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Is Dollarization the Right Option? Financial Fragility, Original Sin and Fear of Floating

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1. Introduction

In this paper we survey the main findings of the literature on the macro-economic (dis)advantages of flexible exchange rates in the emerging market economies focusing on the option of dollarization/euroization. We also discuss transition economies of Central and Eastern Europe in this context. After several financial crises in the 1990s, the issue of the appropriate exchange rate choice has been reduced to favoring flexible exchange rates or dollarization. The issue is far from resolved and opinions vary greatly across the entire spectrum of possible exchange rate regimes.

We focus on the recent literature emphasizing the costs of flexible exchange rate regimes; nevertheless we also attempt to consider the costs of other regimes. In the beginning, we provide general argument for the choice of the exchange rate regime, as set up in the optimum currency area (OCA) theory. Further, we discuss the limitations of the OCA theory in analyzing the choice of the exchange rate regime in emerging market economies. Typically, these countries have a high share of their assets and liabilities denominated in foreign currencies. Moreover, short track records, the political environment and the size of the economy, from time to time causes the OCA theory to yield biased advice.

Next, we examine whether the countries, which adopt a particular regime really maintain that regime, investigating for example whether the officially adopted flexible exchange rate regime is in fact flexible? If not, what consequently makes the pro-claimed exchange rate regime different from the actual exchange rate regime? We also describe the differences between Central and Eastern European transition countries and other emerging market economies under the option of abandoning its own currency as a legal tender. There are several factors that make them different from the other emerging markets. In particular, we present the costs and benefits of adopting the euro and unilateral euroization.

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Despite the one-sided principle applied in this paper, we argue in the conclusion that no single exchange rate regime is right for all countries or at all times. However, nowadays there are some arguments that the benefits of the floating exchange rate regimes are rather limited especially for emerging market economies as well as for some transition countries.

2. Some General Optimum Currency Area Considerations

The choice of the exchange rate regime and the process of its decision-making is a complex matter. In the emerging market economies this is even more intricate due to their specific economic situation. Generally, the choice of the exchange rate regime considers various structural characteristics of the country, its policy goals as well as timing. Usually, the literature distinguishes several characteristics: symmetry of shocks, trade intensity, openness, diversification of production, factor mobility, employee skills, budget mechanism, financial integration, inflation, price and wage stickiness, international coordination, product dissimilarity of export, international monetary system and the size of the economy. Besides economic characteristics, the broader institutional and political context should also be considered, including the credibility of the monetary policy and preferences in economic policy and international coordination. Since it is not the aim of this article to review OCA theory, we state only several issues that shape the discussion about OCA.

2.1 Optimum Currency Area Theory

Friedman (1953) in his *The Case for Flexible Exchange Rate* argues that economies should adopt more flexible exchange rate regimes since this allows for faster and less costly adjustment to equilibrium.¹ Since price and wage stickiness prevails then it is reasonable to adjust nominally by depreciation under negative shock. The fixed exchange rate regime in this case means that adjustments must go through the prices/wages channel.

Later on, Mundell (1961)² challenges Friedman by demonstrating that if the actual currency area is not an optimal currency area (OCA), the benefits of flexible exchange rates are much lower than Friedman has assumed. The difference between actual and optimal currency area limits the ability of the floating exchange rate regime to cushion the shock and bring the countries back to equilibrium. However, when a particular country is an optimal currency area³ and is not OCA with another country, it is advisable to

¹ On the other hand, it is also worth mentioning that Friedman states under which conditions it is favorable for the country to fix its currency.

² Mundell (1973) presents a rather different model. He argues how implementing common currency eliminates uncertainty in the development of the exchange rate and causes assets to be more effectively diversified.

