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THE EFFECTIVNESS OF DE-EUROSIATION MEASURES IN WESTERN BALKANS COUNTRIES

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SUMMARY

The geographical proximity of the euro area as well as the close trade and financial relationship with Eurozone countries , accelerated the wide acceptance of Euro parallel with domestic national currency in all Balkan countries , while Montenegro and Kosovo accepted euro as their official tender. However , the turbulences in the Eurozone, brought many challenges to highly euroised Western Balkan countries including vulnerability of the financial system to sudden changes in capital flows, weakening the central banks' effectiveness in the conduct of their monetary policy in providing macroeconomic and financial stability.

Thus, the WBC monetary authorities were forced to introduce certain macro-prudential measures, to initiated the process the reversible process of de-euroisation. The aim of this paper is to analyze the effectiveness of the measures for de-euroisation, introduced by the authorities in three West Balkans countries , Macedonia, Serbia and Albania through measuring the effect of the interest rates spreads on both loans and deposits in local currencies and those expressed or indexed in euro.

Key words: de-euroisation, macroeconomic stability, macro-prudential measures, fostering local currency .

1. INTRODUCTION

The euroisation of the Western Balkan countries was encouraged by the progress in financial markets integration, harmonisation oflegislation and increasing free movement of capital and labour, as well as promote financial deepening and integration with international markets. Therefore, moderate level of euroisation would probably be welcomed and brought some positive

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effects to many emerging or developing economies , but it should definitely be lower than the levels currently observed in the Western Balkan countries , having the euroisation rate over 40% as a constant trend . The recent sovereign debt crisis and negative impact which was made on the EMU members put forward a question of euro survival and some of the Western Balkan countries started the process of so called de-euroisation.

2. THE EUROSIATION'S SIDE EFFECTS

Although there are empirical evidences about the positive impact of euroisation the small, developing or emerging economies , there are also analysis that prove that there are potentially serious macroeconomic and financial stability drawbacks related to high level of euroisation. This is in particular essential for the monetary authorities being in charge for maintaining price and financial stability in their economies.

Challenges include the vulnerability of the financial system to sudden changes in capital flows and the associated potential for nominal exchange rate volatility, the weakening of the central bank's effectiveness in the conduct of monetary policy and of its function as a lender of last resort, as well as constraints in the choice of an appropriate monetary and exchange rate regime.

The recent studies (made at the beginning of the European sovereign debt crisis) stated that the massive euroisation reduces the effectiveness of monetary policy and makes the transmission of monetary impulses to the real economy more complex than would otherwise be the case. In particular, the central bank has less room to influence macroeconomic variables as the monetary transmission mechanism via interest rates is weakened (García-Escribano, 2010; Acosta-Ormaechea and Coble, 2011).

In the case of asymmetric shocks, monetary and exchange rate policy cannot (or only to a limited extent) react as a shock absorber, as policymakers do not have the same level of control over monetary aggregates and the exchange rate leverage may be limited by the "fear of floating".

Even more, analyzing the consequences of the recent Global financial crisis ,Chitu (2012) found that unofficial dollarization (as well as euroisation) was an amplifying contributor to the economic downturn of 2007-2009 in emerging market economies. In highly euroised economies many policymakers were in favorof maintaining fixed exchange rate, which helps to further reinforce the status quo position in the economies.

The most severe drawback of euroisation is the potential effect it might have on the banks' balance sheets in the event of adverse exchange rate developments, either directly (through currency mismatches and net open

foreign exchange positions) or indirectly through unhedged borrowers. In the latter case currency risks are transformed into solvency risks. As noted by De Nicoló et al. (2003), the indirect solvency risk, which remains for banks even when the foreign exchange exposure of both sides of the balance sheet is matched, may be associated with an increased risk of deposit withdrawals that can lead to bank runs in response to or in anticipation of devaluation. In a similar vein, currency mismatches of corporates, households and the public sector can have severe destabilising effects not only for the banking sector but for the wider economy as a whole (Galindo and Leiderman, 2005).

