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## EXCHANGE RATE AS AN INSTRUMENT OF ECONOMIC POLICY - EXPERIENCE OF EASTERN ASIA COUNTRIES

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The main driver of growth in virtually all economies that have achieved rapid growth in recent decades, especially Asian economies, were investment and exports. There is a general agreement that export expansion represents the most effective way for Serbia's economic recovery. The experience of Asian countries, those with rapid growth, can provide guidelines on how the precarious condition of the Serbian economy can be improved to a certain extent. The exchange rate is an instrument of the economic policy that simultaneously affects both the investment and exports of a country, and is the one easier to run than many other factors of growth and development. Several indicators indicate the importance of the exchange rate as an instrument of the economic policy in increasing exports and investments in Serbia. These are, first, the extremely positive experiences of Eastern Asia economies, whose exchange rate policies are the opposite to that of Serbia, the weakness of the domestic market, indicating the necessity of an increase in exports, and thirdly, the extremely low competitiveness of the Serbian enterprises and its economy.

**Keywords:** exchange rate, foreign trade, competitiveness, economic growth, Serbian economy

JEL Classification: E42, E52, O24

### INTRODUCTION

Among the numerous factors credited for the outstanding success of Eastern Asia economies, in the opinion of most analysts, investment and exports are the most important ones. They are often referred to as "growth locomotives" or "engines of growth" because they have the power to start the entire economy. Such opinions are not based only on the empirical fact that

the Eastern Asia countries have achieved tremendous economic growth simultaneously with the growth in exports and investments; moreover, there are theoretical arguments in support of this thesis. Namely, a high rate of investments indicates an increased equity, and the latter may permanently increase the rate of growth through economies of scale. In the case of exports, the theoretical argument is that an export orientation increases the openness of an economy, which makes it more open to the penetration of new technologies and foreign competition, leading to an acceleration of technological progress.

Bearing in mind that foreign trade is one of the weakest points of the Serbian economy, there is no

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doubt that, similarly to the Eastern Asia countries, Serbia's economic recovery can most effectively be accelerated by the expansion of exports. In support of this thesis goes the fact that, compared to the majority of the Asian countries, Serbia is a small country and its long-term growth cannot be based exclusively on the sale of goods on the domestic market. Besides, without an additional foreign exchange influx, current growth cannot be maintained.

The main hypothesis is that, according to the experience of Eastern Asia countries, especially the experience of China during the period of continuous export growth and economic growth, the currency policy could be a very important instrument of an economic policy for boosting exports and improving the export position of Serbia.

The studies of the impact of the exchange rate policy on economic growth had a significant momentum in the 1980's, when they were stimulated by the rapid growth of Eastern Asia economies; this growth was largely based on exports, while exports were based on competitiveness due to the low value of the domestic currencies. In the last few years, there has been a new interest in the impact of the exchange rate on economic growth among scholars.

This paper aims to scientifically explain the exchange rate impact on export growth, and thus, indirectly, on the acceleration of economic growth. The explanation of this instrument of the economic policy has been presented theoretically and empirically, particularly emphasizing the experiences of the countries of Eastern Asia, as the most successful examples of this influence.

By comparing the exchange rate policy in Serbia with those in Eastern Asia countries, with an emphasis on the differences between and even contradictions in the approaches to the instrument, this paper emphasizes the need for changes in the exchange rate policy in Serbia. Without neglecting the significant limitations of the exchange rate policy as an instrument, it is certain that its application may influence many weaknesses of the Serbian exports.

