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**SERBIA ON ITS PATH TO EUROPE  
– FULFILLMENT OF THE CONVERGENCE CRITERIA**

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***Abstract:** The Maastricht convergence criteria imply that a country enters the euro zone has a relatively low inflation, stable currency, low levels of the government deficit, sustainable public debt and relatively low interest rates. Prior to joining the eurozone the countries should be in the so-called European currency mechanism (ERM II), which primarily means the maximum domicile currency volatility against the euro is  $+ -2.25\%$  in a period not less than two years. Therefore, according to this paper, the Serbia does not meet the most stringent Maastricht convergence criteria, and it is not realistic to expect that in coming years that Serbia could make significant progress on that front.*

***Keywords:** convergence criteria, inflation, interest rate, government deficit, government debt*

**1. Introduction**

When we talk about monetary union, we only think of the European Monetary Union i.e. the euro zone, because the euro, as one of the world's currencies, is constantly in the focus of the market and the public. It should be said that the fulfillment of the convergence criteria is not a prerequisite for entry into the European Union, but for the introduction of the euro as national currency.

The Maastricht convergence criteria imply that a country entering the euro zone has a relatively low inflation, stable currency, low levels of the government deficit, sustainable public debt and relatively low interest rates. Prior to joining the eurozone the countries should be in the so-called European currency mechanism (ERM II), which primarily means the maximum domicile currency volatility against the euro is  $+ -2.25\%$  in a period not less than two years. Before that date the currency exchange rate must not

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deviate from the value of the euro more than 15% up or down. The inflation rate of the country that has access to EMU must not be higher than 1.5 percentage points compared to the average inflation rate in the three EU countries with the lowest inflation. The long-term nominal interest rates must not exceed by more than 2% of the interest rate in the three most successful countries in the European Union during the year, i.e. three countries with the lowest interest rates. The budget deficit must not exceed 3% of GDP a country. The public debt must not exceed 60% of GDP a country.

Perhaps for now, from the perspective of Serbia, it seems premature to discuss joining the Eurozone, but we wanted to explore how much some of economic indicators of Serbia are in accordance with the Maastricht criteria and how they are actually harmonized with their methodology, and thus comparable (meaning their value) with them from other EU countries.

## **2. Conditions for Entry into the European Monetary Union**

All member states of EMU had to fulfill certain conditions before getting into the Union. These conditions must be met two years before entry, at the time of entry and later as long as the country is in the monetary union. It is understood that all currencies included in the eurozone are convertible, not in the sense that changing to other currencies or by the criteria of convertibility of the national central banks and the IMF, but according to market criteria.

In order to access to the planned monetary integration, member states had to fulfill certain conditions which are called "convergence criteria" or "Maastricht criteria", and these are:

- The inflation rate of a country that has access to EMU must not be higher than 1.5 percentage points compared to the average inflation rate in the three EU countries with the lowest inflation. And after the foundation of the euro, the area as a reference is taking data from all EU member states, not just the euro zone.
- The long-term nominal interest rates must not exceed by more than 2% of the interest rate of the three most successful countries in the European Union during the year, i.e. three countries with the lowest interest rates;
- The government deficit must not exceed 3% of GDP a country;
- The government debt must not exceed 60% of GDP a country;
- It must be respected limits deviations currency of  $\pm 15\%$  provided by the ERM2 for two years before the introduction of the third degree of EMU, without devaluing its currency in relation to other currencies of EU countries.

## **3. Inflation in Serbia**

Like many countries, whose central bank has the main quantified objective of the targeting inflation, our central bank also has adopted this regime. In line with *The Agreement with the Government of the Republic of Serbia on Inflation Targeting* and *The Memorandum of the National Bank of Serbia on Monetary Strategy*, pursuant to which the National Bank of Serbia has committed to set inflation targets in cooperation with the Government. The Monetary Policy Committee of the National Bank of Serbia hereby sets the point headline inflation targets (with a tolerance band), measured as annual percentage

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change in the consumer price index, (consumer prices: CPI). Inflation targets have been set by the National Bank of Serbia in cooperation with the Government based on the analysis of current and expected macroeconomic developments and numerical guidelines for the increase in prices of products and services under the Government's direct or indirect regulation. Inflation targets are set as point targets (with a tolerance band) for each month of the year, and the central bank will operate on the assumption of their continuous implementation December–December. The target represents a clear and precise signal of the level of inflation that the central bank strives to achieve. In this way the more efficient communication with the public is enabled, the greater influence on the stabilization of inflation expectations is.

