Ivanka Petkova<sup>1</sup>



ГОДИНА XX, 2011, 2

# EFFECTS OF DIFFERENT CURRENCIES AND EXCHANGE RATE REGIMES IN POST YUGOSLAV COUNTRIES DURING THE GLOBAL FINANCIAL AND ECONOMIC CRISIS

The paper examines the national currencies and their exchange rate regimes in the successor countries of the Socialist Federal Republic of Yugoslavia, which experienced a shift from an optimum currency area to a variety of national currencies. The effects of the existence of several national currencies and of sharing a single currency both unilaterally, and officially, on trade in the region are evaluated. The role of the national currencies and exchange rate regimes in regional economic links are elaborated. Channels through which the substantial instability and excess volatility, as well as the de facto euroization are influencing the banking sectors during the global financial and economic crisis are discussed.

JEL: E32; F31; F41

## Introduction

In monetary terms, the successor states of the Socialist Federal Republic of Yugoslavia faced two crucial issues to decide on after the wars in the 1990s: the choice of the national currency and of an exchange rate regime.

In this paper the discussion on the role of exchange rate regimes is restricted to the experience of ex-Yugoslav countries in moving from an optimal currency area to the introduction of several currencies and exchange rate regimes (ERR). The analyses are based on the evidence that there are three categories of exchange rate regime – floating, firm fixing, and intermediate regimes (Frankel, J 2003). The paper is profiting on three basic conclusions reached in studying the experience with exchange rate regimes in emerging economies (Frankel, J, 2003). First, all the categories of exchange rate regimes are appropriate for some countries. Second, the choice of appropriate regime cannot be made independently of knowledge of the circumstances facing the country in question. Third, no single regime is right for all countries, and even for a given country, it may be that no single regime is right at all times

<sup>&</sup>lt;sup>1</sup> Ivanka Petkova is from Economic Policy Institute, Sofia.

#### 1. Currency and Exchange Regime Options

The targeted countries are applying two main types of ERR: a flexible or floating exchange rate with emphasis on price stability as the final goal of monetary policy and several types of fixed exchange rate regime, in which the exchange rate is the anchor of monetary policy, thus the intermediate target of monetary policy is the exchange rate stability.

The choice of a fixed exchange rate or a managed floating appears to be a practical recognition of the fact that in a highly open economy, there is a close relationship between the external value of the currency and the domestic price level. This (together with the fact that the external value of the national currency is more easily monitored on a day-to-day basis than its internal purchasing power) can justify the pursuit of exchange rate stability as an intermediate target.

The second currency regime option is the adoption of the euro as the national currency. Among the ex-Yugoslavia countries only Slovenia is member of the European Union (EU) and member of the European Monetary Union (EMU). Since the other countries are not members of the EU, EMU membership is ruled out. There is however another option – unilateral adoption of the euro as a national currency and legal tender. In this case the respective country is joining an asymmetric (Buiter, W. H., 2000) monetary union. In practice this is an unilateral euroization with different outcomes for the euroizing country. Net effects for the country are an empirical question depending on a number of conditions and primarily on the degree of monetary, real, and institutional convergence already achieved beforehand. Positive net advantages may be expected especially by smaller countries that are either already converging, or are distant but wish to use a single currency to speed up convergence (Nuti, M., 2002). Estimation the impact of common currencies on bilateral and intraregional trade and economic integration in the Western Balkans some authors come to the conclusion that unilateral euroizaition alone can not deliver economic growth (Ilirjani, A. 2005).

One of the negative consequences is that unilateral euroization would not provide a share of the seigniorage revenues of the common currency area. Second, there would be no automatic access to the discount window of the European Central Bank (ECB). Third, the ECB would not have any lender of last resort responsibilities visà-vis the financial institutions of the respective euroizing country. Fourth, there would be no seat on the ECB Council or Executive Board. Fifth, monetary policy by the ECB would be conducted without any reference to the economic conditions in the euroizing country, unless this were in the national interest of Euroland, as perceived by the ECB. It must be stressed that in 2000 the EU (ECOFIN Council) articulated a negative position to unilateral euroizatioon. On the one hand, it is not compatible with the Treaty, and on the other, countries cannot use this way around to avoid the convergence process.

