

# Exchange Rate Regimes in Central and Eastern Europe: A Brief Review of Recent Changes, Current Issues and Future Challenges

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## I Introduction

Exchange rate regimes and policies have been among the most contested and controversial issues in Central and Eastern Europe (CEE) since the very beginning of transition ten years ago. The purpose of this brief review is to shed some light on a few selected exchange rate issues that are pertinent to Central and Eastern European EU applicant countries. The review starts out by giving an account of the developments of exchange rate regimes in CEE from the onset of the Asian crisis until today, thus covering the last two-and-a-half years. Subsequently, these developments are examined and scrutinized against the backdrop of the recent emerging market crises and, more broadly, the financial crisis theme in general, on occasion with a particular stress on selected country cases. In a further step, the analysis is extended to current and future challenges for exchange rate policies in Central and Eastern Europe. The review ends with short conclusions.

It would go far beyond the objective and the scope of this brief article to revisit and reproduce the debate on *fixed versus flexible exchange rate regimes*. In order to set the stage for the analysis, it is sufficient to recall that, basically, the choice of the exchange rate regime is dependent on the size and the degree of openness of an economy, the nature and source of shocks it is exposed to, its structural features, the preferences of policymakers, and furthermore also on credibility-related considerations.<sup>2)</sup>

In the recent debate on exchange rate regimes, there has been growing support for the view that, in a world of integrated capital markets and greatly increased capital mobility, *intermediate exchange rate regimes* – standard-type pegged regimes and heavily managed floats based on unstated exchange rate rules – are inherently unstable: Large and volatile capital flows render such regimes prone to disruptive and very costly currency and financial crises, regardless of how underlying economic fundamentals develop. Therefore, it is argued that the future, which will entail further increases in capital mobility, will belong exclusively or almost exclusively to corner solutions, i.e. to free (or only very lightly managed) floats on the one hand and to super-strict regimes – currency boards, the adoption of a foreign currency as sole or parallel legal tender or joining a monetary union – on the other hand.

A different view concedes that the substantial increase in capital mobility over the last decade has clearly made the management of intermediate regimes much more challenging. However, it holds that there are still good reasons for many countries to adopt intermediate regimes. If the overall macroeconomic policy stance is coherent and the financial system is robust, functions well and is properly supervised, such regimes can be reasonably

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2 For a concise overview see e.g. IMF (1997).

viable, in particular if they are adopted in the context of a broader economic and political integration process. Capital account liberalization, if carefully timed and sequenced, can support intermediate exchange rate regimes during the transitional period in which these conditions are put in place. Corner solutions, in turn, will tend to constitute the exception rather than the rule for most countries: Currency boards require very demanding preconditions in order to be lastingly viable, while free or only lightly managed floats tend to have significant drawbacks, in particular for the development of the real sectors in small open economies “which lack the size for developing the necessary market infrastructure to cope with exchange rate volatility.”<sup>1)</sup>

## 2 An Account of Recent Developments

Table 1 displayed below contrasts the exchange rate regimes of the applicants in mid-May 1997 when the Thai baht came under severe pressure (which led to its flotation seven weeks later) with the regimes that are currently in place. It shows that exchange rate regimes in Central and Eastern Europe have varied widely across countries: One can find all kinds of arrangements, from currency boards to lightly managed floats.

There is *no uniform trend* which would characterize the evolution of exchange rate regimes in Central and Eastern Europe over the review period of the past two-and-a-half years. Some countries, like Poland, the Czech Republic and Slovakia, have moved or continued to move towards greater exchange rate flexibility – either, like Poland, within the framework of a deliberate strategy<sup>2)</sup> or as a consequence of a successful attack on “standard” exchange rate pegs, fixed pegs to be more precise (Czech Republic, Slovakia)<sup>3)</sup>. This move towards more exchange rate flexibility has been combined with or followed by the adoption of direct inflation targeting frameworks (Czech Republic and Poland), or by a more eclectic strategy that has brought together elements of monetary and direct inflation targeting (Slovakia). Other countries have not advanced towards greater exchange rate flexibility. Hungary and Latvia have retained standard-type pegs with narrow bands, the former operating a crawling, the latter a fixed peg. The number of currency board countries has increased from two to three, with Bulgaria joining Estonia and Lithuania. Also, it should be noted that the two countries that operate crawling peg regimes (Poland and Hungary) have greatly reduced their crawl rates, especially more recently.

In terms of *corner solutions versus intermediate exchange rate regimes*, the following picture emerges: Three countries have typical intermediate regimes – Hungary and Latvia as well as Slovenia, which operates a tightly managed float; the number of clear-cut intermediate regimes has thus gone down over the past two-and-a-half years. Three countries, namely the currency board countries, have definite corner solutions. The degree of exchange rate man-

1 European Central Bank (1999).

2 Poland embarked on this route back in 1991 when it switched from a fixed to a crawling peg. Since the mid-1990s, this has been complemented by a successive extension of fluctuation bands.

