disciplined) member states to finance the costs of their extra spending, which can surge to unsustainably high levels in times of an economic crisis.⁶

National fiscal rules in EU countries

The comparative analysis of national fiscal rules covers the 27 member states of the EU, concentrating on the period between 1990 and 2004/2007, that is, before the outbreak of the recent economic and financial crisis.⁷ Data have been taken from the data base of the European Commission and the OECD (EC [2010*b* and 2010*c*], OECD [2009], and the AMECO database of the ECFIN). The analysis includes only those fiscal rules which have been adopted (1) on a national (or federal) level; (2) on a regional (state) level; (3) or in the

⁶ See the logic of the prisoners' dilemma. The creation of a monetary union can strengthen deviant behaviour (i.e., deficit bias) even if participating states would run balanced budgets without a currency union (*Detken et al.*, 2004).

⁷ Those fiscal rules were selected into the sample of this study which had been introduced until 2004. Delayed effects of fiscal rules were, however, detected until 2007, that is, just before the eruption of the 2008-2009 financial and economic crisis. In some cases (especially in new member states), data were available for only the period following 1991/1992.

social security system. Accordingly, rules introduced on the local level have not been selected for the purpose of this study.

Furthermore, the comparative analysis has been restricted to (1) debt rules, (2) balance budget (or deficit) rules, and (3) expenditure rules. Generally speaking, the primary aim of debt rules is to ensure the long-term sustainability of public finances in such a way that relative flexibility can still be maintained in the conduct of annual fiscal policy. Balanced-budget rules are defined either in terms of some parts of the general budget, or they are applied for the whole general government. Although balanced budget rules are transparent and it is easy to monitor their compliance, they may also prove to be rather inflexible. It is quite often the case, therefore, that countries adopt balanced budget rules in cyclically adjusted forms. The drawback of this latter approach is, however, the complexity of the method of calculating the effects of business cycles appropriately.⁸ Expenditure rules are relatively recent. These rules provide an upper limit for various specific spending items of the budget.

Based on the former restrictions, the 27 EU countries adopted fiscal rules on 39 occasions between 1990 and 2004.⁹ Except for Greece, every single country decided to introduce rules in the group of the old member states (EU-15) – see Table 1. Finland and Luxembourg adopted rules the most frequently, on 4 occasions in total.¹⁰ The most attractive rule these countries had chosen to adopt was the balanced budget rule: 10 countries out of 15 used them. Expenditure rules proved to be a frequent choice, too: 9 old member states operated with them.¹¹

⁸ Flexibility can also be strengthened by the adoption of the so-called golden rule, which prohibits deficit financing only for current expenditures. As such, public investment can still be financed out of debt. Golden rules were categorised in this sample as balanced budget rules.

⁹ Some countries adopted fiscal rules well before 1990. These states were the following: Belgium (balanced budget rule), Luxembourg (debt rule), Germany (golden rule) and Spain (debt rule).

¹⁰ Luxembourg decided to enact fiscal rules despite its incredibly low debt-to-GDP ratio, which remained below 10 per cent in the period under scrutiny.

¹¹ While debt rules and deficit rules were adopted on the Community level (see the Maastricht criteria and the Stability and Growth Pact), no such a rule (i.e., expenditure rule) has been adopted yet on a supranational level.

Table 1. Fiscal rules in EU-15 (1990–2004)

	Debt rule	Balanced budget rule	Expenditure rule	Number of episodes
Austria		1999, 2001		2
Belgium		1992	1993, 1995	3
Denmark		1992	1994	2
Finland	1995	1999, 2003	1999	4
France			1997, 1998	2
Germany				–
Greece				–
Ireland			2000, 2004	2
Italy		2001	1999, 2001	3
Luxembourg		1992, 1993, 1999	1999	4
Netherlands			1994	1
Portugal		2002		1
Spain	2003	2002		2
Sweden		2000	1996	2
UK	1997	1997		2

Source: own compilation based on EC [2010c].

Old member states introduced rules mostly on a regional/state level in the early nineties. Later on, however, federal and national level rules (especially for the central budget and the social security system) became more widely used. Most rules were adopted in the context of the central government: its number (15) equalled the total amount of rules used for the general government, the social security system and the regions.