The unilateral euroizaition can be contrasted with a full and formal monetary union, a (formally) symmetric (Buiter, W. H., 2000) monetary union. In such a type of

monetary union participating nation states acquire several advantages. First, they share the costs and benefits of the monetary union in a way that represents their economic size or weight. Second, their representation on the decision making council of the supranational central bank (the ECB) likewise reflects their economic importance in the union. Clearly, in a formally symmetric union between countries of very different economic size, the larger member(s) will be the dominant partners (Buiter, W. H., 2000). With EU and EMU membership, the respective country would get its fair share of the Euroland-wide seigniorage; financial institutions in this country would have access to the discount window of the ECB on equal terms; the ECB would act as lender of last resort on the same terms and conditions in all member nations, and the monetary policy of the ECB would be directed at price stability and economic activity in Euroland as a whole, which would give a small weight to small countries like the ex-Yugoslavia countries.

There are many other arrangements countries can make choose. For example, an adjustable currency peg to the euro can be an alternative. Another option is a currency board arrangement (CBA) under which the exchange rate is fixed (to the euro) by law. The CBA requires a 100% reserve backing of domestic currency issue. A regime with a exchange rate fixed by law can be chosen, but without 100% reserve backing of domestic currency issue. This option gives room for domestic credit expansion.

Within the type a floating or flexible exchange rate regimes, there are many possible objectives and monetary instruments which can be considered. As most applicable in practice are known single nominal targets, such as inflation targets.

#### 2. From an Optimal Currency Area to a Diversity of Currencies

Economic agents and households in the Socialist Federal Republic of Yugoslavia enjoyed the advantages of an optimal currency area with the Yugoslav Dinar as a legal tender in all of the republics constituting the federation. After the wars in the 1990s from the former Yugoslav medium-sized economy, 7 small open (dependent) economies emerged. The national states building process started also the move from the optimal currency area to introducing new domestic currencies (see table bellow):

Currency choices by the successors of SFR of Yugoslavia

New national	Official euroization		Two currencies
currency	bilateral	unilateral	within a federation
Croatia, Macedonia, Serbia, Slovenia (until 2006)	Slovenia (since 2007 member of the EMU)	Montenegro, Kosovo	Bosnia and Herzegovina, Montenegro (until 2006)

In some cases the choice of the currency was imposed by the reality of a dominating foreign currency (DM in Montenegro within the federation with Serbia, Convertible marka in Bosnia and Herzegovina).

In other cases new national currencies has been created: Croatian kuna, Macedonian denar, Serbian dinar, Slovenian tolar. In the federation of Bosnia and Herzegovina no optimal currency area has been created, instead two kinds of banknotes and coins of the Convertible marka are in circulations – on a federal level, and within Republica Srbska.

The third group encompasses successors of Yugoslavia, who adopted the way of official bilateral or unilateral euroization. Slovenia preferred to went the classical way of adopting the euro by becoming first member of the EU and then to meet the Maastricht criteria and join the Eurozone member countries. Montenegro unilaterally adopted the Euro as its national currency in 2000, by replacing one foreign currency circulating as a legal tender (the DM) by the successor of the DM (and of the national currencies of the EMU member countries). This adoption was carried out in a period, when Montenegro was part of the federation with Serbia and again within the federation no optimal currency area was chosen. Instead, within the federation two currencies were simultaneously used: in Montenegro – the Euro, and in Serbia – the Dinar. The second case of unilateral euroization is Kosovo, where the euro has been adopted after the war in 1999 and with the introduction of euro banknotes and coins in 2000.

This diverse picture of currency choices in post-Yugoslav countries necessitates a clear answer on the role they can play in fostering or hampering regional cooperation. Regional economic cooperation has been imposed by the EU as a precondition for membership. As all of these countries see their future in the EU, the analysis of the issue is of particular importance. The first remark is, that the national currencies of Croatia, Macedonia, Serbia, Bosnia and Herzegovina do not intermediate the economic relations among the respective countries or among all the successors of SFR Yugoslavia: they are not applied either as a currency of transaction, nor as a currency of payment in trade or in foreign investments. Second, as regards the role of their currencies in regional cooperation, the countries mentioned have disadvantages towards those of the successors of SFR of Yugoslavia, who bilaterally (Slovenia) or unilaterally (Montenegro, Kosovo) use an international currency (the euro) as their legal tender.

