ECONSTOR
Make Your Publications Visible.

A Service of

ZBW Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Mozdzierz, Anna

Working Paper

Strengthening the post-crisis fiscal rules - the case of Spain, Slovakia and Sweden

Institute of Economic Research Working Papers, No. 40/2014

Provided in Cooperation with:
Institute of Economic Research (IER), Toruń (Poland)

Suggested Citation: Mozdzierz, Anna (2014) : Strengthening the post-crisis fiscal rules - the case of Spain, Slovakia and Sweden, Institute of Economic Research Working Papers, No. 40/2014, Institute of Economic Research (IER), Toruń

This Version is available at:
https://hdl.handle.net/10419/219600

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

https://creativecommons.org/licenses/by/3.0/

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

Institute of Economic Research Working Papers

No. 40/2014

Strengthening the post-crisis fiscal rules – the case of Spain, Slovakia and Sweden

Anna Moździerz

The paper submitted to

VIII[th] INTERNATIONAL CONFERENCE ON APPLIED ECONOMICS
CONTEMPORARY ISSUES IN ECONOMY
under the title
MARKET OR GOVERNMENT?

Institute of Economic Research and Polish Economic Society Branch in Toruń

18-19 June 18-19, 2015, Toruń, Poland

Toruń, Poland 2014
© Copyright: Creative Commons Attribution 3.0 License

Anna Moździerz
anna.mozdzierz@uek.krakow.pl
Cracow University of Economics

Strengthening the post-crisis fiscal rules – the case of Spain, Slovakia and Sweden

JEL Classification: *H3, H62, H63.*
Keywords: *fiscal rule, fiscal policy, public debt, budget balance, public finance*

Abstract: The purpose of this article is to identify changes in the development of national fiscal rules in response to the crisis, in terms of the new economic governance in the EU. In-depth analysis was carried out on the example of the three countries that have the highest Fiscal Rule Strength Index, i.e. Spain, Slovakia and Sweden. The conclusions of the study were the basis for the formulation of recommendations for Poland. The research focuses on the new rules as well as the rules modified between 2007 and 2012. The key elements of creating fiscal rules and criteria used for their evaluation were recognized. The research shows that the strength of fiscal rules is determined by their legitimacy, the type of institutions monitoring them, the adjustment mechanism and sanctions, as well as the scope of the public sector, which the rule was imposed on. Short duration of most of the rules limits the ability to evaluate their effectiveness. However, the analysis of changes in the finance sector and local government in terms of new institutional arrangements allowed to conclude that the strong fiscal rules index is not a guarantee of maintaining public finance discipline, and the example of this was the varied fiscal position of the countries surveyed.

Introduction

In recent years, there has been a significant increase of interest of the fiscal authorities of EU members in the use of numerical fiscal rules. To a large extent, this is due to the economic governance reform, launched in 2011, which was a reaction to the negative consequences of the recent financial crisis. The essence of the reform boils down to building a system for monitoring economic policy in order to have early detection of macroeconomic imbalances and to strengthen the fiscal surveillance over national fiscal policies.

The Commission and the European Parliament have formulated a number of recommendations to the member countries, related to the conduct of the fiscal policy, including those relating to the institutional arrangements, such as fiscal rules. In accordance with the Council Directive (2011), strong numerical fiscal rules with

explicit objective are to be the basis for enhanced budgetary surveillance framework, together with mechanisms for effective and timely monitoring.

The aim of this article is to identify changes in the development of national fiscal rules in response to the crisis, in terms of the new economic governance in the EU. The new rules as well as those modified between 2007 and 2012 were the subject of the study. An in-depth analysis was carried out on the example of the three countries that have the highest Fiscal Rule Strength Index (FRSI), i.e. Spain, Slovakia and Sweden. The conclusions of the research were used to prepare recommendations for Poland.

Methodology of the research

The starting point of the research was a review of the world literature on the characteristics of fiscal rules. Key structural elements of the rules and criteria used for their evaluation were identified, which allows international comparisons. On the basis of the latest Fiscal Rule Strength Index (European Commission, 2012), three countries with the highest standardized indexes were selected for the in-depth analysis. Changes in the types of existing rules, as well as their structural components, occurring under the influence of the crisis and the EU guidelines were studied starting from 2007, when the financial crisis had begun. The approach used in the research was that of the European Commission, based on the concept of Deroose, Moulin, Wierts (2006). Another element of the research method was to analyze the fiscal position of Spain, Slovakia and Sweden in the light of the applicable national fiscal rules. The short period of time when the multiple rules were applied (especially those introduced in 2012) makes it impossible to evaluate their effectiveness. Nonetheless, even a preliminary assessment of the rules provided interesting results, also for Poland. The article uses the following abbreviations for the sectors: General Government - GG, Local Government - LG, Regional Government - RG, State Government - SG, social security - SS.

Review of literature on the characteristics of fiscal rules

Development of fiscal rules, observed in the last quarter of a century, has intensified in the recent years. It manifests itself not only in the increase in the number of rules, but also in important qualitative changes. While at the beginning of the 90s, national fiscal rules in the EU countries were used mainly in relation to the local government sector, rules covering the whole GG sector are now becoming common (EC, 2008, p. 76). There is also an increase in the importance and the number of transnational numerical rules, which are omitted in the article; it focuses instead on national institutions. However, it should be noted that many of the recently implemented rules in EU member countries are closely linked to the EU restrictions.

In the literature, there are many definitions of fiscal rules. The broader and narrower approach can be distinguished (e.g. Wójtowicz, 2011, p. 138). In broad terms, the fiscal rules are generally understood as standards governing fiscal policy. In this article, domestic fiscal rules are defined in narrower terms, according to the approach of Kopits and Symanski (1998, p. 3), most widely used both in the world and national literature. They define the fiscal rule as the permanent limitation of fiscal policy, which boils down to the imposition of quantitative restrictions on budgetary outcomes, such as the budget deficit, public debt or their main components. Restrictions can be expressed in absolute terms in relation to the above-mentioned elements, as well as in relation to economic variables. In other words, the policy rules may be permanent, or based on feedback. Constant policy rule is independent of the changes in the economy. The rule based on feedback is based on the relation between an increase/ decrease of some value and changes in a different category (e.g. in GDP).