3 In both cases, the regime change was preceded by a widening of fluctuation bands in 1996 (Czech Republic) and 1996/97 (Slovakia) respectively.

Table 1

**Exchange Rate Regimes in Central and Eastern European EU Candidate Countries**

**Before the Outbreak of the Asian Crisis and in Late 1999**

	May 14, 1997 (when the Thai baht came under a fierce speculative attack)	November 14, 1999
Bulgaria	Managed float (DEM reference currency)	EUR peg under a currency board (BGL 1.95583 = EUR 1)
Czech Republic	Fixed peg to a basket (65% DEM, 35% USD) Fluctuation band: $\pm 7.5\%$	Managed float (EUR reference currency)
Estonia	DEM peg under a currency board (EEK 8 = DEM 1)	DEM/EUR peg under a currency board (EEK 15.6466 = EUR 1)
Hungary	Crawling peg versus basket (70% DEM, 30% USD) Fluctuation band: $\pm 2.25\%$ Automatic monthly devaluation: 1.1%	Crawling peg versus basket (70% EUR, 30% USD) Fluctuation band: $\pm 2.25\%$ Automatic monthly devaluation: 0.4%
Latvia	SDR peg (LVL .7997 = SDR 1) Fluctuation band: $\pm 1\%$	SDR peg (LVL .7997 = SDR 1) Fluctuation band: $\pm 1\%$
Lithuania	USD peg under a currency board (LTL 4 = USD 1)	USD peg under a currency board (LTL 4 = USD 1)
Poland	Crawling peg versus basket (45% USD, 35% DEM, 10% GBP, 5% FRF, 5% CHF) Fluctuation band: $\pm 7\%$ Automatic monthly devaluation: 1%	Crawling peg versus basket (55% EUR, 45% USD) Fluctuation band: $\pm 15\%$ Automatic monthly devaluation: 0.3%
Romania	Managed float (USD reference currency)	Managed float (USD and EUR reference currencies)
Slovakia	Fixed peg to a basket (60% DEM, 40% USD) Fluctuation band: $\pm 7\%$	Managed float (EUR reference currency)
Slovenia	Managed float (DEM reference currency)	Managed float (EUR reference currency)

agement in the other four countries has been diverse, with little central bank intervention in the foreign exchange market in the Czech Republic and Poland since early 1998. However, even in these two cases, the authorities appear to have remained genuinely concerned about exchange rate developments.

During the course of the last two-and-a-half years, three of the ten countries – Bulgaria, the Czech Republic and Slovakia – have carried out *exchange rate regime changes*. Poland and, to a lesser extent Hungary, have made tangible alterations within particular regimes. The other five countries, in turn, have undertaken no change or only technical adaptations.<sup>1)</sup>

The two cases in which “standard” peg regimes collapsed are closely linked in terms of timing to *emerging market crises* events: The breakdown of the Czech peg occurred on May 27, 1997, i.e. at the onset of the Thai crisis, while the collapse of the Slovak peg took place in the immediate aftermath of the Russian crisis, on October 1, 1998. (Bulgaria, in turn, took the

1 Clearly, this categorization does not convey any information about the occurrence of currency crises during the review period, as there is no systematic interrelation between changes in exchange rate regime and currency crises. Regime changes can be undertaken in calm times (as the Polish case illustrates), while they may or may not be associated with currency crises if they are enforced by speculative attacks. Regime changes do not have to lead to “currency crashes” – one possible definition of currency crises – as the Czech and the Slovak case show (see section 3 and charts 1a and 1d). Vice versa, currency crashes can occur under floating systems without regime changes, as repeated currency collapses under such regimes in Romania and in Bulgaria before the adoption of the currency board demonstrate. The same holds basically true if currency crises are understood as incidents of “major exchange rate pressure,” which, again, can but does not have to be associated with regime changes.

decision to move to a currency board already in early 1997, i.e. in times of international market tranquility.) On the other hand, the peg regimes of Hungary and Latvia as well as the tightly managed float of Slovenia were maintained during the recent bout of emerging market crises.

Table 1 shows that the exchange rate policies of Central and Eastern Europe are primarily oriented towards the *euro* today. Up to now, this has largely been the legacy of the role of those currencies which have been superseded by the euro, in particular the Deutsche mark.<sup>1)</sup> Looking at the current state of affairs in individual countries, the euro is the dominant currency in the baskets of Poland and Hungary, while Bulgaria's and Estonia's currencies are already fully linked to the euro. Moreover, the single currency has become the reference currency for all applicant countries with (managed) floating exchange rate regimes.

### 3 Interpreting Recent Developments

What was the impact of the 1997 to 1999 emerging market crises on exchange rate regimes in Central and Eastern Europe? Three issues, namely the robustness of intermediate exchange rate regimes, the drawbacks and advantages of different exchange rate arrangements in crisis times and the impact of a crisis environment the implementation of planned regime alterations, are examined further in this section.

#### 3.1 The Robustness of Intermediate Exchange Rate Regimes

The viability of intermediate exchange rate regimes has increasingly been questioned in recent years. What does the recent experience of Central and Eastern European EU candidate countries contribute to the debate on this proposition?