The euro plays main role in economic relations of post Yugoslav countries with the EU. As a result, the three countries enjoy the same benefits EMU member countries are enjoying in their economic relations or in their external economic relations, where the euro is used as a currency of transaction or as a means of payment. In bilateral exports and imports or in foreign direct investment projects in the region the euro plays a dominant role. Third, a next competitive advantage even to EMU member countries is that in exchange of adopting the euro unilaterally, euroizing countries (Montenegro, Kosovo) do not have to meet or keep meeting any of the Maastricht criteria. Fourth, the issue is open on what would be the requirements to unilateral euroized countries when they become members of the EU. Will they be

obliged to follow the prerequisites for a membership of the EMU or a different approach will be applied to them by the EU institutions.

#### 3. The Exchange Rate Regime Choice

Experience shows that for countries at a relatively early stage of financial development and integration into the international markets of goods and services, fixed or relatively inflexible regimes seem to present a tool for reaching anti-inflation credibility without damaging growth. Later, when countries attain a higher level of economic development flexible exchange rates can bring substantial economic advantages. Among the targeted countries only Serbia has chosen the option of a flexible exchange rate regime with inflation targeting. The actual applied regimes in the rest of the targeted countries rather cover the types of inflexible regimes, under which the exchange rate is the anchor of the monetary policy.

More concrete and according to the IMF classification, the post-Yugoslav countries apply 5 out of the 8 possible exchange rate arrangements (IMF, 2008):

В&Н	• CBA • ER anchor of the monetary policy	
Slovenia	Independently floating (2006) Member of the Eurozone (2007)	
Montenegro (2001), Kosovo(2002)	No separate legal tender (unilateral euroization)	
Croatia	<ul><li> Managed floating with a de facto peg to the Euro</li><li> ER anchor of the monetary policy</li></ul>	
Macedonia	<ul> <li>Managed floating with a de facto peg to the Euro (around Den 61= 1Euro),</li> <li>ER anchor of the monetary policy</li> </ul>	
Serbia	<ul> <li>Managed floating with no pre-determined path for the exchange rate</li> <li>Inflation targeting</li> </ul>	

# 3.1 Currency board arrangement (CBA)

The CBA is the mist rigid exchange regime. To the adoption of this exchange rate regime Bosnia and Herzegovina has been forced by the uncompleted state building process. It was applicable to Bosnia and Herzegovina, because it depoliticize the monetary system by depriving the government of the power to exercise pressure on the central bank to print money.

# 3.2 Official Euro/Euroization

Among the targeted countries there are examples of both unilateral adoption of the Euro, and by a full, formally symmetric monetary union. Existing literature reveals

that there is insufficient knowledge about the various dimensions of euroization in the region but investigations show that what regards cash and deposit holdings the euro plays a more substantial role in SEE than in Central Eastern European countries (Dvorsky, S., Thomas Scheiber and Helmut Stix, 2008).

At the same time, there are plenty of theoretical and case studies (regarding particular countries) analyzing the pros and contras in joining a monetary union. In cases of bigger economies scholars (Buiter, W.H. 1999) clearly define the advantages and disadvantages for being part of a monetary union. Microeconomic transactions costs savings argue in favor of either form of monetary union. Seigniorage considerations argue against unilateral adoption of the US dollar, but in favor of a formally symmetric monetary union. Loss of the lender of last resort is a powerful argument against unilateral monetary union. The optimal currency area arguments (which concern the macroeconomic stabilization aspects of a permanently fixed exchange rate) probably favor either form of monetary union. The shockabsorber properties of a flexible exchange rate are dominated by the extraneous instability and excess volatility inherent in a market-determined exchange rate when financial markets are highly integrated.

