EXCHANGE RATE REGIMES AND MACROECONOMIC PERFORMANCES IN EMERGING EUROPEAN ECONOMIES

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Abstract

In this work we contribute to the ongoing debate on impact of choice of exchange rate regime on macroeconomic performances. We discus impact of exchange rate regime on three indicators of macroeconomic performance - real growth, current account and inflation - with particular focus on stylized facts in selected Emerging European Economies (EEE). Results firmly confirmed our expectation on size and direction of impact, with respect to change of economic circumstances after outbreak of the global crisis in 2008.

Key words: exchange rate regime, inflation, current deficit, real growth, Emerging European Economies

1. INTRODUCTION

After the collapse of Bretton Woods system of fixed exchange rates in which currencies were pegged to the dollar, rising uncertainty about impact of adopted exchange rate regime on macroeconomic performances has occupied a lot of attention in economic research. Most of concerns in empirical research revolve around two questions: how exchange rate regimes should be classified to capture *de facto* behavior of monetary authorities (opposite to *de jure* announced regime) and whether systematic relationship between exchange rate regimes and macroeconomic performances exist?

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Various empirical studies offered different answers on these questions, regarding the countries or period encompassed by sample, methodology applied and chosen classification of exchange rate regimes. On the other side, change of economic circumstances often confronted theoretical beliefs on optimal choice of exchange rate regime, so the attitude on desirable exchange range system was changing during times. One of the notable examples of these controversies is illustrated by belief in optimality of so-called "two-corner" solution, which states that only extreme cases of regimes, like hard peg or free float, leads to stability of exchange rate regime; accordingly, countries will tend to adopt some of these regimes over time. Nevertheless, two empirical studies, provided by the same institutions in time span of only two years, announce quite opposite results; Bubula and Otker-Robe (2002) find evidences that number of adoption of intermediate regimes is shrinking, while Rogoff et al. (2004) finds that intermediate regimes show persistence in durability. In reality, prior to Asian Crisis in late nineties, fixed corner solution was popular among emerging economies due to expectations of higher investments and trade. However, liberalization of capital controls triggered a few currency crises and since 1998, the IMF has recommended to emerging market economies to move toward free-float corner and to combine free float and inflation targeting in order to decrease the probability of a currency crisis (Ito, 2007).

Similar to illustration of bipolar view, empirical evidences on relationship between exchange rate regime and macroeconomic performances are controversial and ambiguous, and impact of chosen regime on other important economic variables remains to be a subject of long-lasting debates and controversies among economists. In this work we contribute to the debate by discussing impact of exchange rate regime choice on three indicators of macroeconomic performance real growth, current account and inflation - with particular focus on stylized facts in selected Emerging European Economies (EEE). Structure of the work is given as follows. First we discussed proposed classification schemes trying to capture de facto exchange rate regimes across countries. Next three sections provide brief literature overview of existing work analyzing effects of exchange rate regime on real growth, current account and inflation, respectively. Eventually, last section presents results of our own empirical analysis.

2. CLASSIFICATIONS OF EXCHANGE RATE REGIMES

In the most general sense, FX rate regimes could be classified to fixed, intermediate and floating. Severe cases of fixed regime, like currency union, or free floating FX regime are often seen as the "corner" solutions, while exchange rate targeting with crawling band is considered as intermediate solution. Before seventies, fixed regimes were globally prevailing form of exchange rate regimes,

like Specie Gold Standard (1880-1914) or Gold exchange standard (1919-1945)⁴. After Bretton Woods agreement in 1946, system of fixed (but adjustable) exchange rates in which currencies were fixed to the dollar was dominating form of exchange rate regime. After dismantling of Bretton Woods in seventies, exchange rates have supposedly become flexible (McDonald, 2006). The traditional classification of FX regimes in post-Bretton Woods period is linked to the IMF classification, using eight categories of FX regimes, ranging from currency union at one corner to free floating at second corner: pegged regimes (hard pegs, conventional pegs, horizontal bands), intermediate regimes (crawling pegs, crawling bands, target zones), and floating arrangements (free floats, managed floats). Until 1999, IMF was reporting exchange rate regimes based on *de jure* classification, i.e. official announcement of declared exchange rate regime by the IMF member countries.