³ Whatever the difficulty might arise in defining such area.

maintain a flexible exchange rate regime. By saying that particular countries do not form OCA, we basically mean that they are likely to face substantial asymmetric shocks or alternatively the ability to adjust under these shocks is considerably low. If such shocks occur, countries adjust nominally by changing the price of their currency. The question of particular interest is how likely the countries are to encounter the asymmetric shocks. If the probability is rather low, they could be better off by fixing their currencies, because the costs of maintaining their own currency would not be offset by the benefits of their autonomous monetary policy. Assessing the above-mentioned structural characteristics of the economies is one way for the possible answer to the proper choice of the exchange rate regime.

Recent OCA literature introduces “the endogenous hypothesis” (Frankel – Rose, 1998). This hypothesis in contrast to the previous literature says that countries, even if they are not OCA *ex ante*, they might be *ex post*. An adoption of a common currency significantly encourages trade. Stronger trade linkages cause the national business cycle to be correlated; that is the probability of asymmetric shock declines.⁴ Obviously, the crucial issue for policy-makers is to assess the strength of this mechanism in practice.

2.2 Limitations of Traditional OCA Theory

On the other hand, there are also drawbacks of the OCA theory in analyzing the emerging market economy choice of the exchange rate regime. Aside from its low short-run operational precision for the decision-making of authorities, it does not say a lot about financial issues. Given the technological progress and low controls on capital movements, the volume of trade on financial markets becomes much bigger than the commodity trade. Moreover, financial markets are more volatile, especially in emerging economies due to potentially higher overall uncertainty and the economic size of the countries. Financial fragility is thus crucial in shaping the development of exchange rates.⁵ OCA literature typically ignores the initial conditions of the emerging market economies such as dollarization and institutions connected to this issue (Calvo, 2002).

Apart from the general optimum currency area theory, recent literature (e.g. Calvo – Reinhart, 2002), (Hausmann, 2001) has identified several issues that have a strong impact on the choice and the actual behavior of the exchange rate, especially in the emerging market economies. We will discuss them in turn in the following sections.

⁴ On the other hand, Barro and Tenreyro (2003) find that common currency decreases co-movements of shocks to real GDP; i.e. economic specialization increases with the adoption of common currency.

⁵ E.g. Calvo (2002, p. 394) and Hausmann (2001, p. 3) both share this view. Moreover, Calvo (2002, p. 394) mentions that well-known book on monetary integration by Paul De Grauwe (1997): “does not contain the word ‘financial’” in the Subject index. However, there are empirical studies about OCA theory by Bayoumi and Eichengreen (e.g. 1998) that attempt to connect financial issues and OCA theory. There are also other delicate issues about the OCA theory. Fatas (1998) emphasizes empirical evidence on significant asymmetric shocks within the countries while these countries perform well in terms of income growth even with the lack of exchange rate mechanisms.

TABLE 1 Developing Countries: Officially Reported Exchange Rate Arrangements

	1976	1981	1986	1991	1996	1998
<i>Pegged</i>	86	75	67	57	45	41
US dollar	42	32	25	19	15	12
French franc	13	12	11	11	11	9
Other	7	4	4	3	4	8
SDR	12	13	8	5	2	3
Composite	12	14	18	20	14	9
<i>Limited flexibility</i>	3	10	5	4	3	2
Single	3	10	5	4	3	2
Cooperative	–	–	–	–	–	–
<i>More flexible</i>	11	15	28	39	52	57
Set to indicators	6	3	4	4	2	–
Managed floating	4	9	13	16	21	33
Independently floating	1	4	11	19	29	24
<i>Number of countries</i>	100	113	119	123	123	159

Source: (Larrain – Velasco, 2002). Data, except last row, are in percents of total.

3. Do Emerging Market Economies Float?

Over the last two or three decades, more and more developing⁶ countries have adopted a floating exchange rate regime as reported in *Table 1*. Some caution has to be taken to argue that floating exchange rate regimes are thus preferable for these economies. Namely, the adopted exchange rate regime does not have to correspond to the actual behavior of the exchange rate.

