FOREIGN EXCHANGE RATE AS A FACTOR TO IMPROVE THE BUSINESS ENVIRONMENT – THE CASE OF SERBIA[1]

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Abstract

Foreign exchange rate represents an important determinant of the economic policy of each country. The exchange rate affects inflation and balance of payments, economic profitability and social status of the population. Foreign exchange rate is an instrument by which a country can affect the export competitiveness, while by stability of the national currency it may create a favorable macroeconomic environment and thus encourage the inflow of foreign capital. For countries facing inflation, a fixed exchange rate is potentially a more appropriate solution. On the other hand, for countries facing impaired trade balance and slow economic growth, perhaps the best suited decision is the implementation of a more flexible foreign currency-exchange arrangement, while intermediate regimes may provide significant benefits – since they encompass positive aspects of both extremes at the same time avoiding many of the costs. However, the survey results show that the proportion of countries adopting intermediate regimes was reduced either in favor of greater flexibility, or in favor of greater rigidity. Hence, this paper analyzes the basic characteristics of the current exchange rate regimes, and the implications of a managed floating exchange rate application on the success of the Serbian economy.

Key words: *(foreign) exchange rate, exchange rate regimes, de jure classification, RSD, managed floating exchange rate*

INTRODUCTION

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The problem of classification of countries according to the implementation of specific exchange rate regimes is not so simple, due to contradictoriness, or practically – substantive differences, between what the particular country claims to apply, and what is really applied in practice. The fear of floatingis typical for a large number of countries that observe de jure floating exchange arrangements, thereto frequently intervene in the foreign exchange market. On the other side, the fear of fixing is characteristic for countries that practice de jure fixed foreign-exchange rate regimes with frequent equalization or adjustment of parity (peg). Between the two poles, innuendo, the two extremes, there are a number of different foreign-exchange arrangements which implies the existence of a situation in the theory known as the continuum of flexibility (Becker, 2006).

CLASSIFICATION OF EXCHANGE RATE REGIMES

Numerous authors use different indicators to correct the de jure exchange rate regimes while trying to present those de facto applied. The level of foreign exchange reserves and exchange rate variability are indicators that are commonly used for this purpose.

Regarding the problem of choice of the exchange rate regime, the literature finds different classifications. Authors: Hausmann, Panizza, and Stein (Hausmann, Panizza, Stein, 2000) observe that countries that de jure apply fluctuating arrangements, in fact demonstrate great differences in the management of the exchange rate fluctuations. These countries hold different level of foreign exchange reserves, thus allowing for different degrees of exchange rate flexibility in relation to the variability of foreign exchange reserves and interest rates. Greater variability of foreign exchange reserves and interest rates reflects the intervention of the monetary authorities in the foreign exchange market, or reconciliation within the economy in order to achieve the defined path of the exchange rate, which is the characteristic of more rigid currency arrangements.

In the following we turn to the most common classification of exchange rate regimes, and then tackle to the analysis of specific regimes. By Frankel (Frankel, 1999) the exchange rate regimes, ranging from the more rigid towards those arrangements with a greater degree of flexibility, are classified as follows:

- Fixed currency-exchange rate arrangements - monetary union, dollarization, a currency board;
- The intermediate foreign-exchange rate arrangements - conventional fixed mode, adjustable pegs, crawling pegs and target zones;
- Flexible foreign-exchange rate arrangements - managed- and free fluctuations.

Haggart (Haggart, 1999) uses similar classification of exchange rate regimes:

- Fixed regimes - monetary union, dollarization, a currency board;
- Intermediate regimes - adjustable pegs, crawling pegs, basket peg and target zone;
- Flexible regimes - managed- and free fluctuations.

Following classification of foreign exchange rates is presented by the authors Levy-Yeyati and Sturzenegger (Levy-Yeyati, Sturzenegger, 2003). The authors classify exchange rate regimes into groups based on the following three variables:

- The instability of exchange rates. This variable is measured by the average percentage change in the exchange rate on a monthly basis during the year.
- The instability of exchange rate changes. The specified variable is the standard deviation of monthly percentage changes in exchange rates, i.e. the average deviation of the nominal exchange rate from its mean value during one year.
- The instability of reserves. As measured by the average absolute monthly change in national saving, relative to the monetary base in the previous month.