All this implies that the central bank cannot fulfill its stabilizing role as a safeguard against the liquidity problems of a single institute or threats to the system as a whole.

In case of the West Balkans countries , there is the evidence of several drawbacks of eurosiation on WBC economies in terms of certain shocks of economic development and sustainability indicators, vulnerability of WBC' financial systems to sudden changes in capital flows , higher risk for nominal exchange rate volatility as well as weakening of the central bank's effectiveness in conducting the monetary policy and its function as a lender of last resort.

3. THE PROCESS OF DE-EUROISATION IN WESTERN BALKAN COUNTRIES

The sovereign debt crisis, change the attitude of the monetary authorities , banks and private entities in the Western Balkans countries to be more cautious regarding the extensive use of euro in their financial transactions , savings and credit activities. This stressed the necessity of reversible process of so called de-euroisation and therefore fostering wider use of their local currencies. Namely, over the past 5-6 yeas these countries have deployed some of the macro prudential measures to moderate or even stop the trend of eurosiation.   Different regulatory measures towards de-euroisation have had different impact on de-euroisation process in different WBC due to many factors that naturally support euroisation (such as memories of macroeconomic turbulences, high inflation rates and low credibility of monetary authorities).
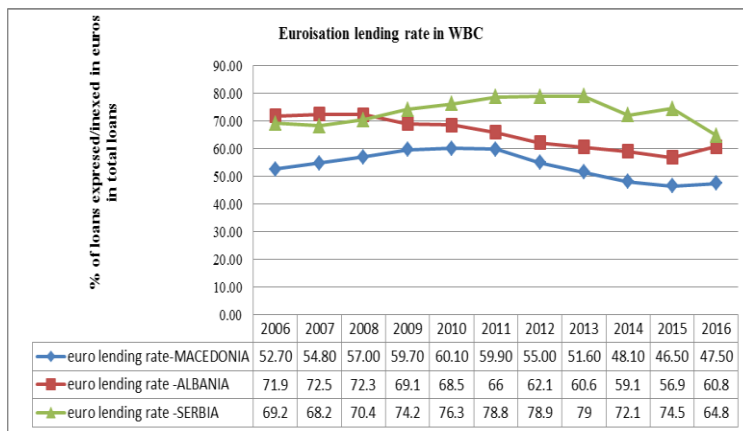
In this regard the analysis of de-euroisation process have been made in three Western Balkan countries-Macedonia, Albania and Serbia, having specifics related to the foreign curency regimes, macroeconomic stability as well as

the different prudent measures that have been depolyed by the monetary authorities over the observed period.

Namely, Macedonia as the smallest economy is employing fixed foreign exchange regime peged to euro, the other two (muchbigger) ones, (Albania and Serbia) have managed float foreign exchange regime. Further , Serbia has showen comparatively high and volatile inflation rates as well as high external and fiscal imbalances compared to the other two, while Macedonia till 2015 has been emproving the business enviroment , which has been worstened in the recent period (2016 and on) , due to political crisis. Albania is still facing with the problem of low credibility in institutions and debendence of remitances from abroad , which are directly supporting euroisation, and the monetary authorities are less comitted (in related to other two countries) in introducing more radical measures towards de-euroisation.

More explicitly, the level of de-euroisation analyzed through the level of lending euroisation(% of loans expressed or indexed in euro in total loans to non-financial corporations and households) and level of deposit euroisation(% of euro deposits in total deposits from non-financial corporations and households) in the period 2006-2016 is presented in Figure 1 and Figure 2.
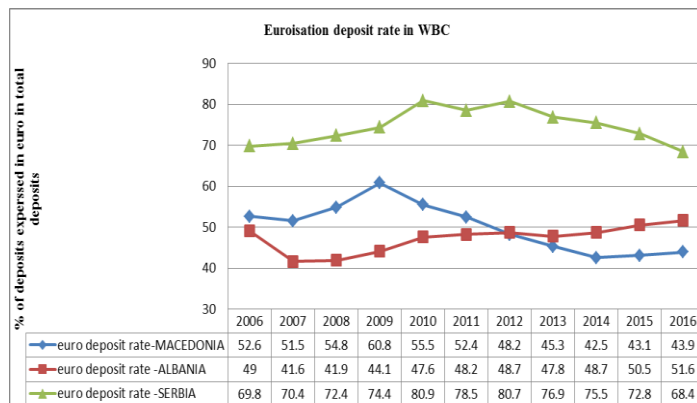
Figure1 :Euroisation lending rate in WBC