At first glance, the cases of the *Czech Republic* and *Slovakia* could be seen as evidence of an intrinsic fragility of intermediate regimes.<sup>2)</sup> A somewhat closer analysis, however, shows a somewhat different picture. Although the cases of these two countries are in many ways different, they share one common feature: One can explain the collapse of both the Czech and the Slovak exchange rate pegs by shifts in domestic economic fundamentals rather than interpreting them as crises of the self-fulfilling variety: In both cases, the breakdown of the peg originated from domestic policies which were unsustainable and inconsistent with the maintenance of the fixed exchange rate regime.<sup>3)</sup>

The Czech exchange rate peg had become vulnerable due to a gradual loss in price competitiveness which resulted from sluggish structural reforms on the one hand and from an inappropriate macroeconomic policy mix in the wake of massive capital inflows between 1993 and 1996 under a fairly liberal

1 Only in Poland did the introduction of the euro lead to an imminent strengthening of the orientation to the single European currency, as compared to its precursors. For the future perspectives of the euro's role as an anchor currency for CEE see section 4.

2 For detailed reviews of the Czech case, see Begg (1998), UN ECE (1998), OECD (1998). For a thorough analysis of the Slovak case, see OECD (1999a).

3 Begg, Halpern and Wyplosz (1999) arrive at a very similar conclusion on the Czech case (while they do not discuss the Slovak case).

foreign exchange regime on the other hand. In particular, there was no fiscal response to the inflows (in fact the overall budgetary stance tended to be expansive at the time)<sup>1</sup>), and real wages soared because of weak corporate governance and the absence of incomes policies. This led to an overheating of the economy and a large current account deficit. Export growth stalled in 1996 and turned slightly negative in the first months of 1997, while the economy began to run out of steam, unemployment started to rise, the fiscal position worsened and conflicts within the ruling coalition were compounded. This combination of unsustainable macroeconomic policies and incomprehensive and partly inappropriately designed reform measures set the stage for the demise of the Czech exchange rate peg. In Slovakia, the reasons for the breakdown of the exchange rate regime have to be sought in the very expansive fiscal stance in the years 1996 to 1998, leading to a surge in the current account deficit and to a fast increase in external debt unfolding against the backdrop of major deficiencies in structural reforms. The crises elsewhere – in Thailand and in Russia respectively – helped trigger the speculative attacks, but were not themselves the underlying causes of the collapse of the two regimes. It should be added that in both cases, fiscal policy stances tightened after the turbulences, which improved the macroeconomic policy mix and strengthened the commitment to undertake structural reforms. This limited the depreciation both currencies experienced after their flotations (see charts 1a and 1d).

However, in the course of the recent emerging market crises, *cases of contagion occurred which were largely unrelated to underlying changes in economic fundamentals* in CEE. One of these instances stands out prominently. After the Russian devaluation and partial default in August 1998, Hungary, Poland, the Czech Republic and, to a lesser extent, Slovenia experienced significant financial contagion effects, although their trade and financial relations with Russia were relatively small and although – in contrast to Slovakia at the time – domestic policies were broadly consistent and sound.<sup>2</sup>) To a varying degree, these countries experienced capital outflows that led to exchange rate pressures, rising interest rates and tumbling equity prices (see charts 1a to 1e, 2 and 3). In the event, the robustness of typical intermediate exchange rate regimes (the Hungarian narrow-band crawling peg, Slovenia's heavily managed float) did not differ much from that of more flexible regimes (Poland's wide-band crawling peg, the Czech Republic's managed float). After a general initial flight to quality, markets began to differentiate

1 From 1993 to 1997, the Czech general government balance moved from a slight surplus to a deficit on the order of 2% of GDP; this relapse was twinned with a strong growth of contingent fiscal liabilities.

2 Central and Eastern European countries also experienced financial contagion effects from the Asian crisis in 1997 and the Brazilian turbulences in early 1999, respectively. The Asian crisis had a significant impact on a limited number of specific areas. Stock markets were temporarily affected in the Central European countries (see chart 3) and more pronouncedly and lastingly in the Baltics; moreover, the latter group of countries (most markedly Estonia) also experienced a rise in interest rates for some time. Furthermore, as discussed, mounting pressure on the Thai baht helped trigger the attack on the Czech exchange rate regime. (The collapse of the Czech peg, in turn, hardly affected the countries in the CEE region, except for Slovakia, which experienced substantial but temporary exchange rate pressure; see in particular chart 1a to 1e). The effects of the Brazilian crisis on CEE were generally mild and very transient (see charts 1a to 1e, 2 and 3).

among countries according to fundamentals, no matter what exchange rate regime was in place.

