The Coordination of the Monetary and Fiscal Policies in Romania and their Impact on the Economic Cycle

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Abstract: *A rate of economic growth close to potential while ensuring a low inflation rate is the primary objective of macroeconomic policies. The monetary and fiscal policies are widely used in Romania and in the European Union to achieve this goal, as modifying their stance is seen as a way to reduce the amplitude of the business cycle fluctuations. This research aims to assess how the monetary and fiscal policies have managed to smooth the business cycle fluctuations in Romania during 2004-2014 and also their degree of coordination and to analyze the restrictions applying to these policies given the rule-based framework within they operate. The results show a lack of coordination of the fiscal and monetary policies, the former permanent acting pro cyclically in the analyzed period, while the latter acting only partly counter cyclically, being mainly concerned with achieving price stability.*

Keywords: *fiscal policy, monetary policy, coordination, countercyclical policies*

JEL Classification: *E32, E61, E63*

1. Introduction

The main objective of the macroeconomic policies is represented by a rate of economic growth close to potential, while ensuring a low inflation rate and without

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large fluctuations in output and employment. The short-term price rigidity causes deviations from the potential GDP and the monetary policy and fiscal policies, through their impact on the aggregate demand, can be used to smooth the business cycle fluctuations. Although there is a debate also regarding the opportunity to use these policies for macroeconomic stabilization, in Romania and in the other EU countries, the monetary and fiscal policies have been given an important role in the macro stabilization process. However, this role is somewhat limited by the rules-based framework in which both types of policies operate.

The coordination of the monetary and fiscal policies is particularly important in the process of diminishing the amplitude of the business cycle fluctuations. Its absence can make useless the efforts of one policy or even more, contribute to instability and lower economic performance. This research aims to investigate the extent to which the monetary and fiscal policies in Romania have acted with respect to the position within the economic cycle in the period 2004-2014 and also to analyze their degree of coordination. In addition, this paper will show the implications of the new fiscal framework based on rules introduced by Romania in 2010-2013 into the process of macro stabilization and the monetary and fiscal policy coordination.

The paper is structured as follows: the next section describes the relevant literature regarding the opportunity of using the fiscal and monetary policies in stabilizing the economy, followed by the presentation of the arguments in favor of the monetary and fiscal policy coordination and the empirical analysis of their degree of coordination in Romania during 2004-2014. The last section exposes the conclusions and the implications for policymakers.

2. The opportunity of using fiscal and monetary policies to stabilize the economy

The classic macroeconomic theory, which most macroeconomists consider that adequately describes the economic behavior on long term, explains the economic growth depending on the elements that influence the factors of production – the capital accumulation and the increase in labor force – and the technological progress. Thus, the long-term economic growth depends on investment which further determines the accumulation of capital, and its steady state level is fundamentally influenced by the rate of saving and the technological progress. Ideally the saving rate should be equal to that which ensures the consumption maximization, to the so called golden rule level of capital, and considering the fact that the quasi majority of countries have a saving rate below

the golden rule level, there should be promoted policies to determine an increase in the saving rate, through its public or private component. According to this theory, the monetary policy does not have any effect on the potential growth on long term, while the fiscal policy can influence only in the sense that, for example, it changes the economic agents' motivation to invest or to participate in the labor force.

However, on short term, the observed economic growth deviates from its long term level, the economy operating cyclically, mainly because prices are rigid, and total revenues and employment are volatile, generating economic difficulties. The monetary and fiscal policies are used on a large scale by the policy makers to diminish the economic cycle fluctuations, but there is an ample debate in the literature about the most appropriate ways to achieve that.

In fact, even if these policies are used for macro stabilization, reflecting an active approach depending on the position in the economic cycle, there are arguments that support the use of passive fiscal and monetary policies. The latter take into account the delay with which these policies efficiently respond to the economic fluctuations, whether if we consider the time necessary for adopting the decision (for example, the changes in interest rates or in the tax system) or if we refer to the time needed for these policies to influence the economic activity. Thus, even if the monetary policy coordinates can be easily changed, the output dynamics will respond more difficult given that, for example, companies plan the investment expenses well in advance, while in the case of the fiscal policy, even if the impact on the economic activity is quicker, it takes a longer time to be implemented. Therefore, the supporters of passive policies show that by the time that the macro stabilizing policies are producing effects, it is possible that the position within the economic cycle changes, thus exacerbating the economic fluctuations.

