

Proposal for the implementation of a fiscal rule system for Romania. Estimate for the reaction of the fiscal rule system to the output's shocks

Cristian SOCOL

The Bucharest University of Economic Studies
cristian.socol@economie.ase.ro

Abstract. *This paper provides arguments for the need to improve the fiscal rule proposed by the European Commission within the Fiscal Compact, considering the implementation of an augmented growth-based balance rule optimum for Romania. The first part of the paper presents the proposal for the implementation of an integrated system of fiscal rules in Romania. In the second part of this paper, we can find simulations for the reaction of the fiscal rule system proposed for the shocks occurring in the economic growth, these estimates being made by the help of the specialists from the National Forecast Commission.*

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JEL Codes: E62, F15.

REL Codes: 8K, 8M, 20H.

IMF (2009) shows that “the targeting of a certain level of the structural budget balance comparative with the situation of the budget balance provides a strong mechanism which increases the flexibility in the response to shocks”.

1. Introduction. Proposal for the implementation of a fiscal rule system in Romania

After researches made in the economic literature and in the good international practices regarding the functioning and the implementation of the fiscal rules, we have proposed an integrated system of fiscal rules for Romania: a Fiscal Rule on the Structural Budget Deficit of maximum 0.7% of the GDP in 2015 (with annual intermediate targets) plus a Fiscal Rule on the Public Debt of maximum 40% of the GDP, with the implementation of corrective measures at the thresholds of 35% of the GDP, respectively 40% of the GDP plus Fiscal Rules on the Budget Expenditure (actually, the functionalization of those already established in the Fiscal Responsibility Law) plus Additions to the system of fiscal rules with statement of exoneration clauses regarding the reaching of the targets and a system of sanctions plus the Adjustment of the fiscal rule to inflation, thus eliminating the inflationary component of the debt service from the budget balance.

The problems related to the uncertainty of the estimation for the potential GDP and of the output involve the need to test the efficiency of the structural balance rule, of the augmented structural balance rule, and also the stimulation of the efficiency of the adjustment to shocks and of the response to the previous deviations in the case of the growth-based balance rule and of the augmented growth-based balance rule for Romania.

The proposal for Romania refers to the use of an augmented growth-based balance rule – AGBBR. The augmented growth-based balance rule includes a term which “tames” the adjustment in the case of the budget balance’s deviation from the target settled for a medium term (rule proposed by Fletcher and Benelli, 2010)

$$b_t = b^* + a(g_t - g^*) + e(b_{t-1} - b^*), \text{ with } a > 0 \text{ and } 0 < e < 1$$

where b_t – the real budget balance in the current year; b^* represents the medium-term budget balance target, a – semi-elasticity of the budget balance in relation to the output gap; g_t – growth rate of the real GDP in the current year, g^* – the average growth rate of the GDP on a long term and e – the deviation correction rhythm in the total budget balance in the last year compared to the medium-term settled budget balance target. This additional term $e(b_{t-1} - b^*)$

delays the adjustment of the deviation from the previous target, thus increasing the anti-cyclicality of the rule (the sign of the adjustment term is positive, differing from the sign of the adjustment term presented in the augmented growth-based balance rule, where adjustment is accelerated) (IMF, 2009).

This fiscal rule replaces the output gap with the difference between the actual rate of the economic growth and the trend of the economic growth rate (the long-term rate or the “potential growth”), thus eliminating the uncertainties determined by the estimates of the potential GDP, the problems generated by the implementation of the one-off measures and also the problems generated by the forecast errors related to the output gap along the budgetary year and so on.

Another advantage is determined by the fact that the proposed fiscal rule (augmented growth-based balance rule) is simpler to explain and to communicate to the large public than the simple structural balance rule. Actually, the AGBBR rule is easier to monitor, as the growth rates can be quantified much easier and certainly than the output gap.

Compared to the growth-based balance rule, the added AGBBR rule supposes an additional term $e(b_{t-1} - b^*)$ which enhances the anti-cyclicality of the rule and provides an economically, socially and politically smoother fiscal adjustment. Thus, the proposed fiscal rule allows the existence of a budget deficit which is lower than the medium-term target when the economic growth is below its potential and vice-versa.

One of the most frequent critics for the simple structural balance rule is related to the fact that it does not provide enough maneuver space (Dumitru, 2012). “In the case of Romania, the structural deficit limit of 0.5% of the GDP will be, most probably, reached before the real public deficit will reach 3% of the GDP. Romania may have budget deficits of 3% of the GDP during extreme crisis periods only – a negative output gap of approximately 8.33%, given the elasticity of the cyclic balance of only 0.3 to the change by one percent of the output-gap. Moreover, during the recession from 2009-2010, the real budget deficits could have not exceeded 2% of the GDP”.

There should be noticed that the newly proposed fiscal rule (augmented growth-based balance rule) allows the reduction of this constraint, the fiscal adjustment being smoother than during the economic growth periods, when they are below the potential.