## THE INFLUENCE OF THE EXCHANGE RATE ON ECONOMIC GROWTH

### Theoretical approach

The exchange rate affects the economy of a country in many ways, and makes a variety of macroeconomic and development effects. Frenkel and Taylor (2006, 1) allocated the areas in which the exchange rate has the biggest impact on developing countries and countries in transition. These are:

- Allocation of resources: The exchange rate has a significant influence on the allocation of resources in a society by affecting the price level. As it simultaneously affects the allocation of resources and the overall demand, a relatively low rate may contribute to an increase in employment.
- Economic Development: A relatively low exchange rate, with an adequate industrial and foreign trade policy, increases competitiveness, thus creating the conditions necessary for increasing productivity and economic growth.
- Finance: The exchange rate itself significantly affects the expectations and behavior of the financial market, which means it can be used as a mechanism for its control and stabilization.
- External balance: The trade and other components of the current account usually respond to a large extent on the relative price of foreign goods and services in relation to domestic ones, or the real exchange rate.
- Inflation: The exchange rate may have a role as an anchor, by holding prices at a relatively low level through appreciation (the overestimation of the local currency), and by holding the currency in a stronger position than it is real.

The exchange rate has the most direct impact on the economic growth of a country through its influence on foreign trade. The hypothesis of an economic growth based on exports sees the export expansion as one of the most important determinants of the growth based on technological acceleration. One of the ways in which foreign trade drives growth is by technological

progress, which is the natural consequence of the international exchange. When a country is open to international trade and competes on the global market, it is natural for it to adopt the most advanced production technologies and management techniques, engage the most qualified human resources, and invest in sophisticated research and development (R&D). Increasing efficiency in terms of the costs and volume, we can improve the factors of production – labor and capital.

The real exchange rate is a good indicator of a country's export competitiveness, showing the relation between the price of goods and services in one country compared to prices in other countries. The undervaluation of the domestic currency is a situation where the nominal exchange rate is above the real one, in which case we are talking about a real depreciation. In the case of the undervalued exchange rate purchasing power in a country is higher than abroad. Due to the high cost of foreign currencies, the price of imports increases, which further leads to the growth of domestic demand and declining demand for imported products. Exporters get more local currency, which increases products export and the competitiveness on foreign markets. These trends result in the improvement of the balance of payments. According to traditional Keynesian macroeconomics, relative depreciation stimulates exports, making them more profitable, which in turn encourages companies to increase the volume of their exports. Since the demand for exports is relatively elastic with respect to prices, increasing the volume of exports leads to an increase in export earnings, and thus to an increase in total income and employment.

Conversely, if the exchange rate is below the level of the real exchange rate, a local currency is overvalued (appreciation), and a foreign one is underestimated. The overvaluation of the local currency means a higher purchasing power abroad than at home. Foreign goods' prices, denominated in the local currency at such a rate, become lower, so there is interest in importing goods, because imports become relatively inexpensive. Foreign goods, which would be too expensive for the average consumer at the real exchange rate, become more competitive in the domestic market at the lower exchange rate, which, naturally, leads to reduced domestic production. Conversely, products that the

given economy could export at the real exchange rate become too expensive, i.e. uncompetitive in the international market.

The overvalued exchange rate makes domestic consumers and producers rely on imports but has a strong negative effect on the export capacities of the given economy. Over time, imports exceed exports, which contributes to the draining of foreign currencies. This, further, leads to the lower and lower ability of buying goods from abroad, and severely increases the inability of paying credits for the servicing of the foreign debt.

The ultimate effect of the overvalued exchange rate is that the given state loses the earlier comparative advantage it had because of the lower price of export products from rival exporters. Of course, the comparative advantage of export does not have to reflect in lower prices. It can be reflected in a better quality, or a technologically more advanced manufacturing process. However, this is the advantage developed countries can count on, while in the case of developing countries, for the majority of products, a low price is a major advantage.

Even in countries where the direct impact of exports on the aggregate GDP is relatively small, it has an immense positive impact on other components of growth, such as investment and spending increase.

Exchange rate management can have a strong impact on the overall savings, because it affects consumption and investments by establishing real wages. The low price of a foreign currency makes borrowing in such a foreign currency relatively cheap, leading to the over-indebtedness of the country abroad, and of its citizens with banks.