However, the aggregate demand – aggregate supply model, which is widely considered to adequately describe the economic behavior on short term, clearly shows how the monetary and fiscal policies can be used to offset the shocks that appear in an economy and ultimately to contribute to an increase in general welfare. Thus, the question is how these policies could be effectively used rather that the appropriateness of using them, starting with option between discretionary policies versus rule-based policies.

Although, apparently the discretionary policies might seem preferable given the flexibility they offer, there are strong arguments in favor of rule-based policies. Thus, it is considered that these tools are often too powerful to be left to the discretion of policy makers. In addition, a firm commitment to a fixed rule reduces the problems regarding time inconsistency, i.e. the motivation to abandon a

preannounced policy after the economic agents had formed their expectations which can lead on medium term to an undesirable behavior of the economic agents and to difficulties in successfully implementing different fiscal or monetary policies.

In the EU, the fiscal and monetary policies are seen as macro stabilization tools and are conducted by rules. Thus, in the case of the Eurozone countries, the monetary policy is entrusted to the European Central Bank whose main objective is represented by price stability, i.e. an inflation rate between 0 and 2% per year. In Romania, the central bank's strategy is inflation targeting that involves a preannouncement of the inflation target and an allowed variation band. Thereby, the rules are accompanied by a certain degree of discretion, allowing thus a room for maneuver for the central banks. Kydland and Prescott (1977) were the first to identify an inflationary "bias" which occurs in the case of central banks that do not have a firm commitment to a monetary policy rule. Further research confirmed this result: for example, Ireland (2002) observed that in the case of a central bank that is unable to credibly assume a rule, it is tempted to exploit the Phillips curve based on expectations in order to reduce unemployment below the natural rate. The rational expectations imply that agents deduce the central bank's intention to allow higher inflation and they adapt their inflation expectations in the wage bargaining process. Eventually, the unemployment rate remains at the natural level and the central bank's efforts to exploit the Phillips curve lead only to a suboptimal high inflation rate. Given the findings presented in literature, EU central banks are targeting price stability, and the variation band allows them to take into account to some extent the output gap in the loss function.

The EU also adopted a fiscal framework based on rules. Thus, the Stability and Growth Pact, by its corrective arm, sets a limit of 3% to the headline budgetary deficit, while the preventive arm provides a medium-term objective for each country, defined in terms of structural budget balance. Moreover, the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union requires a maximum structural deficit of 0.5%, which can increase up to 1% for some countries, as in the case of Romania, that are characterized by indebtedness significantly lower than 60% of GDP threshold stated by the Maastricht Treaty. A flexibility of the rules can be also noted, their definition in terms of the structural balance allowing for automatic stabilizers to smooth the economic cycle; such rules are regarded as active.

The recent sovereign debt crisis in the Euro Area determined a higher preference of the EU countries for a rules-based fiscal policy, but this option was not always observed especially given the fact that, in a monetary union, which implies giving up to the monetary policy independence, the fiscal policy's role is to respond to any asymmetric shocks to the economy. Thus, Wierts (2010) studying the behavior of France and Germany during 1999-2008, showed that France had a

greater preference for countercyclical fiscal policies, while Germany had shown a greater preference for rules. However, these preferences are not fixed and the public debt unsustainable trajectory due to the economic and financial crisis was likely to determine in France a fiscal policy based on rules to a greater extent. Moreover, the EU's response to the sovereign debt crisis was the establishment of a tighter system based on rules, through the adoption in 2012 of the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union.

Moreover, there are many authors who argue in favor of a rules-based fiscal policy. For example, Fatas and Mihov (2003), studying the consequences of a discretionary fiscal policy on output and economic growth, based on a sample of 91 countries showed that Governments which use fiscal policy in an aggressive way induce instability, causing a lower dynamics of production, so a discretion limitation, by imposing institutional constraints is preferable. Also, Adam and Iacob (2014) advocates a solution to the deteriorating position of public finances in many EU countries after the economic and financial crisis the implementation of fiscal consolidation through the introduction of effective fiscal rules which should support on medium term the fiscal policy sustainability.