Fiscal rules are defined as institutional mechanisms supporting the credibility of fiscal policy. Policy rules were primarily advocated by such economic schools as the monetarist orthodoxy, new classics, the real business cycle school, the Austrian School. In the literature, the advantages and disadvantages of using fiscal rules are indicated. Alesina and Perotti (1996) perceive fiscal rules not only as the tools to discipline public finances, but also as measures affecting the

prosperity of society. Rules are also a useful institution according to Buchanan (1997, p. 130), who argues that in the absence of restrictions imposed on, for example, local authorities, the practice of the process of democratic choice could result in debt beyond the boundaries of "efficiency", although the rising costs of servicing the loan could also impose certain restrictions on the over-extension of expenditure. It is a mistake, however, to present an uncritical approach to fiscal rules because of the negative consequences for the economy and public finances. The imposition of excessively restrictive rules could result in the restriction of investment opportunities in the public sector and the need for verification of public tasks, by transferring a part of the funding to the commercial sector or separating the relevant public sector units performing public tasks (Marchewka-Bartkowiak, 2012, p. 49).

Restrictive fiscal rules may lead to the use of creative accounting in order to maintain power and political reputation. Such a hypothesis is formulated by Milesi-Ferreti (2003, p. 377 – 394). Empirical evidence of the correctness of this hypothesis was provided by Hagen and Wolf (2004). Their research shows that fiscal rules introduced in the Pact for Stability and Growth and the consequent excessive deficit procedure resulted in the use of creative accounting by the member countries. An uneven approach to exceeding the limit of the deficit and the debt limit (the procedure was activated only in the case of excessive deficit) contributed to this. Meanwhile, the increase in debt in the period preceding the global financial crisis in many countries of the EMU showed a weak association with the size of the accumulated deficits (public debt).

Similarly, Fourçans and Warin (2007, 51-62) tried, using game theory, to prove that institutional solutions in the Pact, reinforced in 2005, would not reduce the phenomenon of moral hazard.

Research conducted by representatives of science, for example. J.M. Poterba [1994] A. Alesina, R., Perotti, (1996), as well as international institutions, i.e. The International Monetary Fund (2009), show the effectiveness of fiscal rules. The intended objective, however, requires a good design of a fiscal rule. The quality of fiscal rules is determined by the type of rules and their elements.

With regard to the type criterion, we can distinguish the following rules: budget balance, debt, expense and income. In this article, the

characteristics of the rules were not covered. I would like to refer the readers to publications by other authors (e.g. Działo, 2009; Wójtowicz 2011; Próchnicki, 2013, Marchewka-Bartkowiak, 2012; G. Paluszak, 2010). The article placed greater emphasis on the quality of fiscal rules which, in accordance with the assumptions, should improve the effectiveness of fiscal policy. Construction of high quality fiscal rules requires recognition of possible channels of influence on the economy and public finances. Buiter (2003, p. 84 - 99) formulated the Ten Commandments for a Fiscal Rule in the E(M)U, which can be used to design rules on a national level. According to Buiter the rule should be: 1) simple; compliance should be easily verifiable, 2) maintain the government's solvency, 3) apply to the financial deficit of the sovereign, that is, to the consolidated general government, 4) make sense also in the long run, 5) allow for relevant differences in economic structure and initial conditions, 6) make sense at the level of the individual nation state and for the EMU area as a whole, 7) credible, 8) enforced impartially and consistently. The rule should not: 9) prejudge the issue of the appropriate/optimal size of the public sector; 10) encourage pro-cyclical behavior of the policy instruments.

Research (Schaechter et.al., 2012) conducted in the period from 1985 to March 2012, using the sample of 81 countries, shows that the "new generation" rules are becoming more complex, combining the objectives of sustainable development with the need for flexibility in response to shocks. Thus, e.g. Agénor, Yilmaz (2011, 69-99) conducted research on the efficiency of alternative fiscal rules in a model of endogenous growth, demonstrating the advantage of the primary surplus rule over the balanced budget rule and the golden rule, from the perspective of long-term growth and response to shocks. From this point of view, it is interesting to combine the relationships between the fiscal rules and the key objectives of the country developed by IMF (2009, p. 6). They are presented in Table 1. They show that the expenditure rules and the rules of the limits of windfall gains interact with three main objectives, i.e. debt sustainability, economic stabilization and government size. You can see a very strong positive effect of the debt rule (expressed in relation to GDP) on the debt sustainability and the balanced budget rule over the cycle rule on the economic stabilization.

The information contained in Table 1 shows that, from the perspective of limiting pro-cyclicality, the concept which involves the construction of such fiscal rules that discipline public finances, leaving room for discretionary measures can be regarded as attractive.

These conditions are fulfilled by the balanced budget rule within the cycle. It gives a greater degree of freedom in the conduct of fiscal policy on a discretionary basis, in connection with moving away from the absolute requirement to balance the budget by the end of each financial year to the requirement to balance the budget within one cycle.

Table 1. Properties of Different Types of Fiscal Rules against Key Objectives

	Objectives		
Type of fiscal rule	Debt sustainability	Economic stabilization	Government size
Overall balance	++	-	0
Primary balance	+	-	0
Cyclically adjusted balance	++	++	0
Balanced budget over the cycle	++	+++	0
Public debt-to-GDP ratio	+++	-	-
Expenditure	+	++	++
Revenue	-	-	++
Revenue ceilings	+	+	-
Revenue floors	+	+	-
Limits on revenue windfalls	+	++	++

Note: Positive signs (+) indicate stronger property, negative signs (-) indicate weaker property, zeros (0) indicate neutral property with regard to objective.
Source: IMF (2009, p. 6)

This rule is difficult to apply because the duration of the cycle must be precisely determined. Therefore, in practice, the EU has given high priority to the rule of a cyclically adjusted balance, which is to maintain a balanced structural balance in each year's budget.

It is also worth noting that the quality of fiscal rules is determined by economic and institutional conditions in which it operates, so the IMF (2009, p. 32) issued a recommendation that the rule should not be introduced in a precarious economic situation.