The export earnings themselves, which, on the one hand, are extremely desirable for any economy, sometimes, on the other hand, encourage the overstatement – appreciation of the exchange rate. The retention of this overvalued exchange rate may result in restraining economic growth.

The common negative effect of the appreciation as well as the one of the depreciation of the local currency sends the wrong signals to investors about the areas in which to invest. In the case of the overvalued local currency, the production relying on imported raw

materials seems more profitable than it really is. On the other hand, the undercount of the national currency, due to the unrealistic increase in the price of imports, sends signals that it should be invested in sectors that may otherwise be profitable only in terms of an unrealistically high exchange rate.

The appreciation is always good for collecting political points, because it reduces the prices of imported products and has an anti-inflation effect. However, for the reasons discussed above, it can have devastating effects on the allocation of resources and prospects for development. In addition, as first described by Frankel in 1983, (Frenkel & Taylor, 2006, 7), a fixed or quasi-fixed strong exchange rate can easily induce the destabilization of the capital movements cycle.

### Empirical Research

The empirical investigation of the impact of depreciation on export earnings gives different results. Some of them show a clear and direct correlation, or a positive effect, while others argue that this correlation does not exist. On the other hand, the research of the correlation between the exchange rate and economic growth shows a significant connection.

A significant empirical research of the impact of the debt crisis in Latin America and Eastern Asia countries was conducted by Sachs in the early nineteen-eighties (1985, 523-573). His conclusion was that the Asian countries more successfully had overcome the crisis specifically because of a better exchange rate regime and a better foreign trade policy. Except for the Philippines, none of the successful Asian economies has an external debt problem.

Numerous recent studies have offered a lot of evidence that the exchange rate has a significant impact on production growth. One of the most important ones is a comprehensive study by Hausmann et al. (2005), which comprised more than 80 cases of sustained growth since the 1950s (i.e. the rapid growth that has lasted for more than eight years), than, further, studies by Razmi (2007), Berg et al. (2008), Blecker and Razmi (2009) and other studies.

Blecker and Razmi (2009) approached this problem by developing a separate index of the exchange rate for each exporting developing country in relation to:

- the currencies of the industrialized countries and
- the currencies of competing developing exporters.

Using the panel data method, they found that the real depreciation of a currency in relation to the developed countries generally gave contraction effects, while the real depreciation in relation to the competing developing countries had a strong expansionary impact on output growth.

All the above-mentioned empirical studies demonstrate a statistically significant role of competitive exchange rates, as one of several factors strongly associated with the continued growth of the analyzed economies.

What regularly appears in empirical research is the relative undercount of exchange rates in Asian countries in the period from 1970 to 2000. In most papers, the low value of the domestic currency in Asian developing countries appears as a regional pattern.

### ASIAN COUNTRIES EXPERIENCE

There is no doubt that trade is an integral part of the model of growth in developing countries. During the 20th century, there was an expansion of foreign trade, which led to the growth of employment and generated wealth, and then, further, to a drastic improvement in living standards around the world. In the mid-20th century, many developing countries in Asia, such as South Korea and Taiwan, successfully adopted a strategy of growth based on exports, achieved financial balance and improved productivity.

Over the last 30 years, the competitive value of Asian currencies has been, one of the most important factors of the successful growth of East- and Southeast Asia countries. Reliance on a strategy of export-oriented manufacturing growth has, in many cases, led to an outstanding business success. Thanks to this strategy, during the period 1960-1980, the region of East and Southeast Asia achieved far higher growth than other regions of the world (Table 1), excluding the Middle East, which made an unusually high rate of growth based on a sudden increase in the oil prices in the 1970s. As can be seen from the data accounted for in Table 1, the growth of Eastern Asia economies in this period was 6.6%, while in developed countries it was

only 4.5%, which was the world average. Growth based on exports continued to the end of the 20th century, although in the last two decades, South Asia, specifically India, has been achieving higher rates of economic growth.