Since late 90's, some of the studies like Gosh et al. (1997), Frenkel (1999) and Calvo and Reinhart (2002) have criticized classification of countries according to officially declared exchange rate, as they empirically observed that in reality interventions on exchange rate markets could create considerable differences between de jure and de facto exchange rate regimes. Typical example of such kind of behavior was restoring of international price competitiveness, when regimes officially declared as fixed underwent through frequent devaluations. These findings emphasized needs for establishing more realistic system of exchange regimes classification and lead to numerous studies on regimes de facto coding. Tavlas et al. (2008) systematized all of the de facto classifications in two subgroups: mixed *de jure-de facto* approach and pure *de facto* codings. First group of classifications attempts to determine actual exchange rate regime by adjustment of *de jure* classification with observed anomalies on exchange rate markets, while second group looks for regime independently from official regime declaration.

Notable example of pure *de facto* coding is based on work of Levy-Yeyati and Struzengger (2005), who define 4-regime scheme using cluster analysis, according to the behavior of three classification variables: changes in the nominal exchange rate, the volatility of these changes, and the volatility of international reserves. Among numerous *de jure-de facto* approaches, the most frequently reffered are Gosh et al. (2002), Ballieu et al. (2003) and Reinhart and Rogoff (2004) classifications. Gosh et al. (2002) and Ballieu et al. (2003) created *de facto* classifications based on measures of exchange rate volatility: Gosh et al. (2002) uses so-called "z-score", defined as the square root of the sum of the square of changes in the exchange rate and the variance of those changes, while Ballieu et al. (2003) uses exchange rate flexibility index for each country, defined as its degree of exchange rate volatility relative to the group average for each year of our sample

⁴ See, for example, Mooslechner (2008)

period. Reinhart and Rogoff (2004) in their influential paper criticized de facto classifications that relies solely on exchange rate volatility as determinant of regime. They propose new classification scheme (henceforth RR classification) that beside exchange rate volatility considers other parameters of de facto regime, like inflation rate or existence of multiple rates at black market. RR classification consists of six coarse categories: peg, limited flexibility, managed flexibility, freely floating, freely falling and hyperfloating, further separated into 15 fine categories.

3. IMPACT ON GROWTH

Economic theory suggests that nominal variable should not directly affects real variable in the long run. Possible channels throughout which exchange rate regimes can affect growth indirectly are investments and international trade; supporters of this view argue that fixed FX rates enhance investments by reducing policy uncertainty and real interest rates, but on the other side increase protectionism and distort price signaling (Ghosh et al., 1997). Empirical analysis conducted before 2000 relied mainly on descriptive analysis. Baxter and Stockman (1989) concluded, based on a sample of 49 countries, in period 1946-1984, that there is no systematic relationship between real aggregates and FX regime, while Ghosh et al. (1995) showed that there is a slightly higher growth in countries with floating FX regime, based on analysis of 145 countries, in period 1960-1990, and found inconclusive results. Moreno (2000) however found a positive impact of FX regime on economic growth and that countries with pegged exchange rate had higher growth comparing with those with fixed rate. These results are based on the analysis of 98 developing East-Asia countries, in period 1974-1999. The main criticism of all these results was related to the fact that the analysis was unconditional, meaning that other relevant variables, like monetary target control, were not included in the analysis. Additionally, the model used by Eichengreen (2008) is estimated on a sample of 28 industries for 40 emerging market countries using annual data covering the period 1985–2003. The most basic regression shows that the real exchange rate terms are positive, indicating that a real depreciation fosters the growth of industry employment.