National Bank of Serbia has changed the way it had analyzed the movement of the consumer price index of 1/january/2012/. The Eurostat has defined a new group of products and services, in accordance with internationally accepted Classification of individual consumption by purpose. The goal was to harmonize the consumer price index of the European Union and the euro zone with the future CPI, for easier and more accurate comparisons of data. This group of products is used by the central banks of EU member states and the European Central Bank.

The purpose of these new indicators of price movements is to facilitate making decision in monetary policy. The most important for monetary policy are permanent factors that influence the trend of overall inflation. Therefore it is necessary to exclude all those factors that temporarily increase or decrease the overall inflation. When we exclude all the products from the CPI, whose prices are characterized by the highest short-term volatility, and they are certainly food and energy, we'll get the rate of inflation that results in the effects of monetary policy or some permanent changes in prices.

According to the Euro convergence criteria, member countries of EMU should not have greater inflation than 1.5% averages inflation 3 countries of EU with the lowest inflation in the year. Table 1. shows the limits (upper limit) for inflation in the euro zone.

**Table 1. Limit values for inflation in the euro area 1999-2011**

Year	Inflation rate (%)
1999	2.0
2000	2.7
2001	3.1
2002	3.0
2003	2.7
2004	2.2
2005	2.5
2006	2.9
2007	2.8
2008	4.0
2009	1.7
2010	2.4
2011	3.4

Source: Calculated data with the Eurostat website

The table shows the limits of inflation that the country, in euro zone, should not exceed in any observed year if it strictly respects the Euro convergence criteria. Having on mind these values we will now analyze the data for inflation in Serbia in recent years as well as some future projections.

In the period 2006-2008 the core inflation was targeted and the goal was achieved in 2007 only, when it was 7.9%. However, the goal for 2008 year was not achieved and the core inflation at the end of the year was significantly above the upper limit of the target range. Thus, the core inflation was amounted to 10.8% at the end of 2008. There was the global economic crisis in 2009. Inflation was within the targeted range during the year. The low growth in consumer prices was the result of low aggregate demand and falling prices of agricultural products due to favorable conditions for agriculture in that year. In December, inflation has returned to the target range and amounted to 6.6%. Inflation rates for the period from 2010 by 2012 were 6% for 2010. with tolerance  $\pm 2$  pp. In 2011, targeted rate was 4.5%, with tolerance  $\pm 1.5$  percentage points, while, with the same tolerance, target was 4% at 2012, which implies that the monetary policy of the National Bank of Serbia continues to be primarily focused on disinflation (Memorandum of the National Bank of Serbia on the Setting Inflation Targets for the period 2010 - 2012). Consumer prices in Serbia in the period 2002-2012 are presented in the Table 2.

**Table 2. Consumer prices in Serbia in the period 2002-2012**

Year	IPC (%)
2002	14.8
2003	7.8
2004	13.7
2005	17.7
2006	6.6
2007	11.0
2008	8.6
2009	6.6
2010	10.3
2011	7.0
I 2012	3.2
April 2012	2.7
May 2012	3.9

Source: [www.nbs.rs](http://www.nbs.rs)

Based on given data, we find that Serbia still does not fulfill the convergence criteria for inflation. Lowering inflation from year to year, we see that Serbia is on good way to reach the required value. The strategic goals of Serbia in a medium term, i.e., to the eventual accession to the European Union, should be stable and sustainable economic growth with employment growth and improving living standards. Monetary policy should facilitate the fulfillment of these objectives by providing low and stable inflation. Experiences in many countries have confirmed that securing price stability, in a medium term, is a necessary condition for the realization of all other macroeconomic objectives.