For example, it makes a great difference whether the anchor currencies float against each other or are pegged. It was much more difficult to defend pegged regimes after the break-up of the Bretton Woods system when the DEM started floating against the USD. Pegging to one of these currencies floating against the other and vice versa. This significantly jeopardized the efforts to stabilize exchange rates. The choice to introduce floating between two major currencies only, made many others follow them. Bayoumi and Eichengreen (1997, p. 186) put it right: “Actual exchange rate behavior may in fact convey more information about underlying economic determinants than the putative exchange rate regime.” These authors also provide empirical evidence on the importance of considering the international monetary system for exchange rate behavior. Among others, Haus-

⁶ In the article, we concentrate on the emerging market economies that are narrower set of countries in comparison to developing countries. Some developing countries are not market economies, even if the definition of emerging market economy is a manner of degree. By emerging market economies the authors usually mean most of the countries of Latin America, Eastern Europe and Far East. These countries are characterized *inter alia* by openness of capital account, exposure to real shocks, investor sentiment, insufficiently developed institutions, policy weaknesses and low credibility. However, the arguments put forward may be generalized to developing countries, to a certain extent.

mann, Panizza and Stein (2001) as well as Calvo and Reinhart (2002) show that the emerging market economies even if they *de jure* float, they in fact *fear floating* and heavily try to stabilize the development of the exchange rate.

Hausmann, Panizza and Stein (2001) present an empirical study on the explicability of exchange rate flexibility by the lack of ability to borrow in own currency and exchange rate pass-through. The authors also calculate the index of exchange rate flexibility. The results are clear-cut. Emerging market economies hold several times greater international reserves (normalized by M2) than developed countries. Yet they provide evidence that emerging market economies heavily intervene in the foreign exchange market. The calculated exchange rate flexibility index⁷ shows that flexibility of emerging market economies is lower than for smaller and medium-sized industrial economies and much lower than for the USA, Japan and Germany. In conclusion, this study suggests that the emerging market economies despite adopting floating exchange rate regimes do not float a lot anyway. In a similar manner, Calvo and Reinhart (2002) show the evidence of limited exchange rate flexibility.

4. Why Emerging Market Economies in Fact Do Not Float?

Encountering large discrepancies between the official and actual exchange rate management, one can naturally ask for the reason that the country demonstrates such behavior. Therefore in this section, we discuss the causes why these countries are likely to fear floating.

4.1 Credibility-Inflation Framework

Emerging market economies usually lack the credibility of their monetary policy as compared to developed countries. This lack of credibility is often connected to the misuse of monetary policy. As a result, the countries with lower credibility are likely to suffer higher equilibrium inflation. The private sector anticipates this behavior and then it is more costly for monetary authorities to disinflate the economy and to regain the credibility.⁸ One way to escape this is to import credibility by introducing officially hard currency (or dollarization) or to eliminate the abuse of the monetary policy (for example, by an independent central bank with inflation targeting or a well-functioning currency board). The practical issue is how quickly these alternative mechanisms work. It seems reasonable that the currency

⁷ At first, they consider more proxies on assessing exchange rate flexibility. In the calculation of the indices they use the data on the international reserves, money supply, exchange rate depreciation and interest rates and then by the factor analysis set up the overall exchange rate flexibility index.

⁸ In this sense, Edwards (1993) provides evidence that the exchange rate regime significantly affects the level of inflation. His results support the view that developing economies with a fixed exchange rate regime experienced lower inflation during the 1980s. On the other hand, Larrain and Velasco (2002) provide survey of the studies of the same issue and document that once money growth variable is introduced, the effect of the fixed exchange rate regime on inflation rate is much lower.

board (or even dollarization is generally more credible since the costs of abandoning are higher) can considerably speed up the process of disinflation at reasonably low costs.

On the other hand, Larrain and Velasco (2002, p. 365) points out that the way to escape the inflation-credibility problem is: "Adoption of an inflation target as the main anchor for monetary policy, coupled with a monetary policy reaction function that – aside from reacting to output gaps and other determinants of the inflation rate – reacts also partially to movements in the nominal exchange rate." There are several economies capable of maintaining both a floating exchange rate and single-digit inflation, such as Colombia or Chile in the 1990s.