Key elements of fiscal rules

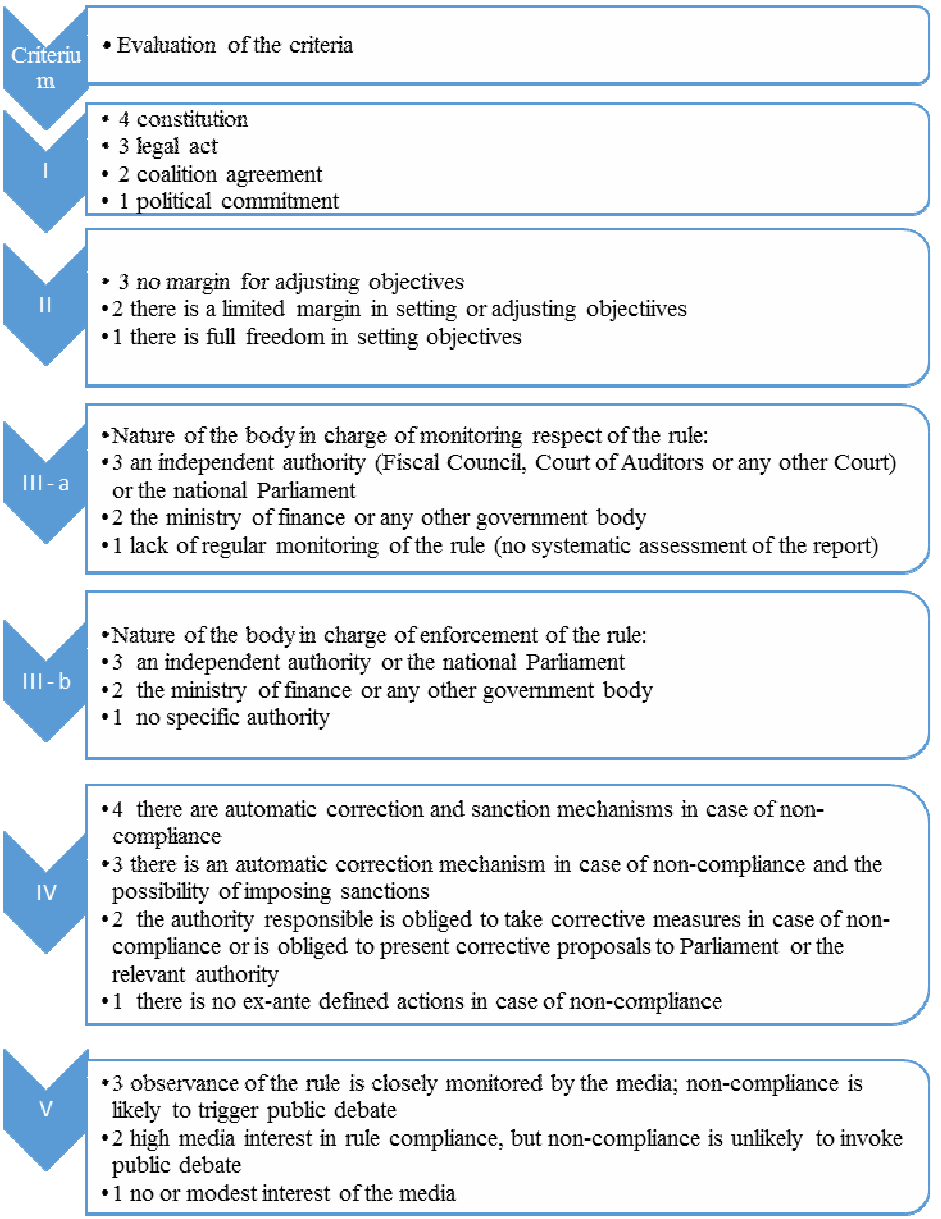
Quality assessment of such institutional arrangements as fiscal rules, which allows comparability between countries, is carried out by international organizations (European Commission, IMF) on the basis of a synthetic indicator called the Fiscal Rule Strength Index.

For its construction, the characteristics of the fiscal rules are used, judged on five criteria: 1) the statutory base of rule, 2) the room for revising objectives, 3) the mechanism of monitoring compliance and enforcement of the rule, 4) the existence of pre-defined enforcement mechanisms, 5) media visibility of the rule (EU 2006, p. 163 – 164).

Indexes are calculated for each fiscal rule based on the criteria, the assessment of which is described in Figure 1 as well as the ratio of the public finance sector covered by the policy. The cumulative index of fiscal rules in force in the country is obtained by summing the individual indexes. If several rules apply to the same range of public finances, a weight system is used (the methodology was described in the EU in 2006, pp. 149 - 167).

On the basis of the scores of the criteria, it can be established that the highest index will be applied to the fiscal rule: a) incorporated into a legal act with constitutional status, b) with no margin for adjustment of objectives, c) monitored by an independent fiscal institution or parliament - with automatic mechanism of correction and sanctions in case of non-compliance, d) closely monitored by the media, e) covering the entire scope of the GG sector.

Figure 1. The criteria for ranking the characteristics of fiscal rules



Source: Author's own study on the basis of (European Commission, 2012).

Table 2 shows the standardized index of fiscal rules in the EU in 2007 and 2012. The countries are ranked in descending order according to the index size in 2012. The difference in size between the study years, allows us to see the scale of strengthening of the fiscal rules, after negative experiences from the financial crisis.

Table 2. Standardized fiscal rules index in the UE countries in 2007 and 2012.

Country	2007	2012	Difference 2012 - 2007	Country	2007	2012	Difference 2012 - 2007
Spain	1.555	3.264	1.709	Austria	0.243	0.819	0.576
Slovakia	0.305	2.661	2.356	Estonia	1.059	0.671	-0.388
Sweden	2.298	2.464	0.166	Finland	1.008	0.408	-0.600
Bulgaria	1.483	2.233	0.750	Belgium	0.114	0.151	0.037
Poland	2.102	1.935	-0.167	Portugal	-0.041	0.129	0.170
Denmark	1.642	1.644	0.002	Latvia	0.074	0.074	0.000
United Kingdom	2.017	1.641	-0.376	Czech Republic	0.221	-0.139	-0.360
France	0.526	1.550	1.024	Italy	-0.144	-0.166	-0.022
Germany	0.501	1.422	0.921	Romania	-0.623	-0.623	0.000
Lithuania	0.371	1.338	0.967	Slovenia	0.438	-0.794	-1.232
Luxembourg	1.758	1.212	-0.546	Ireland	-0.800	-0.810	-0.010
Netherlands	1.115	1.191	0.076	Cyprus	-1.007	-1.007	0.000
Hungary	0.498	1.056	0.558	Malta	-1.007	-1.007	0.000
Greece	-1.007	0.977	1.984				

Source: European Commission, 2012.