#### **4. Interest-rate in Serbia**

Long-term interest rates are determined by the nominal yield on the securities of the central government in the country with a maturity of 10 years (Prokopijevic M. 2007. "European Monetary Union", Published by Belgrade, p. 92). Long-term securities are used by the country to service its debt. If a country reduces its government debt to an acceptable level, it will have no need for long-term securities of the central government. The yield of long-term securities is calculated according to the trade on the secondary market, and only when we don't have that date, we take the return to emission. According to the Euro convergence criteria, the long-term nominal interest rates must not exceed by more than 2% of the interest rate in the three most successful countries in the European Union during the year, i.e. three countries with the lowest interest rates. Interest rates should be measured on the basis of long-term government bonds or comparable securities, taking into account differences in national definitions.

In the Serbian market, there are no government bonds in dinars issued for a period of 10 years, i.e. there is no interest rate that would be, by methodological requirements, considered the referents. Moreover, there are relatively few government bonds on the domestic market, and those that exist are usually issued with a currency clause. The reasons should be sought in a high degree of euroisation of our market.

As an indicator of long-term local currency active interest rates could serve three-year rate of return on treasury bills. Treasury bills of the Republic of Serbia are debt securities. Treasury bills are securities that carry minimal risk. Namely, from the previous year, the state is more active on the domestic capital market. We have recorded falling interest rates on treasury bills since June 2011. In late September 2011 interest rate on two and a half year of treasury bills was 14.89%, and in January 2012 14.70%. As an indicator of the level of interest rates, but not long term, can be used weighted average active interest rate on bank loans, which was 14.24% in June 2011 ([www.nbs.rs](http://www.nbs.rs)). That number is far from the convergence criteria. When it comes to long-term interest rates in foreign currencies, which are not required but can be used as an indicator, the bonds of old foreign currency savings and bonds of restitution, which will be broadcast from 2015, are very important. Due to the unwillingness of people to save in local currency, the idea of payment some of the obligations in the dinar bonds was abandoned. A certain amount of dinar assets would be of great importance for the Serbian financial market, because it would be form a long-term yield rate for domestic currency, which is one of the conditions for joining the Eurozone (of course, the requirement is met if the yield is relatively low).

Currently the interest rate i.e yield on bonds of old foreign currency savings is about 5%. Serbian is indebted in the amount of one billion dollars in global financial markets for a period of 10 years at an interest rate of 7,25 per cent in mid-September 2011.

The table 3. indicates the downward trend of interest rates after the formation of EMU. If we consider the period 1999-2006 the situation in which membership in the euro area leads to lower overall risk and hence long-term interest rates is obvious. In that situation, each country member of the euro area has benefited from falling interest rates, because then financing their debt becomes cheaper. In most cases, their debts are not small. These advantages may be the main reason why the government of almost all European countries simply flocked to the European Union and the eurozone, although perhaps they were not ready by the set the fulfillment of economic criteria. Increasing indebtedness of euro area countries, has also increased the long-term interest rates since 2006 up to now.

**Table 3. Limits for long-term interest rates in the Eurozone in period from 1999 to 2011**

Year	Long-term interest rates
1999	3.6
2000	7.4
2001	6.9
2002	6.8
2003	6.1
2004	6.1
2005	5.3
2006	5.8
2007	6.3
2008	6.3
2009	5.8
2010	5.6
2011	6.4

Source: Calculating was made by using data from the site <http://epp.eurostat.ec.europa.eu>

### 5. Government Deficit in the Republic of Serbia

In recent years the Republic of Serbia has been faced with the problem of high government deficit, which becomes higher throughout the years. Economic crisis has strongly affected our country. On the one hand, government income decreased, while, on the other hand, the need for financing from the budget, such as fiscal incentives to industry to mitigate the consequences of the crisis and increasing social transfers to households, increased. The result is significant government deficit, which was financing by loans on the domestic market and loans from international financial institutions.