**Table 1** GDP growth in the regions of the world 1960-2012

	1961-1980	1981-2000	2001-2011
East Asia	6.6	4.1	3.6
Developed countries	4.5	3	1.6
Latin America	5.5	2.3	3.4
MENA	8.7	3.0	4.4
South Asia	3.7	5.4	6.9
The World	4.6	3.1	2.5

Source: Author, according to the World Bank (<http://databank.worldbank.org>)

The most successful export strategies were implemented in the so-called Asian Tigers, which include South Korea, Taiwan, Hong Kong and Singapore, in the 1970s and the 1980s. The rise of the Asian Tigers: Hong Kong, Singapore, South Korea and Taiwan, had started in the 1960s, with the development of the industrial base and by focusing on international trade. Their production, compared to developed countries, had had a significant

advantage, due to the relatively low wages. Thus, the initial stage of their boom was marked by the export of cheap low quality products into huge trading partners, Japan and the United States. With the help of high investments (domestic and foreign), and an increase in labor productivity, these economies achieved a better quality of goods over time, but they continued to rely on their most important competitive advantage – the low cost of products. In some cases, the Asian Tigers used mechanisms such as trade barriers, the exchange rate control, as well as other forms of the government intervention to boost foreign trade as a major pillar of their economic development.

Their growth began to decline in the 1990s, and China and India assumed the leading role among the Asian countries in terms of the GDP growth rates. In the 1990s, these two countries took advantage of the relatively low exchange rates, which incited exports and output growth.

In the region of Eastern Asia, which has been achieving rapid growth for decades, the Chinese economy growth of 11% on average has been the most rapid one in the last decade (Table 2). China's economy has mainly been managed by using traditional macroeconomic instruments such as the monetary policy and the exchange rate policy. China's exchange rate policy is the subject of much international attention, but also a source of pressure, because many believe that, currently, it contributes to an increase in global imbalances.

**Table 2** The growth rate of the economies of East and Southeast Asia, 1960-2009

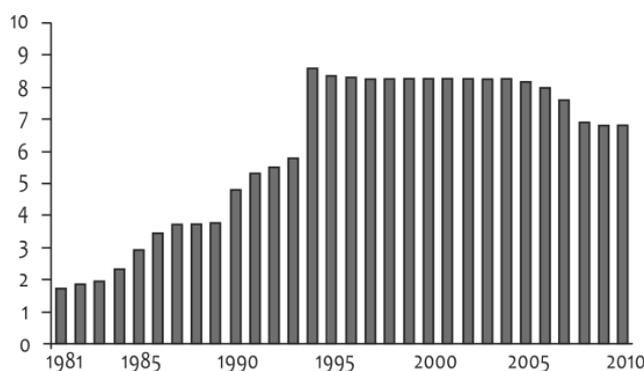
	1960-1980	1980-2002	2003-2006	2007	2008	2009	2010	2011
China	4.9	9.5	11	14.2	9.6	9.1	10.4	9.3
Hong Kong	9.5	5.1	8.4	6.4	2.2	-2.8	7.0	5.2
Indonesia	6.0	5.1	5.3	6.3	6.0	4.5	6.2	6.5
Japan	7.4	2.4	2.0	2.4	-1.2	-5.2	4.4	-0.7
Korea	7.8	7.1	4.1	5.1	2.3	0.2	6.3	3.6
Malaysia	7.2	6.1	5.8	6.5	4.7	-1.7	7.2	5.1
Singapore	9.3	6.8	8.8	8.5	1.8	-1.3	14.8	4.9
Thailand	7.5	5.9	5.7	4.9	2.5	-2.2	7.8	0.1

Source: Author, according to the World Bank (<http://databank.worldbank.org>)

China's share in world trade has rapidly increased in recent years. It is the largest exporter in the world, and its share in the total world exports continues to increase. In 2010, it amounted to more than 10.4% of the world exports (WTO, World Trade Report 2012, 23). In 2011, the Chinese export with a growth rate of 9.3% was the second fastest-growing one in the world, after the Indian one (WTO, World Trade Report 2012, 21).

