

## **EFFECTS OF FOREIGN CURRENCY EXCHANGE RATES ON COMPETITIVENESS OF THE REPUBLIC OF SERBIA IN INTERNATIONAL BUSINESS**

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### **Sažetak**

U eri globalizacije i međunarodnih tokova koji sa sobom nose liberalizaciju, deregulaciju i povećan uticaj međunarodnih monetarnih institucija, kao i opšti makroekonomski ambijent i ekonomska politika nacionalne ekonomije imaju krucijalni značaj na konkurentnost privrede na međunarodnom tržištu. Politika deviznog kursa, kao jednog od faktora ekonomske politike, ima značajne implikacije na konkurentnost, platni bilans i zaduženost zemlje. S tim u vezi svrha rada jeste da ukaže na režim deviznog kursa Republike Srbije koji je apresijacijom dinara doveo do smanjenja konkurentnosti domaćih proizvoda, deficita platnog bilansa i visokog stepena zaduženosti zemlje. Metodologija rada zasniva se na obradi sekundarnih podataka publikovanih u javnim izvorima, a za period od 2001. do 2012. godine Republike Srbije, kako bi se dobila reprezentativnost analiziranih podataka. Rezultati istraživanja ukazuju da je realni devizni kurs dinara skoro duplo veći od zvaničnog kursa te se nema naročitog interesa za izvoz domaćih proizvoda. Stoga se monetarno-devizna, kao i celokupna ekonomska politika javlja kao katalizator razvoja konkurentnosti Srbije na međunarodnom tržištu, te se slobodno može zaključiti da monetarno-devizna politika nije ostvarila ekonomske ciljeve iako se konstantno potencira na stabilnosti deviznog kursa kao pozitivnoj meri od strane kreatora ekonomske politike. Ta tobožnja stabilnost koštala je Srbiju veoma mnogo, što pokazuju podaci iz platnog bilansa: visok deficit, visoka spoljna zaduženost i poslednično: dužničko ropstvo Srbije.

**Ključne reči:** devizni kurs, konkurentnost, međunarodno poslovanje.

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## Summary

In the era of globalization and international flows that carry the liberalization, deregulation and increased impact of international monetary institutions, as well as the general macroeconomic environment and economic policies of the national economy have been crucial to the economic competitiveness in the international market. Exchange rate policy, as one of the factors of economic policy, has significant implications for competitiveness, balance of payments and indebtedness. In this regard, the purpose of this paper is to point out the exchange rate regime of the Republic of Serbia, which has, by appreciation of currency reduced the competitiveness of domestic product, balance of payments deficit and a high level of indebtedness. The work methodology is based on the processing of secondary data published in public sources for the period 2001-2012 of the Republic of Serbia in order to obtain a representation of the analyzed data. The research results indicate that the real exchange rate of the dinar is almost double the official rate, and there is no particular interest in exporting local products. Therefore, the monetary and foreign exchange as well as the overall economic policy appears as a catalyst for the development of Serbia's competitiveness in the international market, and it can be concluded that the monetary-and-foreign exchange policy has not achieved economic objectives although the stability of the exchange rate as a positive measure is constantly emphasized by economic policy makers. The alleged stability cost Serbia a lot, as evidenced by data from the balance of payments: a high deficit, high external debt and consequential debt slavery of Serbia.

**Keywords:** exchange rate, competitiveness, international business.

## 1 Introduction

For a longer string of years, a floating foreign currency exchange rate is applied in the Republic of Serbia, having the characteristics of a dirty form of the foreign currency exchange rate, as in opposite case there would have been no interventions of the Serbian National Bank (NBS) in the financial market. Cumulatively taken, a policy of appreciated foreign currency exchange rate is implemented in Serbia in respect of Euro and all other convertible foreign currencies, which has a long term character. In order to maintain stability of Dinar, NBS has spent huge amounts of foreign currency reserves conserving stable Dinar in relation to Euro, while buying power of Dinar have been constantly decreasing.

Such a policy of foreign currency exchange rate results in stimulation of import and lessening of competitiveness of domestic products in the international market. Also, which is the most important, ravages exploitation of local resources and level of use of local capacities and decreases employment. Such a policy has negative impact on economic growth and increase of GDP, and stimulated import is the main cause of adverse balance of payments.