Index of -1 means that the country did not use national fiscal rules. In 2007, this applied to Cyprus, Malta and Greece. Even in the context of new economic governance, Cyprus and Malta have not introduced national rules, whereas Greece has in 2012 implemented the primary balance limit in respect of the GG sector. The index at the level of 1.984 is an expression of the strength of this rule. The highest index has been granted to the rules in Spain (3.264). The index value greater than 2 characterizes the rules in Slovakia, Sweden and Bulgaria. Slovakia has strengthened the rules the most of all EU countries - the index rose from 0.305 in 2007 to 2.661 in 2012. It should be noted that in nine countries the index decreased

between the study years, especially in countries where already in 2009 it remained at a low level (Ireland, Slovenia, Italy, and Czech Republic). In the ranking of the strength of fiscal rules, Poland has a very high 5th place with an index of 1.935. It is significant that in Poland the index was higher in 2007 than in 2012. It is the result of a lower assessment of the institutional arrangements applicable to the local government sector (debt limit, deficit limit) according to the criterion of "media visibility of the rule" (2 in 2007, and 1 in 2012 - figure 1).

Comparison of rules functioning in Spain, Slovakia and Sweden

The rest of this article provides an in-depth analysis of the countries with the highest index of the EU fiscal rules. Table 3 summarizes the rules functioning in Spain, Slovakia and Sweden in the period under observation, indicating its scope (coverage of GG finances).

In all three countries, there were rules that imposed restrictions for the budget balance and public expenditure. In Spain and Slovakia the debt rules are additionally applied to both the local government sector as well as the GG. In Sweden no national debt limits have been introduced. In order to present the diversity in the field of applied solutions in different countries their characteristics are presented below.

Spain

In Spain in 2007, four fiscal rules were functioning, three of which referred to debt limits, and one to budget balance. The index in 2012 has been calculated on the basis of five fiscal rules, three referring to the debt, one which is the limit for the budget balance and one which is the limit for the public expenditure. In the period under observation, the rule relating to the budget balance has changed. The rule (ES-1), introduced in 2006, according to which budgetary objectives should take into account the cyclical nature of the economy, allowing budget deficits in periods of economic downturn (no more than 1% of GDP), with the requirement of the surplus in periods of high growth, remained in force until 2011. From

2012 onwards, more restrictive rule (ES-2) applies, according to which the government deficit (CG) and the deficit of the Autonomous Communities cannot exceed the limit set by the European Union and the budget of municipalities must be balanced. The rule covers 97.5% of the GG sector and has the strongest index of the rules in force in the country (8.77). The advantage of the current rule over the pre-existing one lies in the fact that it is incorporated into the Constitution and is subject to the automatic mechanism of correction and sanctions. The previous rule was introduced by a legal act of lower rank and did not define what actions were to be taken in case of exceeding the limit.

Table 3. The scope and strength of fiscal rules in selected EU countries in the period of 2007 - 2012

Rule no.	Type	Sector	Coverage of GG finances (%)	Fiscal rule strength index (FRSI)	Time when the rule was in force
Spain					
ES-1	BBR	GG	97.5	6.66	2006 - 2011
ES-2	BBR	GG	97.5	8.77	2012 +
ES-3	DR	LG	11.1	5.74	1990 – 2012 +
ES-4	DR	RG	32.2	6.81	1990 – 2012 +
ES-5	DR	RG	32.2	5.62	2003 - 2011
ES-6	ER	GG	70.0	5.72	2011
ES-7	ER	GG	70.0	6.92	2012+
ES-8	DR	GG	100.0	8.11	2012 +
Slovakia					
SK-1	ER	CG	47.2	8.04	2002-2011
SK-2	ER	CG	48.6	7.38	2012+
SK-3	DR	LG	14.6	6.01	2002-2012+
SK-4	BBR	LG	18.0	5.44	2005-2008
SK5	BBR	LG	11.6	6.64	2009-2012+
SK-6	DR	GG	100.0	9.71	2012+
Sweden					
SE-1	BBR	LG	46.3	5.84	2000-2012+
SE-2	ER	CG, SS	56.4	6.84	2007-2009
SE-3	ER	CG, SS	56.4	8.02	2010-2012+
SE-4	BBR	GG	100.0	6.66	2007 – 2012+

Note: BBR – budget balance rule; DR – Debt rule; ER – Expenditure rule.
Source: the same as Table 1.

The main rule relating to public debt (ES-8) also has a firm legal basis. Like the budget balance rule, it is incorporated into the Constitution and it is an expression of the implementation of the obligations of membership in the EMU. According to it, the debt of the GG sector must not exceed 60% of GDP. A characteristic feature of the rule is that its scope includes the GG sector, but the limits are different for the sub-sectors, i.e. 44% - Central Administration, 13% - Autonomous Communities, 3% - Local entities. Indicators refer to the entire sub-sector, hence the law (Ley Orgánica 2/2012, art. 14, par. 1) clarifies that the debt limit in each of the autonomous regions must not exceed 13% of the gross regional product. An automatic mechanism of correction and sanctions is built into the rule.

In Spain, since 1990, two rules on financial supervision apply - regarding the debt of the local sub-sector (ES-3) and the debt of the regional sub-sector (ES-4). The first one shows that the central government, or the Autonomous Communities, are authorized to approve all long-term credit operations carried out by the local authorities, if they have negative net savings or debt exceeding 75% of the current income. According to the second rule, borrowing by regional authorities requires the authorization of the government. In the period of 2003 – 2011, the debt of the RG sector was tightened by one more rule (ES-5), which obliged each unit of the local government to maintain the debt in nominal terms at the same level at the beginning and at the end of the financial year.