China's exchange rate policy consists in maintaining the artificially low exchange rate of Yuan, with the aim of realizing profits from foreign demand and achieving high growth rates.

Since the beginning of the economic reform in 1978, there have been several adjustments of the Yuan exchange rate (Graph 1). In January 1981, the government halved the value of the Yuan in trade transactions, by introducing the internal rate of 2.8 Yuan against the U.S. dollar, while the official rate remained at 1.5. From January 1981 until late 1984, the authorities gradually depreciated the official rate, until it reached 2.8, when the internal rate was abolished. However, the government continued to gradually devalue the official exchange rate, which reached 3.2 by the middle of the 1986. In July 1986, the authorities continued to reduce the value of the currency by 15 percent, and the rate reached 3.7 Yuan against the U.S. dollar.



**Graph 1** RMB middle exchange rate annual average

Source: Author, according People's Bank of China ([www.pbc.gov.cn/publish](http://www.pbc.gov.cn/publish))

In late 1989, the authorities again significantly devalued the official exchange rate, this time by as much as 21.2 percent. The government, then, made a few minor adjustments in the official rate. Later, in January 1994, the government unified the two rates, and the market price of 8.7 Yuan against the dollar prevailed. Since the unification, the Yuan reached a record value of 8.28 against the U.S. dollar by the middle of the year 1995, and that value has declined to 6.5 Yuan against one U.S. dollar up to date.

The exchange rate issue is becoming a growing source of antagonism at the global level. The U.S. and the European Union have criticized China for the maintenance of the depressed value of the Yuan at an undervalued level by up to 40% against the dollar. The issue, which threatens to cause a trade war, was at the top of the agenda at the Summit of finance ministers and central bank governors of the G 20, held in Seoul in November 2010. However, the leaders of the Group of 20 largest world economies refused to support the U.S. pressure on China to allow the rise of the value of its currency. At the end of the Summit, the heads of the Group of 20 issued a moderate press release, pleading for refraining from the "competitive devaluation" of currencies.

The U.S. officials claim that a more expensive Yuan would make Chinese exports more expensive and American goods cheaper in China. That would reduce the constant U.S. problem of trade deficit with China. According to the data from the U.S. Census Bureau (2010), in the year 2010, the U.S. trade deficit with China amounted to 273 billion U.S. dollars, which is a new record after the one of 268 billion dollars in the year 2008. According to the same source, the deficit had exceeded 100 billion U.S. dollars already in 2002, and it has been growing at an incredible rate since then, which, according to a general opinion, is a direct result of the undervalued Yuan rate. Washington did not obtain support for the criticism of China, probably because the U.S. has been pursuing the same policy of the domestic currency devaluation since the Great Depression of 2009. Namely, following the decisions of the U.S. Federal Reserve, the additional amounts of several hundred billion dollars are constantly fed into the slow U.S. economy. In this way, the market is

stuffed with dollars, which diminishes the value of the American money and favors the U.S. exporters.

Another fact corroborating the hypothesis of a positive impact of maintaining the value of the local currency at a low level is the experience of the Asian countries with the consequences of the Asian crisis of 1997. Those countries that less intensively defended their currency by interventions in foreign exchange reserves during the Asian crisis of 1997, ended up with the smaller depreciation of the national currency and, of course, less reduction in the foreign exchange reserves than it was the case with those central banks that did so at any cost.

#### FOREIGN TRADE FEATURES AND EXCHANGE RATE POLICIES IN SERBIA

The main features of the state of the economic relations between Serbia and abroad are the enormous growth of the external debt and a high foreign trade and balance of payments deficit, which continues to rise.