The starting point is the fiscal rule defined by Fletcher and Benelli in 2010

$$b_t = b^* + a(g_t - g^*) + e(b_{t-1} - b^*)$$

Deducting b_{t-1} from each member of the equation, we will obtain as follows

$$b_t - b_{t-1} = (1-e)(b_{t-1} - b^*) + a(g_t - g^*), \quad a > 0, \quad 0 > e > -1$$

b^* is the medium-term budget deficit target, respectively 1% of the GDP. According to the last EC assessments, Romania has the minimum budget objective (MTO) corresponding to the structural deficit of 1.3%. We have considered as being relevant that the medium-term budget deficit target, respectively 1% of the GDP, is corresponding to the sustainable public debt, below the threshold of 60% of the GDP, this criterion being required in the Maastricht Treaty and in the Fiscal Compact.

Thus, the minimum necessary adjustment to bring back the public finances on a sustainable direction (convergence towards the budget deficit target settled in the medium-term macro-economic and budgetary framework and the convergence of the public debt towards the sustainable level) depends on the following: a) the gap between the share of the previous budget deficit and the medium-term deficit target (expressed by the term $(b_{t-1} - b^*)$, also actually indicating the medium-term adjustment) and b) the gap between the real growth rate and the medium-term growth rate (expressed by the term $(g_t - g^*)$, also actually indicating the anti-cyclicality of this fiscal rule). The coefficient a represents the efficiency of the automatic stabilizers (a higher coefficient a means a higher power of the automatic stabilizers) and e represents the adjustment rhythm required when the budget deficit deviates from the target (we can notice that a higher coefficient e means a slower adjustment).

IMF (2010) shows that we may also calculate the structural adjustment of the budget deficit in the current year, as follows the structural adjustment in the current year $= b_t - b_{t-1} - a(g_t - g^*) = (1-e)(b^* - b_{t-1})$

Moreover, taking into account the specific of the emerging/developing countries during the high absorption periods, the AGBBR fiscal rule may be added with an adjustment element related to the foreign unbalance (the current account unbalance) (Hagemann, 2012). In Romania's case, it is necessary to take into account the current account unbalance and its impact upon the sustainability of the public finances, particularly during the absorption periods.

Thus, the rule will become

$$b_t = b^* - a(g_t - g^*) + e(b_{t-1} - b^*) + \gamma(ca_{t-1} - ca^*)$$

In the current situation of Romania, given the financing conditions, the coefficient e should be maintained to a moderate level (as during the last three

years, Romania has recorded a pretty high fiscal adjustment rate). However, without implementing accelerated structural reforms in education, health, pensions and in the state companies' sector, the coefficient e should be maintained to a medium level for a medium time period. If we use the growth-based and foreign unbalance-adjusted fiscal rule, we should take into account the high degree of correlation between $(g_t - g^*)$ and $(ca_{t-1} - ca^*)$, as the parameter γ is difficult to estimate.

2. Simulation for the efficiency of the fiscal rules proposed for Romania

By means of the expertise made by the specialists from the National Forecast Commission, simulations for Romania have been underlain by assuming some requirements from the EU regulations as parameters in the equations proposed by the International Monetary Fund.

Thus, three scenarios have been considered, according to the potential growth:

- the average growth rhythm of the GDP forecast for 2014-2016, equal to the potential growth (3%);
- the average growth rhythm of the GDP forecast for 2014-2016 with one percent below the potential growth (2%);
- the average growth rhythm of the GDP forecast for 2014-2016 with one percent over the potential growth (4%);

For each scenario, 2 simulations have been made in order to calculate the growth-based balance and the augmented growth-based balance.

For this purpose, the following relations have been used:

$$b = b^* + a(g - g^*), \quad (1)$$

where

b^* is the medium-term budget deficit target, respectively 1% of the GDP. According to the last EC assessments, Romania has the minimum budget objective (MTO) corresponding to the structural deficit of 1.3%. For the countries member to the fiscal pact (25 out of 27), the maximum allowed structural deficit is of 1%. For Romania, this means that the value of 1.3% is theoretical, as the pact required a more ambitious MTO (1%);

a is the semi-elasticity of the budget balance compared to the position in an economic cycle (*output-gap*). The budget semi-elasticity is the change of the ratio budget balance/GDP to the change of the GDP by one percent. In the last EC calculations, it is 0.32 for Romania;

g is the real growth of the GDP forecast for the current year, according to NFC forecast;

g^* is the long-term average growth, assimilated with the potential growth

$$b = b^* + a(g - g^*) + e(b_{t-1} - b^*), \quad (2)$$

where e is the adjustment rhythm of the budget balance in the previous year b_{t-1} compared to the medium-term target.

According to the provisions from the Fiscal Compact, the adjustment rhythm of the structural deficit is 0.5% of the GDP each year until reaching the MTO. It is calculated as the difference from the consolidated budget deficit of the previous year and we cannot establish a very distinct correspondence with the parameter e from formula (2).

The above mentioned EU Regulation No. 1175/2011 specifies that “the deviation from the MTO is significant if it is at least 0.5% of the GDP in one year and at least 0.25% of the GDP per year on average, in two consecutive years”.

Taking into account the fact that the proposed simulations consider the evolution of the structural budget deficit for several years, a value of 0.5 is proposed for parameter e , namely a slower adjustment policy, consistent with the fact that the MTO for Romania exceeds the limit specified in the Fiscal Compact.