Reduction of expenses in the form of a numerical fiscal rule was introduced in Spain only in 2011. (ES-6). The limit was imposed on eligible expenditure growth, which, on an annual basis, must not exceed the medium-term growth rate of GDP, calculated on the basis of the average size of the GDP in nominal terms for a period of 9 years. In 2012, restrictiveness of expenditure rule (ES-7) was increased, through the extension of the scope of its applicability and by connecting it to automatic mechanism of correction and sanctions for non-compliance with the limit.

Sweden

In Sweden, there are two rules relating to the budget balance. In 2002 they introduced the principle of maintaining balance of the GG sector at 2% of GDP over the cycle. In 2007, this rule was mitigated

by adopting the criterion of 1% of GDP (SE-4). Since 2007, the rule operates on the basis of the Constitution before that it was regulated by the coalition agreement.

The second rule (SE-1) includes only the LG sector, forcing its subjects to maintain a balanced budget.

The implementation of the budget surplus is favored by the expenditure rule. It was introduced in 1996, but it was modified in 2007 (SE-2) and 2010 (SE-3). The essence of this rule is to establish a maximum spending limit of the central level and the expenses for pensions, which are settled in a non-budgetary system. Since 2010, a three-year planning period has been introduced. Apart from the rule, expenditure on public debt is allowed.

Slovakia

In Slovakia, the national rule of the GG sector balance has not been introduced. However, the rule disciplining the local government budget (SK-3, SK-4) has been functioning since 2002. It is based on highlighting the operating and the capital budget. The operating budget (current), must be sustainable or closed with a surplus. There is a deficit option in the capital budget, provided that unused funds from previous years, loans or a budget surplus in the current fiscal year are the source of its funding. In 2009, the possibility of imposing sanctions on the municipalities in the case of non-compliance with the principles was introduced.

At the same time, the debt limit (SK-3) was imposed on the local government sector (regional and local). The limit was set at 60% of the nominal current income in the previous year. The limit was also imposed on the annual installments of debt repayment, which must not exceed 25% of the nominal income in the previous financial year.

The implementation of the obligations arising from the signing of the Fiscal Pact in 2012 resulted in the introduction of a new debt rule which, within its scope, included the entire GG sector (SK-6). The rule was introduced by the Fiscal Responsibility Constitutional Act. The solution resembles prudential and remedial procedures operating in Poland since 1998. In Slovakia, four debt thresholds were introduced: 1) 50-53%; 2) 53-55%; 3) 55-57%; 4) 57-60%. The thresholds are to be applied until 2017, when they will be reduced so that the highest rate in 2027 will be 50%. It should be noted that it is

this fiscal rule that has received the highest index ratio of 9.71. Polish remedial and prudential procedures were granted the index of 9.05, mainly due to the smaller range of coverage of the public finance sector rule (97.5%).

Expenditure rule has applied in Slovakia since 2002. It also allows an increase in expenditure not included in the budget act during prosperity. Initially, the spending limit was set at 15% of total expenditure approved in the budget, and now it is 1%.

The spending can be increased only if the deficit remains unchanged. In 2012, the coverage of the rule was extended so that it included 48.6% of its public finance sector (previously 47.2%). Despite the tightening of the rules and expanding its range, the index of the rule decreased. This was caused by a decrease in media interest in the rule, which resulted in lower assessment of the rule, according to the "media visibility" criterion.

Characteristics of fiscal rules in Spain, Slovakia and Sweden will be extended to include the assessment of the institutional solutions adopted, on the basis of the assessment of the characteristics of the fiscal rules according to the criteria listed in Figure 1. In this analysis, attention was focused solely on the rules relating to the GG sector. The exception is to include expenditure rule in Slovakia, which is superimposed on the CG sector rather than on the GG sector. Due to the lack of the debt rule in Sweden, and the rule of the GG sector balance, comparisons in case of balance and debt rules will be carried out between the two countries, in which the rule can be found. Assessment of the rules is provided in Table 4.

The best score in the Fiscal Rule Strength Index (FRSI) was granted to the expenditure rule in Sweden. Its biggest advantage over the rules in other countries is that it is closely monitored by the media, so in case of a failure to comply with it, there is a high probability of a call for a public debate. In Slovakia and Spain the media interest in the rule is negligible. The expenditure rule in Spain, where the index is lower by 1.1 percentage points than the same index in Sweden, shows an advantage in connection with the built-in mechanism of action in the event of occurrence of non-compliance. The high assessments of expenditure rules in the countries surveyed consisted of such elements as their incorporation into a legal act and a lack of margin for adjustment of objectives.

In Spain, the budget balance rule, implemented in 2012, received better grades from the rule functioning since 2007 in Sweden. In the period of 2006 – 2011, the balance rule in Spain has already functioned, and its index was at the same level as for Sweden (6.66).

Table 4. Evaluation of the rules referring to the GG sector

	Statutory base	Adjustment margin	Monitoring body	Alert mechanism	Enforcement body	Non-compliance actions	Escape clauses	Media visibility	Fiscal Rule Strength Index
Debt rules									
Spain	4	3	2	1	2	4	1	1	8.11
Slovakia	4	3	3	0	3	4	1	3	9.71
Balance rules									
Spain	4	3	2	1	2	4	1	2	8.77
Sweden	3	2	3	1	1	1	0	3	6.66
Expenditure rules									
Spain	3	3	2	0	2	4	0	1	6.92
Slovakia (CG)	3	3	3	1	3	3	0	1	7.38
Sweden	3	3	3	1	2	2	0	3	8.02

Source: the same as Table 1.

The improvement is due to the strengthening of the rule in the aftermath of the crisis. In Spain, the rule was introduced into the Constitution and did not leave any margin for adjusting the objectives. An automatic mechanism of action in case of non-compliance was introduced. In Sweden, the rule is provided in a legal act of a lower rank than the constitution, and some margin in setting or adjusting the objectives is allowed. In the construction of the expenditure rule, greater emphasis was placed on the monitoring system, and the system of correction and sanctions was not accepted. As in the case of the expenditure rule, the media in Sweden show more interest in the rule than they do in Spain, which promotes the discipline of public finances. In Sweden, the rule covers the whole GG sector, while in Spain it covers 97.5%.