*In all charts, four periods are specifically singled out by gray bars: the attack on the flotation of the Czech koruna (mid-May to end-June 1997), the Asian crisis (end-October to end-November 1997), the Russian crisis (mid-August to mid-October 1998) and the Brazilian crisis (mid-January 1999).*

Chart 1a

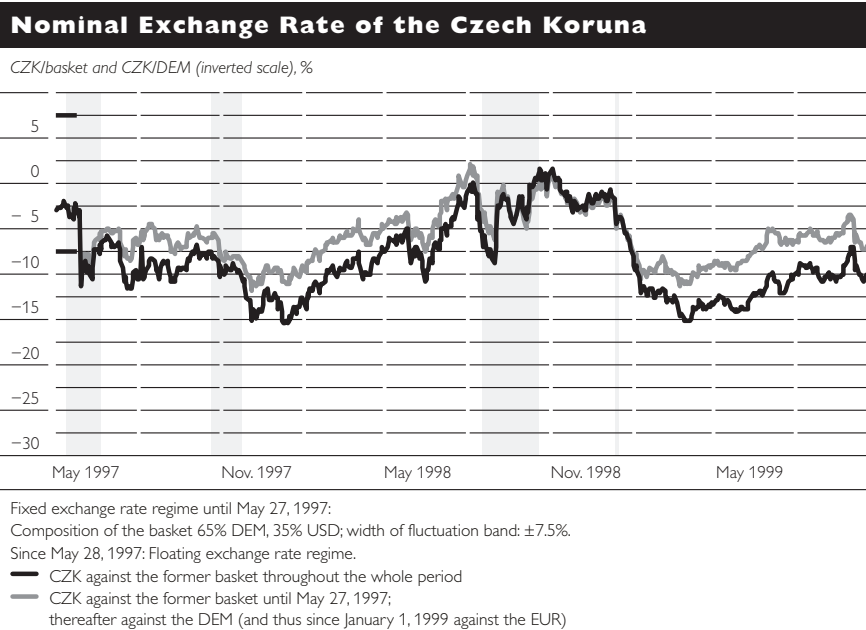


Chart 1b

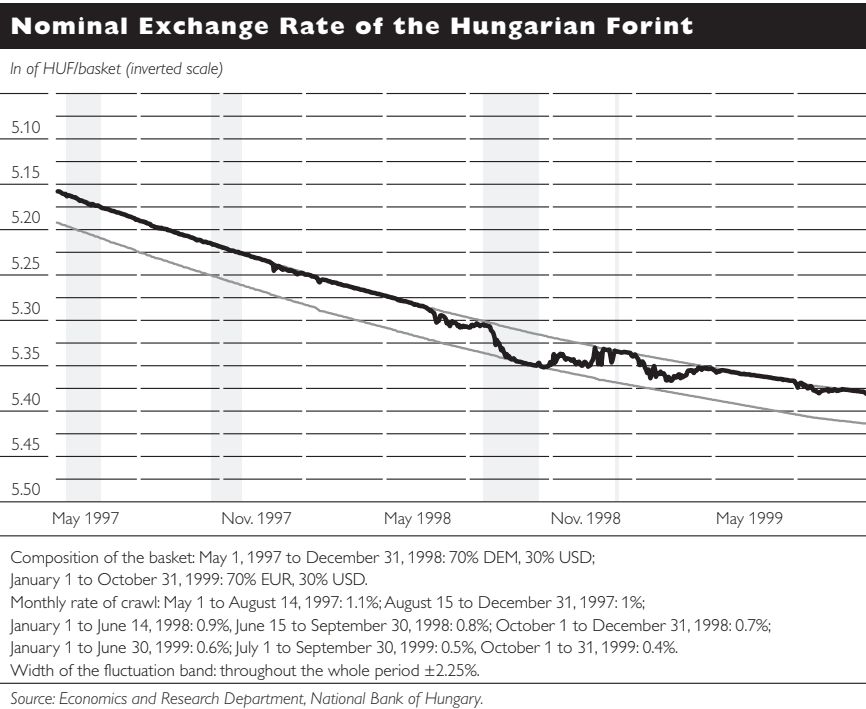


Chart 1c

### Nominal Exchange Rate of the Polish Zloty

*ln of PLN/basket (inverted scale)*



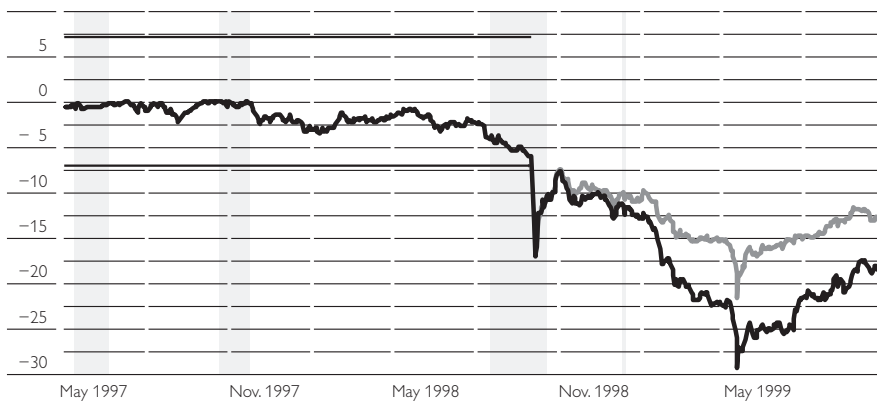
Composition of the basket: May 1, 1997 to December 31, 1998: 45% USD, 35% DEM, 10% GBP, 5% FRF, 5% CHF; January 1 to October 31, 1999: 55% EUR, 45% USD.  
 Monthly rate of crawl: May 1, 1997 to February 26, 1998: 1.0%; February 27 to July 17, 1998: 0.8%; July 18 to September 10, 1998: 0.65%; September 11, 1998, to March 24, 1999: 0.5%; March 25 to October 31, 1999: 0.3%.  