Low credibility is not only problematic for inflation itself. Low credibility through inflationary expectations also causes high interest rates. Emerging economies often have high government debt and high interest rates (and swings in these rates) make it harder to service their debt. If the stock of debt is sufficiently high, little room remains for fiscal policy. Dollarization would likely import the credibility and reduce interest rates due to the elimination of currency risk as well.

In contrast to the inflation-credibility problem, Hausmann (2001, p. 8) emphasizes: "The new discussion about exchange rates in emerging markets has not been prompted by concerns over inflation... (Nor... over trade and growth)." Instead, financial fragility experienced by the emerging economy shapes the discussion on the choice of the exchange rate arrangements, according to Hausmann. International capital flows were important for these fragilities and it is a question of particular interest whether some arrangements help in creating these fragilities. Moreover, inflation declined in the 1990s across all exchange rate regimes.

4.2 Exchange Rates and Insulation from External Shocks

Concerns that emerging market economies with a flexible exchange rate do not exhibit lower interest rate volatility, lead to the issue whether floating rates provide insulation from external shocks. In principle, depreciation (or also appreciation) could insulate the economy from external shocks. However, depreciation works only if it is a surprise for the public. Otherwise, when it is anticipated, nominal depreciation stays without real effects. This means that the depreciation would be equipped with inflationary tendencies and would not significantly increase the competitiveness of the export.

Whether nominal depreciation will lead to real depreciation depends on the level of pass-through from depreciation to prices.⁹ In this respect, it is interesting to mention that depreciation can even lead to the increase of real interest rates. Initially, depreciation causes nominal interest rates to

⁹ Hausmann, Panizza and Stein (2001) test whether higher passthrough in the economy is accompanied by lower degree of exchange rate flexibility. They find negative, but insignificant correlation between pass-through and flexibility. They argue that the insignificant results might be caused by the difficulty in constructing the proxy for the degree of pass-through.

decrease (from standard uncovered interest rate parity, see model Hausmann, Panizza and Stein, 2001). But this is accompanied by the increase of prices due to wage indexation.¹⁰ Finally, nominal interest rates increase and with some overshooting it is possible that the real interest rates are even higher than originally. Hausmann *et al.* (1999) provide evidence for Latin American countries in this case and finds that real interest rates do not fall. Nevertheless, the degree of pass-through varies strongly across the countries. Larrain and Velasco (2002, p. 375) mention that devaluation in e.g. Korea and Brazil during the crisis was not accompanied by higher inflation (contrary to Mexico in 1994). Aside from credibility dimension, the level of competitiveness, and openness and the size of the economy also matters for the degree of pass-through also.

4.3 Original Sin

Emerging market economies are reluctant to float for other reasons as well. Given the fact that these countries borrow in foreign currency,¹¹ there is always risk arising from unexpected changes in the exchange rate that their net foreign debt may worsen. In other words, firms and government can face currency mismatch in their balance sheets because of their inability (non-existence of such markets) to borrow abroad in domestic currency. Moreover, they are usually unable to borrow at home for a long term. Borrowing for a short term at home is not a solution either. In this case, maturity mismatches might arise. This means that firms/the government is unable to roll over the debt due to the swings in the interest rates.

Then, in the case of shock to the economy, exchange rate movements (typically depreciation) cause currency mismatch for some companies. If the monetary authority decides to increase the interest rate to prevent depreciation, then corporations are likely to encounter maturity mismatch. In literature, this is called the devil's choice. This choice is caused by what Hausmann (2001) calls an original sin. The hypothesis of original sin emphasizes an incompleteness in financial markets, which prevents the domestic currency from being used to borrow abroad or to even borrow long term domestically.

There are several causes of original sin. Net creditors are unwilling to let the net borrowers manipulate the value of the currency. Clearly, there is a strong moral hazard to devalue. When a median voter is a net borrower, one may expect lower political pressure to keep the real value of domestic currency assets in the country. There is also the 'economies of scale' argument. Little markets are illiquid and portfolio diversification makes sense with ten, but not with one hundred currencies.