Based on aforesaid variables authors Levy-Yeyati and Sturzenegger, classified the foreign-exchange arrangements as fixed, flexible, and mixed. In mixed regimes, which present the combination of the two, the authors include crawling peg and dirty float models.

The traditional classification of exchange rate regimes is associated with the report of the IMF (Annual Report on Exchange Rate Arrangements and Exchange Restrictions), which until recently was based on declarative plea member states with regards to the implementation of one of four foreign-exchange rate arrangements (Beker, 2006). Starting from 1999, the following, much more complex classification, designed according to a growing degree of flexibility, is being used:

- Foreign exchange arrangements associated with the exclusion of national monetary sovereignty;
- The currency board;
- Other conventional arrangements of fixed/pegged parity;
- Exchange rate parity set in the framework of horizontal band;
- Floating (fluctuating) parity;
- Floating (fluctuating) band;
- Managed floating exchange rate;
- Independent fluctuations.

FEATURES AND CATEGORIES OF FIXED EXCHANGE RATE REGIME

Strong presence of the monetary authorities in the foreign exchange market, which in an authoritarian manner control the inflow and outflow of foreign currency, is a common characteristic of all rigid models of the exchange rate system. Within the fixed regimes, the monetary authorities are left to the discretion to impose and publish the exchange rates by their own decisions.

In the literature, a fixed exchange rate is attributed to formation of a more stable macroeconomic environment, the realization of faster economic growth and the reduction of inflation (Frankel, 1999). In addition, the stability of the nominal exchange rate creates the illusion of a stable economic situation, which, consequently, has a positive impact on the inflow of foreign capital. As other advantages of these arrangements, the literature highlights the decrease of transaction costs and, logically, the reduction of exchange rate risk. Thus, it is clear that fixed exchange rates prevent competitive appreciation and depreciation, which countries could implement in order to influence their exporting competitiveness. Inability of fine adjustment to external shocks, which occurs as a result of inability to use monetary policy instruments for such purpose, is said to be a fundamental lack of rigid exchange rate regime.

Currency Board

The main characteristic of the currency board, as one of the fixed foreign-exchange arrangement is complete coverage of the monetary base with foreign currency. Furthermore, the obligation of the conversion of domestic into foreign currency for a fixed amount is declared by law, due to which, in the literature, this arrangement is often compared with the Gold standard (Tsang, 2000). The monetary discipline (and the consequent reduction of inflationary trends) is said to be the basic criterion for a country's commitment to the implementation of the currency board, given that the confidentiality of the monetary authorities is limited by the regulation on the inability of expansion of monetary base over the level of foreign exchange reserves. Naturally, the monetary discipline is followed by the fiscal discipline. This means that countries that apply this kind of exchange rate regime do not allow deficit financing of budget spending. Accordingly, the currency board presents the regime, which is a signal of high credibility to market players, making it less vulnerable to speculative attacks.

The disadvantages of this arrangement, at the same time immanent to all rigid regimes, are the inability to fine-tune monetary policy according to the needs of the business cycle, and the renunciation of monetary sovereignty. Applying the

currency board, the state practically imports the monetary policy of the state of the reserve currency, which is not necessarily compatible with the phase of the economic cycle in which the particular economy is. According to the author Tsang, there is a different firmness in obligation to maintain the currency board. By the analysis of a large number of countries that apply this model of foreign-exchange rate arrangements, it was noted that institutional commitment to conversion is the strongest in Bosnia and Herzegovina, and the weakest in Hong Kong (Beker, 2006).

Dollarization

In the rigid fixed foreign-exchange arrangements we also include dollarization regime. Within this regime, a specific country is completely substituting its own currency with foreign reserve currency. In other words, it implies the use of foreign currency as legal tender in all transactions carried out in the country. Typical for developing countries, as well as those who are going through the transition process, is the application of non-formal and informal forms of dollarization.