In conclusion, monetary and fiscal policies are widely used in the EU for macro stabilization and they are enforced on the basis of rules that contain some degree of flexibility. In order to achieve the objective of smoothing the economic cycle fluctuations it is essential to have coordination between these policies, without which the macro stabilization objective may not be achieved.

3. Arguments in favor of the coordination of monetary and fiscal policies

The main objectives of the fiscal policy are the sustainability of public finance and smoothing of the economic cycle's fluctuations, while the monetary policy focuses on price stability and also on macroeconomic stabilization. There are many interactions between the two types of policies, given that their objectives may conflict, considering that monetary policy, through its ability to alter the interest rate, affects public debt financing costs, as well as the availability of credit in the economy. Therefore, a lax fiscal policy, which may eventually lead to an unsustainable debt trajectory, will put pressure on the central bank in the process of modifying the interest rate which could lead eventually to an inflationary "bias". The unpleasant monetary arithmetic concept was introduced by Sargent and Wallace (1981) for this type of situation, when the interest rate increase amplifies the debt sustainability problems, while a lax monetary policy leads to higher expected inflation and adverse effects on the economic growth rate. Thus, in order to achieve

a sustainable economic growth, close to potential and also without generating excessive inflation, it is necessary that both the monetary and the fiscal policies are implemented in a sustainable manner and, moreover, that they are coordinated with each other. In this respect, Togo (2007) pointed out the importance of separating the two policies in the sense of being independent from one another, but also their coordination in order to prevent the domination of one authority over the other, which could lead to an inconsistent mix of policies.

Also, Laurens and Piedra (1998) argue that, in addition to the sustainability of both policies, their coordination aims to set targets consistent with the fundamental objectives jointly agreed upon, as well as to facilitate effective implementation of decisions. The lack of coordination will translate into lower macroeconomic performance, and in extreme cases it can even cause instability, manifested by high interest rates, pressures on the foreign exchange market, high inflation and low economic growth.

Halett (2008) defines monetary and fiscal policy coordination as making decisions in an environment where they are influenced not only by the individual interests of each category of decision makers, but also by the impact of one policy on the other. Therefore, the coordination also implies that the support provided to the fiscal policy by the monetary policy or *vice versa* in order to obtain superior results can contribute to better performances for those who initiate such measures. Coordinating the two policies also decreases significantly the costs imposed on the other policy makers in the opposite situation, in the sense of making it harder for them to reach their targets if they are only seeking to carry out their own agenda. Thus, each player can position himself higher if he eliminates the costs he generates for the other player.

Budnevich (2002) shows that, in the case of many emerging economies, being heavily dependent on the monetary policy in the macro stabilization process can lead to an inferior macroeconomic performance compared to a more balanced environment, in which the fiscal policy is used for the same purpose. However, using the latter involves as a precondition the sustainability of public finances and redefining fiscal institutions in order to increase the efficiency and flexibility of the fiscal policy.

Thus, the coordination of fiscal and monetary policies generally leads to optimal results only if both policies are on a sustainable path and it cannot succeed otherwise, even if the policy makers work closely together. Equally important is the credibility of the two types of policies. More specifically, anchoring the inflation expectations cannot succeed if the fiscal policy generates destabilizing expectations, and achieving the inflation target would involve high costs for the economy in terms of high interest rates or loss of international reserves. Also,

Laurens and Piedra (1998) note that a less credible monetary policy is usually accompanied by higher interest rates in the economy.

An important element to be taken into account in the coordination of monetary and fiscal policies is the fact that they operate on a different time horizon. While the monetary policy can be quickly adjusted, the fiscal policy is characterized by a considerable implementation lag, and in these circumstances a "fine tuning" of the economic activity can only be achieved through the monetary policy.