 Width of the fluctuation band: May 1, 1997, to February 26, 1998:  $\pm 7\%$ ; February 27 to October 28, 1998:  $\pm 10\%$ ; October 29, 1998 to March 24, 1999:  $\pm 12.5\%$ ; March 25 to October 31, 1999:  $\pm 15\%$ .

Source: Economics and Research Department, National Bank of Hungary.

Chart 1d

### Nominal Exchange Rate of the Slovak Koruna

*SKK/basket and SKK/DEM (inverted scale), %*



Fixed exchange rate regime until October 1, 1998:  
 Composition of the basket 60% DEM, 40% USD; width of fluctuation band:  $\pm 7.0\%$ .  
 Since October 2, 1998: Floating exchange rate regime.  
 — SKK against the former basket throughout the whole period  
 — SKK against the former basket until October 1, 1998; thereafter against the DEM (and thus since January 1, 1999, against the EUR)

Chart 1e

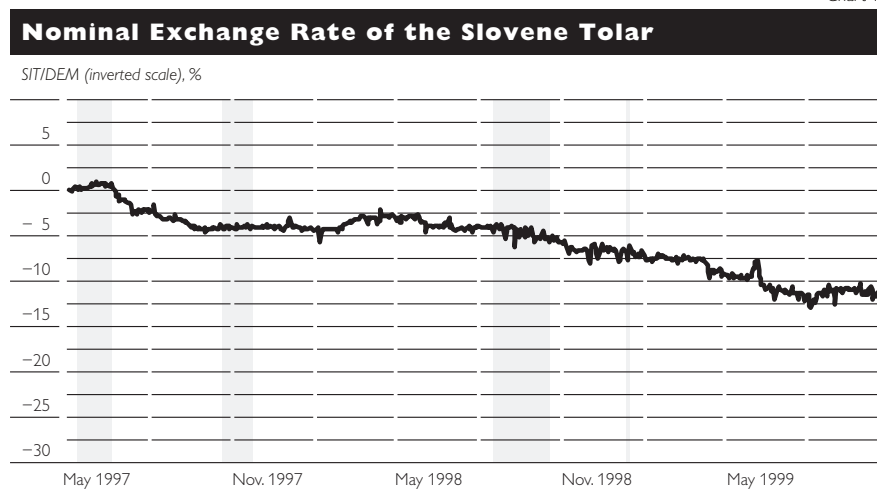
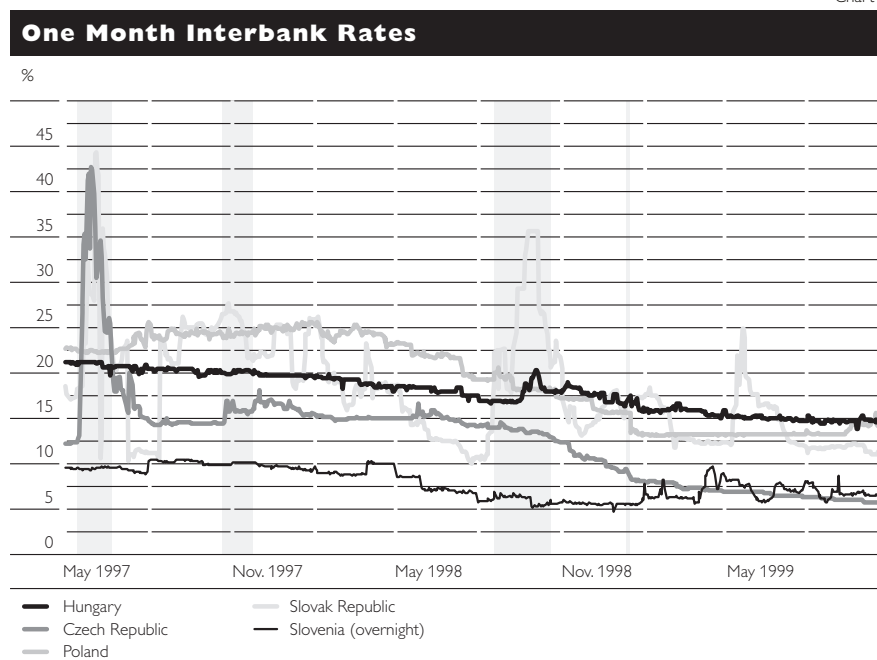