The advanced methodology on this subject started to apply with the work of Levy-Yeyati and Sturzenegger (2002) and Edwards and Levy-Yeyati (2003). They used pooled regression on a sample of 183 countries over the post-Bretton Woods period (1974-2000) and found robust evidences that in developing countries less flexible exchange rate regimes are associated with slower growth and greater output volatility, while no significant evidences on impact of regimes on growth in industrial countries has been found in first study, but opposite results in second study. Bleaney and Francisco (2007) found negative correlation between flexible

FX regime and growth, using the sample of 91 developing countries, in period 1984-2001.

Opposite conclusion can be found in the work of Bailliu *et al* (2003). They had a sample of 60 countries, in the period 1973-1998 and by using generalized methods of moments (GMM) conclude that the more flexible FX rates are associate with faster growth. De Grauwe and Schnabl (2004) found the same results, with the same method using the sample of 10 CEE countries, like Eichengreen and Leblang (2003) who used dynamic panel regression analysis on 21 countries, in period 1880-1997. Dubas *et al* (2005) confirm this conclusion and on sample of 180 countries, in period 1960-2002 and found that the countries with fixed FX regimes have, on average, higher growth (apx. 1%) compared with the countries with floating regimes, but these conclusion is significant only for non-industrialized countries.

Third group of studies came up with no effect or inconclusive results. Husain et al (2005) used sample of 158 countries, in period 1970-1999, and based on pooled regression found that flexible FX regime do not provide economy growth. No relationship between regime and growth for developed economies can be found in the empirical work of Huang and Malhorta (2004). They used a relatively small sample of 12 developing and 18 developed counties, in period 1976-2001. These results were confirmed by Domac et al. (2001), on relatively small sample of 22 transition countries in period of 10 years (they used different period, after 1990, for each county). It is also important to mention the work of Miles (2008) who employs the difference-in-differences method to a set of emerging markets that switched to more flexible currency policies. He use data from countries that had substantial currency intervention and then switched to more flexible rates in period 1998-2000, countries with fixed exchange rates in period 1994-2000 and countries with regimes classified as "fixed" by L-S for the same period as previous. The results indicate that exchange rates themselves exert no significant impact on growth, inflation or output.

The systematic analysis, review of the theoretical and empirical literature offered Petreski (2009) and he concludes that the empirical research offers divergent results. Generally, the issue of endogeneity is not treated at all or inappropriate instruments are repeatedly used. Very few studies pay attention to the capital controls, an issue closely related to the exchange rate regime and only one study puts the issue in the context of monetary regimes.

4. IMPACT ON CURRENT ACCOUNT

An important aspect of the exchange rate regime is the way of its effect on the balance of payments. Proponents of flexible exchange rates claim that these regimes are more efficient than fixed exchange rates in correcting balance of payments disequilibria. They also underscore that by allowing country to achieve external balance easily and automatically, flexible exchange rate facilitate the achievement of internal balance and other economic objectives of the country. On the other hand, advocates of fixed exchange rate regimes contend that by introducing a degree of uncertainty not present under the fixed rates, flexible exchange rates decrease the volume of international trade and investments and more likely to lead destabilizing speculation and they are inflationary (Domac, Peters and Yuzefovich, 2001).

Descriptive analysis by Domac, Peters and Yuzefovich (2001) implies that countries with fixed exchange rates appear to have higher current account deficits compared to those adopting intermediate and flexible regimes. Contrary to this, in case of transition economies countries with floating regime experience, on average, have higher current account deficits.

Gosh, Terrones and Zettelmeyer (2009) come to the conclusion that large current account reversals very rarely occur under flexible exchange rate regimes and when they happen they involve much lower initial imbalances. Allowing for threshold effects, they conclude that exchange rate regimes seems to be highly relevant for current account dynamics.

Hermann (2009) examine the relationship between the exchange rate regime and the pace of current account adjustment. The panel data set includes 11 catching up countries from central, eastern and south-eastern Europe between 1994 and 2007. The exchange rate regime is measured by a continuous z-score measure of exchange rate volatility. Based on a basic autoregression estimation, the results indicate that a more flexible exchange rate regime significantly enhances the rate of current account adjustment.