## 2 Methodology of work

Statistic method as a scientific method will be used for describing, learning about, research, comparison and analysis of the foreign exchange rate indicators for competitiveness of the Republic of Serbia, which is the subject of research. Statistic assessments are based on data from the sample in order to estimate, predict and generalize the research subject. In that sense, the correlation method will be used by applying the *Pearson* correlation coefficient, i.e. the relation between variables, within the hypothesis made based on relations:

$$r = \frac{n \sum x y - \sum x \sum y}{\sqrt{[n \sum x^2 - (\sum x)^2][n \sum y^2 - (\sum y)^2]}} \quad (1)$$

and making a two-way *t-test* with critical test value for  $\alpha/2$ ,  $t_{v,\alpha/2}$ ,  $v = n-2$ , on the reliability level of 99% with the following deciding rules:

- $H_0$  is accepted if  $|t| < t_{v,\alpha/2}$
- $H_1$  is not accepted if  $|t| \geq t_{v,\alpha/2}$ .

Test statistics is:

$$t = r/s_t \quad (2)$$

$$s_t = [(1 - r^2) / (n - 2)]^{1/2} \quad (3)$$

as well as descriptive method which describes in a scientific way the findings about the research subject in the symbolic language of science.

The sample which is examined in the research was made based on official and relevant data which have been officially published, and consists from data of the import and export amounts as well as the current balance of payment account for the period 2001-2011 in Serbia, with the objective to make an impartial assessment of tested parameters. Selecting the number of years for the sample, care was taken that the number is suitable and sufficient for statistic data processing, as well as that the time period is the range based on which an appropriate judgment about regularity of the analyzed parameters trending. Since majority of tests are made based on numeric data, elements which make the sample are suitable for individual and summary observation of their indicators, in accordance with the hypothesis testing method.

## 3 Foreign currency exchange rate and its implications in international business of the Republic of Serbia

Adopting liberal and market concepts, Serbia adopted the policy of dirty floating (flexible) foreign exchange rate, basing this policy on the concept of unrealistic Dinar exchange rate, which has negative consequences for competitiveness of products, companies, economy and general economy. Since 2001, Serbian Dinar has constantly been appreciated in relation to Euro, which had significant influence on

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competitiveness of local products in the global market. Estimated value of Serbian Dinar (Table 1) favored the import sector, and had destimulating effect on export of local products. Stimulating import, consumption of foreign was stimulated, and supported by undervalued Euro, they made significantly higher competitiveness than real one, which resulted in decreased demand for local products and constantly decreasing employment of local producer capacities (Stamenković, Pavlović R. & Pavlović, M., 2011).

**TABLE 1: TRENDS OF NOMINAL AND REAL FOREIGN CURRENCY EXCHANGE RATE IN SERBIA, 2001-2012**

Year	Chain indices (end of prev. year=100)	Cumulative	Official exchange rate Euro/Din	Real exchange rate Euro/Din
2001	130,0	-	59.7000	77,6100
2002	116,8	151,84	61.5845	93,5100
2003	101,9	154,72	68.4861	105,9617
2004	98,9	153,02	79.0803	121,0087
2005	101,6	155,47	85.5000	132,9269
2006	114,2	177,55	79.0000	140,2645
2007	109,7	194,77	79.2362	154,3283
2008	95,1	185,23	88.6010	164,1156
2009	97,7	180,97	95.8888	173,5300
2010	96,9	175,36	105.4982	185,0016
2011	104,4	183,08	104.6409	191,5766
2012	101,5	185,83	113.7183	211,3227

*Source: Pavlović i Stamenković (2012); Narodna banka Srbije (NBS) (2012).*

What has been a special pride of our economic reformers and their liberal like-mindedness since 2000 is the stable exchange rate of Dinar and *healthy* banking system, which has been almost fully conceded to the hands of foreign capital (Dušanić, 2012). Such trends explain in great deal the condition of national economy and blanketing of domestic production which is not competitive in respect of prices on international or on the local market, while a good part of domestic market is conceded to foreigners, without competition, which is simply inapprehensible, with value of our enterprises being depreciated at the same time (Dušanić, 2003a). What causes particular worries is the fact that the problem of realistic foreign currency exchange rate is still observed isolated, as an incident or a defect that needs to be solved by a higher or a lower correction of the national currency rate, instead of being treated as an important element of standard economic doctrine, which is, unfortunately, dominant in our scientific and professional public (Dušanić, 2003b).