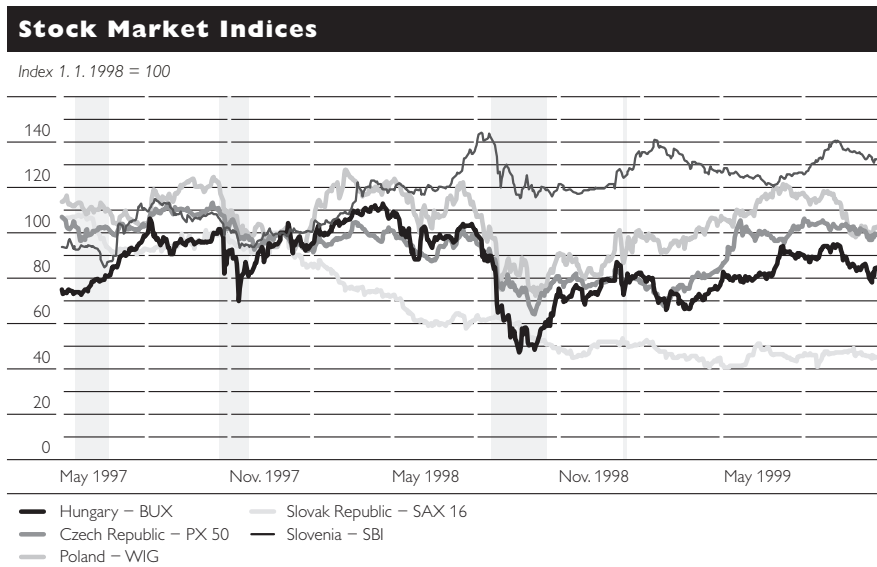
Chart 2



Although the case of the Baltics is somewhat different, as these countries had significantly closer economic and financial ties to Russia than the Central European countries, the pattern is similar. All three countries weathered the storm reasonably well and retained their exchange rate regimes, Estonia and Lithuania their currency boards and Latvia its narrow-band fixed peg, although its financial sector had by far the highest exposure to Russia of all applicant countries.<sup>1)</sup>

<sup>1</sup> For a comprehensive account of economic developments in the Baltics, see OECD (1999c).

Chart 3



Thus, the *tentative conclusion* from the Central and Eastern European experience to date is that intermediate exchange rate regimes – at least up to the current stage of transition – can be reasonably robust, if backed up by sound and consistent macroeconomic and structural policies, especially financial sector reform (focused on ensuring that financial institutions have a strong capital base and are subject to functioning ownership control, and effective supervision). In other words, these cases show that the consistency of the overall policy mix matters more than the choice of the exchange rate regime. Several further factors also seem to matter:

- a high degree of commitment to the policy framework in place as well as the readiness to underscore this commitment by tackling existing weaknesses in a determined manner (in the case of Latvia, for example, this meant sorting out the effects of the Russian crisis on the financial sector) and by undertaking “recommitting” activities during crisis times (lowering the rate of crawl in Hungary in the immediate wake of the Russian crisis to signal that the exchange rate regime in place was there to stay, while simultaneously raising the ex post yield of domestic debt instruments expressed in foreign currency and dampening inflation expectations);<sup>1)</sup>
- the independence and reputation of the central bank, including the personal reputation of the central bank governor;
- the country size (small countries – like very large ones – are less likely to become the target of a speculative attack);

<sup>1</sup> Hungary announced in late August that it would reduce its automatic monthly crawl rate from 0.8% to 0.7% as of the beginning of the fourth quarter of 1998. In late October 1998 a further cut to 0.6% as of January 1999 was proclaimed. Poland took a similar step reducing its crawl rate from 0.65% to 0.5% as of September 10, 1998. (More recently, both countries cut crawl rates further: On March 24, 1999, the Polish rate was reduced to 0.3% and on April 20, 1999, Hungary announced further reductions to 0.5% as of July 1, 1999, and to 0.4% as of October 1, 1999.)

- restrictions on short-term capital movements in the cases of Slovenia and Hungary (Begg and Wyplosz, 1999, examine differentials between onshore and offshore forint interest rates to show that Hungarian controls were effective in reducing short-term capital outflows at the peak of the crisis in September 1998; remarkably, the figures presented by Begg and Wyplosz, 1999, do not display any sizeable differentials between onshore and offshore rates in the period up to August 1998, which appears to be at odds with claims that controls reduced inflows of short-term capital during the precrisis period as well);
- an approach which emulates currency board features with the objective of underscoring exchange rate commitment (this was apparently the case in Latvia, where the central bank has stuck to a 100% backing of the monetary base by official foreign exchange reserves, except for a few and very brief periods, and it has tended to accept relatively large interest rate swings).<sup>1)</sup>

### **3.2 Advantages and Drawbacks of Different Regimes in Crisis Times: The Interest Rate Issue**

A second question about the effects of the recent emerging market turbulences on CEE exchange rate regimes is the question of what relative advantages and drawbacks different exchange rate regimes have in times of international financial market crisis. One of the issues which has been debated in this context is that, in the aftermath of the Russian crisis, interest rates increased significantly in Hungary and remained at relatively high levels in the months after the crisis, while there was only an insignificant and very transient blip of interest rate in the Czech Republic or in Poland. Moreover, stock prices fell more sharply in Hungary than in the two other countries.