Not only old member states, but also new ones decided to induce discipline in their public finance activities by institutionalising a rule-based regime. See Table 2 for details. The most active country was the Czech Republic, which adopted its first rules right after the 1997 currency crisis. Yet, the most well-known rules were introduced by the Polish, who incorporated a debt rule even into their national constitution. The Polish fiscal rule has become an example to follow for some other new member states (such as Hungary and Bulgaria), as part of their exit strategy from the crisis.

It is worth pinpointing that debt rules have become the least popular amongst old member states, whereas countries having joined the EU after 2004 used this type the most frequently. One explanation for such a difference is the fact that the Stability and Growth Pact made debt rule an integrated part of Community-level legislation, so these countries opted for other, mostly supplementary alternatives (expenditure rules for instance). Another distinguishing feature of the group of new member states has been that these countries

adopted rules with a much wider coverage; basically, the whole general government fell under control.¹²

Table 2. Fiscal rules in EU-12 (1990–2004)

	Debt rule	Balanced budget rule	Expenditure rule	Number of episodes
Bulgaria	2003			1
Cyprus				–
Czech Republic	1998, 2004			2
Estonia		1993		1
Hungary				–
Latvia				–
Lithuania	1997			1
Malta				–
Poland	1997			1
Romania				–
Slovakia	2002		2002	2
Slovenia	2000			1

Source: own compilation based on EC [2010c].

According to political economy arguments, the main motive for the adoption of fiscal rules is the hope for strengthening fiscal discipline by anchoring the expectations of rational agents. One way to proxy fiscal discipline is to measure the change in the debt-to-GDP ratio (see for instance EC, 2006). In contrast to the annual budget deficit, the size of debt and especially the dynamics of its change (i.e., the speed of acceleration) have a direct impact on the future potential growth rate of an economy. The accumulation of debt can significantly add to the future tax burden of individuals (*Barro, 1979*), and also it reduces readiness to invest (*Baldacci and Kumar, 2010*).¹³

In the period under investigation, the debt-to-GDP ratio declined by an annual 0.5 per cent (of the GDP) on average in EU-27 – independently from the fact whether a fiscal rule was introduced or not.¹⁴ Two explanations can be given for this somewhat surprising observation. The general explanation is that from the very early nineties onwards, inflationary

¹² The only exceptions were Slovakia and the Czech Republic, where rules covered the regional governments

¹³ *Reinhart and Rogoff* [2010] found that an annual growth deficit of 2.5 per cent emerged between countries of low debt ratios (below 30 per cent of the GDP) and high ratios (above 90 per cent). *Kumar and Woo* [2010] added that a 10 percentage point increase (in GDP) of public debt lowers economic growth by 0.2 per cent on average. This effect is more significant in emerging and developing countries due to their higher cost of debt financing.

¹⁴ Standard deviation, however, was relatively high in the population of EU countries: 4.0

bias was significantly curbed and a stable economic growth was initiated in both the developed and the developing parts of the world. The two-decade-long period was termed as the Great Moderation in the literature (*Csaba, 2010*). A more specific explanation is provided, however, by the EU itself. Member states showed a strong dedication to fiscal consolidation in the nineties as part of their qualification attempts to enter the euro-zone. The lowering of the debt ratio was fuelled by different sources, therefore: (1) by accelerated economic growth, (2) by lowered (real) interest rates, and (3) by recovery in the primary general government balance.

Table 3. Change in the debt-to-GDP ratio in the whole population and the sample of countries with fiscal rules

	Change after one year	Change after 3 years
Entire population (N=364)	-0.5 (4.0)	-1.4 (9.7)
Fiscal rules (n=33)	-0.8 (3.3)	-3.9 (6.7)

Source: own compilation.

Notes: Changes are as per cent of the GDP. Standard deviation in brackets. The number of fiscal rule episodes dropped to 33 from the original 39 because some countries introduced two different types of rules in the same year.)