Unlike the currency board whose application does not eliminate the problem of currency differences, by the commitment to a dollarization regime a particular country annihilates the problem of currency composition in the structure of assets and liabilities. In addition, by the application of dollarization, the economic policy of the country of the reserve currency is being imported. This shall create a stable, non-inflationary macroeconomic environment, but also prevent vulnerability to speculative attacks. In addition, the application of the above regime leads to the reduction in the risk premium which reduces the price of borrowing of the country in the international market. However, the desired goal of macroeconomic stability cannot be achieved without a sacrifice, which underlies all forms of fixed parity. It is the already mentioned loss in running of sovereign monetary, fiscal and exchange rate policies. In addition to the above, dollarization has another disadvantage, which is only her inherent - loss of seigniorage that occurs as a result of the elimination of the national currency and the loss of the central bank as a lender of last resort. Therefore, the implementation of dollarization makes sense only for very small and open economies that do not really have a real autonomy in terms of keeping the exchange rate policy, and where the significant problem of high rates of inflation is expressed.

Monetary Union

The next in a series of rigid exchange rate regimes is a monetary union. Monetary Union is a currency zone within which member countries share the same currency and administer a common monetary, and exchange rate policies. These are the fixed exchange rates between member countries of particular currency zone. For the country is good to therefore choose this arrangement if it cherishes strong economic ties with future partners in the currency zone, if those countries are characterized by similar economic structure, and in the event that the fiscal federalism is presented within the countries. Taking these circumstances into account, the implementation of a given regime minimizes the losses of joining the monetary union, while maximizing the benefits.

If we consider the benefits that countries achieve by joining the currency union, we should first highlight monetary efficiency and the use of the exchange rate, which in this mode is used as an anchor when running monetary policy. The monetary efficiency refers to the benefits deriving from improvements in international trade and inflows of foreign capital, and occurs as a consequence of the stability of exchange rates and therefore the reduction of foreign exchange risk.

The biggest disadvantage of acceptance of monetary union as a regime, is the loss of economic sovereignty. This means that, for a particular country, it is not possible to independently implement measures of monetary and foreign exchange policies in order to stabilize the decline in employment and output. However, the high level of trade integration, a strong correlation of economic structure, the existence of fiscal federalism and the mobility of capital and labor, reduces the need to conduct an independent monetary policy, and consequently diminishes the necessary sacrifice for joining the monetary union (Beker, 2006).

From what has been mentioned, clearly follows the conclusion that the choice of a fixed exchange rate (either as a currency board, dollarization, or monetary union) is an adequate solution in the situation when there is significant trade between particular state and its reserve currency state, if the the member states are going through similar economic cycles within the same time intervals, if the countries are prepared to take the sacrifice manifested through the loss of monetary sovereignty, if they are faced with high rates of inflation, but also if the particular country has significant foreign currency reserves (in order to be capable to hold a fixed exchange rate in any moment).

FEATURES AND CATEGORIES OF INTERMEDIATE EXCHANGE RATE REGIMES

The emergence of intermediate exchange rate regime occurs as a result of combining the advantages of rigid and flexible foreign-exchange arrangements. The advantage of rigid regimes, enshrined in the pegged regimes is the existence of pre-defined parity and the use of the same as the anchor of monetary policy. Due to the fact that they present a combination of fixed and flexible regimes, the pegged regimes are referred to as the hybrid regimes.

Fixing of national currency can be conducted by its pegging against the value of another single, particular currency, a basket (combination) of other currencies or to another measure of value, such as gold. Generally speaking, in soft fixation, the monetary authorities adopt a certain level of the exchange rate as a target, and then use monetary policy measures to ensure that the course is not too much away from the defined value. Intermediate exchange rate regimes differ from each other according to defined criteria for monetary authorities' intervention. The intermediate form of exchange rate regimes, according to a growing degree of flexibility, includes adjustable pegs, crawling pegs (crawling peg or moderate fixed exchange rate), as well as corridor regimes (target zones, floating and monitoring bands).

Adjustable Peg

Typical for adjustable peg is that the monetary authorities define a fixed ratio between domestic and selected foreign currency, at the same time pledging to defend the pre-defined target by monetary policy measures. Under this regime, the deviation from the central parity is allowed in very narrow limits (not more than +/- 2.25%). Regime is called adjustable because the country has the opportunity to change (adjust) the defined fixed parity in accordance with the new macroeconomic conditions.