Edwards (2004) using panel data set for 157 countries in period 1970-2011 investigated the mechanics of sudden stops of capital inflows and current account reversals. The empirical analysis suggest that countries with more flexible exchange rate are able to accommodate better shocks stemming from a reversal than countries with more rigid exchange rate regimes.

D'Adamo and Rovelli (2014) research analyze the influence of exchange rate regime on country competitiveness, which was represented as export market share

(EMS), or country's total export as a share of world exports. Results shows that the fixed exchange rate is associated with an EMS about 8% lower, and even more rigid regimes (that are not fixed) are associated with lower EMS.

Ghosh et al. (2013), argued Chinn and Wei (2008) findings because they are based on existing regime classification, which do not adequately capture exchange rate flexibility that is relevant to current account adjustment. They used a measure of regimes based on trade-weighted bilateral exchange rate volatilities and establish that more flexible exchange rate regimes are associated with economically and statistically significant faster current account adjustment.

Tippkötter (2010), investigated the impact of the exchange rate regimes on the current account adjustment process. The dataset includes 171 countries for the 1970 to 2008 period. He found monotonic relationship between exchange rate flexibility and the rate of current account reversion, indicating faster current account convergence for more flexible regimes.

Gnimassoun and Coulibaly (2014), analyzed sustainability of current accounts in Sub-Saharian Africa and determing whether this sustainability depends on the exchange rate regime. They rely on formal theoretical framework and recent panel cointegration techniques. Their findings show that sustainability of current account has been lower for countries operating a fixed exchange rate regimes or belonging to a monetary union.

Arratibel et al.(2011) confirms that hard pegs tended to experience relatively larger external imbalances than floaters, by using panel estimations for the period of 1995 to 2008 on the Central and Eastern European EU Member States.

Contrary, there are few research which concluded that there is no relationship between exchange rate regime and current account imbalances. The most important is consider one by Chinn and Wei (2008). In analysis which covers over 170 countries, over the 1971-2005 period authors examined whether the rate of current account reversion depends upon de facto degree of exchange rate fixity measured by two popular indices. They found that there is no strong, robust or monotonic relationship between exchange rate regime and the rate of current account reversion.

5. IMPACT ON INFLATION

The relationship between the exchange rate regime and the inflation rate has long been debated and has been one of the most controversial topics in international

macroeconomics (Yamada, 2013). Predominant view on the relationship between the exchange regime and inflation is that pegged exchange rates contribute to lower and more stable inflation (De Grauwe and Schnabel, 2004). Advocates of the fixed exchange rate regimes usually emphasized that fixed exchange rate regime in countries with capital mobility unrestricted usually helps in achieving greater price stability in several ways: by providing monetary discipline, anchoring inflationary expectations and reducing possibilities of expansionary monetary policy and debt monetizing. For example, Ghosh et al. (1997) argued that fixed regime provides a high commitment to prudent monetary and fiscal policy to avoid political costs of abandoning the peg, while impeding demand for the domestic currency, which reduces the inflationary consequences of expansionary monetary policy. Impact of exchange rate regime in inflation is especially important issue for emerging economies, where nominal exchange rate was typically used to slow down inflation, and one of the main arguments favoring fixed regimes was so-called "fear of floating" (Edwards, 2006). "Fear of floating", first described by Calvo and Reinhart (2002), is characteristic for a large number of countries with de jure floating regimes but with frequent interventions at the FX markets.

Many authors have analyzed impact of exchange rate regimes on growth and inflation. While evidence on regime and growth relationship are vague, empirical research seems to support positive impact of fixed regime on stability of prices. Gosh et al. (1997) work was one the first studies which finds that inflation is lower and more stable under fixed regimes on comprehensive dataset of 140 countries. However, it should be emphasized that this findings mostly holds for developing (emerging) economies or countries with lower income. Levy-Yeyati and Sturzenegger (2001) analyze impact of regime on inflation for both advanced and developing countries and work find positive effects of fixed regimes on price stability only in developing countries. Similar results are obtained by Husain et al. (2005) and Coudert and Dubert (2005). Ghosh et al. (2002) and Rogoff et al. (2004) works support the findings that fixed regimes are associated with the low inflation only in lower and lower-middle income countries, while floating regimes are associated with low inflation in upper-income countries.