In 2008, the imports of Serbia were two times higher than exports. In that year, according to the data of the Republic of Serbia Statistical Office (2011), the total foreign trade amounted to nearly 34 billion dollars, and the value of goods exported was only 11 billion. Although the global economic crisis has not led to a trade deficit, it has caused a drastic drop in imports from the most important trade partners of Serbia, which has contributed to the further enlarged deficit, in terms of percentage. In 2009 and 2010, the deficit was gradually reduced, but the total exports further reduced.

According to the data of the Statistical Office, the crisis of Serbian exports has been lasting for a much longer time period. In the last ten years, the deficit increased from 1.75 to as much as 11.9 billion USD in 2008, only to drop to about 7 billion USD in 2009 and 2010, and again increase to over 8 billion USD in 2011, which accounted for a deficit of about 16%. The growing foreign trade deficit is a reflection of the enormous increase in imports and the low growth of exports over the past five years. According to the analysis of the Statistical Office, a certain increase in exports and a decrease in

the deficit in 2010, compared to 2009, are the result of the export of the ferrous and non-ferrous metallurgy, as well as the export of agricultural products, and of a mild depreciation of the dinar, too, which occurred in 2010.

**Table 3** Foreign trade of Serbia in the period 1999 - 2011

Year	(in millions USD)		
	Exports	Imports	Balance
1999	1369	2881	-1512
2000	1558	3330	-1772
2001	1721	4261	-2540
2002	2075	5614	-3539
2003	2755	7473	-4718
2004	3523	10753	-7230
2005	4482	10461	-5979
2006	6428	13172	-6744
2007	8825	18554	-9729
2008	10973	22875	-11902
2009	8344	16056	-7712
2010	9,794	16,735	-6,941
2011	11779.5	19861.9	-8082.4

Source: Republic of Serbia Statistical Office, 2011

In terms of trade with certain regions, the largest deficit, although together with the largest volume of exports, was recorded in trade with developed countries - 988 million USD, then with transition countries, 859 million USD, while with the developing countries, it amounted to a 131 million USD deficit. Such a structure of the export markets, and the fact that we have the largest deficit with developed countries, confirms the assumption about the negative effects of the overvaluation of the national currency in Serbia. Imports in Serbia have become relatively inexpensive.

According to the comprehensive study Competitiveness of Serbian economy (Konkurentnost privrede Srbije, Jefferson Institute, 2006, 1), based on several studies conducted, Serbia is able to generate significantly more exports than it currently does. According to the results of this study, all the reasons for that delay can

be reduced to a common denominator, which is the lack of competitiveness. The Serbian economy is not competitive, not only compared to the EU, but to the neighboring countries as well. The research comprised the total of 76 countries, and Serbia was ranked 69th according to the competitiveness of its economy.

The policy of strengthening competitiveness cannot be separated from the exchange rate policy, which, in addition to the previously mentioned, is another motive to examine the range and capabilities of this instrument of the economic policy.

In Serbia, there has always been a tendency to have a fixed nominal exchange rate policy. The practice of many countries, confirmed by numerous empirical studies, shows that the fixed nominal exchange rate only provides short-term results, while afterwards all the negative effects of the national currency appreciation appear – such as a balance of payments deficit and the excessive borrowing of the country. Under inflationary conditions the “fixed exchange rate becomes enormously unrealistic, foreign currencies become undervalued and the dinar overvalued, which erases all the attempts of companies to remain competitive in the export and domestic markets.” (Kovač, 2006, 15)

After the political change of 2000, Serbia has to some extent abandoned the fixed exchange rate system, which at that time was incredibly unrealistic 6 dinars against the German mark. The exchange rate was then increased to 30 dinars for the mark. It should be emphasized that even then the exchange rate was not left to the market. For a certain period, it was also fixed, only on more realistic values. After October 5th, 2000, the National Bank of Serbia (still Yugoslavia at that time) used the exchange rate to achieve the macroeconomic stability and inflation reduction, following the recommendation of the International Monetary Fund. In good part, this proved to be successful.