Original sin causes emerging economies to be exposed to self-fulfilling at-

¹⁰ It depends on the price and wage setting in the economy. Devaluation increases the price of imports. At the same time it is usual that trade unions consider the increase in the price of the imports and are reluctant to lower the real wage for their members.

¹¹ The effects of the dollarization of liabilities matter more with high debts.

TABLE 2 Reported Ratios of Foreign Currency Deposits (FCD) Broad Money in Selected Countries with IMF Arrangements

Country	1995
Argentina	43.9
Azerbaijan	50.3
Belarus	30.7
Bolivia	82.3
Cambodia	56.4
Costa Rica	31.0
Croatia	57.4
Georgia	30.8
Guinea-Bissau	31.2
Lao P. D. R.	35.6
Latvia	31.1
Mozambique	32.6
Nicaragua	54.5
Peru	64.0
São Tomé and Príncipe	31.9
Tajikistan	33.7
Turkey	46.1
Uruguay	76.1

Source: www.imf.org, Occasional paper no. 171

tacks on their currencies. The consequence of this is a reversal of capital flows causing either a currency or a liquidity crisis.

Another issue of concern is that households partially save in the foreign currency. *Table 2* reports the ratio of foreign currency deposits to broad money for selected emerging market economies. It makes little sense for residents to save in domestic currency if the strength of the currency positively correlates with the output. Clearly, anyone would not want to have her savings worth less, when they are most needed. Aizenman and Hausmann (2000) show that during a recession savings in the domestic currency are worth less because of depreciation. Therefore Hausmann (2001, p. 11) states: "With foreigners lending only in dollars and residents saving partly in dollars, the supply of loanable funds to corporations will be heavily tilted towards a foreign currency. Hence, currency mismatches can be quite significant in a country with open capital accounts and original sin."

This behavior makes countries likely to encounter a self-fulfilling currency crisis. Knowing that possible depreciation would cause defaults in the economy¹² can initiate an attack on the currency. Defaults are likely because of the currency mismatch. In an attempt to defend the currency by raising interest rates or tightening money, the central bank would expose the economy to a maturity mismatch.

One might argue that the domestic currency was overvalued and depreciation is a natural way to the equilibrium. Depreciation would help to restore the external balance as well as increase borrowing because of lower interest rates. However, for a partially dollarized economy the expansio-

¹² Government has one more choice: to monetize the deficit.

nary effect of the lower interest rates is limited by the weakening of the balance sheets. That is why, as Hausmann (2001) argues, countries suffering original sin would find full dollarization attractive.¹³

4.4 Sudden Stops

An alternative argument to explain self-fulfilling crises is the model of sudden stops by Calvo (1998). He explains how the reversal of capital inflow may lead to the disruption of the whole economy.¹⁴ Emerging market economies often run current account deficits that allow them to maintain higher income and consumption, as well as lower interest rates. Then if for whatever reason inflow of the capital suddenly stopped, or even the flow reversed, plenty of problems for the emerging market economy occur. Domestic demand would fall sharply. Interest rates would rise and worsen the service of the debt. Meanwhile, tax revenues would decrease. At the corporate level, borrowing would become harder, endangering the solvency of companies. The reason for a sudden stop is not only due to political tensions, but also simply the expectation of the depreciation.

It is also important to stress the contagion effects as well. They arise due to imperfect information. As a way to limit contagion effects, Calvo (2002) considers the following reasons which might in turn lead to the choice to fully dollarize: There are short track records. Thus emerging market economies require more frequent monitoring and this consequently leads to lower information gathering, since it is costly to monitor. The size of emerging economies is small and if they pursue their own monetary policy, it suggests that this monitoring is costly as well. The evolution of the level of government intervention is unclear also. These reasons may cause emerging markets to seriously consider dollarization. Dollarization lowers currency as well as country risk. This in turn leads to better access to investment projects.