In case of the debt rule of the GG sector, the structure adopted in Slovakia was highly rated (9.71). Both in Slovakia and Spain the implementation of rules in 2012 was a part of disciplining measures aimed at public finances in EMU, in accordance with the guidelines of the new economic governance.

In both countries the rules received equally high marks for their legal basis in the constitution, disregarding the margin for adjustment of objectives, automatic mechanism of correction and sanctions, and the rule covering the entire GG sector. A higher value of the debt rule in Slovakia is the result of a stronger monitoring system of respecting and enforcement of the rule, as well as greater interest in the media.

With regards to the rules in force in Spain, it can be noticed that their weakness is the fact that the institution that monitors their compliance with the rules is the Ministry of Finance. The supportive function is fulfilled by the institutions of the regional sector, which control the fulfillment of the debt rule. In terms of monitoring the compliance with the rules, Sweden is the role model, as such powers have been given there not only to the Ministry of Finance and other institutions of the government sector, but also to the independent institutions, i.e. The Court of auditors.

The strengthening of the fiscal rules in the aftermath of the crisis is manifested by a change of their legitimacy. Table 5 presents rules, classified according to the criterion of the legal basis in 2007 and 2012.

Table 5. Legitimacy of the fiscal rules

	Constitution	Legal act	Coalition agreement
2007 r.			
Spain	X	ES-1; ES-3; ES-4	ES-5
Slovakia	X	SK-1; SK3; SK- 4	X
Sweden	SE-4	SE-1	SE-2
2012 r.			
Spain	ES-2; ES-8	ES-3; ES-4; ES-7	X
Slovakia	SK-6	SK-2; SK-3; SK-5	X
Sweden	SE-4	SE-1; SE-3	X

Source: the same as Table 1.

It draws attention to the increase in 2012 of the number of rules incorporated into the constitution, which is to be a guarantee of their sustainability and compliance. While in 2007, only Sweden has given constitutional status to the fiscal rule (budget balance), in 2012 each of the countries surveyed had such a rule. Constitutional authority with regards to fiscal rules in the countries within the euro area is a consequence of adopting the Fiscal Pact.

Slovakia incorporated the debt rule into the constitution, and Spain did the same with both the debt rule and the budget balance rule. Other rules are provided in legal acts of lower rank. In 2012, there were no rules, introduced on the basis of the coalition agreement. In Spain, the debt rule for the RG sector, based on the coalition agreement, was in force in the period of 2003 – 2011. Coalition agreement was the basis for the imposition in 2007 of the expenditure rule on the CG and SS sectors. Since 2010, the expenditure rule is based on a legal act.

Due to restrictions on the volume of the article, detailed solutions for the construction of fiscal rules, such as the exemption from the rule or the mechanism of correction and sanctions were not characterized.

However, as the mechanism of correction and sanctions was a rare element of the rules before the crisis, it was decided that an example of such a solution should be built into the debt rule in Slovakia. This mechanism means that when debt-to-GDP ratio reaches 50 percent, the Minister of Finance is obliged to explain the increase to parliament and suggest measures to reverse it. At 53 percent of GDP, the cabinet shall pass a package of measures to trim the debt and freeze wages. At 55 percent, expenditures would be cut automatically by 3 percent and next year's budgetary expenditures would be frozen, except for cofinancing of EU funds. At 57 percent of GDP, the cabinet shall submit a balanced budget (IMF, 2009, s. 22).

Changing the fiscal position of the surveyed countries

According to J. Działo (2009, p. 2) "rules seem to be an effective instrument because of their simplicity and transparency." These characteristics of the fiscal rules do not prejudice the effectiveness of the rules, the assessment of which must be based on the degree of

realization of the objectives. The results of empirical studies confirm the positive impact of fiscal rules on budgetary outcomes (EU, 2008, p. 77; Poterba, 1996). However, caution should be exercised when interpreting the results because the changes which have occurred in the budget expenditure, balance and debt can be attributed to the influence of other factors.

Most fiscal rules, which have received high marks, have functioned only from 2012 onwards. It is difficult to assess the effectiveness of the rules, but it allows for the formulation of some initial conclusions. The research period was extended by two years, i.e. 2006, which preceded the assessment of rules in 2007 and 2013 – the last year with available data.

The data in Table 6 shows that the lowest public debt occurs in Sweden, and it was achieved despite the absence of a national debt limit. In addition, the debt in relation to GDP between 2006 and 2013 decreased in this country by 4.6% of GDP and remains well below the EU rule (60% of GDP).

In Spain, - the country with the highest number and strength of fiscal rules, the debt level increased by 53.2 percentage points. The increase of debt by 23.9 percentage points also occurred in Slovakia, but its size is below the convergence criterion.

Table 6. Debt of the GG sector (% GDP)

	2006	2007	2008	2009	2010	2011	2012	2013	Difference 2013 : 2006
Spain	38.9	35.5	39.4	52.7	60.1	69.2	84.4	92.1	53.2
Slovakia	30.7	29.8	28.2	36.0	41.1	43.5	52.1	54.6	23.9
Sweden	43.2	38.2	36.8	40.3	36.7	36.1	36.4	38.6	-4.6

Source: Eurostat.

In Spain, after the budget surplus in 2006 and 2007, there were high, even double-digit, budget deficits every year in subsequent years. This occurred despite the budget balance rule, imposed on the GG sector, functioning since 2006. Strengthening of this rule in 2012 by means of the above arrangements is to contribute to the increase of fiscal discipline.

Table 7. Budget balance of the GG sector

	2006	2007	2008	2009	2010	2011	2012	2013
Spain	2.2	2.0	-4.4	-11.0	-9.4	-9.4	-10.3	-6.8
Slovakia	-3.6	-1.9	-2.4	-7.9	-7.5	-4.1	-4.2	-2.6
Sweden	2.2	3.3	2.0	-0.7	0.0	-0.1	-0.9	-1.3

Source: Eurostat.

In Slovakia, where the national budget balance rule has not been introduced, after a marked increase of deficits in the years of crisis, in 2013, the excessive deficit was eliminated. Finally, in Sweden, in which there is both the balance rule for LG sector, as well as balance rule for the GG sector, incorporated into the Constitution since 2007, the fiscal situation is the best. In the period of 2006 – 2008, Sweden showed a budget surplus, and in subsequent years, the budget was balanced or there was a small deficit (from -0.1% to -1.3% of GDP). This is all the more noteworthy considering that in 2009, the most acute year for the EU, it was Sweden that had the highest decline in GDP in comparison with the countries surveyed, as well as the highest output gap (Table 8).