In fact, four countries in the group of EU-15 achieved a two-digit number improvement in their debt-to-GDP ratios: these were Belgium, Denmark, the Netherlands and Sweden (see Table 4.). Ireland (which experienced a dramatic drop of 68 percentage points) and Spain produced also a negative debt dynamic, but the 2008-2009 crisis caused severe challenges with regard to the sustainability of public finances. A further group of old member states (Austria, Finland, Luxembourg and the UK) could increase their indebtedness without violating the 60 per cent limit set up in the Stability and Growth Pact. Only 5 countries – France, Greece, Germany, Italy and Portugal – did not abide by the community-level debt-rule and accumulated debt on a permanent basis. That is, these five countries entered the crisis with an already high debt ratio, which significantly narrowed the room for fiscal laxity as a possible cure of losses in economic output and employment. Table 4 convincingly informs that the emergence of a kind of reform fatigue (see *Briotti, 2004*) was hardly the case for the whole European Union. Only a few countries embarked on lax policies after the launch of the EMU project in 1999. Countries which successfully managed to lower their debt ratios achieved their best results in 2006 and 2007; that is, well *after* the start of the EMU project and just before the eruption of the current economic crisis.

Table 4. Changes in the debt-to-GDP ratio in EU-15 countries (1990–2007)

	1990	Minimum*	2007	Change (1990–2007)
<i>Group A</i>				
Belgium	125.7	84.2 (2007)	84.2	–41.5
Denmark	62.0	26.8 (2007)	26.8	–35.2
Netherlands	76.8	45.5 (2007)	45.5	–31.3
Sweden	72.4**	40.5 (2007)	40.5	–31.9
<i>Group B</i>				
Ireland	93.2	25.0 (2006)	25.1	–68.1
Spain	42.6	36.1 (2007)	36.1	–6.5
<i>Group C</i>				
Austria	56.1	56.1 (1990)	59.5	+3.4
Finland	14.0	14.0 (1990)	35.2	+21.2
Luxembourg	4.7	4.1 (1991)	6.6	+1.9
UK	33.3	33.3 (1990)	44.2	+10.9
<i>Group D</i>				
France	35.2	35.2 (1990)	63.8	+28.6
Greece	71.0	71.0 (1990)	95.6	+24.6
Germany	39.5	39.5 (1990)	65.0	+25.5
Italy	94.7	94.7 (1990)	103.5	+8.8
Portugal	55.0	50.4 (2000)	63.6	+8.6

Remark: *The year in which the minimum ratio was achieved is in brackets. ** data as of 1994. Data are as per cent of the GDP.

Source: own compilation based on EC [2010b].

Debt ratios posed a real challenge only for a few countries amongst new member states. Relatively high debt ratios were mostly not the direct result of the transformation process itself. Hungary, Poland and Bulgaria had suffered from huge indebtedness under communist rule already. One of the most relevant challenges for these three countries was therefore to turn back the upward trend of indebtedness. Bulgaria embarked on a drastic consolidation after 1997, by which the country was able to reduce its debt level from over 100 per cent to below 20 per cent Poland and Hungary initiated also ambitious adjustment programmes, which did bring about some results. Hungary, however, returned to deficit financing and debt accumulation in the new millennium again and entered the period of the recent crisis with a debt level higher than the Maastricht criteria. The crisis made the situation even worse and the Hungarian debt-to-GDP ratio peaked at 81 per cent by 2010.

Table 5. Changes in the debt-to-GDP ratio in EU-12 countries (1990–2007)

	In the starting year	Minimum	2007	Change (Starting year–2007)
<i>Group A</i>				
Bulgaria	105.1 (1997)	18.2 (2007)	18.2	–86.9
Estonia	9.0 (1994)	3.8 (2007)	3.8	–5.2
Latvia	13.9 (1996)	9.0 (2007)	9.0	–4.9
Romania	16.5 (1997)	12.4 (2006)	12.6	–3.9
<i>Group B</i>				
Hungary	86.2 (1995)	52.0 (2001)	65.9	–20.3
<i>Group C</i>				
Cyprus	50.2 (1996)	50.2 (1996)	58.3	+8.1
Czech Republic	14.6 (1994)	12.5 (1996)	29.0	+14.4
Poland	43.4 (1996)	36.8 (2000)	45.0	+1.6
Lithuania	11.5 (1995)	11.5 (1995)	16.9	+5.4
Slovakia	22.2 (1995)	22.2 (1995)	29.3	+7.1
Slovenia	20.4 (1996)	20.4 (1996)	23.3	+2.9
<i>Group D</i>				
Malta	39.0 (1996)	39.0 (1996)	62.0	+23.0

Remark: Data are as per cent of the GDP.