Diverse determinations and implications can be observed from the practice of the small economies in the SEE region. In Slovenia the driving force for choosing formally symmetric monetary union was the advanced relations with the EU. determining a clear vision on formally joining the EMU according to the requirements of the Treaty. In December 1997 the European Council in Luxembourg adopted the recommendation of the European Commission to officially begin negotiations with six countries, including Slovenia. In March 1998 Slovenia started negotiations and in May 2004 became full fledged member of the EU. The motivation of the society and the political goal was to be at home in Europe (doma v Evropi). After that Slovenia became the first new member county to formally join a formally symmetric monetary union, entering the third stage of the EMU in January, 2007. Slovenia was obliged to join the EMU as soon as it fulfills the Maastricht criteria for monetary, fiscal and exchange rate convergence. The question arises: why did Slovenia want to join the EMU as soon as possible and why the country achieved a smooth EMU accession? One of the reasons could be that in developing countries and emerging markets monetary policy is usually a source of volatility, rather than an instrument of macroeconomic stabilization in the case of exogenous (asymmetric) shocks (De Grauwe, P. and Gunther Schnabl, 2004). This means, that if membership in the monetary union incorporates a significant degree of macroeconomic stabilization the gains from joining the monetary union are substantial.

A different case is Montenegro, because this country started with unilateral (de facto) euroization (first accepting the DM) even fare before becoming independent state in 2006. The case is interesting also in view of distinctive proofs compared to that one can find in the literature. In some analyses (Kotios, A. , 2002) main attention is paid to the preliminary theoretical examination of factors determining the decision to unilaterally euroize or not and its implications. The costs and benefits, the implication of unilateral euroizatation on monetary policy, on growth

are scrutinized. Based on the future economic advantages/disadvantages of the political decision these kind of analyses rather concentrate on the possible future outcomes supporting or opposing the decision, while missing the two important features of unilateral euroization. The first one regards the role of the historical experience in adopting a foreign currency and its causes. The point here is whether the respective country or region has been subjected to adopt a foreign currency, is the experience positive or negative, whether the choice(s) was (were) based on less sensitivity of citizens on the notion of loosing national sovereignty, independent monetary policy etc. Some authors (Stix, H., 2008) support the view, that the persistence of the use of foreign currency is driven to a large extent by factors that are related to the past (Stix, H., 2008)

The second one concerns the practical evidence, that in most cases this is a process of a spontaneous euroization. As other authors (Feidge, E.L. and James W. Dean ,2002) indicate, unofficial (de facto) euroization results from individuals and firms voluntarily choosing to use a foreign currency for the monetary services of domestic currency. Authorities then are forced to take the decision on unilateral euroization, because economic agents and households has taken it earlier, before the official adoption of the preference to replace the domestic currency is taking place. This sequence is typical for the countries of post-Yugoslavia, where the decision on unilateral euroization has been prepared by the specific conditions of wars and loss of confidence in the domestic currency dominating the region in early 90-ies. The decision to euroize was incorporated into the aim to build a nation state (Montenegro, Kosovo). For example, in Montenegro, the authorities accepted officially the DM even at a moment, when Montenegro was part of the Republic of Yugoslavia, where the dinar was the legal tender.

There is also another aspect worth mentioning – the attitude to the euroization of the EU institutions in charge. At the beginning of the third stage of the European Economic and Monetary Union the European Commission was against unilateral euroization and persisted on the fulfillment of the Maastricht criteria. On the other hand, countries (Bulgaria), which were in the process of negotiations and tried to make it visible that they meet the Maastricht criteria, have been reminded that they have to stick to the Copenhagen criteria first and foremost. The understanding of the European Commission was that countries have first to become EU members and only after that step they can start preparing for the EMU accession.

Another peculiarity in euroization is based on the distinction between currency substitution and asset substitution. Even after the stabilization of the economy in mid-1990s, economic agent and household in Croatia continued to use foreign currencies because of the important role of network effects and of remittances (Stix, H., 2008). Similar effects can be observed in Serbia.

As a result, there are three varieties of euroization in place in the targeted countries. In the case of Slovenia there is a bilateral official euroization reached by joining the EMU. Alternatively, Montenegro euroized unofficially, de facto and then an unilateral decision followed to accept the Euro without joining the EMU and without

explicit prior sanction by the EU authorities. In the case of Croatia and Serbia, the euroization takes place in the form of an asset substitution .

#### 3.3 Managed floating (de facto peg)

Very often countries announce a different exchange rate regime than they actually implement. This is the case with Croatia and Macedonia, which adopted a de jure policy of floating regime of their national currencies but use domestic monetary policy to smooth exchange rate fluctuations. There are several reasons for this. However, usually countries declare a de jure float as a result of external pressure from bilateral investment treaties or the IMF. Inconsistencies between the official and actual regimes could come up when real pressures occur and guide the movement of the exchange rate in a different direction than a nominal pressure would lead.