Table 8. Cyclical adjustment of budget balances based on production function approach against the GDP and the output gap (prices from 2005)

	2006	2007	2008	2009	2010	2011	2012	2013
Spain								
CAB	1.0	0.6	-5.0	-9.2	-7.1	-6.8	-7.1	-3.3
GDP	4.1	3.5	0.9	-3.8	-0.2	0.1	-1.6	-1.2
GAP	2.8	2.8	0.9	-4.0	-5.3	-5.9	-7.3	-8.1
Slovakia								
CAB	-4.2	-4.3	-4.7	-7.6	-7.4	-4.4	-3.8	-1.6
GDP	8.3	10.5	5.8	-4.9	4.4	3.0	1.8	0.9
GAP	3.1	7.6	7.9	-1.1	-0.4	-1.1	-2.1	-3.4
Sweden								
CAB	1.1	1.8	1.9	2.7	1.2	0.4	0.3	0.1
GDP	4.3	3.3	-0.6	-5.0	6.6	2.9	0.9	1.5
GAP	2.1	3.0	0.4	-5.8	-1.5	-0.4	-1.4	-2.0

Source: European Commission, 2014, pp. 19, 30, 41.

Respecting the rule to maintain the budget balance at the level of 1% of GDP over the cycle has resulted in structural surpluses in the 2006 to 2013 period in the range of 0.1 - 2.7% of GDP.

In Spain, the structural deficits have occurred since 2008, and in Slovakia during the whole period under consideration. The solutions, adopted in the fiscal Pact, with regards to the size of MTO, which forced the EMU countries in particular to strengthen the national fiscal rules, have a positive impact on its implementation.

In all the countries surveyed, institutional solutions for the local government sector were successful, which is reflected in the budget balance for the LG sector (table 9), which is close to balance. Accordingly, there is a debt stability in the local sector. For example, in Spain, the local debt was 2.7% of GDP in 2006 and 4% of GDP in 2013. In Slovakia, the changes in the amount of debt between 2010 and 2013 reached 0.5 percentage points (from 2.7 to 2.2% of GDP) and in Sweden it was 2.1 percentage points (from 5.4% to 7.5% of GDP). In Spain, the deficit of the SG sector peaked in 2011, i.e. it reached. 5.1%, but in 2012 and 2013 it fell below 2% of GDP. This sector is responsible for 20% of GDP of public debt in Spain.

Table 9. Balance of the LG sector (% GDP)

	2006	2007	2008	2009	2010	2011	2012	2013
Spain	0.1	-0.3	-0.5	-0.5	-0.7	-0.8	0.3	0.5
Slovakia	-0.2	-0.1	-0.1	-0.7	-0.9	-0.1	0.1	0.2
Sweden	0.1	0.1	-0.1	-0.2	0.2	-0.3	-0.1	0.0

Source: Eurostat.

Countries covered by the research show significant differences in the size of public spending. In Spain and Slovakia public spending is below the average for EU28 (49.1% in 2013) and in Sweden, were in all years it exceeded 50% of GDP, it is above the average for EU28. Between extreme years, the biggest increase in expenditure was recorded in Spain by 6.4 percentage points. The increase in Slovakia was 2.2 pp., and in Sweden in 2013 it remained at a comparable level as in 2006 (a difference of 0.1 percentage points). Data on changes in expenditures in Sweden are a confirmation of the implementation of the country's sound fiscal policy (economic). The increase in public

spending was temporary in the most difficult economic times, after which it decreased.

Table 10. Expenditures of the GG sector as a percent of GDP

	2006	2007	2008	2009	2010	2011	2012	2013	Difference 2013 - 2006
EU28	46.2	45.5	47.0	51.0	50.6	49.0	49.4	49.1	2.9
Spain	38.4	39.2	41.4	46.2	46.3	45.7	47.8	44.8	6.4
Slovakia	36.5	34.2	34.9	41.6	39.8	38.9	38.2	38.7	2.2
Sweden	52.7	51.0	51.7	54.9	52.3	51.5	52.0	52.8	0.1

Source: Eurostat

Looking at the changes in the size of public spending in Spain, it can be assumed that its reduction in 2013 shows the relationship with the expenditure rule, reinforced in 2012. Both in the case of the expenditure rule as well as the other rules, verification of their effectiveness will be possible in a few years.

Conclusions

The growth of the fiscal rules in the EU countries, observed in recent years, is due to the modification of the EU fiscal framework, in accordance with the concept of the new economic governance, which is a response to the recent financial crisis. In the period covered by the research, the EU countries introduced new fiscal rules as well as strengthened the existing solutions. From the countries selected for analysis, the least fiscal rules characterized by the least variability occurred in Sweden. Spain applied the most rules in its fiscal policy. The introduction of the debt rule for the GG sector and strengthening of the fiscal rules in Spain in 2012, in accordance with the regulations for the member countries of the euro area, resulted in Spain obtaining the highest rank in the EU Fiscal Rule Strength Index. Sweden was third in the ranking and this country had a high index already in 2007, and within the time covered by the observations, it made only one change in the legitimacy of the expenditure rule.

In the ranking of fiscal rules, Poland was ranked fifth, with the index of 1.935, which means a reduction of 0.167 percentage points, when compared to 2007. The debt limit, stated in the constitution in

1997, received the highest grade. The limit was strengthened by prudential and remedial procedures included in the Public Finance Act (index (9.05). The expenditure rule received a rating of 7.47. The indexes of fiscal rules in 2012, relating to the LG sector, received the value of 6.58 for both the deficit rule and the debt rule.

On the basis of the conducted analyzes, the following conclusions can be drawn for Poland in this article:

Firstly, the introduction of fiscal rules should be preceded by research of their potential impact on economic stability.

Secondly, in order to achieve a high index of fiscal rules it is necessary to create solutions using highly ranked institutional key elements of fiscal rules.