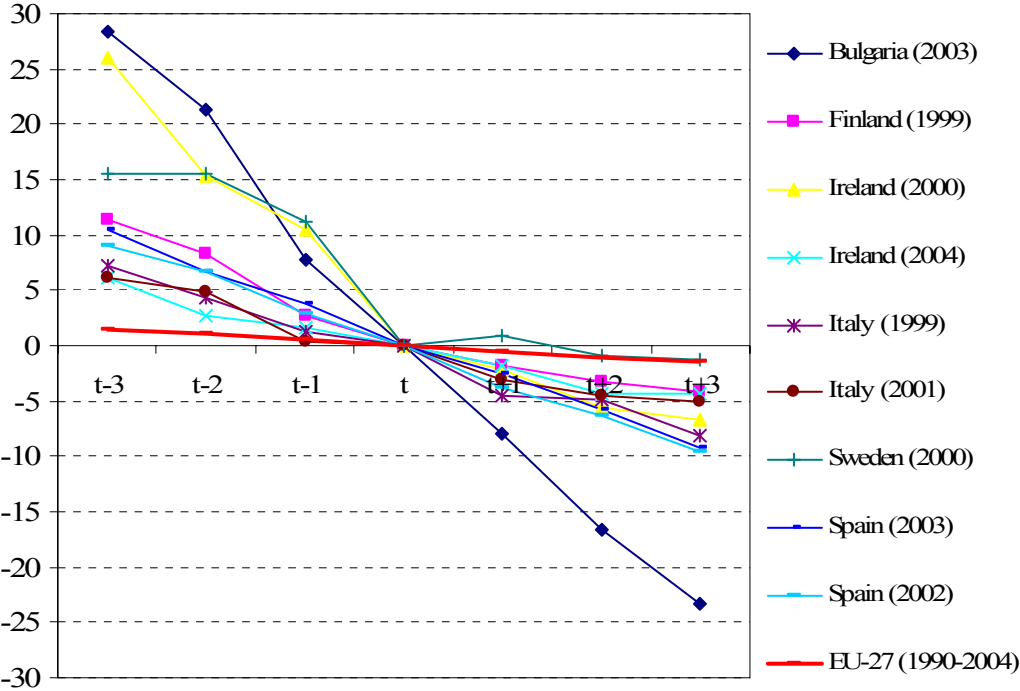
Source: own compilation based on EC [2010b].

The first lesson that can be drawn from the above scrutiny is therefore that establishing and/or strengthening fiscal discipline was by and large a general tendency in both new and old EU countries, irrespective of the fact whether it was facilitated by rules or not. Yet, countries which decided to support their efforts in pursuing fiscal discipline by fiscal rules were on average more successful than the whole population of EU-27. Debt-to-GDP ratio declined by 0.8 percentage point on average right after the introduction of the rule (standard deviation was however quite large: 3.3) in the sample of states with a rule as opposed to 0.5 per cent for the whole population. The cumulative effect of fiscal rules was even more substantial in the third year: the decline reached 3.9 percentage points on average (st. deviation: 6.7), which was more than 2.5 times higher than the decline in the entire population (1.5 percentage point). (Note that the data have been provided in Table 3.) It seems, therefore, that rules might have exerted a positive effect on fiscal performance of EU countries.

Yet, an assumed positive correlation between the introduction of fiscal rules on the one hand and improved fiscal discipline on the other hand does not signal the exact direction of such a relation. It might be that rules pave the way for fiscal discipline, but it might also be

the case that disciplined governments adopt rules in order to demonstrate their political commitments. This second hypothesis was supported by some evidence in EU countries, too. In fact, in half of the observed cases, the decline in the debt-to-GDP ratios was quite substantial already *before* the adoption of fiscal rule (i.e., in year t-1). Moreover, one-third of the cases showed a significant drop in the preceding three years; these episodes were the following: Bulgaria (2003), Finland (1999), Ireland (2000 and 2004), Italy (1999 and 2001), Sweden (2000) and Spain (2002 and 2003).¹⁵ (Details are reported in Figure 1.)

Figure 1. The change in gross public debt as compared to the year of rule adoption



Notes: The change in the debt-to-GDP ratios is zero in year t, time of the adoption of rules. The straight line labelled EU-27 (1990–2004) displays the change of the entire population as a benchmark (note that the annual average decline was 0.5 per cent of the GDP):

Source: own editing.