Also, the monetary and fiscal policy coordination should not be understood as a passive attitude on the part of one authority in order to accommodate to the others' actions, the latter possibly having a dominant position. The inflation targeting regime, a strategy that has been adopted by Romania since 2005, involves a high degree of independence from the fiscal authorities of the central bank, which in theory should lead to only pursuing price stability. In this context, a fiscal expansion amid the manifestation of an excess of aggregate demand in the economy would trigger a reverse response, i.e. an interest rate increase having an adverse effect on the economic activity. This situation argues strongly in favor of a joint determination of objectives for the fiscal and monetary authorities, as a precondition in order to achieve an effective coordination.

4. The analysis of the degree of coordination of fiscal and monetary policies in Romania, 2004 – 2014

From the perspective of the economic cycle, the period 2004 – 2014 can be divided into two different intervals: 2004-2008 when the economy functioned significantly above the potential, the output gap ranging between 4.1% and 8.9% of the potential GDP, the economic growth exceeding on average 6% annually, fueled by large capital inflows, financed mainly through external indebtedness and only partially through foreign direct investment, and 2009-2013 when the economy functioned well below potential, the output gap ranging between -0.3% and -3.9% of the potential GDP. The conduct of the fiscal policy has been expansionary from 2004 to 2008, this aspect being especially noticeable when analyzing the structural budget balance. Thus, the fiscal impulse (the structural budget balance variation) has been positive in 4 of the 5 years in the period 2004-2008; in the years 2006 and 2008 it was equal to 1.9% and 3.4% while the output gap exceeded 6% and the structural deficit was already situated at very high values. This evolution was favored by the placement of the headline deficit below the 3% threshold stated by the Maastricht Treaty between 2004 and 2007, even if in the first two years of the interval mentioned the structural deficit was close to 3%, while in the last two years it exceeded 3%. It should be noted that in that period, the fiscal policy in Romania was not based on rules, the threshold of 3% of GDP for the headline deficit being

virtually the only anchor. Also, Romania is a member of the EU only since 2007, and the provisions of the preventive arm of the Stability and Growth Pact which stated a medium term objective defined in structural terms for each country were not yet operable *de facto*. Since the positive output gap was likely to generate significant cyclical budgetary revenues, the deterioration of the public finance position was not totally observable at the level of the actual deficit. The table below summarizes the output gap, the structural and actual budgetary balance, but also the fiscal impulse in the 2004 – 2014 period.

Table 1: The evolution of the output gap, the structural balance and the fiscal impulse, 2004-2014

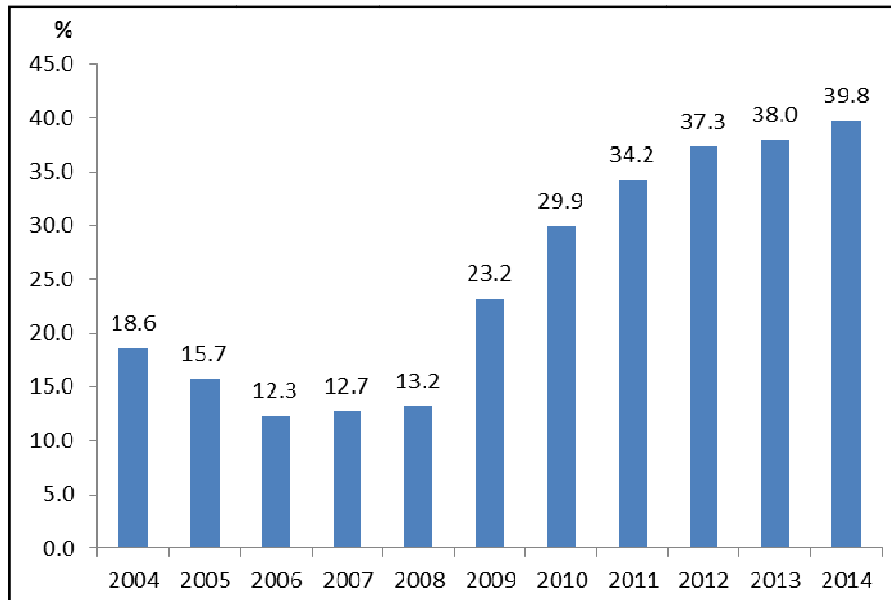
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Output gap (% of potential GDP)	4.71	4.06	6.55	6.72	8.93	-0.29	-2.45	-2.80	-3.91	-2.10	-1.30
Budget balance (% of GDP)	-1.21	-1.15	-2.22	-2.90	-5.58	-8.87	-6.65	-5.35	-2.93	-2.18	-1.49
Primary budget balance (% of GDP)	0.19	0.05	-1.42	-2.20	-4.88	-7.37	-5.15	-3.75	-1.23	-0.48	0.11
Structural budget balance (% of GDP)	-2.81	-2.53	-4.44	-5.17	-8.60	-8.77	-5.86	-3.26	-2.12	-1.47	-1.03
Fiscal impulse	0.96	-0.28	1.92	0.73	3.43	0.17	-2.91	-2.60	-1.14	-0.65	-0.44
Primary fiscal impulse	-0.07	0.14	1.47	0.77	2.68	2.49	-2.22	-1.40	-2.52	-0.75	-0.59