With the contemplation of full dollarization, one might argue that there is no difference between currency board and full dollarization since the real effects are the same. This view neglects the importance of credibility. Under fully credible currency boards, there is indeed no difference. But the economic agents understand that the costs to leave the currency board regime are much lower than under full dollarization.

4.5 Costs of Dollarization

So far, we have largely focused on the costs of flexible exchange rate regimes, but there are also costs of the other corner solutions (pegged regimes, dollarization), too. Let us touch upon those costs that relate to the OCA

¹³ In this sense, de la Torre, Yeyati and Schmuckler (2002) argue that the official dollarization in Argentina would probably prevent a run on the banks and the consequent collapse of the financial system during the Argentinean crisis in 2001.

¹⁴ More generally, it does not have to be a reversal, capital stop or even sufficient slowing down might suffice for a crisis.

theory only briefly since they are discussed in the previous chapters. The main concern is asymmetric shocks. How will a fully dollarized country adjust when encountering an asymmetric shock? One can hardly imagine an effective fiscal policy in the emerging market economies. Apart from *per se* problems of fiscal policy, irresponsible short-run oriented fiscal policy causes a lot of problems for these countries. One may also raise the issue of the importance of political cycles in these policies. The prices and wages are to a large extent downwardly inflexible as that may cause higher unemployment (for example under shock this calls for a depreciation of the real exchange rate). Resulting social tensions decrease the efficiency of fiscal policy further. Of course, these are all empirical issues as dollarization also imposes some prudence for domestic authorities as well. Labor markets usually do not serve as effective means of adjustment as well. Another issue is that if depreciation were important, dollarization might increase the default risk of the corporate sector (Wojcik, 2000).

Calvo (2002) argues that devaluations in Latin America (with the exception of Brazil in 1999) have been contractionary. It seems that devaluations are useless, especially under liability dollarization, contagion effects and shocks coming from capital accounts. Indeed, exchange rate flexibility cannot be an argument against dollarization.¹⁵

Another argument against dollarization (alternatively currency board) is that these regimes do not possess the lender of the last resort (LOLR). Larraín and Velasco (2002) argue that LOLR can enhance the stability of the financial sector by allowing extra credit and decrease the probability of self-fulfilling bank runs. This might divert liquidity crisis and subsequent runs on the banks. However, there are alternative ways to provide extra credit when needed. Clearly, special stabilization funds or seignorage sharing could do the job as well.¹⁶

According to Calvo (2002), the most serious threat is debt deflation. Clearly, the debt might cause serious troubles when it is high, as it is often the case for emerging market economies. Unanticipated collapse in prices can eventually lead to many bankruptcies. Costly hedging might solve this threat.

In section 4, we have mainly argued for the benefits that may arise from dollarization or currency board for emerging market economies while mentioning the costs as well. Nevertheless, it is a largely empirical issue, as to how strong the various 'benefits and costs' factors are. The empirically oriented literature tends to give us some "average" evidence for these countries. Hence, the pros and cons may differ from country to country and must be carefully analyzed in every individual case.

Moreover, one has to stress that it is empirically very difficult to analyze the costs and benefits of exchange rate choice as the available theories do

¹⁵ Moreover, Calvo (2002, p. 398) proposes that real exchange rate misalignments can be fixed by commercial policy by imposing temporarily uniform import tariff-cum-export-subsidy policy. De la Torre *et al.* (2002) proposed for Argentina so-called pesofication at the margin (dollar for savings and peso – alternatively other domestic currency for transactions).

¹⁶ See Calvo (2002) for more on the substitute of LOLR or Rostowski (2002) for discussion about these alternative ways under the unilateral euroization.

not give clear-cut answers. The exchange rate choice (and sometimes management) is also to a large extent a political issue.

