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# GROWTH, FINANCE AND REGULATION

## DEVALUATION AS THE INSTRUMENT FOR RECESSION OVERCOMING IN BOSNIA AND HERZEGOVINA

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**Key words:** Devaluation, openness of the economy, currency substitution, external indebtedness, Bosnia and Herzegovina.

**Abstract:** Devaluation is the instrument of monetary policy which has been used very often during the 20th century. In recent time of globalization, the many limited factors (openness of the economy, capital movements, currency substitution, money illusion) significantly reduce or completely make impossible the devaluation implementation as the measure for foreign trade deficit or recession overcoming in many countries. This paper discusses on positive and negative effects of devaluation in the case of Bosnia and Herzegovina economy.

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### Introduction

Devaluation is a measure of monetary policy by which Central bank could promptly change the relative prices of import and export goods ("terms of trade"). In short term, after devaluation implementation, the changes in prices of import and export goods or "terms of trade" stimulate export and reduce import, increase employment of domestic factor of productions and increase national income. However, despite these positive short term effects of devaluation on economy competitiveness, there are many negative consequences or costs of devaluation

implementation in a long term (e.g., import of inflation, increasing of real foreign debt). The net result of devaluation implementation will be the sum of all its effects and it depends of concrete conditions of certain economy and its international surrounding.

Bosnia and Herzegovina is a country which has been implementing the currency board system which does not enable exchange rate changing or any independent monetary policy conducting. Besides that, Bosnia and Herzegovina has been realizing enormous and continuous foreign trade deficits because of its low international competitiveness.

TABLE 1. BOSNIA AND HERZEGOVINA: FOREIGN TRADE DEFICITS (2000 - 2009)

	Imports (in million KM)	Exports (in million KM)	Deficit (in million KM)	Coverage of imports by exports (%)
2000	7 114	1 970	-5 144	27.69
2001	6 564	1 807	-4 757	27.53
2002	6 881	1 888	-4 993	27.44
2003	8365	2428	-5936	29.03%
2004	9422	3012	-6410	31.97%
2005	11180	3783	-7397	33.84%
2006	11388	5164	-6224	45.35%
2007	13898	5936	-7961	42.71%
2008	16287	6714	-9572	41.22%
2009	12324	5509	-6814	44.71%

Source: B&H Agency for Statistics, www.bhas.ba.

Due to the reasons some economists suggest the devaluation as the instrument for sustaining domestic economy competitiveness and foreign trade deficit overcoming. In that way, the devaluation will increase the competitiveness of domestic traded goods and through higher export enable the full employment of domestic factor of productions. But, many other costs of devaluation could reduce or even overrun the positive effects of devaluation.

### The limitations of devaluation implementation

In Bosnia and Herzegovina, as well as in many other transitional countries, there are few systematic involved problems which significantly reduce or completely make impossible any exchange rate manipulation policy. Before all, there are other factors such as high openness of the economy, free and high capital movements, high degree

of currency substitution (eurization), and many other non-economic problems (high corruption, distrust into state institutions, etc.) which disable the autonomous conducting of monetary policy.

### Openness of the economy

Analysis of openness of the Bosnia and Herzegovina's economy and its effects has key importance for understanding the statement toward exchange rate as the instrument for foreign trade deficit overcoming. There are two types of goods: traded goods and non-traded goods. In the case of closed economy (such as USA or Eurozone; "open economy" and "closed economy" in this case should be understood in the sense of foreign trade share in

GDP, not in the sense of protection by customs, quotas, etc.), where the non-traded goods are dominant, the prices of domestic factor of productions (the wages before all) are determined within the sector of non-traded goods. In such economies, the devaluation or depreciation of domestic currency could improve the competitiveness of their traded goods without creating inflation (i.e., increase in wages).

In the opposite case of open economy (such as Bosnia and Herzegovina), the traded goods are dominant and domestic wage level is determined primarily by prices of traded goods on the international market. In such economy, the devaluation will cause imported inflation. It means that exchange rate in the case of open economy is less applicable instrument of monetary policy.

TABLE 2. OPENNESS OF THE B&H ECONOMY

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Foreign trade amount (exports and imports, million KM)	9084	8371	8769	10793	12434	14963	16552	19834	23001	17833
Nominal Gross domestic product (million KM)	11689	12565	13821	14505	15786	17127	19252	21760	24702	23950
Openness of the economy (foreign trade as a percentage of GDP)	77.71	66.62	63.45	74.41	78.77	87.36	85.97	91.15	93.11	74.46

Source: B&H Agency for Statistics, www.bhas.ba.