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
euro lending rate-MACEDONIA	52.70	54.80	57.00	59.70	60.10	59.90	55.00	51.60	48.10	46.50	47.50
euro lending rate -ALBANIA	71.9	72.5	72.3	69.1	68.5	66	62.1	60.6	59.1	56.9	60.8
euro lending rate -SERBIA	69.2	68.2	70.4	74.2	76.3	78.8	78.9	79	72.1	74.5	64.8

Source: WBC Central Banks Annual Reports (created by the author)

Analyzing the level of lending and deposit euroisation in the banking sectors of the observed Western Balkan countries, the most evident drop of euro denominated deposits and loans is registered in Macedonian banking sector , decreasing its deposit share from over 60% to 43% , while the share

of euro denominated and indexed loans decreased from over 70% to 47% at the end of 2016.

Figure 2:Euroisation deposit rate in WBC

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
euro deposit rate-MACEDONIA	52.6	51.5	54.8	60.8	55.5	52.4	48.2	45.3	42.5	43.1	43.9
euro deposit rate -ALBANIA	49	41.6	41.9	44.1	47.6	48.2	48.7	47.8	48.7	50.5	51.6
euro deposit rate -SERBIA	69.8	70.4	72.4	74.4	80.9	78.5	80.7	76.9	75.5	72.8	68.4

Source: WBC Central Banks Annual Reports (created by the author)

The banking sector in Serbia faces extensive euroisation, reaching portion of about 80% of euro deposits in total banks' deposits in 2012 and 79% euro indexed loans in 2013 . However , since then , trend of de-euroisation is noticeable at both lending and deposit side and due to improved macroeconomic indicators as well as to the measures from de-euroisation strategy , the level of euroisation dropped below 70% in 2016. Albania there is the evidence of de-euroisation process on the lending side till 2015 , with slight increase of euroisation in 2016. However there is stable or even slight, but constant increase of euroisation on the deposit side., It might be concluded that Macedonia as a country with fixed exchange rate regime seem to score somewhat better in terms of de-euroisation than the two other countries with floating exchange rate arrangement. The Macedonian authorities argue that the local currency fixed to euro inspires the confidence of depositors in the local currency and its relative value in euro, which on the other side , might create a false sense of security for borrowers in foreign currency .

The stable macroeconomic environment needed to be supported by effective regulatory and prudential measures which can serve as a catalyst for increasing the use of the domestic currency in each of the observed countries.

4. DE-EUROISATION MEASURES IN WESTERN BALKAN COUNTRIES

The observed Western Balkan countries (Macedonia, Albania and Serbia) have been relatively active in implementing regulatory and prudential de-eurosiation measures, which were mostly aimed to discourage foreign exchange lending rather than to create incentives for saving in domestic currency, while only Serbia introduced more comprahensive de-euroisation (or "dinarisation") strategy in March 2012.

Some of the prudential measures mainly served to enhance financial stability , but as well to reduce euroisation, to minimise risks stemming from foreign exchange lending and to incentivise local currency savings.

Prudential measures taken in the region include ceilings on foreign exchange exposure, higher reserve requirements for foreign exchange denominated liabilities, liquidity requirements for foreign exchange denominated assets as well as provisioning requirements.

In that respect , in the period 2009-2015 , Macedonian authorities continiously introduced more favorable reserve requirement on local currency liabilities, which envisaged that reserve requirement of 8%, for deposits in denars, while deposits indexed to foreign currency to 20%, and deposits denominated in foreign currency to 15% (previously all were subject to 10%). Furthermore, as of September 2015 , the reserve requirement ratio on banks' liabilities to households in local currency with a contractual maturity of above one year is equal to 0%.