Furthermore, Tavlas et al. (2008) points out that literature reveals differences in impact of sub-categories of fixed regimes on inflation: first, regimes that underwent "frequent" adjustments in central parity and, for basket pegs, in the composition and/or the weights of the basket, generated higher inflation than did "infrequent" adjusters; second, single-currency pegs, which tend to be easier to verify than other pegs, had lower inflation rates than other-pegged arrangements and third, the harder the peg, the lower the inflation rate.

Although adoption of fixed regime may seem as a better solution at least for developing countries, Gosh et al. (1997) work claims that country with fixed regimes experienced higher volatility of real GDP growth, while Edwards (2006) warns that fixed regimes could end up with currency crisis if real exchange rate is overvaluated.

6. EXCHANGE RATE REGIMES, MACROECONOMIC PERFORMANCE AND GLOBAL CRISIS IN SELECTED EEE: STYLIZED FACTS

We focus our empirical analysis on stylized facts regarding macroeconomic performance of selected emerging European countries with fixed and floating regimes, for the periods 2003-2012. Sample of countries encompasses Western Balkan Countries (WBC) and New Member States (NMS), sixteen countries in total. Observed period is subdivided in two periods, pre-Lehman period of economic boom 2003-2008, and post-Lehman period of global recession 2008-2012. Main objective of the analysis is two-fold: to compare whether the difference in macroeconomic performances exists with respect two exchange rate regime, and second, to provide explanation of possible mechanisms that create a difference.

Important issue that arises at the beginning of the analysis is classification of EEE exchange rate regimes. Table 1 presents classification of EEE exchange rate regimes according to two classification schemes: RR for the period 2003-2010 and IMF for the period 2011-2012 (RR classification data are not available for these two years). Table below points out a few interesting facts. First, that classification of RR seems to mostly coincide to the classification of IMF, with one interesting exemption – while IMF scheme placed Poland and Czech Republic as countries with free floating regimes, according to RR no single country achieved free floating regime. Second, that fixed exchange rate regimes dominated in EEE during analyzed period. Third, most of EE countries haven't change exchange rate policy after global crisis outbreak in 2008.

	2003	2004	2005	2006	2007	2008	2009	2010	2011/12 (IMF)	Bipolar
ALB	10	10	10	10	10	10	10	10	Floating (IT)	Float
BIH	2	2	2	2	2	2	2	2	Currency board (peg to Euro)	Fix
HRV	8	8	8	8	8	8	8	8	Crawl-like arrangement	Fix
MKD	8	8	8	8	8	12	12	12	Stabilized arrangement (Euro)	Fix
MNE	1	1	1	1	1	1	1	1	No separate legal tender	Fix

Table 1 Classification of EE exchange rate regimes

	2003	2004	2005	2006	2007	2008	2009	2010	2011/12 (IMF)	Bipolar
SRB	12	12	12	12	12	12	12	12	Floating (IT)	Float
BGR	2	2	2	2	2	2	2	2	Currency board (peg to Euro)	Fix
CZE	10	10	10	10	10	10	10	10	Free Floating (IT)	Float
HUN	8	8	10	10	10	10	10	10	Floating (IT)	Float
POL	12	12	12	12	12	12	12	12	Free floating (IT)	Float
ROM	12	12	12	12	12	12	12	12	Floating (IT)	Float
SVK	8	8	8	8	8	8	1	1	EMU	Fix
SVN	8	8	8	4	1	1	1	1	EMU	Fix
EST	2	2	2	2	2	2	2	2	EMU (01/11)	Fix
LVA	8	8	8	11	11	11	11	2	Conventional peg (to Euro)	Fix
LTU	2	10	8	8	2	2	8	8	Currency board (peg to Euro)	Fix

Source: RR database, IMF (2012a), IMF (2013)