Table 1 presents the scenarios made for the trajectory of the real budget deficit compared to the medium-term target, according to the growth-based fiscal rule and to the augmented structural balance rule, compared with the data presented in Table 2, thus reflecting the simulations made by using the structural balance rule and the augmented structural balance rule.

Table 1

**Simulation for the efficiency of the growth-based fiscal rules
for $e = 0.5$**

	2011	2012	2013	2014	2015	2016
Growth of the real GDP – g	2.5	0.7	2.0	2.5	3.3	3.2
<i>Long-term average growth of the GDP – g^*</i>			3.0	3.0	3.0	3.0
Medium-term budget deficit target – b^*			-1.0	-1.0	-1.0	-1.0
Semi-elasticity of the budget deficit compared to the output gap – a			0.32	0.32	0.32	0.32
Adjustment rhythm of the deficit from the previous year – e			0.5	0.5	0.5	0.5
<i>Growth-based balance</i>			-1.3	-1.2	-0.9	-0.9
<i>Augmented growth-based balance</i>		-2.8	-2.2	-1.8	-1.3	-1.1
Growth of the real GDP – g	2.5	0.7	2.0	2.5	3.3	3.2
<i>Long-term average growth of the GDP – g^*</i>			2.0	2.0	2.0	2.0
Medium-term budget deficit target – b^*			-1.0	-1.0	-1.0	-1.0
Semi-elasticity of the budget deficit compared to the output gap – a			0.32	0.32	0.32	0.32
Adjustment rhythm of the deficit from the previous year – e			0.5	0.5	0.5	0.5
<i>Growth-based balance</i>			-1.0	-0.8	-0.6	-0.6
<i>Augmented growth-based balance</i>		-2.8	-1.9	-1.3	-0.7	-0.5
Growth of the real GDP – g	2.5	0.7	2.0	2.5	3.3	3.2
<i>Long-term average growth of the GDP – g^*</i>			4.0	4.0	4.0	4.0
Medium-term budget deficit target – b^*			-1.0	-1.0	-1.0	-1.0
Semi-elasticity of the budget deficit compared to the output gap – a			0.32	0.32	0.32	0.32
Adjustment rhythm of the deficit from the previous year – e			0.5	0.5	0.5	0.5
<i>Growth-based balance</i>			-1.6	-1.5	-1.2	-1.3
<i>Augmented growth-based balance</i>		-2.8	-2.5	-2.3	-1.8	-1.7

Source: simulations made by the NFC experts, 2012.

Table 2

Simulation for the efficiency of the structural balance-based simple fiscal rules

	2011	2012	2013	2014	2015	2016
<i>Output gap – y^c</i>	-1.9	-3.3	-3.5	-3.4	-2.7	-2.1
Medium-term budget deficit target – b^*			-1.0	-1.0	-1.0	-1.0
Semi-elasticity of the budget deficit compared to the output gap – a			0.32	0.32	0.32	0.32
<i>Structural balance</i>			-2.1	-2.1	-1.9	-1.7
<i>Augmented structural balance $c=0.5$</i>		-2.8	-1.2	-2.0	-1.4	-1.5

Source: simulations made by the NFC experts, 2012.

In order to increase the anti-cyclicality of the AGBBR fiscal rule, the coefficient a should be increased, thus reflecting the impact/efficiency of the automatic stabilizers.

Conclusions

The simulations indicate a distinct way of increasing the anti-cyclicality of the fiscal rule by means of increasing the acting efficiency of the automatic stabilizers. We can notice that a more efficient action of the automatic stabilizers (a high coefficient a) provides a higher discretionary fiscal stimulus during the expansion period.

Coming back to the implementation of an integrated system of fiscal rules in Romania, we consider it should be functionalized by means of strengthening the fiscal rules on expenditure required in the Fiscal Responsibility Law.

The Fiscal Responsibility Law (FRL), which came into force in 2010, provides a rule on expenditure which settled the limits for its increase according to the growth of the nominal GDP for three years and, more than that, it settles the thresholds for the share in the GDP of the wage “cover” for the public employees. The Fiscal Responsibility Law allowed the coming into force of the Fiscal Compact, an independent institution of which role is to express opinions referring to the macro-economic and budgetary opinions, the law on budget and the fiscal and budgetary strategy, and also an obligation to monitor and implement the recommendations made. Moreover, the FRL sets limits for the number of the budget adjustments to maximum two per year, the purpose being to increase the budget discipline and the uniform distribution of the budget expenditure along that year.

It is necessary to render a proper functionalization of the fiscal rules on expenditure, by means of implementing sanctions in the Fiscal Responsibility Law, thus putting pressure on the compliance with the thresholds of the macro-economic indicators, corresponding to the sustainable trajectory of the public finance increase agreed with the international organisms.

The proposal for the fiscal rules package also includes the implementation of a fiscal rule on the threshold of the public debt to 40% of the GDP and the implementation of protocol debt which should provide corrective actions to the thresholds of 35%, 40% and 45% of the GDP.

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