Source: Ameco, own calculations.

Thus, in Romania the fiscal policy was significantly pro cyclical in the 2004 – 2008 period, acting in the sense of stimulating the economy even if it was growing above potential, given that there were not too many constraints imposed on the fiscal policy makers, in the absence of a rule-based fiscal framework. Subsequently, because of the financial crisis starting in 2008, the fiscal position deterioration became fully noticeable also at the level of the actual budget deficit; the level of 8.9% of GDP recorded in 2009 required at the beginning of 2010 the initiation of a major fiscal consolidation process which had as a result the

reduction in the actual deficit to 1.5% of GDP in 2014. Given the exhaustion of the fiscal space in the period 2004–2008 which could have been used in the periods of recession, the fiscal policy was constrained to be pro cyclical again; the reduction in the deficit took place in the period when the aggregate demand deficit in the economy was significant. Moreover, beyond the fact that the fiscal policy has not contributed to smoothing the economic cycle fluctuations, but on the contrary, its conduct has caused serious problems also in terms of public finance sustainability, as it is shown in the graph below, which illustrates the evolution of the public debt in Romania between 2004 and 2014.

Graph 1: The evolution of the public debt in the 2004 – 2014 period, as share in GDP



Source: Eurostat.

To prevent further slippages in terms of the fiscal policy stance, in 2010 the Fiscal Responsibility Law was adopted, which stipulates a much stricter rule-based regime; in this respect a new institution was founded, namely the Fiscal Council, in charge of the analysis of the compliance with the fiscal rules, and also of issuing independent opinions and analysis regarding the main fiscal documents (the medium-term fiscal framework, the annual budget drafts, the

budgetary amendment drafts, analysis of the budget execution). After Romania signed the Treaty for Stability, Coordination and Governance in the Economic and Monetary Union, the law was amended in December 2013 with the purpose of introducing of the rule regarding the structural budget balance into the national legislation. Thus, compared to the 2004–2009 period, the legislative framework was greatly strengthened, setting more clear rules regarding the fiscal policy conduct, the compliance of which should lead in the future to a counter cyclical fiscal policy and to ensuring public finance sustainability.

In terms of monetary policy, in Romania during the period 2004–2014, it was conditioned by the adoption of the inflation targeting regime starting in 2005 which implies that the central bank's commitment to achieve the inflation target (also considering the allowed fluctuation band) prevails over other objectives, such as smoothing the economic cycle fluctuations. As it can be noticed in the below table, over the analyzed period, the inflation target was achieved only three times; in six cases the registered inflation was higher than the upper limit of the targeted interval and only one time the end year inflation was lower than its lower limit. However, many times the deviations were either minor, or explained by objective reasons – indirect tax changes, ample agricultural production variations, and, in general, the central bank's credibility has remained at optimal parameters, managing to successfully anchor the economic agents' inflation expectations.