Since foreign currency exchange rate is one of determinants in international business, categories of import and current account in the balance of payments need to be considered in order to understand import transactions of the national economy with foreign countries and the effect of foreign currency exchange rate on the value of import and balance of payments deficit (Table 2). Stabilization, liberalization and privatization are treated as objectives on their own. Stable financial situation, low inflation, stable foreign currency exchange rate, privatization and liberalization of economy should be the means of economic strategy, and fundamental objective of reforms should be achievement of faster economic growth and improvement of the living standard of citizens. Foreign currency exchange rate was stabilized in Serbia relatively quickly and easily and so-called internal convertibility of Dinar was established owing to satisfactory foreign currency reserves. Implementing transitory changes within credit and monetary and foreign currency policy, holders of economic administration in Serbia replaced the central bank with a currency board, with following main features: automatism and absence of (discretionary) monetary policy, as well as internal convertibility with fixed foreign exchange rate. With foreign currency exchange rate of Dinar which have actually been a fixed exchange rate (years 2001, 2002, etc.), in a situation of much higher inflation than in Western economies, a real appreciation of Dinar occurred. In that way, competitiveness of domestic products decreased abruptly, both in the local and in international markets. In such a situation, almost every export becomes cost-inefficient, and import very economically attractive. Such a foreign currency exchange rate policy makes imported goods cheaper and more competitive in the Serbian market. At the same time, everything that is produced in Serbia is expensive and not competitive both on Serbian and international market (Nedeljković, 2012).

**TABLE 2: IMPORT TREND AND BALANCE OF SERBIAN BALANCE OF PAYMENTS CURRENT ACCOUNT (2001-2011.)**

in mill. EUR

Year	Import	Current account
2001	-5.024	282
2002	-6.387	-672
2003	-7.206	-1.345
2004	-9.543	-2.620
2005	-9.612	-1.779
2006	-11.970	-2355
2007	-16.016,4	-5052,5
2008	-18.843,2	-7054,2
2009	-13.403,6	-1910,1
2010	-14.642,9	-1887,2
2011	-16.627,1	-2870

Source: NBS (2012).

Based on Table 2 and data of NBS, and divergence of import and export and their negative consequences for competitiveness and development of the Republic of Serbia can be unambiguously stated. "A country has much more advantages its currency is the basic reserve currency of international monetary system. Its currency is treasured in foreign currency reserves of other countries, each drop of its value stimulates export of USA and decreases value of foreign currency reserves of other countries. USA can afford high deficits of trade balance and balance of payments because other countries readily go into surplus with it, increasing their foreign currency reserves" (Kovač, 2011, pg. 64).

While global economy under impact of the crisis pumps the money into financial sector, which is by its nature a sector of services, real economy and sustainable growth remain on the margins of interest (Anufijeb i Dašić, 2011), same as competitiveness of companies and external debt of Serbia, caused a great deal by appreciation of local currency, which presents a very serious danger at the moment as, under influence of global oligarchy, forces the country to additional indebteding, which involves very serious consequences which will be manifested in closer or further future (although it is evident at the moment) and result in debt bondage (Pavlović i Stamenković, 2013). Overvalued local currency and a high interest rate make a recipe for collapse (Stiglic, 2001). Having the above mentioned in mind, conclusion can be made that commitment to the policy of realistic foreign currency exchange rate is necessary, having in mind shrinking of the buying power of citizens and their high indebtedness with foreign currency clause, which presents a double-bladed sword for economic policy creators: increased competitiveness or liquidity collapse.

#### **4 Overview of the research results**

Setting up of a zero and working hypothesis:

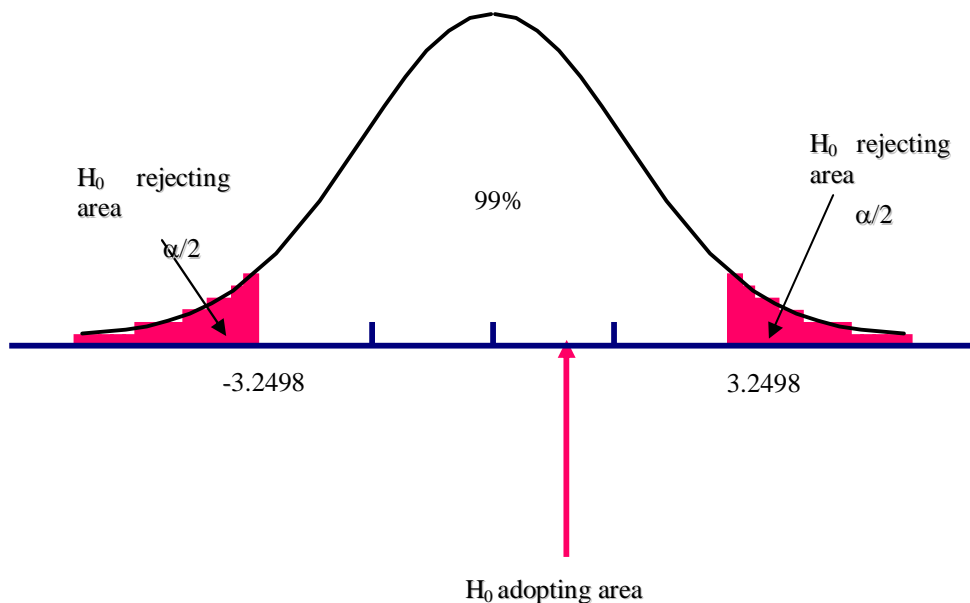
$H_0$ : If the policy of realistic foreign exchange rate is implemented, there will be no change in the balance of payments and competitiveness of Serbia.