Accordingly, a sizeable group of countries decided to adopt rules only *after* their governments initiated improving measures in the general government. The question is, therefore, whether it was due to improved external conditions, such as increased economic growth (i.e., allowing countries to grow out of debt) or whether it was the decisive step of

¹⁵ Belgium (1995) and Slovakia (2002) experienced a significant drop in their debt ratios two years ahead of the introduction of their specific rules.

incumbents to consolidate the general budget or its parts. The results do not point into one direction, however. Some countries such as Ireland strongly benefited from high economic growth. Italy and Bulgaria initiated reforms mostly on the revenue side of the budget by increasing marginal tax rates and the tax base. Finland and Sweden, however, concentrated their adjustment efforts mostly on the expenditure side of the general budget. The Nordic countries cut back welfare subsidies and the salaries paid to the public sector substantially. Ireland had a special status not just with regard to the strong growth-effects but also because it adopted serious structural reforms, focusing mostly on the labour market.

The only common feature of these “successful” episodes was the substantial recovery in the interest payments. The drop in interest payments could not, however, be linked directly to the adoption of fiscal rules. Instead, a kind of Maastricht effect could be identified, that is, the process of changeover to the euro induced a relatively solid decline in the risk premia paid on treasury bonds in these countries. A summary of consolidation efforts focusing on the expenditure side is provided in Table 6.

Table 6. Changes in public spending before the adoption of fiscal rule(s)

	Final consumption on expenditure	Collective consumption on expenditure	Social transfers in kind	Social benefits other than social transfers in kind	Compensation of public sector employees	Interest payments	Gross fixed capital formation
Bulgaria 2003	✓--	✓✓-	---	✓-✓	✓--	-✓✓	✓✓✓
Finland 1999	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	-✓✓
Ireland 2000	✓✓✓	✓✓✓	✓--	✓✓✓	✓✓✓	✓✓✓	✓✓-
Ireland 2004	---	-✓-	---	---	---	✓✓✓	-✓✓
Italy 1999	-✓-	✓--	-✓-	-✓-	---	✓✓✓	---
Italy 2001	---	---	---	-✓✓	-✓-	✓✓-	-✓-
Sweden 2000	-✓✓	✓-✓	-✓✓	✓✓✓	✓✓✓	✓✓✓	---✓
Spain 2002	---	--✓	-✓-	✓✓-	✓✓✓	✓✓✓	✓--
Spain 2003	---	-✓-	✓--	✓-✓	✓✓-	✓✓✓	---

Notes:

✓: a decline in the specific spending item (measured in GDP),

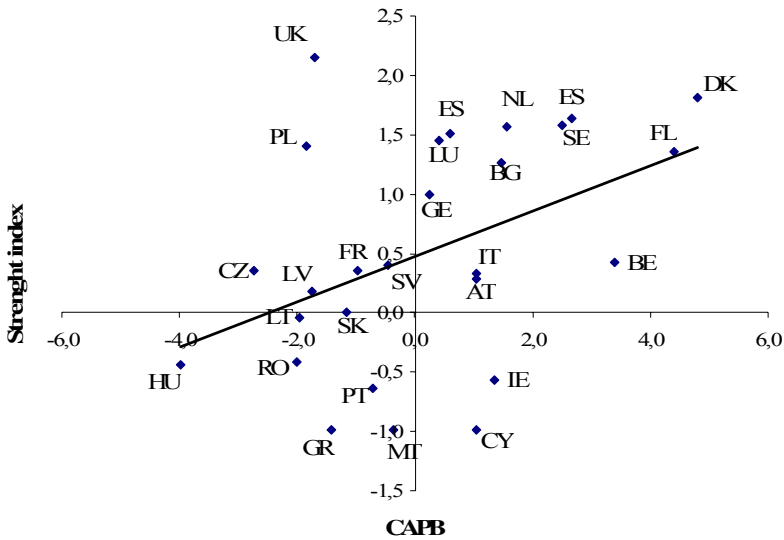
--: an increase or stagnation in the specific spending item (measured in GDP).

The first symbol refers to changes in period between $(t-3)$ and $(t-2)$, the second one displays the change between $(t-2)$ and $(t-1)$, whereas the last symbol refers to a change from $(t-1)$ to t .

Source: own compilation based on AMECO data base.