Note: Coding of fine RR classification: 1) No separate legal tender; 2) Pre announced peg or currency board arrangement; 3) Pre announced horizontal band that is narrower than or equal to +/-2% 4); 4) De facto peg; 5) Pre announced crawling peg; 6) Pre announced crawling band that is narrower than or equal to +/-2%; 7) De factor crawling peg; 8) De facto crawling band that is narrower than or equal to +/-2%; 9) Pre announced crawling band that is wider than or equal to +/-2%; 10) De facto crawling band that is narrower than or equal to +/-5%; 11) Moving band that is narrower than or equal to +/-2% (i.e., allows for both appreciation and depreciation over time); 12) Managed floating; 13) Freely floating; 14) Freely falling; 15) Dual market in which parallel market data is missing.

We continue further analysis by bipolar grouping of countries to corner exchange rate regimes, i.e. fixed and floating, according to IMF (2012b). Group of countries with fixed exchange rate regimes encompasses Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Bulgaria, Slovakia, Slovenia, Estonia, Latvia and Lithuania, while group with floating regimes is smaller and encompasses Albania, Serbia, Czech Republic, Hungary, Poland and Romania. Analysis is focus on average performance in real growth, current account and inflation, with respect to the bipolar country grouping. Real growth and inflation are calculated as cumulative change of real GDP and GDP deflator, regarding sub-period of analysis. Based on literature review presented in previous sections, we formed several expectations about impact of exchange rate regime on macroeconomic performances:

Current account deficit in the eve of the crisis should be higher in countries
with fixed exchange regimes due to the larger capital inflows in period of
economic boom;

- 2) There should be no systematic relationship between exchange rate regime and growth, which holds prior and after crisis outbreak. However, it is reasonable to expect that in pre-crisis period growth in countries with fixed regimes was higher if 1) is true, while in post-crisis period opposite holds, as possibility of deprecation gives the opportunity to countries with floating regimes to restore international competitiveness;
- 3) Volatility of current accounts with respect should be lower in countries with floating regime as it allows better accommodations and greater flexibility to change in capital flows;
- 4) Inflation rates should be lower in countries with fixed regimes both in preand post-crisis period.

Figures 1 and 2 represents the cumulative real economic growth and current account for 16 European emerging countries. Countries with floating regime are presented on the LHS of the figures, while countries with fixed regime are placed on the RHS. Horizontal lines in Figure 1 represent average cumulative real growth for both sub-periods, with respect to regime groups. Similarly, average current account in the eve and in the aftermath of the crisis is presented in Figure 2.

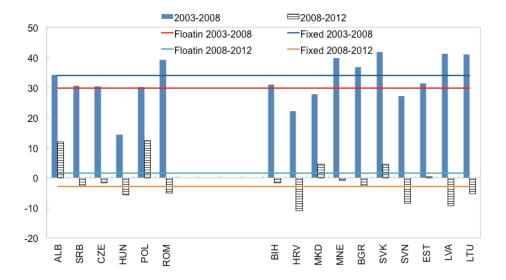


Figure 1 Impact of exchange rate regime on cumulative real growth

Source: IMF WEO, Author's calculation

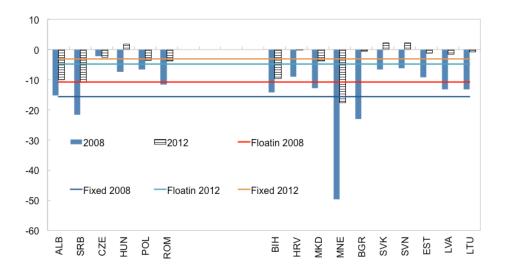
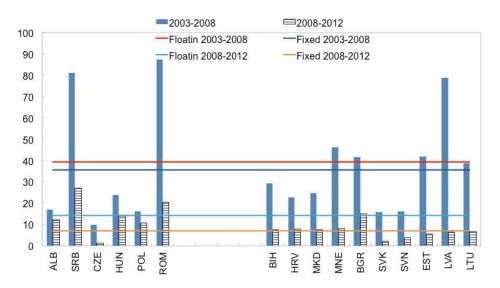