**Table 4. The overview of government revenues, expenditures and government deficit/deficit in the Republic of Serbia from 2005 to 2012 (in million euros)**

Year	Government revenues	Government expenditures	Government deficit/deficit	Government deficit/deficit as a % of GDP
2005	446997.2	438803.2	8193.9	0.47%
2006	494137.2	529707.5	-35568.3	-1.81%
2007	579453.5	617625.3	-38171.7	-1.68%
2008	651271.9	702068.3	-50796.5	-1.91%
2009	655994.1	746454.7	-90460.6	-3.33%
2010	712225.1	820240.8	-108015.7	-3.62%
2011	744760.2	877295.1	-132533.9	-4.17%*
2012**	338900.0	437900.0	-99000.0	

Source: Bulletin of public finances, Ministry of Finance

\* Evaluation of Statistical Office of the Republic of Serbia that GDP in 2011 is 3175020 dinars

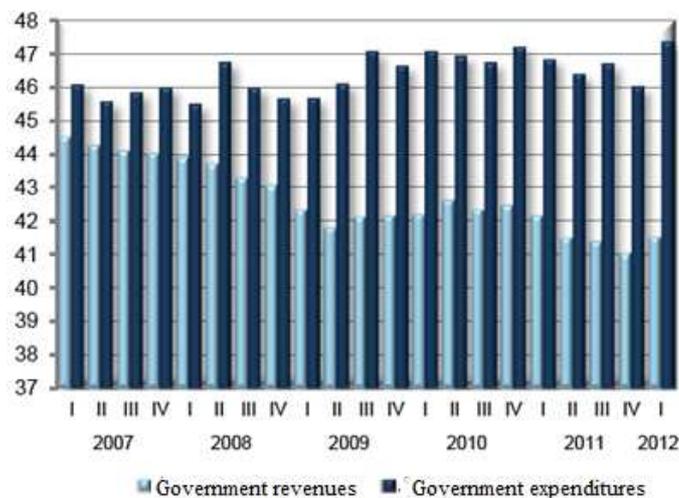
\*\*Data for 2012 are given only for a half year

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Table 4. clearly shows us that despite growth of revenues, expenditures are growing at a higher rate making the government deficit larger throughout the years. The most important items of revenues are value added tax and excise duties, while the highest expenditures are expenditures to staff salaries and transfers to social insurance organizations. Also, we can see that after the year of 2008, deficit breached Maastricht limit.

According to the Budget Law for 2011, planned revenues were 726.4 billion dinars, planned expenditures were 846.92 billion dinars and planned government deficit was 120,5 billion dinars. We can see in the table that revenues in 2011 amounted 744.8 billion dinars and expenditures were 877.3 billion dinars. It is clear that the planned government deficit exceeded for about 12 million dinars.

The proposed budget for current year projected revenues of 750 billion dinars, expenditures of 890 billion and deficit of about 140 billion dinars, which would be financed by borrowing through issuing bonds in domestic and foreign markets in domestic and in foreign currency. However, deficit at the end of June amounted 98.95 billion dinars. Total revenues for the first six months were 338.9 billion and expenditures were 437.9 billion dinars. Only in the June government revenues were 49.7 billion and expenditures amounted 73.3 billion, so the deficit is for 20 billion dinars higher than at the end of May. Government deficit of the Republic of Serbia is now one of the largest in the country history (Ministry of Finance, August 2012). Projections for this year are that the deficit would be about 6.5%. The main reason for the high rate is drop of government revenues due to decrease of important tax bases, private consumption, employment and real incomes. This situation is getting even worse with tax evasion. Also the low level of private and government savings, makes investment in Serbia strongly depended on the inflow of foreign capital. So the EU, as our biggest investor, has a great influence on Serbian economy. From mid of the 2011 the growth of export, which was the main driver of economic growth in the past two years, begins to slow. Figure 1. shows government revenues and expenditure for period from 2007 to 2012.