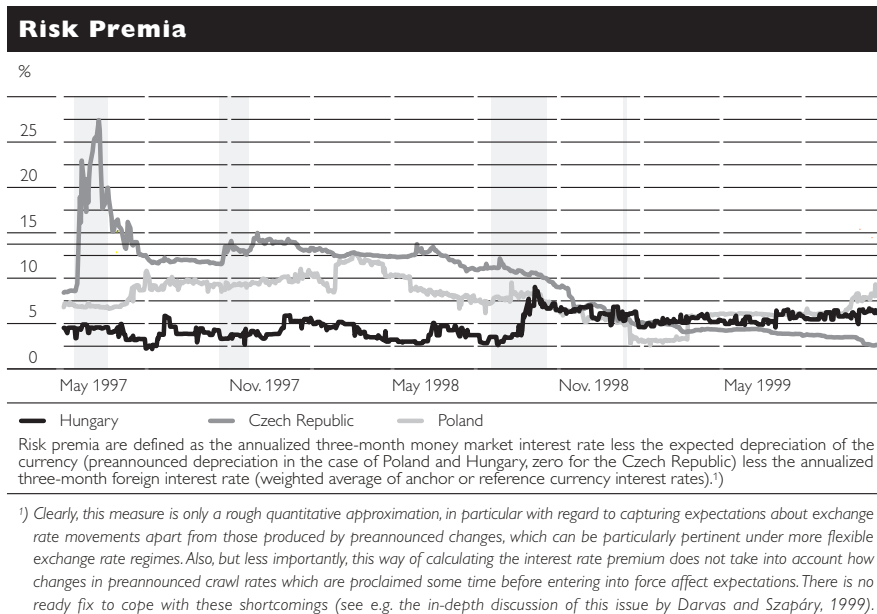
Begg and Wyplosz (1999) link this rise in the cost of borrowing directly to the exchange rate regime and state that countries which operate narrow band regimes have to let interest rates rise more sharply in crisis times than countries with a more flexible regime, in order to defend the narrow band; markets are aware of this and price this risk into equities and bonds even beyond immediate crisis times.

The counterargument, put forward by Darvas and Szapáry (1999), is that the Hungarian interest rate rise was not related to the exchange rate regime per se but primarily due to the rise in the risk premium in Hungary to the level of that of the two other countries, as international capital markets shifted from an assessment in which country-specific factors played a major role to an assessment in which the regional aspect dominated, in the aftermath of the Russian crisis. In this interpretation, the sharp drop in the prices of shares during the fall of 1998 reflected, to a degree, a correction of the stock market rally in the period before the Russian crisis “which contained an element of overreaction.”

Risk premia developments in Hungary, Poland and the Czech Republic are depicted in chart 4, which shows a tangible degree of volatility of risk premia for these three countries over the recent past. Whether the under-

<sup>1</sup> See OECD (1999b).

Chart 4



lying shifts in market sentiment are related to the design of exchange rate regimes at all, and if so to what extent, is difficult to gauge. In the assessment, the importance of macroeconomic developments – or more precisely, the perception of these developments by the markets – should not be underrated. In the Hungarian case, one may argue with good reason that some portion of the risk premium rise in autumn 1998 was due to an increasing current account deficit at the time (as compared to the very favorable data for 1997) unrelated to the Russian crisis, while there was apparently some uncertainty about the authorities' resolve to use fiscal adjustment measures to cope with potential future external imbalances. In a similar vein, the fact that the risk premium has remained around 5% during most of 1999 may also reflect developments in the fiscal and the external accounts<sup>1)</sup> rather than constituting a prolonged upward effect due to the features of Hungary's exchange rate regime. Also, it is interesting to see that Hungary's risk premium has developed more favorably than Poland's since the spring of 1999 and especially in the most recent months, while both countries exhibit similar risk characteristics. Thus, apart from outright crisis periods where evidence is not clearcut, the surveyed cases do not lend support to the view that the performance of an intermediate exchange rate regime, in terms of the cost of borrowing over a longer time horizon, is worse than that of alternative arrangements.

### 3.3 Impact of a Crisis Environment on Planned Regime Changes

A third question is whether the external crisis environment actually made planned exchange rate regime alterations more difficult to implement. Here, the cases of *Romania* and *Lithuania* are noteworthy. International turbulences contributed to locking these two countries into their regimes, although they

<sup>1</sup> The OECD (1999b) appears to share this perception.

had intended to alter them: Lithuania had planned to exit its currency board to a “standard” fixed peg, while Romania had intended to move from its managed float to a crawling peg. But, in both cases, the external environment was not the only impeding factor. The case of Lithuania shows that exiting a currency board is intrinsically difficult, in particular if it cannot be undertaken from a position of definite strength. In Romania, the country’s fragile macro-economic situation and its structural weaknesses have played a major role in delaying an exchange rate regime change.