Besides the ability to bind to a particular currency, the country can bind its currency value against the value of a basket of currencies, which represents the average (weighted) value of particular currencies. By binding to a basket of currencies, fluctuations in individual currencies within the basket are being "averaged", thus avoiding the effect of destabilizing movements of a specific reserve currency to domestic currency. Interventions in this type of regime are rare, and they are conducted in large amounts, in order to maintain the desired value of the exchange rate. In addition, the regime is often supported with control of capital movements. The reason is that in present conditions, concerning the global capital

market, the adjustable peg is often a target for speculative attacks. In other words, due to the freedom of capital movements, maintaining a fixed parity may often be more expensive option than giving up and devaluing of the national currency. In addition, in the phase of the economic downturn and the rise in the unemployment rate, the state can hardly defend defined parity. In circumstances where there is no institutional obligation of maintaining the parity, the decision is likely that it will be abandoned, which will be followed by a devaluation of the national currency. The ideal solution would certainly be to abandon this regime before the onset of a crisis.

More intensive integration of capital market with the smooth movement of this resource makes countries more vulnerable to speculative attacks. For this reason, some authors believe that the regime of adjustable peg does not offer an adequate response in modern conditions due to the fact that it is neither irrevocably fixed (to turn away or completely eliminate speculative attacks), nor flexible enough (to provide monetary policy principals with freedom in responding to external shocks).

Crawling Peg Regime

Mobile parity, or crawling peg regime, derives from conventional-fixed regime. In addition, it is at the higher level of flexibility than the previously discussed modes. Within this regime, changes in exchange rates do not depend on the decisions of the monetary authorities, but on the criteria that are set in advance as a basis for moving of nominal exchange rate. Thus, the main characteristic of crawling peg regime is reflected in the relatively frequent parity movement, namely in the implication of mini-devaluation/revaluation series in accordance with the selected indicator and defined time intervals. Selected indicator is determined mainly by inflation differential (differential of current inflation in relation to the anchor currency), viz. in accordance with the change in purchasing power parity between the two countries.

The institutional capacity for correction of nominal exchange rates in frequent intervals occurs with the objective of maintaining price competitiveness, as well as equalization of differences in inflation levels, as well as in situations where it is estimated that there are no conditions for the transition to a flexible exchange rate regime. The best results regarding to application of this model are achieved in economies that are export-oriented and which significantly depend on the inflow of foreign direct investment. Based on the business indicators in countries that apply this regime, foreign investors can project the real value of their investment, due to the fact that the use of a given arrangement creates a predictable and stable currency environment. The existence of a stable currency environment positively affects the inflow of foreign capital and a reduction in inflationary pressures, which

further implies an increase in the attractiveness of the national currency in the international market.

Corridor-Type Regime (Target Zone)

Corridor (band or zone) is a hybrid foreign-exchange rate arrangement. This mode is characterized by a wider margin of fluctuation of the both sides of the parity (between 10% and 15%). Within this regime, the monetary policy makers are required to maintain the exchange rate within a certain broad band around the defined central parity. The extent to which the monetary authorities of the respective state allow the exchange rate to deviate from announced parity, determines the type of corridor. In this regard, if the parity is periodically adjusted in small increments in order to comply with changes in the main macroeconomic variables, it is a regime of mobile corridor or *„crawling band"*. On the other hand, if the monetary authorities do not have to defend the band limits at all costs, but act according to their own discretion, for such a regime we say that functions as a monitoring corridor or *„monitoring band"*.

Monitoring band, comparing to crawling band, presents a more relaxed foreign exchange rate arrangement. Within this regime, the band limits within which the exchange rate can fluctuate are set broadly (often over +/-15% as compared to the published value). In addition, monetary authorities retain the discretion not to intervene if the exchange rate overpasses the defined band. However, the fact that the intervention can occur in the event that the exchange rate exceeds the defined level, affects the market in such a manner that the exchange rate is maintained within predefined limits. If, however, market participants attempt to position the exchange rate outside the published zone, the monetary authorities will react and neutralize such an endeavor, which is why such moves are discouraged at the outset.