**Figure 1. Government revenues and expenditures from 2007 to 2012 (% of GDP)**

Source: [www.nbs.rs](http://www.nbs.rs)

For the next period the main goal of fiscal policy is moving towards a sustainable deficit. This requires reducing public spending. By 2013 public spending should be reduced for 2.7% of GDP. The Report on Fiscal Strategy is designed to reduce deficit to 3.7% in 2013 and to 2.9% in 2014 (Fiscal Council of the Republic of Serbia, (2011), The Opinion on the draft of the Report on the Fiscal Strategy for 2012 with projections for 2013 and 2014, Belgrade).

Significant fiscal adjustment is not possible without firm fiscal discipline. Fiscal adjustment must be made primarily on the expenditure side, because the level of public spending is high, much higher than in the European emerging markets. Also, there is scope to raise some revenues, such as excises and property tax and progressive taxation of income can also be introduced. Of course best cure for the problem of deficit is the investment and the stimulation of the production. This would increase tax bases and therefore government revenue. Also, payments for subsidies and social transfers would be lower.

Due to economic crisis, EU member states also faced with the problem of government deficit. A key task for the fiscal policy in the euro zone will be implementation of already taken plans for consolidation, which include access to support member states that are under pressure from the market because of excessive debt and deficits. New ideas within euro zone, that are considered by two leading states, Germany and France, in recent months is forming fiscal union.

## **6. Government Debt in the Republic of Serbia**

The next Euro convergence criterion is the criterion of government debt, under which the ratio of government debt to GDP must not exceed 60% at the end of the preceding fiscal year. This criterion is closely connected to the criterion of government deficit, because the government debt represents a cumulative government deficits of years. When the government deficit appears, together with losses of public enterprises, it must be financed. If government does not want monetary instability and financing deficit by issuing money, it will be forced to borrow and the result is government debt.

Violation of the criteria of government deficit and government debt is a major problem for the bodies of the European Union since beginning of EMU. Because of that, they have pressured national governments that violate these criteria. The main requirement was a reduction of government spending in order to reduce primarily government deficit and then government debt.

Budget system law of the Republic of Serbia limits government debt to 45% of GDP. Government debt reached 46,4% of GDP at the end of 2011. However, analysis of Fiscal Council has shown that there are accumulated obligations of some budget beneficiaries, who are unable to service them. So government debt in 2011 is over 46,4%. This is the first time that government debt exceeded the legal limit since 2006 as we can see in the table 5.

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**Table 5. The share of government debt in GDP from 2002 to 2012**

Year	Government debt (million euros)	GDP (million euros)	Government debt as % of GDP
2002	11529.0	16028.4	71.92%
2003	11023.0	17305.9	63.69%
2004	9676.0	19026.2	50.86%
2005	10283.0	20304.9	50.64%
2006	9352.0	23304.9	40.13%
2007	8875.0	28467.9	31.19%
2008	8781.0	32668.2	26.88%
2009	9789.0	28956.6	33.81%
2010	12028.0	28006.1	42.95%
2011	14467.0	31143.0	46.45%
2012	15292.0		

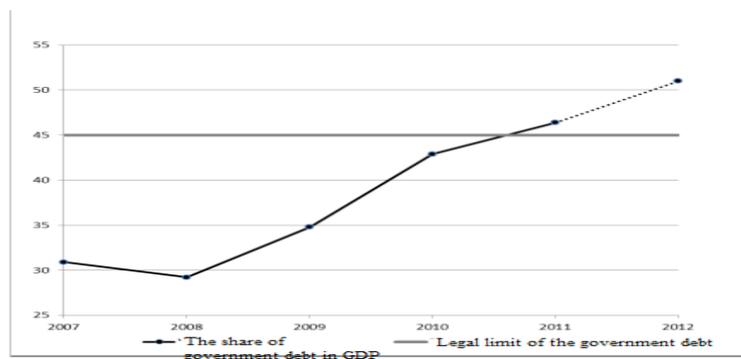
Source: Ministry of Finance - Public Debt Administration

Government debt at the end of 2008 amounted 8.78 billion euros and that was 26.88% of GDP. At the end of 2009 government debt rose to 9.78 billion euros or 33,81% of GDP. Government debt at the end of the last year was 14.46 billion euros, while it amounted 12.16 billion euros in 2010.