$H_1$ :. If the policy of realistic foreign exchange rate is implemented, change in the balance of payments and competitiveness of Serbia will occur.

Based on relation (1) we get correlation coefficient  $r = 0.916985064$ .

Making a two-way *t-test* on the importance level  $\alpha = 0.01$  we get the test statistics based on relation (2) and (3)  $t = 6.8832$ .

Since tabular value is  $t_{v,\alpha/2} = t_{9,0,005} = 3.2498$ , test statistics value  $|t|$  is in the  $H_0$  rejecting area because  $|t| = 6.8832 > 3.2498$  therefore alternative (working) hypothesis is adopted specifying that *if the realistic foreign exchange policy is implemented, change will occur in the balance of payments and competitiveness of Serbia* with 1% risk of error.



## 5 Conclusion

Who are the losers and who are the winners of such a foreign currency exchange rate? Winners of such a foreign currency exchange rate are those in import lobby, who import products with cheap Euro and sell them on the local market at high prices, and NBS who buys foreign transfers of citizens at low price. The loser is complete economy because with such a policy local products are not competitive either on local or on international market, in respect of either price or quality.

For this reason, monetary and foreign currency policy, as well as complete economic policy, appears to be a catalyst of growth of company and economy competitiveness, therefore a conclusion can be made that monetary and foreign exchange rate policy hasn't achieved economic objectives, although stability of foreign currency exchange rate has been constantly emphasized as a positive measure by the economic policy creators. That pretended stability have had a very high cost for Serbia, as shown by data from the balance of payments: high deficit, high external debt and resulting debt bondage of Serbia.

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## 6 References

- Anufijeb, A. i Dašić, G. (2011). Agrar kao spas za posrnulu ekonomiju Srbije. *Ecologica, br. 62/18*, str. 255–260.
- Dušanić, J. (13. april 2012). Kurs dinara i reformatori. *Politika*, str. 28.
- Dušanić, J. (2003). Srbija na dobrom (reformskom) putu ili ne. *Ekonomski anali, br. 46*, str. 121–134.
- Dušanić, J. (2003). *Tranzicija u Srbiji*. Sarajevo: Consseco Institut.
- Dorđević, V. (2004). *Statistika u ekonomiji*. Niš: Ekonomski fakultet.
- Kovač, O. (2011). New Institutions and Mechanisms for Resolving the Sovereign debt Crisis in EU. In *Proceedings from International Scientific Conference „Forces driving the revival of the companies and economy“* (pp. 61–66). Beograd: Megatrend Univerzitet.
- Narodna banka Srbije (NBS). (2012). *Statistički bilten 2001–2012* [Zvanični podaci]. Beograd: Autor.
- Nedeljković, M. (03.11.2012). *Sumorna slika stvarnosti Srbije*. Preuzeto 18.02.2013, sa sajta <http://www.nspm.rs/ekonomska-politika/sumorna-slika-stvarnosti-srbije.html>.
- Pavlović, R. i Stamenković, S. (2012). Efekti apresijacije dinara na deficit platnog bilansa Republike Srbije. In *Proceedings from Sixth International Multidisciplinary Scientific Conference Eurobrand* (pp. 98–103). Zrenjanin: TQM Center.
- Stamenković, S., Pavlović, R. i Pavlović, M. (2011). Economic Policy as a Catalys for The Development of Competitive Agricultural Sector and Stimulation of Agricultural Entrepreneurship. In *Proceedings from International Scientific Conference “Strengthening the Competitiveness and Economy Bonding of Historical Banat – SCEBB”* (pp. 127–132). Beograd: Megatrend Univerzitet.
- Stiglic, D. E. (15.10. 2001). Zamke prebrze privatizacije. *Politika*, str. 8.