Despite wide set limits around the central parity, the corridor-type regime is not flexible enough to isolate the country from macroeconomic shocks. Specifically, in the event of a large internal or external shock of exogenous nature or caused by economic policy measures, even margin of fluctuation ranging from +/- 15% is not enough for the country to adapt and isolate from the resulting shock. In this case, the margins will expand increasingly searching for the realistic exchange rate, until they are completely discarded and the transition to a system of fluctuating regime is carried out.

Pursuant to the above, we can clearly conclude that the intermediate regimes arise as a necessity to provide greater freedom and discretion to the monetary authorities with an attempt to keep the nominal anchor as a tool to discipline the monetary

policy. However, with the increase flexibility and frequent changes of parity, the nominal anchor is lost, which makes the intermediate regimes very vulnerable to speculative attacks and, in severe cases, to currency crisis.

FEATURES AND CATEGORIES OF FLEXIBLE EXCHANGE RATE REGIMES

Although often mentioned in theory, the option of independent or "pure" floating is not applied in practice. A country that is closest to the regime of free-floating is the United States because the Federal Reserve intervention in the foreign exchange market rarely occurs. However, the exchange rate is too important variable in economic policy, to be left absolutely susceptible of market forces actions. Hence, most economists prefer managed instead of independent floating regime.

The essential characteristic of managed flexible exchange rate arrangement is contained in its name. Namely fluctuation is managed in terms of interventions in the foreign exchange market that are made by monetary authority, although the exchange rate is basically determined by the market. In other words, the monetary authority does not react in order to defend the preset parity. Within this regime, as a rule, interventions are uncommon, and are implemented with the aim of limiting the excessive destabilizing oscillations of the exchange rate. Given that there is no predefined parity, there is no need for the monetary authorities to accumulate foreign exchange reserves in order to intervene in the FX market. Consequently, due to the lack of targets for speculative attacks, there is less possibility of currency crises.

The key argument in favor of flexible exchange rate regime choice is the possibility to conduct an independent monetary policy. In the event of an external shock, the burden of adjustment does not have to be borne by the internal economic objectives, which would be the case if some of the fixed arrangements were used. In case of a negative external shock, the currency will automatically depreciate and, consequently, make the economy more competitive, or fix exacerbated external position (which manifests in the form of balance of payments deficit). The alternative to such an automatic adjustment mechanism (which emerged due to implementation of some of fixed regimes) is certainly keeping a restrictive monetary policy. Implementation of restrictive monetary policy would improve the competitiveness of the country concerned through decline of the price level (and the levels of employment and production). In addition, by managed fluctuation the problem of currency disparity is eliminated, because flexible exchange rate explicitly pinpoints the existence of the risk. Daily exchange rate fluctuations that are immanent to free-float, necessarily involve the foreign exchange risk.

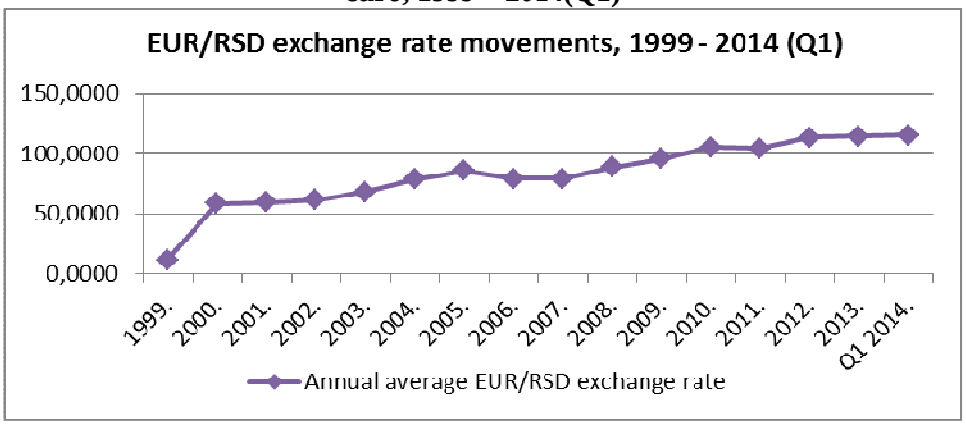
Within the managed float regime, monetary policy is autonomous and independent of the exchange rate policy. A popular combination of this exchange rate regime and monetary policy is *„managed floating plus"* regime. It is a combination of managed float as a foreign-exchange rate regime and inflation targeting as a monetary policy regime.