### 3.4 Managed floating with no pre-determined path for the exchange rate

This regime has been chosen by Serbia, together with the decision to move towards inflation targeting. The monetary policy is based on the inflation anchor although the central bank has been heavily intervening on the market to withstand the depreciation pressure on the dinar particularly since end of 2008.

# 4. The Implications of De Facto Euroization (asset substitution)

De facto euroization heavily manifested itself during the pre-crisis period both in banks and in the corporate sector. There are several motives for holding either cash or deposits, or receiving credits in foreign currency. Among foreign currencies cash holding in euro are preferred in the region and are more widespread in in the SE countries than in the CEE countriesd. Studies (Dvorsky, S., Thomas Scheiber and Helmut Stix, 2008) show that cash holdings in euro dominate in Macedonia (49%).

More serious implications has de facto euroization in the form of bank deposits and loans. This is particularly true in the cases when the foreign exchange rate risk is turning out to become a solvency risk. For example, during the depreciation of the national currency the degree of solvency risk for a bank can increase as a result that its corporate borrowers became overleveraged in foreign currency. The extent of exposing to this risk is tightly connected with the level of asset substitution in the respective country. Not only banks, but also companies can be offended by high levels of de facto euroization, because it negatively influences their economic performance and burden their export capacities. The process has been accelerated during the credit expansion pre-crisis period. Credit boom was typical for all emerging Europe countries. However, in the post-Yugoslav area it has been bold by the extensive de facto euroization. (about three fourths of bank loans in Serbia are in foreign currency or foreign exchange related). For example, about three fourths of bank loans in Serbia are in foreign currency or foreign exchange related (IMF,

2008). The accumulated potential of foreign exchange risk before the crisis manifestated them to a bigger or less extent in the form of credit risk the region.

Vulnerabilities occurred well before the crisis, but their importance has been (in most cases) neglected. One typical risks economies in post Yugoslavia countries have been exposed were the currency mismatches in the banking sector. Currency mismatch is usually referred to the extent to which an economy's liabilities are denominated in foreign currency while its assets are denominated in domestic currency. This is one of the main mechanism through which emerging economies are exposed to systemic risk.

In the pre-crisis period, lending activities of banks were based on the expectation that returns are high, and companies can serve their credits and pay back. However, this was not the main factor boosting credit expansion. The access of foreign bank subsidiaries to cheep funding on the international markets and the competition for acquiring larger market shares on the host countries' markets enhanced lending directly in foreign currencies. While this factor was typical for the behavior of foreign bank subsidiaries in emerging Europe, critical for the post-Yugoslav countries was the behavior of potential borrowers induced by the lack of sufficient trust in local currencies.

Recent research presents evidence that an economy might have a low foreign currency debt relative to its net exports, but the risk can arise from the fact that its debt might be concentrated in borrowers with no foreign currency income (Ranciere, R. Aaron Tornell and Athanasios Vamvakidis, 2010). Some of the authors (Prat, St., 2007) concentrate on sectoral analyses and calculate banks' currency mismatch as the share of their foreign currency liabilities not covered by their foreign currency assets. However, this literature does not take into account foreign currency loans made to unhedged borrowers. If debtors cannot effectively hedge their exchange rate risk, banks are indirectly exposed to exchange rate risk through credit risk. Thus, there is a *de-facto* systemic risk, which is not reflected in a notional currency mismatch measure that focuses only on banks' balance sheets (Ranciere,R. Aaron Tornell and Athanasios Vamvakidis, 2010). At the same time, in countries where financial markets are underdeveloped and economic agents do not have the opportunity to hedge their open positions in foreign currency, they face high foreign exchange risks.

This is the typical experience in South Eastern European countries. During the precrisis years banks in SEE (like in the rest of emerging Europe), used the worldwide period of cheep money to borrow in foreign currencies and to grant loans denominated in foreign currencies both to the corporate sector and to households. In 2007 the share of foreign currency lending in total lending to the non-financial sector attained to more than 50 percent in most of the countries. A considerable part of the credits was granted to clients with no foreign currency revenues or channeled to finance consumption and investment in nontradable goods.