The conclusion is clear, the devaluation or depreciation as the instrument of monetary policy is much more appropriate for closed than for open economies. Devaluation has the much higher influence on domestic price level - inflation in the case of small open economy and consequently on all other macroeconomic indicators (export, production, employment, interest rate, investments etc.). For large closed economies it is not a case. Namely, in the floating exchange rate system, the prices of export and import goods (traded goods) expressed in domestic currency fluctuate together with an exchange rate changing, but the prices of non-traded goods remain unchanged. That is why, the exchange rate manipulation has much higher influence on price level stability in small open economies with a dominant share of traded goods, but in the case of large and closed

economies with dominant share of non-traded goods within the GDP structure, the devaluation will has less influence on price level stability.

### Currency substitution (eurization) and money illusion as the limited factors of devaluation implementation

Currency substitution (eurization or dollarization) represents the situation when the residents of certain country use the significant amount of foreign currencies in domestic economy instead of its own currency. There is no accurate indicator about currency substitution in Bosnia and Herzegovina, but it is reasonable to suppose that currency substitution in Bosnia and Herzegovina is very high in respect of currency structure of bank deposits.

TABLE 3. BOSNIA AND HERZEGOVINA: CURRENCY STRUCTURE OF BANK DEPOSITS

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Saving and time deposits in domestic currency (million MK)	77.9	140.9	272.2	461.9	703.4	818.1	1058.3	1479.5	1726.7	1784.5
Saving and time deposit in foreign currency	428.2	907.7	974.4	1102.5	1604.6	1999.4	2544.4	3113.2	3470.3	3888.5

Source: B&H Central Bank.

The currency substitution is a characteristic of small and open transitional economies, with unstable and ineffective economic policy and with distrust into domestic currency and domestic monetary authority. Bosnia and Herzegovina has absolutely such characteristics. Within the conditions of high currency substitution and liberalized capital movements, where the economic agents (producers and consumers) are very sensitive to exchange dynamics, the exchange rate

moving is mostly determined by expectations. The so called "money illusion" in such conditions practically does not exist. State inhabitants will be completely aware about real value changes in their financial and real estate because of exchange rate devaluation. That is why, the each devaluation, either gradual devaluation or just announcement of devaluation implementation, in Bosnia and Herzegovina could bring the total eurization and

disappearance of domestic currency (convertible mark) from money supply, because of exchange rate risk.

The consequences of exchange rate devaluation will be more expressive if the money illusion is less. In that case, the inhabitants and firms will react more intensively through changes of their property portfolio structure with intention of maintaining real value or increment of their properties (financial and real estate). That is why the small open economies, with less money illusion and more intensive consequences of exchange rate devaluation, fix the value of their currencies to the currencies (or currency basket, such as SDR) of higher and closer monetary areas where the money illusion is much higher.

Bosnia and Herzegovina is a country with a very high degree of currency substitution (eurization). But, although the eurization is a very logical consequence of B&H economic and political situation, i.e. eurization is a result of rational responses of B&H residents because of the protections from uncertainty and their property value maintaining<sup>1</sup>, the currency substitution makes many limitation in exchange rate policy conducting, as well as in all monetary and macroeconomic policy.

First, in the condition of high currency substitution in B&H, devaluation of convertible mark will significantly change the currency structure and real value of deposits in the banks. Then, it will also affect the banks' credit activity.<sup>2</sup> So, after the devaluation implementation, the depositors and even more the speculators will change the currency which devaluated into currency which revaluated (*Gresham's Law*); in that way the currency structure of deposits will change and the pressure on further devaluation of domestic currency will be higher.

Second, in the condition of high currency substitution and import dependence, the devaluation has significant influence on domestic price level, i.e. inflation; this connection is especially expressed between exchange rate and production prices through import goods. Therefore, eurization makes pressure on exchange rate stability and forces countries on fixed exchange rate policy conducting. The economic systems with high degree of eurization are too much sensitive to exchange rate fluctuating.

### The costs of devaluation

It is not possible to introduce the real Central bank of Bosnia and Herzegovina with its all usual functions of monetary policy as well as real convertibility of national currency, because of previously described economic and non-economic reasons (i.e. high openness of the economy, liberal foreign trade and capital movements, high currency substitutions, high import dependence, low

money illusion, political instability and corruption, undeveloped financial system, etc.). Within such economic and political framework, each exchange rate manipulating will bring many different costs for all residents in the state.

First, the devaluation of domestic currency and high import dependence will cause the imported inflation through price increment of import goods. Consequently, the imported inflation will make pressure on nominal wages increment (because of consumers purchasing power maintaining) and after that it will also develop cost inflation. Cost inflation will reduce domestic production, increase unemployment, etc. All these effects together will cancel any positive effects of devaluation. Besides imported inflation and cost inflation, the reducing of real interest rate will decrease available deposits and investments and slow down economic growth in a long term. Devaluation will enforce depositors to switch their deposits in domestic currency into deposits in foreign currency because of its real value maintaining, and foreign exchange speculations will bring high *flight of capital* abroad.<sup>3</sup> The confirmations of these statements could be found on the examples of many countries which made devaluation within the similar conditions in the past. The deep financial and economic crisis in the countries of Eastern Asia (Thailand, Malaysia, South Korea, Philippines and Indonesia) at the end of 20th century have shown the catastrophic consequences of flight of capital through foreign exchange speculations in the conditions of expected devaluation and free capital movements.