Table 2: The evolution of inflation in the 2005–2014 period, compared to the target assumed by the central bank

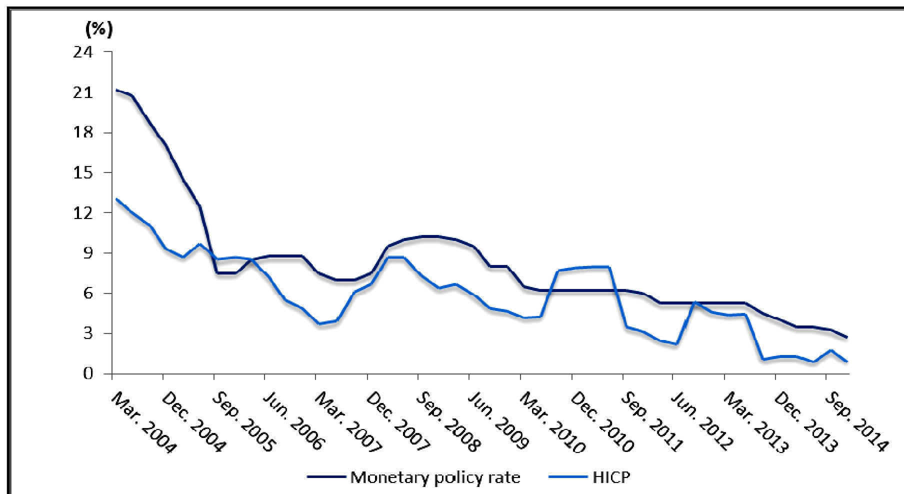
	Actual inflation	Targeted inflation	Fluctuation band	Achieved target
2005	8.6	7.5	1	NO
2006	6.56	5	1	NO
2007	4.87	4	1	YES
2008	6,3	3.8	1	NO
2009	4.74	3.5	1	NO
2010	7.96	3.5	1	NO
2011	3.14	3	1	YES
2012	4.95	3	1	NO
2013	1.55	2.5	1	YES
2014	0.83	2.5	1	NO

Source: NBR.

The central bank's firm commitment to the inflation target is proved by the following graph which comprises the evolution of the monetary policy rate and of

the inflation rate. Thus, it can be seen that the real interest rate has been constantly positive, both when the output gap was positive and when it was negative, which suggests a high weight in the central bank's loss function for the inflation target, detrimental to smoothing the economic cycle fluctuations, which is in line with the characteristics of an inflation targeting regime. It should be mentioned that keeping the interest rates at a relatively high level over the period 2009–2012, after the economic and financial crisis in Romania, it is possible to have been influenced also by the necessity of preventing an additional depreciation of the national currency, which could have aroused financial stability concerns, given the high share of foreign loans in total loans in Romania.

Graph 2: The evolution of the monetary policy rate versus in the inflation rate over the 2004–2014 period

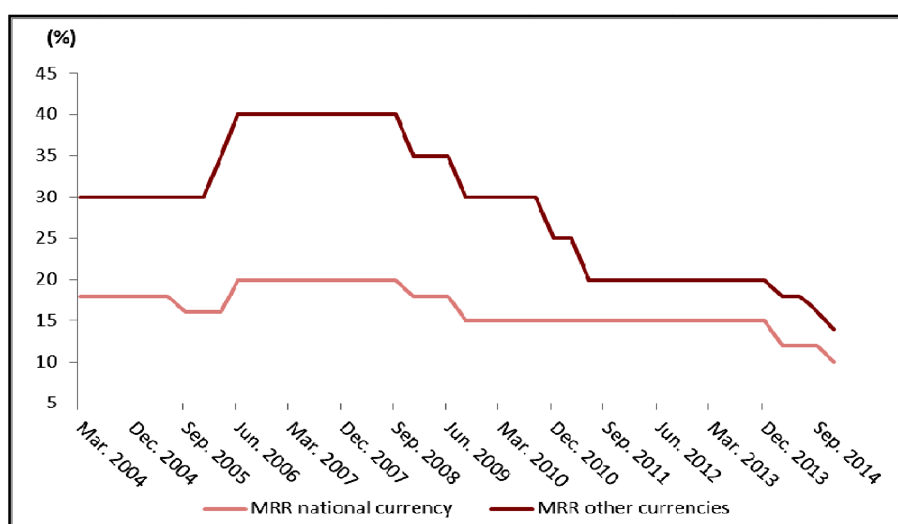


Source: NBR.