THE EXCHANGE RATE REGIME APPLIED IN SERBIA

The issue of choosing the most appropriate regime of the national currency is one of the most relevant and always current questions when it comes to domestic economic theory and practice. Counting precisely on its stability, for many years our country persisted on the application of a fixed exchange rate of the dinar. However, this foreign-exchange rate arrangement gave results only in short terms, leaving the structural mismatch behind. In December 2000 Serbia introduced a hybrid exchange rate regime – *managed floating*, recognized by academic and professional practice as a regime of managed floating of the domestic currency.

Since the introduction of the euro to the present, the local currency is characterized by a constant depreciation against the euro. Looking at a series of data relating to the movement of the exchange rate of the dinar against the euro (and with the exception of 2006 in which the dinar appreciated) we see that in the period from 2000s to the present, the average annual depreciation of the dinar was around 7.35%, while the total depreciation of the domestic currency in the same reporting period, cumulatively amounted approximately 56%.

Table 1. Data schedule of exchange rate movements of the dinar against the euro, 1999 – 2014(Q1)



Source: Independent work of the author made on the basis of data published on the website of the National Bank of Serbia

Analysis of the causes that have affected the values of national currency against the euro, we note that the biggest problem is that the stabilization of the exchange rate in certain periods (especially in 2006) was not a result of an increase in the competitiveness of domestic exports and rising domestic production, but the inflow of foreign currency on the basis of FDI. In addition, an incentive to foreign investors did not provide a stable and predictable currency environment. Instead, the largest percentage of foreign investment comes from privatization or takeovers of private property, and to a lesser extent from Greenfield investments, whose inflow would have a positive impact on local economic development in the future.

With it, in 2006, in addition to the inflow of foreign direct investments, significant indebtedness of the Republic of Serbia as per three following reasons occurred (Fabris, 2010):

- borrowing from international institutions for various development projects,
- indebtedness of the economy, at partners abroad and,
- indebtedness of the banks, borrowing from parent banks abroad.

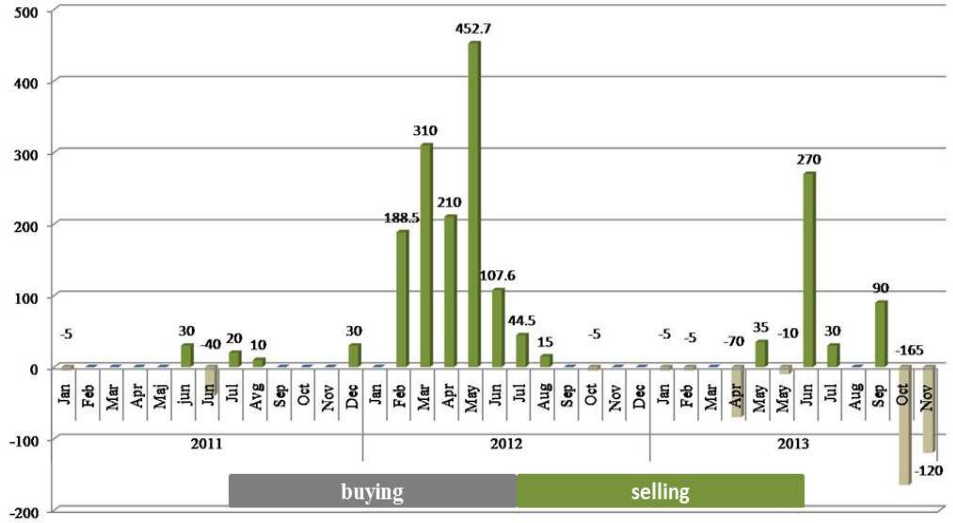
In the period between 2002 and 2008, economic growth and increase in the level of living standard in Serbia are based on borrowing, and not on a strong and competitive economy. Domestic consumption was approximately equal to the GDP or slightly higher, while investments were financed through borrowing. In addition, the structure of the growth was very unfavorable: sectors that produce material goods recorded the growth of gross value significantly below average - agriculture 0.3% and the industry 1.6% per year on average. On the basis of these data, we can unambiguously conclude that the domestic production was substituted by the imports offerings, which was manifested in the form of increased share of deficit in goods and services to meet the total domestic demand. According to many economists, this model of growth could have been upheld only while there was an inflow of foreign capital.