5. A Digression on Transition Economies

Transition countries in Central and Eastern Europe are emerging market economies as well. However, their economic environment is, to some extent, different from the rest of the emerging market economies. The prospect of EU/EMU accession for some countries considerably eliminates a number of problems other emerging market economies face. There is also a much lower level of (unofficial) dollarization/euroization. On average, the level tends to be higher in Balkan countries. The debt is not drastically high; to the contrary, it is rather low in several countries. Hence, transition countries encounter different challenges in their exchange rate management. Currently, if we focus on the accession countries, this is an optimal timing of euro adoption and an optimal scenario of the adoption. In the spirit of the paper, we largely focus on the costs and benefits of unilateral euroization.¹⁷

Let us first briefly comment on the current economic development in transition economies. They are suffering current account deficits as a consequence of high capital inflows.¹⁸ For many countries this deficit is higher than 5 % of GDP. This exposes the countries to several threats such as capital stops; as mentioned above for emerging market economies in general. Consumption smoothing, Harrod-Balassa-Samuelson effect, higher returns on physical investment and the distortions on domestic capital markets mainly cause this deficit (Rostowski, 2002). The deficit might eventually be perceived as unsustainable and expose the country to a currency crisis and subsequent economic recession. Clearly, one may ask whether the policy can affect the current account deficit.

Economic policy is, to a large extent, ineffective. Increasing the interest rate, the further deterioration of the current account is very much likely. On the other hand, transition countries must fulfill Maastricht criterion asking for low inflation. The decrease of interest rates might endanger meeting the inflation criterion. Expansive fiscal policy stimulating the domestic demand inevitably leads to the worsening of the current account deficit, too. The only escape might be a restrictive fiscal policy unless government prudence is not perceived as a positive signal for investors.

A possible solution, as proposed by Rostowski (e.g. 2002) might be unilateral euroization. Technically, it is relatively simple and with sufficient international reserves it would be possible to set up a special stabilization fund to work as a substitute to the LOLR. The probable story would be strengthening of investment due to the elimination of the currency risk as well as lowering of interest rates. Clearly, there cannot be any nominal ap-

¹⁷ See (Wojcik, 2000), (Rostowski, 2002) and (Horvath, 2003) among others on unilateral euroization.

¹⁸ See (Begg *et al.*, 2002) for an in-depth study on the sustainability of capital movements in the transition economies.

preciation and no currency mismatches. It is also likely that unilateral euroization would strengthen fiscal accounts and promote greater financial stability.

The adjustment under asymmetric shocks as well as other applicable OCA considerations is discussed in the previous sections. Although most of the empirical studies¹⁹ suggest that the OCA characteristics of the transition economies are roughly the same as those of the Eurozone members. Hence, in the long run the probability of encountering these shocks is similar among all the countries with the euro as their legal tender. Low economic size and high trade linkages as well as similar productive structure and commodity structure of exports suggest that the costs of euro adoption in the transition economies should be rather low. Clearly, these arguments fit the best Visegrad and Baltic countries, but much less do they fit the remaining transition economies.

Moreover, Habib (2002) provides empirical evidence on the inability of flexible exchange rates to insulate the country from shocks for Poland, Hungary and the Czech Republic with the data from period 1997–2001. He finds that all these countries were significantly affected by the emerging market risk premia. Volatility contagion coming from emerging market economies plays a role, too. Moreover, Habib finds that floating exchange rates do not considerably absorb the external shocks in the case of the Czech Republic. Nevertheless, the findings about the role of exchange rate insulation may change over time.

Recently, some studies have argued that the benefits of euroization outweigh its costs. Except Rostowskis' (e.g. 2002) arguments for Polish unilateral euroization, Sulling (2002) provides the arguments for Estonia and Gros (2002) considers 'political economy' arguments and finds unilateral euroization attractive for Balkan countries, too. Corricelli (2002) also considers early euroization desirable and argues that the corresponding benefits will be greater if the euro is adopted simultaneously by the accession countries. Moreover, what concerns the frequently mentioned EU aversion to unilateral euroization; Bratkowski and Rostowski (2002) as well as Nuti (2002) find that there is no economic justification to this aversion. On the other hand, Wojcik (2000) criticizes extensively the proposals for unilateral euroization. Begg *et al.* (2002) argues that unilateral euroization is less risky than the euro adoption under the current institutional arrangements.