The conclusions regarding the correlation between the monetary policy stance and the economic cycle position are somewhat different if we consider an additional monetary policy instrument, i.e. the change in the minimum reserves requirements (MRR). Thus, as it can be noticed in the graph below, in the period 2005–2008, characterized by a major positive output gap, MRR were raised and maintained at high levels; 20% for the RON denominated liabilities and 40% for those in foreign currencies. These levels were likely to somewhat slow down the credit growth which fueled the overheating of the economy. In the period 2009-

2014, when the output gap was negative, the minimum reserves requirements rate fell steeply, reaching 10% for lei and 14% for other currencies. Thus, although the central bank was concerned mainly with price stability its actions were also meant to somewhat smooth the economic cycle fluctuations, especially if we consider the changes in the minimum reserves requirements.

Graph 3: The evolution of the minimum reserves requirements ratio in the 2004 – 2014 period



Source: NBR.

The analysis of the monetary policy and fiscal policy in the period 2004–2014 suggests a lack of coordination between them, as the first category was significantly pro cyclical, while the second one targeted mainly the price stability, acting only slightly countercyclical. Regarding the impact of monetary policy on debt financing, considering the fact that the economy grew above potential and the fiscal deficits increased from year to year, they were financed to a large extent through privatization revenues, and later as the debt grew, the interest expenses could be accommodated in the budget, the lack of a sustainable trajectory of the public finances was not able to modify the central bank's behavior and to create an inflationary bias. The fiscal consolidation process determined the return of the public finance to a sustainable position and created the premises for a better coordination between the two policies. Thus, despite that the coordination of the two types of policies was extremely low in the 2004–2014 period, the

consequences of this fact – as they are described in the literature – were not very significant, in the sense of a higher inflation or higher interest expenses of the government as o consequence of higher interest rate practiced by the central bank.

In the current context, in which both policies – fiscal and monetary – are based on strict rules, there are the premises for a better coordination between these two, given that these rules are designed to either ensure the policy sustainability, or to offer a larger space of maneuver – through the automatic stabilizers in the case of the fiscal policy or through the variation interval around the inflation target in the case of the monetary policy – in the sense of smoothing the fluctuations of the economic cycle. However, there are some risks concerning the future coordination of the fiscal and monetary policies, given the relatively weak constraints exerted by the Fiscal Responsibility Law that in theory was supposed to ensure and maintain the fiscal discipline, which could further determine a lack of coordination between the two types of policies.

5. Conclusions and implications for policymakers

Changing the parameters of the monetary and fiscal policies is taken into consideration in Romania in order to smooth the business cycle fluctuations. Although the primary objective of the monetary policy is represented by price stability while macroeconomic stabilization is only an alternate goal and also considering that monetary and fiscal policies are governed by rules that only provide a certain flexibility, a reduced volatility in income and employment remains an important objective for policymakers. The central bank takes into account the output gap in its loss function, which has also an impact on inflation – or, in other words acts to some extent counter cyclically – while the fiscal policy, through the automatic stabilizers contribute to reducing the amplitude of the economic cycle fluctuations. However, it is to be noted that given the operating framework for monetary and fiscal policy, their discretionary power should be limited.

Analyzing the 2004-2014 period in terms of the role played by the monetary and fiscal policies in the stabilization of the economy and also in terms of coordination, several conclusions can be drawn. First, the fiscal policy throughout the whole analyzed period acted pro cyclical, i.e. in the sense of amplifying the business cycle fluctuations, stimulating the economy during the periods of expansion and inhibiting the economic activity during recessions, thus exhausting the fiscal space during the economic boom. The monetary policy acted mainly in order to achieve the inflation target and only the change in the minimum reserve requirements can be regarded as counter cyclical. Also, it can be concluded that there was not an effective coordination between monetary and fiscal policies, as they often acted in different directions, partly in response to the actions of the

other, and as a result the macroeconomic performance was suboptimal. The new fiscal framework based on rules established during 2010-2013 by the approval and the subsequent amendment of the fiscal responsibility law should support the future coordination of the two types of policies.

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