The global financial crisis has also confirmed the fact that the described model of growth was not economically viable. Namely, due to the collapse of the American and then of the global financial market, the inflow of foreign capital in Serbia was significantly reduced. Reduced capital inflow also meant a reduced offer of foreign currency in the domestic foreign exchange market, which caused the dinar to significantly lose value against the euro since 2008. The global economic crisis has affected the macroeconomic environment in the country, and in the next period, the GDP recorded a negative growth rate, there is an increase in unemployment, decrease of investment with simultaneous increase in illiquidity of the economy. In addition, depreciating pressures on the dinar in the preceding period were continuously carried out by extremely high trade and budget deficit. In addition to these factors, consistently higher rate of inflation in Serbia compared to that in the

euro zone, was also putting pressure on nominal alignment of values of the two currencies.

By analyzing the movement of the exchange rate of the dinar against the euro, we note that the national currency, by the end of 2009, generally weakens against the euro. Depreciation pressures on the domestic currency are accompanied by frequent interventions of the National Bank with considerable amounts, in order to maintain the psychological level of the exchange rate. However, despite the interventions on the interbank foreign exchange market (as much as 100 million euros daily) the National Bank was unable to maintain the target level of the exchange rate. In the first half of 2012, the National Bank sold a total of 1,288.8 million euros in the interbank foreign exchange market. Continuation of the trend of significant interventions of the National Bank in order to maintain stability of the dinar endangers the level of foreign exchange reserves and threatens their significant reduction. In the first quarter of 2013, the domestic currency was appreciated (until 7th of May the National Bank intervened in the foreign currency purchases with 90 million euro). After that, the direction of intervening is changing and, by the end of the third quarter of 2013, the National Bank generally occurred as a seller in the interbank foreign exchange market, in order to prevent a further decline in the value of the domestic currency. In October and November 2013, there has been a change in the direction of intervening again. The monthly interventions of the National Bank in the interbank foreign exchange market in the period 2011 – 2013 are presented in the Graph 1.

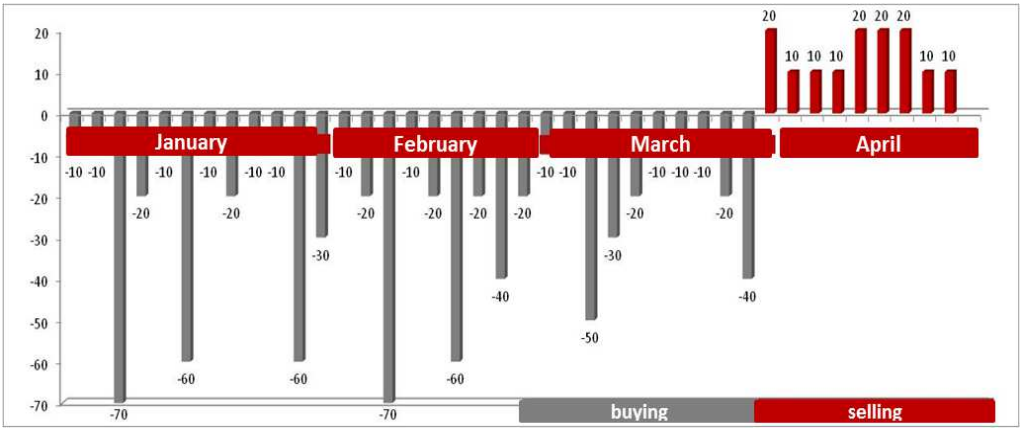
Graph 1. Monthly interventions of the National Bank of Serbia, 2011 – 2013



Source: The National Bank of Serbia, 2014.