Compared to the year 2000, “the real effective exchange rate enormously appreciated in 2001 and 2002” (Kovač, 2006, 16). The introduction of the New Economic Policy in the year 2001 constantly led to the overvaluation of the domestic currency. Since 2003, at least nominally, the managed floating exchange rate regime has been

in force. This model presumes the market-determined exchange rate, and a float managed in terms of an occasional interference of the monetary authorities in the foreign exchange market trends.

However, although the model of the managed floating exchange rate has in the past period been the closest to the Serbian one, we clearly notice the frequent interventions of the National Bank of Serbia in order to maintain the current value of the dinar. In this manner, it takes on certain characteristics (adverse effects) of a fixed model.

The monetary authorities should not react to defend a certain parity; instead, they should relatively rarely intervene to limit excessive destabilizing fluctuations in exchange rates. “The managed fluctuation of the national currency in the foreign exchange market does not imply the existence of a pre-announced target value of the exchange rate, and there is no need for monetary authorities to accumulate foreign exchange reserves and to intervene in the foreign exchange market. Therefore, the lack of targets for speculative attacks leads to the lesser likelihood of currency crises” (Beker, 2006, 31-49).

According to the official view of the economic policy in Serbia, the exchange rate is not the cause of high external deficits, and the nominal exchange rate is still considered to be an anchor to control inflation (this attitude is imposed by international economic and financial organizations), regardless of its large real appreciation.

Empirical research suggests otherwise. The Dinar is still constantly overrated. The growth of the domestic prices is constantly greater than the change of the dinar rate against the dollar and the euro. “It was only in the year 2004 that there was a mild real depreciation unable to correct the immense accumulated appreciation. At the end of March 2005, this cumulative appreciation amounted to 53.48%” (Kovač, 2006, 16). According to a comprehensive study, the “Macroeconometric modeling of the Serbian economy – the theoretical basis and the results” (CES MECON, 2005), the real appreciation of the dinar during this period was mainly caused by an increase in imports, and to a lesser extent an increase in production. Center for Economic Studies Mecon joined the econometric

testing of imports to Serbia, which showed that the level of imports was significantly affected by the movement of the real exchange rate, real wages and industrial production. The testing of the imports showed that, in the stabilization period, the exchange rate was a significant factor in the growth of imports, and, consequently, in the trade deficit of Serbia.

More recent analyses also suggest that the constantly overvalued exchange rate is one of the major causes of "a massive trade deficit and the growing debt of citizens, businesses and the state..." (Jovović, 2011, 66). In the first half of 2011, the dinar appreciated by 3% against the euro and 12% against the U.S. dollar (Jovović, 2009, 74). In April 2011, the value of the dinar fell to below 100 dinars against the euro, to the level from a year ago. The appreciation of the dinar constantly keeps going on, without real coverage or without an adequate inflow of export-generated foreign exchange. "It is impossible to have a strong dinar in a weak economy with low export..." (Jovović, 2011, 68). This can mainly be attributed to more NBS intervention in the election year.

The overvalued exchange rate and import liberalization stifle local production, which again encourages the growth of imports. The aim of imports liberalization was to encourage the import of new technologies and equipment that would improve and instigate production in Serbia. Unfortunately, instead of strengthening the competitiveness of domestic products in foreign markets, liberalized imports have led to the increased competitiveness of foreign goods in the domestic market, which has led to the closure of a number of companies.

Another mentioned weakness of the overvalued national currency – excessive borrowing, has also emerged in Serbia. The indebtedness of the private sector is a consequence of the great appreciation of the rate of the dinar and its external value being much higher than the internal one. The largest debt was incurred at the time of the highest appreciation in the years 2005-2008. By the end of this period, the rate had reached 88.6 dinars for one euro, as a result of the events in the foreign exchange market at the end of the year. According to the Association of Serbian Banks (The Association of Serbian Banks, Press

Conference 18/09/2012), at the end of 2011, the total of 11.8% of borrowers (households, entrepreneurs and legal entities) who had taken loans from banks were late with repayment. In most cases, the reason was the large depreciation of the dinar against the euro (from 79 dinars for one euro in 2007 to 116 for 1 euro in 2012).