Thirdly, we must remember that a strong index of fiscal rules does not guarantee the maintenance of public finance discipline, as demonstrated by a varied fiscal situation of the countries surveyed.

Fourthly, the case of Sweden stimulates a reflection that public finance discipline can be maintained without imposing an increasing number of fiscal rules, with built-in mechanism of correction and sanctions, etc. but by conducting prudent fiscal policy over the business cycle.

Fifthly, sound fiscal policy requires simultaneous approach to the expenditure and revenues (Owsiak, 2014); Uncritical approach to cuts in public spending in the conditions of adopted restrictions, requires verification of tax policy of the state.

Sixthly, when exacerbating the restrictiveness of national fiscal rules, the experience of the EU countries should be taken into account, avoiding the transnational rules.

Seventhly, to increase the effectiveness of fiscal policy in Poland, the establishment of an independent fiscal institution should be considered rather than introducing further quantitative restrictions. The institution, independent of the fiscal authorities, would increase the credibility and transparency of the policy, provide support for the government in respecting national and transnational fiscal rules, and, at the same time, constitute an obstacle to the hiding of discretionary decisions made by politicians from the public, resulting in deterioration of public finances (Moździerz, 2012, pp. 85-86).

References

Agénor, P.-R., Yilmaz, S.D. (2011). The tyranny of rules: fiscal discipline, productive spending, and growth in a perfect foresight model: *Journal of Economic Policy Reform*, 14(1), http://dx.doi.org/10.1080/17487870.2010.503086.

Alesina A., Perotti, R. (1996). *Budget Deficits and Budget Institutions*, Working Paper, 5556, National Bureau of Economic Research: Cambridge MA.

Buchanan, J.M. (1997). *Finanse publiczne w warunkach demokracji*, WN PWN, Warszawa 1997.

Buiter, W.H. (2003). Ten commandments for a fiscal rule in the E(M)U, *Oxford Review of Economic Policy*, 19(1), http:// dx.doi.org/10.1093/oxrep/19.1.84

Council Directive (2011). Directive on requirements for budgetary frameworks of the Member States, 85/EU, L 306/41.

Deroose, S., Moulin, L., Wierts P. (2006). *National expenditure rules and expenditure outcomes: evidence for EU Member States*, Wirtschaftspolitische Blätter , 1.

Działo, J. (2009). *Polityczne uwarunkowania jakości instytucji fiskalnych*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź 2009.

European Commission (2006). *Public finances in EMU 2006*, European Economy, 3.

European Commission (2008). Fiscal rules in the EU at national level: experiences and lessons, *Presupuesto y Gasto Público,* 51.

European Commission (2012). Numerical fiscal rules in the EU Member States, Retrieved form http://ec.europa.eu/economy_finance/db_indicators/fiscal_governance/fiscal_rules/index_en.htm (15.11.2014).

European Commission (2014). *Cyclical Adjustment of Budget Balances,* Directorate General ECFIN Economic and Financial Affairs, Economic databases and statistical co-ordination, Autumn.

Fourçans, A., Warin, T. (2007). Stability and Growth Pact II: Incentives and Moral Hazard: Journal of Economic Policy Reform, 10(1), http://dx.doi.org/10.1080/17487870701213599.

Hagen von J., Wolf, G.B. (2004). *What do deficits tell us about debt? Empirical evidence on creative accounting with fiscal rules in the EU*, Deutsche Bundesbank, Discussion Paper, Series 1: Studies of the Economic Research Centre, 38.

IMF (2009). Fiscal Rules—Anchoring Expectations for Sustainable Public Finances, Retrieved form https://www.imf.org/external/np/pp/eng/2009/121609.pdf (15.11.2014).

Kopits, G. (2001). Fiscal Rules: Useful Policy Framework or Unnecessary Ornament?, Working Paper, IMF.

Ley Orgánica 2/2012, de 27 de abril, de Estabilidad Presupuestaria y Sostenibilidad Financiera, 5730, BOLETÍN OFICIAL DEL ESTADO, Núm.

103, Sec. I. Pág. 32653, Retrieved form http://www.spanishreforms.com/documents/10180/12868 (17.11.2014).
Marchewka-Bartkowiak, K. (2012). Reguły fiskalne w warunkach kryzysu finansów publicznych: Ekonomia i Prawo, 10(3), http://dx.doi.org/10.12775/EiP.2012.023.
Milesi-Ferretti, G. (2003). Good, Bad or Ugly? On the Effects of Fiscal Rules with Creative Accounting: *Journal of Public Economics*, 88.
Moździerz, A. (2012). Przesłanki powołania rady fiskalnej w Polsce, *Zeszyty Naukowe PTE*: Kraków, 12.
Owsiak, S. (2014). Kontrowersje wokół wypierania dochodów z gospodarki przez finanse publiczne. In: J. Czekaj, S. Owsiak (Ed.), Finanse w rozwoju gospodarczym i społecznym, Warszawa: PWE.
Paluszak, G. (2010). Reguły fiskalne rządów na poszczególnych poziomach władzy w państwach członkowskich Unii Europejskiej: *Acta Universitetatis Loziensis, Folia Oeconomica,* 238.
Poterba, J.M. (1994). State Responses to Fiscal Crisis: The Effects of Budgetary Institutions and Politics: *Journal of Political Economy*, 102(4) http://dx.doi.org/10.1086/261955.
Poterba, J.M. (1996). Do Budget Rules Work?, NBER Working Paper 5550, National Bureau of Economic Research: Cambridge MA.
Próchnicki, L. (2013). Reguły fiskalne a stabilność fiskalna krajów Unii Europejskiej: Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania, Uniwersytet Szczeciński, 32.
Schaechter, A., Kinda, T., Budina, N., Weber, A. (2012). *Fiscal Rules in Response to the Crisis—Toward the "Next-Generation" Rules, A New Dataset*, IMF Working Paper, Fiscal Affairs Department, WP/12/187.
Symansky, S., Kopits, G. (1998), *Fiscal Policy Rules*, IMF Occasional Paper, 162, International Monetary Fund: Washington D.C.
Wójtowicz, K. (2011). Problem konstrukcji optymalnej reguły fiskalnej w warunkach kryzysu finansowego: *Zeszyty Naukowe PTE:* Kraków,10.