Another type of vulnerability could take place as a result of the sovereign debt crisis in the Eurozone. Foreign banks are regarded to have played a positive role during the global financial crisis. However, the Greek sovereign debt crisis since the beginning of 2010, is creating concerns that the large presence of Greek banks entails considerable risks for the banking systems of those countries where their share is dominating the bank assets. Those countries could suffer from a potential withdrawal of Greek parent banks and declining exports to Greece.

# 5. Role of National Currencies and Exchange Rate Regimes in Regional Cooperation

One of the characteristic feature of the region is that the markets in the successor states of Yugoslavia are of a small scale and of a fragmented nature in some cases. Before the global financial and economic crisis growth was underpinned by large capital inflows.

National currencies are not used in intra-trade or foreign direct investments between countries from post Yugoslavia. However several exchange rate levels to the main currencies used in international trade (USD, Euro, CHF etc.) exist (105 RSD = 1 USD, 1.95830 KM = 1 USD, 7.42 HRK = 1 USD, 61.5050 MD = 1 USD). This presumes that under more flexible exchange rate regimes exchange rates of national currencies (to the main international currencies) can be managed in favor of national exporters to get competitive advantages towards their counterparts from the region.

Countries with CBA (Bosnia and Herzegovina) and de facto peg (Croatia and Macedonia) have no, respective less maneuvering room to reach this goal. In the region this rather feasible for Serbia due to the flexible exchange rate regime.

Exporters or investors from countries, which have unilaterally (Montenegro, Kosovo) or bilaterally (Slovenia) adopted the euro as their legal tender do not have to and are not able to influence the exchange rate of the EUR to other main currencies used in international economic relations. In equal terms, exporters and investors from these countries definitely are gaining on avoiding foreign exchange risk in comparison to their competitors from countries with national currencies and flexible exchange rate regimes.

One of the main channel currencies and exchange rate regimes are influencing economic cooperation in the region could be the positive effect of currency depreciation on exports. For several reasons the exchange rate of the Serbian dinar has been diverging from other flexible currencies in the region. The Serbian dinar is depreciating since 2009 and this process has been boosted also by the Greek crisis (from 95 RSD to the EUR in early 2009 the exchange rate reached the level of 107 RSD to the euro in late 2010). However, despite the depreciation exports are increasing slower (19%) than imports (34%). This means that exports of Serbia are not sensitive to price advantages of depreciation.

Another channel is the impact of depreciation on corporate performance. The depreciation of the Serbian dinar negatively affected balance sheets of corporations. Their extensive borrowing in foreign currency both from domestic banks and

directly from international parent banks (36% of GDP) was not hedged because of the lack of a local foreign exchange forward market liquidity. Due to the foreign exchange risk balance sheets became overleveraged - corporations were incapable of servicing their credits with available capital sources. In the most cases debt rescheduling is needed.

The depreciation channel is also influencing inflation. Continuing depreciation pressure on the Serbian dinar generated on negative impact on domestic inflation expectations. Inflation volatility undermines the government policy measures on deeuroization of the economy.

Adverse effects can be observed in countries, in which the euro is adopted as national currency. The elimination of foreign exchange transaction costs and of the foreign exchange risk bring considerable advantages to investors and from these countries in the region. In 2009 the amount of foreign direct investments of Slovenia to Bosnia and Herzegovina surpassed those of Germany and Montenegro has been ranked on 11 place out of 18 foreign investors with investments exceeding 1 million euro. Undoubtedly there are more import driving forces (than the advantages of using the euro as national currency) behind the position of Slovenia and Montenegro as foreign investors in the region. The geographical proximity and the historical ties, the existing and newly established networks definitely play a essential role and the impact of these invisible assets can be observed on the foreign direct investments of Croatia and Serbia, together they would occupy the second place, after Austria. However, the benefits of the official euroization in such cases in comparative terms cannot be neglected.

In countries with national currencies, de facto euroizaition is a key source of vulnerability of corporate borrowers. It hampers imports used for export production and creates currency mismatches of banks.

#### Conclusion

The national states building process in post-Yugoslav countries has been accompanied by switching from an optimal currency area of the Yugoslav dinar to the introduction of new domestic currencies. The picture of currency choices made is diverse including four national currencies, one case of official and another of unilateral euroization, and in one federal successor state there are two kinds of banknotes and coins of the national currency in circulation (one on federal level, and another one in only a part of the territory).