Nevertheless, costs are also associated with unilateral euroization. Seignorage revenues would probably be lost (seignorage sharing would not be likely). The countries would likely encounter problems with smooth access to the euro money markets for domestic financial institutions. Money supply growth would probably decelerate substantially (but not to Eurozone levels due to high capital inflows; this growth depends on the credit dynamics in economy as well). Unilateral euroization, while obviously removing currency risk, could in fact increase the default risk of the firms due to non-existence of depreciation (Wojcik, 2000). Joining the EU in 2004, these coun-

¹⁹ See (Horvath – Komarek, 2002, p. 24–25) for a survey of these studies.

tries should treat their exchange rate policy as a matter of common concern. Thus, it would be a politically hazardous for these countries to unilaterally euroize. Moreover, those countries that want to adopt the euro quickly may do that in 2006–2007 via agreed institutional arrangements thus eliminating some of the drawbacks of unilateral euroization.²⁰ Other arguments that apply, not only to unilateral euroization but to euro adoption in general, is the degree of flexibility of labor markets and the fiscal position; i.e. the issues that mainly favor postponing Eurozone accession.

Nonetheless, euro adoption is most likely only a question of time for the applicant countries. While unilateral euroization has some attractive economic arguments, there are considerable drawbacks for the accession countries to euroize unilaterally. However, this does not mean that for other transition economies, such as the Balkan countries, the benefits from unilateral euroization could not outweigh the costs.

6. Conclusion

This paper analyses the option of dollarization/euroization and attempts to provide some arguments for the view that there are no one-size-fits-all policies for the emerging market economies. This means (in the words of J. Frankel) that no single exchange rate regime is right for all countries or at all times as the optimum currency area literature suggests. The limitations of the OCA theory in examining the choice of the exchange rate regime must be stressed. The OCA theory does not analyze financial issues, which shapes the discussion about appropriate regimes in the emerging market economies.

Nonetheless, examining various emerging market economies (by the ‘non-OCA theories’) there are several arguments undermining the benefits of flexible exchange rate regimes. For many reasons, these countries fear floating. There is weak evidence that these arrangements would insulate the country from the external shocks. Interest rate volatility is not lower in the countries maintaining a floating exchange rate regime. They suffer from the incompleteness of financial markets; i.e. original sin, basically the inability to borrow in the domestic currency. This exposes them to currency and maturity mismatches. Given the high stock of debt in some emerging market economies, these mismatches are a serious threat, which leads to currency crises and subsequently undermines the economic growth.

Dollarization might help these countries to solve at least some of their problems. Nevertheless, it is important to stress that the arguments favoring dollarization are sensitive to the initial conditions. If the conditions in the emerging market economies are such as described in the text (original sin, financial fragility, high stock of debt, short track records etc.), dollarization might be the right option.

There are arguments for euroization for the transition countries as well. The potentially unsustainable current account deficits and examination of

²⁰ The author thanks one of the referees for some points about the costs of unilateral euroization.

the OCA criteria suggest that euro adoption might be beneficial for some transition countries as well. However, unilateral euroization bears strong drawbacks for the countries becoming EU members in the near future. Also, non-exchange rate adjusting mechanisms must be considered since for some countries labor markets are not flexible and there is also a need for fiscal consolidation.

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SUMMARY

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Is Dollarization the Right Option? A Survey of Disadvantages of Flexible Exchange Rates in Emerging Market Economies

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This paper focuses on the option of dollarization or euroization for emerging-market economies. There are no “one-size-fits-all” exchange-rate policies for emerging-market economies; however, there are macroeconomic disadvantages associated with flexible exchange-rate regimes in such economies. Similarly, the timing of euro adoption in EU accession countries is a complex matter as well. The paper compares the costs and benefits of euro adoption, in particular to unilateral euroization.