Second, the devaluation will increase the real value of foreign debt that is dominant in the structure of total public debt in Bosnia and Herzegovina. It will significantly make difficult the repaying off foreign debt annuities, as well as total public debt in the future. The higher public debt (external and internal) through its repayment will limit the possibilities of economic development in Bosnia and Herzegovina in long term. The state governments usually procure the additional money for public debt repayment to the bond-holders through tax revenue increment, but it is additional costs which reduce investments and productions. Therefore, the foreign debt repayment means the leakage of national income which reduces the disposable national saving as the base for economic growth.

Third, by devaluation implementation, the currency clause directly makes the foreign exchange risk into credit risk. In other words, currency clause together with devaluation implementation will increase the real value of credits and in that way make more difficult the credit clearances and bring into danger the liquidity of inhabitants and whole economy.

All these negative effects of devaluation (import inflation, the real foreign debt increment, flight of capital, the saving decrement, distrust of investors, the illiquidity etc.) together have very strong influence on recession. Clearly, the devaluation in the conditions of B&H economy is not good solution.

<sup>1</sup> E.g., because of high inflation rate, low real interest rate on deposits in domestic currency, expected devaluation, distrust in domestic currency etc.),

<sup>2</sup> The banks protect themselves from the exchange rate risk by credit indexation. In that case, the credits in domestic currencies are linked toward foreign currencies, and then the nominal value of credits changes in accordance to money value changing, so the real value of credit stay unchanged. But, the borrowers are unprotected from the exchange rate risk. In the case of currency depreciation and currency clause implementation, they would pay the higher values of their annuities.

<sup>3</sup> The flight of capital should be distinguished from the export of capital. The export of capital is motivated by profit goal, but flight of capital is motivated by fear that capital will lose its value if it stays in the country.

TABLE 4. THE FOREIGN DEBT OF B&H GOVERNMENT AND ITS REPAYMENT

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Foreign debt (in million KM)	4066	4431	4299	4014	4032	4338	4071	3961	4240	5200
Foreign debt (as the percentage of GDP)	34.8	35.3	31.1	27.7	25.5	25.3	21.1	18.2	17.2	21.7
Foreign debt repayment (in million KM)	198	178	237	254	227	230	270	239	230	246
Foreign debt repayment (as the percentage of export of goods and services)	5.9	5.0	7.0	6.7	4.9	4.1	3.8	2.9	2.5	3.2

Source: B&H Central Bank.

TABLE 5. BOSNIA AND HERZEGOVINA: FOREIGN EXCHANGE RESERVES IN RELATION TO MONEY SUPPLY

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Gross foreign exchange reserves (in million KM)	2697	2484	2793	3479	4225	5452	6699	6296	6212
Money supply M1 (cash in circulation + demand deposits in domestic currency)	2692.3	3007.6	3113.4	3535.4	4102.8	5070.7	6159.8	5995.3	5888.4

Source: B&H Central Bank.

The foreign trade deficit and recession overcoming should be done by decreasing and switching of public expenditure structure (about 50% of GDP)<sup>1</sup> and with enlarging of productivity. It requires fiscal and structural reforms.

The B&H Central Bank has owned the foreign exchange reserves which are over the amount of money supply. It enables the stable prerequisite for structural reforms and fiscal consolidation which will bring the competitiveness growth and economic development. Also, the stable economic development and higher international competitiveness level is the best way for stable price level and stable exchange rate maintaining in long term.

### Conclusion

The exchange rate manipulating policy, within the conditions of high currency substitution and high openness of the economy is not possible; and fixed exchange rate policy (i.e. currency board system) is the only solution in Bosnia and Herzegovina. The devaluation or even anticipating of devaluation in the conditions of free capital moving in Bosnia and Herzegovina will bring the high flight of capital through foreign exchange speculations with all its negative consequences. So, the devaluation will not have the positive net effects in Bosnia and Herzegovina, but it will cause the long term inflation and deeper recession. If the currency board system will be switched by some more liberal exchange rate system, Bosnia and Herzegovina will lose the only instrument of macroeconomic stability - exchange rate stability.

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<sup>1</sup> The public expenditure amounts (as the percentage of GDP) were: 52.1% (2000), 46.3% (2001), 37.2% (2002), 40.8% (2003), 38.8% (2004), 39.6% (2005), 42% (2006), 43.9% (2007), 46.1% (2008). Source: B&H Central Bank.