Even more rich are the choices of exchange rate regimes covering almost the whole range of options existing among the members of the IMF. Starting from the bold rigid form of fixed exchange rate (CBA), representing a member of the Eurozone and of the unilateral euroization, to end at managed floating with de facto peg to the euro, managed floating with no pre-determined path for the exchange rate, and independently floating rate.

The role of the euro is visibly important for the economies from the region. The defacto euroization in some countries with national currencies dominates in the form of cash euro holdings (Macedonia), and in the others (Serbia and Croatia) in the form of bank credits (and deposits) in foreign currencies, mainly in euro.

Official euroization, both bilateral (Slovenia) and unilateral (Montenegro, Kosovo) could inspire national market agents (exporters and investors) to deepen cooperation with post-Yugoslav counterparts, provided they possess adequate potential and interest to channel their efforts to. Both de-facto and official euroization leads to the elimination of foreign exchange transaction costs, which is a competitive advantage for exporters and investors from the respective countries.

Despite a proliferation of new currencies and varying exchange rate regimes, during the global financial and economic crisis countries from the post –Yugoslavia area did not experience uncontrolled devaluations and systemic bank failures.

During the crisis main possible channels influencing the regional economic cooperation among post Yugoslav countries could be depreciations of national currencies and the usage if the euro as legal tender in some of them. Empirical evidence shows that countries with flexible exchange rate regimes could not make use of depreciation because of the low level of price sensitivity of exports. At the same time depreciation increased inflation expectations, increased interest rates made credit more expensive, which hampered production also for export. Depreciation discovered potentials of foreign exchange risk to become a credit risk, damaging the performance of overleveraged corporations and detecting the risks banks have been accumulating through currency mismatches during the pre-crisis period. In countries where the exchange rate is the anchor of monetary policy, actions of the central banks were constrained by the need to maintain the de facto fixed exchange rate, which revealed also a persistent euroization.

#### References

- Buiter, W.H. (1999) The EMU and NAMU: What is the Case of a North American Monetary Union? Canadian Public Policy / Analyse de Politiques, Vol. 25, No. 3 (Sep., 1999).
- Buiter , W. H. (2000) Is Iceland an Optimal Currency Area? Central Bank of Iceland, August, 2000
- De Grauwe, P. and Gunther Schnabl (2004) EMU Entry Strategies for the New Member States, Intereconomics, Vol. 39 (2004), Issue 5 (September), 2004.
- Dvorsky, S., Thomas Scheiber and Helmut Stix, (2008) Oesterreichische Nationalbank, Focus on European Integration, N 1, 2008.
- Frankel, J (2003) Experience of and Lessons from Exchange Rate Regimes in Emerging Economies, NBER Working Paper 10032.
- Feidge, E.L. and James W. Dean (2002) Dollarization and Euroization in Transition Countries: Currency Substitution, Asset Substitution, Network Externalities and Irreversibility, paper presented at the Fordham University international

- conference on Euro and the Dollarization: Forms of Monetary Union in Integrating Regions, April, 5-6, 2002, New York.
- Ilirjani, A. (2005) The Euro before the EU? An Estimate of the Effect of Euroization on Trade and Growth of Albania, Macedonia, and Serbia, (dissertation for acquiring the degree of doctor of philosophy), Central European University, Budapest, 2005.
- IMF (2008), De Facto Classification of Exchange Rate Regimes and Monetary Policy Frameworks, IMF, 31 April, 2008
- IMF (2010) Country Report N 10/147, May, 2010.
- Kotios, A., (2002) Southeastern Europe and the Euro Area: The Euroization Debate, Thessaloniki, 2002.
- Nuti, M. (2002) Costs and Benefits of Unilateral Euroization in Central Eastern Europe, Russion European Center for Economic Policy, Workin Paper Series, January 2002
- Prat, St. (2007), The Relevance of Currency Mismatch Indicators: An Analysis through Determinants of Emerging Market Spreads, Economic Internationale, N 111(3), 2007.
- Ranciere, R. Aaron Tornell and Athanasios Vamvakidis (2010) A New Index of Currency Mismatch and Systemic Risk, IMF Working Papers, WP/10/263, November, 2010.
- Stix, H. (2008) Euroization: What Factors Drive its Persistence? Househod data and Evidence for Croatia, Slovenia and Slovakia, Austrian National Bank Working Papers, April, 2008.