Based on the results of the aforementioned econometric modeling, it follows that the appreciation of the real exchange rate and excessive growth in domestic demand have also been the main drivers of the increase in imports and the trade deficit since early 2001.

The econometric finding that the growth of imports and the foreign trade deficit caused the expansion of domestic demand, which has for several years been by 20-25% beyond the production in Serbia and still growing, which is not sustainable in the long term, is also greatly significant.

Due to the relatively high exchange rate, Serbian products are uncompetitive in exports in the price terms, while demand for imported products is higher than agreeable with the capabilities of the Serbian economy. The NBS has until recently emphasized that its primary goal is to preserve inflation, although it is known that the stable value of the national currency has to be the result of a stable economy, and that the growth of the economy has to be the result of productivity growth, not the result of spending foreign exchange reserves. To make matters worse, the dinar rate has, until now, been largely defended by the borrowed funds. Namely, the maintenance of the dinar at a given level is a consequence of the frequent intervention of the NBS with the funds from the foreign exchange reserves, which are the result of privatization, and borrowing from the outside, not the result of the export of goods and services.

## CONCLUSION

Several indicators point out the significance of the exchange rate as an instrument of the economic policy to increase exports and investments in Serbia. This paper points out the highly positive experiences of Eastern Asia economies, whose exchange rate policy

is the opposite to that of Serbia. An additional reason for the export-oriented development strategy is the weakness of the already-too-small a domestic market. Third, the factor representing the most serious obstacle for the export is the extremely low competitiveness of Serbian companies and the economy.

The strategy of increasing the competitiveness of the Serbian economy should be based on the market value of the exchange rate. A Real or slightly depressed exchange rate would encourage the competitiveness of exporters and possibly instigate the development of new product lines, which, in terms of an overvalued exchange rate, has no economic justification.

In order to create a competitive foreign exchange market and form a foreign exchange rate which would be the result of the real market conditions, the reduction of the role of the National Bank of Serbia in the foreign exchange market is necessary. This would mean abandoning the previous policy of the exchange rate stability, given that this way of defending the dinar is extremely expensive, since it consumes the foreign exchange reserves and leads to further borrowing. In that case, the NBS would intervene in the foreign exchange market only occasionally, when it is necessary to prevent extreme fluctuations in the exchange rate. The NBS should take responsibility for the inflation moving within certain limits, while the determination of the exchange rate should be left to the market.

Today, Serbia has a managed floating exchange rate, which, in the opinions of the majority of domestic and foreign analysts, is probably the best solution. There are supporters of free-floating and fixed exchange rates, but these represent a significant minority. Most of them understand that both extremes have many weaknesses, which Serbia, with its weakened economy, would hardly handle.

The fixed exchange rate would bring lower interest rates, fewer risks and fewer uncertainties regarding business, but it would exhaust the Serbian foreign reserves. On the other hand, a completely free exchange rate would lead to a (real) decline of the dinar, which, in a certain period, would most surely lead to a significant increase in exports, but the consequences

for businesses and citizens with loans related to the euro would be disastrous.

The exchange rate would have to be as close to its real value as possible, and any deviation from the real value would have to tend to the underestimation rather than overestimation of the dinar, which would stimulate exports, as only export expansion can make Serbia overcome the crisis.

Along with releasing the intervention of the National Bank, because of a possible decline of the dinar in the future, the problem of huge foreign exchange loans to individuals and businesses should be solved. All the subjects – borrowers, commercial banks, the state officials, and the National Bank of Serbia – should take part in finding a solution.

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