The European Commission has compiled a solid data set which enables us to qualify the strength of fiscal rules in a comparative manner. The strength is measured by a composite index encapsulating all the relevant qualitative features of rules such as the statutory base, the monitoring and enforcement body, the coverage, the sanctions, etc. Based on the EC (2010c) data set, it can be safely claimed that fiscal discipline (proxied by the cyclically adjusted primary balance of the general government) and the strength of rules display a robust and statistically significant correlation (the correlation coefficient is 0.43 in Figure 2). As a corollary, a further lesson that can be drawn from the EU-27 sample is the following: it is not simply the adoption of a rule that may contribute to fiscal discipline, but rather the design (i.e., the strength) of the particular fiscal rule. The best-performing countries with regard to the strength of fiscal rules are the ones which were also named in the previous section, that is, Bulgaria, Finland, the Netherlands, Spain, Sweden and Denmark.

Figure 2. The relationship between the strength of fiscal rules and primary balances



Note: : The average of standardised fiscal rules index (between 2003 and 2007) are highlighted on the vertical axis, whereas cyclically adjusted primary balance (CAPB) averages (between 2003 and 2007) have been plotted against the horizontal axis.

Source: own compilation based on EC (2010b and 2010c).

The role of fiscal rules in exit strategies

The 2007/2009 financial and economic crisis caused severe damages in advanced countries, which responded to the drop in economic activity by accumulating an accelerated aggregate demand from public sources.¹⁶ Crisis management, therefore, significantly contributed to the building up of unsustainable debt ratios. According to the IMF [2010a], the crisis itself and the crisis management (inclusive of bail outs of part of the banking sector) would increase advanced countries' debt ratios by 36 percentage points on average between 2007 and 2014. What this means is that the average debt-to-GDP ratio would climb above 110 per cent by 2015. The record-high levels can prove to be damaging to potential growth rates of these countries, which, however, may be lowered by 0.5 per cent of the GDP on average (IMF [2010b]).

The recovery from the crisis should induce countries to implement economic policies which not simply stop further deficit financing and debt accumulation, but also restore the long-term competitiveness and sustainability of the crisis-hit countries. The already high level of income centralisation does not allow advanced countries (especially the ones in the European Union) to further increase marginal tax ratios because this would endanger competitiveness of their economies on a world-wide scale. Crisis management, however, was pursued not by the lowering of taxes. Instead, governments engaged in extra public spending. Thus, exit from the crisis should concentrate on the expenditure side of the general budget, too. It is high time, however, for advanced countries to initiate consolidation efforts in a more systematic way than it has been previously carried out. No across-the-board type cuttings would contribute to the sustainability of economic growth in these countries. Targeted and well-designed adjustment efforts should be implemented instead, targeting areas such as the pension system, the health care system or public administration.¹⁷

¹⁶ In addition, monetary authorities adopted accommodative policies by reducing official interest rates to zero or close to zero.

¹⁷ The challenge of the aging population will pose an enormous trouble for EU countries in the next decades. If nothing is to change, age-related expenditures could increase automatically by 4 to 5 per cent of the GDP after 2020 (IMF [2010a]). According to the (ECB [2010]), the most severe problems would emerge in Greece (where an estimated 15.9 per cent of GDP increase is expected in public spending), Slovenia (12.8), Cyprus (10.8) and Malta (10.2).

According to the most recent plans of the European Commission and the European Council,¹⁸ fiscal rules can play a significant role in the exit process from the crisis by re-establishing fiscal discipline and putting an end to further debt accumulation. As it has been shown in this paper, fiscal rules may indeed contribute to the creation and maintenance of fiscal discipline, but the commitment of national governments to fiscal sustainability is probably even more important than the rules themselves. Just as the Maastricht process throughout the nineties (i.e., the qualification for euro-zone membership) helped politicians to demonstrate their willingness to refrain from unnecessary and destabilising discretionary deficit financing, the current financial and economic crisis may provide another window of opportunity for troubled countries to engage in comprehensive reforms of their general budget, thereby strengthening the position of the European Union on a global scale. Such an engagement can be supported by the adoption of well-designed fiscal rules, which would anchor the expectation of both voters and market agents. The supranational rules-based economic governance system supplemented by national fiscal rules, embedded in a medium-term fiscal framework, and a more enhanced and capable national system of statistical and monitoring offices can become integrated elements of not just the exit strategies but also a future-oriented governance structure.

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¹⁸ See EC [2010a] and European Council [2010].

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