Since the beginning of 2014, the dinar was quite unstable. After a long period of permanent pressure on the domestic currency to break the informal limit of 116 dinars for one euro, in first four months of 2014 the National Bank of Serbia by interventions in favor of sales of foreign exchange in the amount of about 820 million euros, ensured that the aforementioned psychological border is not exceeded. It is interesting that the appreciation pressures on the exchange rate of the dinar against the euro dominated during the second quarter of 2014. In addition to the decline in country risk premium, this was contributed by increased foreign investments in government bonds. On the other hand, the strengthening of geopolitical tensions, as well as the occurrence of adverse news regarding the intensity and pace of fiscal consolidation in the coming period, influenced the fact that dinar depreciated in July. In late August and early September, the exchange rate against the euro recorded its lowest value in 2014. During July and August, in addition to the above factors, the increased demand for foreign currency, which is of seasonal character, influenced the dinar to depreciate in the specified period.

Grapf 2. Interventions of the National Bank of Serbia on the interbank foreign exchange market by day, January2014 – April 2014



Source: The National Bank of Serbia, 2014

CONCLUSION

The decision on the choice of exchange rate regime is a specific problem that every country is facing. In addition, the choice of the regime depends on the condition and trends of macroeconomic indicators in the country, but also of the events in its external business environment. Thus, the volatility of variables in the internal and external environment influences a selected foreign-exchange rate arrangement not to be the final and optimal choice. Accordingly, the paper discussed the categories

and features of foreign-exchange arrangements which are now represented in economic theory and practice. Macro-economic conditions in the world have changed over time, thus creating the need for finding new foreign-exchange arrangements that would adequately solve the problems the national economies were facing over time. Today, in addition to the two extremes-classical (conservative) models of fixed and flexible foreign-exchange rate arrangements, there are also hybrid models that are derived from the primary. The emergence of the intermediate regimes occurs as a result of combining the advantages of rigid and flexible foreign-exchange arrangements.

Since December 2000, a managed flexible exchange rate regime is applied in Serbia. This means that the National Bank of Serbia intervenes in the interbank foreign exchange market to prevent excessive daily fluctuations in the exchange rate of the dinar. The exchange rate of the dinar against the euro expresses instability since the introduction to the present. Depreciation pressures on the domestic currency are accompanied by frequent interventions in the interbank foreign exchange market. Macroeconomic environment in Serbia is still unfavorable; the unemployment rate is extremely high; while the rate of inflation is much higher than in the euro zone. In addition, depreciation pressures on the local currency are continuously happening due to high foreign trade and budget deficit.

References

Beker E. (2006), Devizno-kursni aranžmani od ekstrema do „normale“, *Panoeconomicus*, Vol. 53, No.1, pp. 31-49.

Broda C. (2000), *Terms of Trade and Exchange Rate Regimes in Developing Countries*, NBER Working Paper.

Calvo G.A., Mishkin F. (2003), *The Mirage of Exchange Rate Regimes for Emerging Market Countries*, NBER Working Paper

Calvo G.A., Reinhart C. (2002), Fear of Floating, *Quarterly Journal of Economics*, Vol.***117, No*** (2), pp. 379-408.

Dornbush R., Fisher S. (1994) *Macroeconomics*, McGraw-Hill Inc, International Edition.

Fabris N. (2010), Kretanje deviznog kursa u Srbiji: krizno prilagođavanje ili posledica dubljih strukturnih neravnoteža, *Nacionalni interes*, Vol. 6, No. 1, pp. 183-201.

Frankel J.A. (1999), *No Single Currency Regime is Right for all Countries or at all Times*, NBER Working Paper.

Haggart B. (1999), *Exchange Rate regimes: Possible options*, NBER Working Paper.

Hausman R., Panizza U., Stein E. (2000), *Why Do Countries Float the Way they float*, NBER, Working Paper.

Levy-Yeati E., Sturzenegger E. (2003), *Flexible Exchange rates as Shock Absorbers*, NBER, Working Paper.

Levy-Yeati E., Sturzenegger E. (2002), Classifying Exchange Rate Regimes: Deeds vs. words, *European Economic Review 49 (2002)* 1603 – 1635.

Rogoff K.S., Husain M., Mody A., Brooks R., Oomes N. (2003), *Evolution and Performance of Exchange Rate Regimes*, IMF Working Paper.