Government debt is the only criterion that our country meets. But since 2008 government debt has recorded a significant growth from 27% in 2008 to 53% at the end of September 2012, as we can see in the table 5. This growth is mainly the result of the financing of the fiscal deficit. Government debt of 53% of GDP is a bigger burden for countries with low credit rating, especially during the economic crisis and due to the inconfidence of investors.

On the following figure 2. it is presented the motion of government debt to GDP from 2007 to 2012 with the line that shows legal limit of government deficit.

**Figure 2. The motion of ratio of government debt to GDP from 2007 with projections for 2012**



Source: Assessment of Fiscal Rules Compliance in 2011

The main problem is not in the amount of debt, but in the fact that it is getting harder to finance the debt without growth of GDP and program for reducing deficit. In the future Serbia will have difficulties to pay off credits and will do so under unfavourable terms.

Analysis of Fiscal Council points out that government debt will continue the growth without a program of fiscal consolidation. Because of obligations of restitution, the government debt of Serbia in 2015 would exceed Maastricht criteria of 60% of GDP. Therefore, the evaluation of Fiscal Council is that exceeding legal law in the last year permanent, not temporary. Restoring the government debt in the framework of 45% GDP, even with ambitious program for reducing the government debt, will probably not be possible before 2016.

A recent analysis of the European statistical office Eurostat showed that the government debt increased in the past two years in most EU countries, except Estonia and Sweden. In 2010, fourteen member states reported the indicator of government debt over the allowable 60% of GDP. The highest ratio was recorded in Greece 144.9% and the second place is Italy with government debt 118% of GDP.

In 2012 in euro zone share of government debt in GDP amounted 88.2% at the end of March and that is slight increase compared to the end of the last year, when government debt was 87.3%. Government debt exceeds 60% of GDP in sixteen member states.

In December 2011, new regulations were adopted. Those regulations provide stricter fiscal supervision of the Member States and penalties for those countries that do not comply with fiscal rules.

Countries with government debt levels above 60% of GDP will be obliged to reduce the debt. In the case that country does not apply the new rules, the European Court of justice may impose financial penalties in the level of 0.1% of GDP.

## **7. Conclusion**

It is clear that the Serbia practically does not fulfill quantified objectives, except last one, government debt. In addition, the country must first be a member of the EU, and before entering the Eurozone should be in the so-called. European currency mechanism. Thus, the dinar is unstable and vulnerable, inflation is very high, interest rates are double digit, the government deficit is relatively high. The conclusion is clear, Serbia is still far from entering the Eurozone. It should be emphasized that once Serbia succeeds to satisfy the package of Maastricht criteria and when to introduce the euro, hard work would not be done. Then, need to put a major effort to continuously meet all the criteria, thus ensuring the competitiveness of the economy in the EU.

It is indicative that the crisis of the eurozone in some way a consequence of failure to meet convergence criteria, this time in countries that are members of the eurozone. It is not realistic to expect that in coming years Serbia could make significant progress on that front.

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### **SRBIJA NA PUTU DO EVROPE**

**Rezime:** Mastihtski kriterijumi konvergencije podrazumevaju da zemlja koja ulazi u Evrozonu ima relativno nisku inflaciju, stabilnu valutu, nizak nivo konsolidovanog budžetskog deficita, održiv javni dug, kao i relativno niske kamatne stope. Pre ulaska u Evrozonu treba biti i u tzv. Evropskom valutnom mehanizmu (ERM II), što, presvega, podrazumeva maksimalnu volatilnost domicilne monete premaevru od  $+ -2,25\%$  u roku ne manjem od dve godine. Dakle, prema ovom tekstu, Srbija ne ispunjava najstrože Mastihtske kriterijume konvergencije i nije realno očekivati da bi u narednim godinama mogla da napraviti značajnije pomake na tom planu.

**Ključne reči:** kriterijumi konvergencije, inflacija, kamatne stope, javni deficit, javni dug