In recent two years (2015 and 2016) the Serbian authorities required reserves rates are different by currency and by maturity of liabilities included in the required reserves base. Thus, rates for domestic currency liabilities are 5% (maturity up to two years) and 0% (maturity over two years), while the corresponding rates for foreign exchange liabilities are 23% and 16% (20% and 13% as of February 2016), respectively.Albanian authorities envisage , tighter provisioning requirements for foreign exchange loans.In that respect , loans in foreign currency granted for nonfinancial entities outside the country bear a risk coefficient of 150% for the purpose of calculating the risk weighted capital of the bank (since 2010). Any increase in net investments with non-resident financial institutions or securities bears a risk coefficient of 100% (2013). While the lower or no reserve requirements for liabilities in local currency is in favor of both lending and deposit de-euroisation, the

provisioning requirements for loans in euro is only in favor of lending de-euroisation.

Thus , the limited effect of de-euroisation on deposit side versus more evident on lending side is quite understandable.

5. EMPIRICAL FINDINGS OF DE-EUROISATION MEASURES EFFECTIVNESS IN WESTERN BALKAN COUNTRIES

The above mentioed regulatory measures enables the banks in the region to inrease their lending volume , as well as to decrease the interest rate on loans expresed in local currency . However , there is the evidence that the reduction of the interest rate differential between lending in euro and in domestic currency contribute further to the process of de-euroisation. This is the case particularly in Albania and Macedonia where the reduction of the interest rate differential was accompanied by a decrease in euro lending. The simmilar effect with pospond effect is noticable in Serbia too, as the prudent mesures from denarisation strategy started to show more evident effects in 2016 .The impact of the differences in domestic and foreign exchange lending rates on the level of euroisation will be demostrated, using the model of panel regression as well as trend anlysis in three observedWestern Balkans countries.

To examine if the decreasing spread between the domestic and foreign exchange lending rates contribute to the process of de-euroisation (particulary at the loan side), it is examined the influence of the mentioned spread on the level of lending euroisation (i.e % loans expressed or indexed in euro in total loans to non financial institutions.

For that purpose OLS approach is aplied , where as dependent variable is considered lending euroisation level(EURL) , while as the independent variable is included interest rate gap (IRG), as a difference between lending interest rate for loans expressed in national currency (IRDC) and the interest rate for loans expressed or indexed in euro (IREUR).

In the empirical analysis are used the annual data series which covers the period 2006-2016. The main sources of data are the reports and other official publication of the observed WB countries' Central Banks and State Statistical Offices.

E**conometric Model** represents the random effects of panel regression model as follows :

$$\ln\text{EURL}_i = \beta_0 + \beta_1 lnIRG_i + \varepsilon_i$$

where EURL is the level of lending euroisation in time i; β_0 is the constant; while IRG is the interets gap (differential) between lending interest rate for loans expressed in national currency and the interest rate for loans expressed or indexed in euro. With 'ε' is presented the error term, or stochastic factor that is supposed to be with zero conditional mean and constant variance, ie $E(\varepsilon_i) = 0$ for each period i. All the data are transformed into logarithms. (Table1)

Table 1 : Regression output for period 2006-2016

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─────────────────────────────────────────────────────────────────────
Random-effects GLS regression           Number of obs      =        33
Group variable: country                 Number of groups   =         3
R-sq:  within  = 0.4851                  Obs per group: min =        11
       between = 0.9995                                 avg =      11.0
       overall = 0.8418                                 max =        11
                                         Wald chi2(1)       =    164.92
corr(u_i, X)   = 0 (assumed)             Prob > chi2        =    0.0000
─────────────────────────────────────────────────────────────────────
  log_udkvok |     Coef.   Std. Err.      z    P>|z|    [95% Conf. Interval]
─────────────┼───────────────────────────────────────────────────────────
     log_kg  |  .1791797   .0139524    12.84   0.000    .1518336    .2065259
      _cons  |  3.939903   .0196634   200.37   0.000    3.901364    3.978443
─────────────┼───────────────────────────────────────────────────────────
     sigma_u |         0
     sigma_e |  .0614038
         rho |         0   (fraction of variance due to u_i)
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Analyzing the results, the focus is made on the z-statistics, which tests the significance of the coefficient of the interets gap (differential) between lending interest rate for loans expressed in national currency and the interest rate for loans expressed or indexed in euro(IRG).