Figure 2 Impact of exchange rate regime on current account balance

Source: IMF WEO. Author's calculation

Results confirmed our expectations about cumulative growth and current account. Countries with fixed regimes were generally more attractive for expansion of credit activities of foreign banks during the period of boom, for example IMF (2012b) finds that Baltics, Bulgaria, Montenegro, and Ukraine all had annual credit growth at about 10 percent of GDP or more, while many of the countries in the region with more flexible exchange rate regimes managed to avoid a credit boom. Consequently, larger capital inflows allow countries with fixed regimes to run larger current deficits. After a sudden stop of capital, countries with fixed regimes deficits had to correct their current balances to permanent possibilities of deficit financing, which create higher volatility in current balances relative to countries with floating regimes with initially lower deficit. On the other side, capital inflow boosted private demand and investments, which reflected in higher growth of countries with fixed regimes in pre-crisis period, but positive impact of fixed regime growth vanished once when capital inflows stop.

Figure 3 presents average cumulative inflation for both sub-periods, with respect to regime groups.



Source: IMF WEO, Author's calculation

Most of the countries with fixed regimes in our sample are either member of EMU or pegged their currencies to EUR, so they lost their monetary independency. Consequently, countries in EMU have low inflation rates determined by ECB, while countries with pegged currencies "import" inflation from EMU. In addition, nominal anchoring in exchange rates helps in keeping expectations on low inflation. While outbreak of the crisis is arguably expected to affect current account and growth, we didn't expect that it would influence impact of exchange rate regime on inflation. Indeed, Figure 3 shows that gap between average inflation in group of floating and fixed regime' countries even widened. This is also in line with the work of De Grauwe and Schnabel (2004) Zdravkovic and Vukovic (2010), who find evidences that stable exchange rates contributes significantly to low inflation in selected EEE.

7. CONCLUSIONS

Most of concerns in empirical research tackling impact of exchange rate regime on macroeconomic performances revolve around two questions: how exchange rate regimes should be classified to capture *de facto* behavior of monetary authorities (opposite to *de jure* announced regime) and whether systematic relationship

between exchange rate regimes and macroeconomic performances exist? Various empirical studies offered different answers on these questions, regarding the countries or period encompassed by sample, methodology applied and chosen classification of exchange rate regimes. Empirical evidences from literature review mostly supported view that fixed exchange rate regimes contribute to lower inflation and higher current accounts, while impact of regime on real growth is ambiguous.

In this work we contribute to the debate by discussing impact of exchange rate regime choice on three indicators of macroeconomic performance - real growth, current account and inflation - with particular focus on stylized facts in selected Emerging European Economies (EEE). Sample of countries encompasses Western Balkan Countries (WBC) and New Member States (NMS), for the period 2003-2012. Observed period is subdivided in two periods, pre-Lehman period of economic boom 2003-2008, and post-Lehman period of global recession 2008-2012. Analysis is based on bipolar grouping of countries to corner exchange rate regimes, i.e. fixed and floating, according to IMF (2012b).

Results confirmed our expectations that countries with fixed exchange rate regimes achieved higher growth in pre-crisis period, but also higher current deficits, with capital flows as a main transmission channel. Attractiveness of fixed regimes for expansion of credit activities boosted foreign capital inflows, private investments and demand during pre-crisis period. Yet, sudden stop of capital after global crisis outbreak forced countries with fixed regimes to correct their current deficits. It created higher volatility in current balances relative to countries with floating regimes, and vanishing of positive impact on growth. While outbreak of the crisis is arguably expected to affect current account and growth, we didn't expect that it would influence impact of exchange rate regime on inflation. This is confirmed by empirical analysis, as fixed regime group of countries achieved lower inflation, both prior and after crisis outbreak. This supports view that nominal anchoring of exchange rate or pegging to the currency of low-inflation economy helps in maintaining price stability.

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