This estimation present the IRG value of 12.84 which is much higher than the critical value of 2.

Thus it can be concluded that there is a positive and highly significant impact on decreasing lending euroisation rate .

The similar findings can be confirmed by observing the p-value.

Being (< 0.01) indicates the high level of significance (and therefore rejection of the null hypothesis of non significance). In other words, a predictor that has a low p-value is likely to be a meaningful addition to our model because changes in the predictor's value are related to changes in the response variable. Furthermore, the coefficient of independent variable IRG is 0.179, which indicate that 1% change of interest gap will imply 0.179% change of euroisation.

From the model, it can be also analyzed the R-squared, between and overall R2 (as a statistical measure of how close the data are to the fitted regression line). According to the results the overall R-squared is 0.84, implying that 84% of variations of the lending euroization rate , could be explained by the changes of differential) between lending interest rate for loans expressed in

national currency and the interest rate for loans expressed or indexed in euro (IRG).
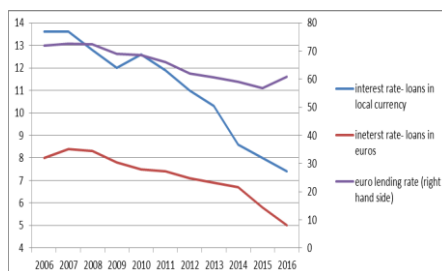
The strong corelation and impact of differences in domestic and foreign exchange lending rates on the level of euroisation with each of the observed Western Balkan countries can be confirmed through trend analysis presented on the following graphs :

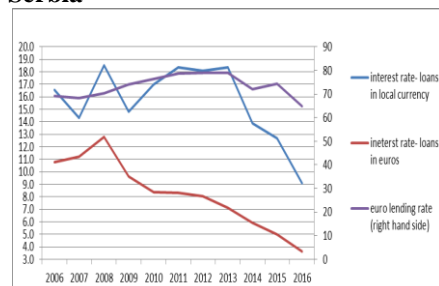**Graph 3: Banks' lending rates in euro and domestic currency loan**

Macedonia
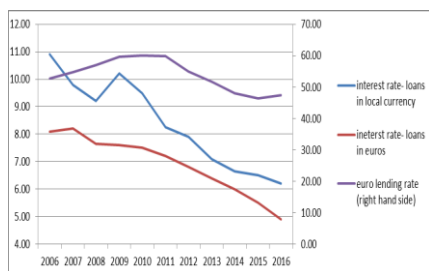
Albania

Serbia

Source: Central Banks reports –created by the author

The graphs clearly present that the country with constanly highest euroisation (Serbia) has the bigest diferences in domestic and foreign exchange lending rates. However the dicrease of the spread of the mentioned lending rates in recent year , resulted with decreasing the level of euroisation. On the other hand ,Macedonia is the country which has the biggest results in the process of de-euroisation andin the same time , the smallest diferences in domestic and foreign exchange lending rates. The same correlation implies for Albania.

6. CONCLUSIONS

Although the evidence and literature findings suggest that macroeconomic stabilization of the West Balkans countries bring euroisation rates down, the process of de-euroisation need to be accompanied with respective regulatory and prudential measures. The observed Western Balkan countries have introduced certain regulatory and prudential measures, especially aimed at lowering foreign exchange lending. While clear causalities between measures taken and a reduction in the eurosiation rates are difficult to establish, some conclusions can be drawn. In this paper it is demonstrated clear evidence that the reduction of the interest rate differential between lending in euro and in domestic currency contribute further to the process of de-euroisation

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