#### **4 Broadening the View: Current and Future Challenges**

The choice of the exchange rate regime is a dynamic issue. This is particularly true of Central and Eastern European countries headed for EU and EMU integration. Obviously, the final exchange rate regime and monetary policy destination for this group of countries is joining a common currency area, i.e. participation in the euro area. The challenge is to formulate strategies for the intermediate period towards eventual full monetary integration which are both economically sound and institutionally fitting with respect to the integration framework of the European Union in general and Economic and Monetary Union in particular.

##### **4.1 Institutional Issues**

According to the EU framework, the process of *monetary integration* of applicant countries will take place in three stages. Applicants will first join the European Union, then participate in the exchange rate mechanism (ERM II)<sup>1</sup>) and finally adopt the euro. The framework, which is based on the equal treatment principle between incumbent and future members of the euro area, does not envisage the possibility of “short cuts”; the three steps have to be taken one by one. In particular, the euro cannot be introduced without a prior fulfillment of the convergence criteria. Furthermore, the accomplishment of the criteria can only be examined for EU Member States and the fulfillment of the exchange rate criterion, as it stands, requires a two-year period of formal membership in the ERM II which can only commence after EU accession. Moreover and most fundamentally, it is obvious from the sequencing this overall integration framework entails that meeting the conditions for EU membership (i.e. the Copenhagen criteria) is the basis and the precondition for further integration in the monetary field.

The constraints on exchange rate policies become tighter as integration into EU and EMU structures proceeds. There are no formal constraints on

*1 The ERM II governs exchange rate relations between the euro area and those EU Member States which have not yet introduced the single currency. It is based on fixed but adjustable central parity rates of the participating currencies vis-à-vis the euro. In order to avoid significant misalignments, realignments shall be conducted in a timely fashion. There will be a standard fluctuation band of  $\pm 15\%$  around the central rates of participating currencies, but formally agreed (as well as informally accorded) narrower bands will also be possible. Intervention at the formal margins will in principle be automatic and unlimited, with very short-term financing available. However, the ECB as well as the participating NCBs can suspend intervention if it were to conflict with their prime objective of price stability. The flexible use of interest rates by central banks of non-euro countries will be an important feature of the mechanism, and there will be the possibility of coordinated intramarginal intervention.*

exchange rate regimes before EU accession, but exchange rate policy should be conducive to an orderly integration into EU and EMU and be embedded, in a consistent manner, into a stability-oriented overall policy framework. Upon EU accession, applicant countries will have to treat their exchange rate policies as a matter of common concern. Inter alia, this includes that they will be expected to join ERM II, though not necessarily in the immediate postaccession phase. Depending on country-specific circumstances, in particular progress with convergence, entering ERM II could also take place later. Participation in ERM II is based on a fixed (but adjustable) peg to the euro; crawling pegs and exchange rate links to other anchor currencies than the euro will have to be phased out in time. Equally, floating regimes will have to be exited.

Currency board arrangements do not appear to fit into the ERM II framework in its current form.<sup>1)</sup> Similarly, retaining standard pegs with narrow or zero bands when entering ERM II will only be possible under mutual consent. How to handle these issues is still an open question which probably will have to be tackled if and when EU accession of CEE countries with such arrangements comes closer. It should be dealt with in time to avoid uncertainties about the range of possible monetary integration paths and about the credibility of such exchange rate arrangements. Economic considerations will be important when taking decisions on ERM II compatibility and participation, especially in currency board cases where the intricacies of exiting the exchange rate arrangement smoothly, the implications of potential exiting problems for other CEE countries with currency board arrangements and the suitability of introducing monetary policy temporarily in a context where it is not needed, will have to be weighed appropriately.

Conversely, strengthening constraints on exchange rate policies will tend to make it harder, as integration goes on, to stick to pure versions of alternative monetary policy strategies (monetary targeting or direct inflation targeting); conflicts of targets could emerge and would probably have to be resolved in favor of exchange rate stability, at least during the more distant period in which qualification for the euro zone will become the main objective.<sup>2)</sup>

#### 4.2 Economic Issues

There are *three main economic questions* about exchange rate regimes and policies in the runup to EU and EMU integration. First, what is the appropriate degree of exchange rate flexibility during the transition period towards full monetary unification and how does it change over time? Second, what is the appropriate choice of anchor currency? Third, how much time should the transition towards full monetary integration take; in other words, what is the optimal timing for entirely giving up monetary independence?

1 Countries with currency boards cannot make use of the flexibility of the ERM II for nominal exchange rate movements (bands and realignments), of interest rate flexibility by central banks or of the full application of intervention rules.

2 However, it should be mentioned that Finland and Spain were able to adhere to a direct inflation targeting strategy while at the same time fulfilling the EMU exchange rate criterion, as the targets did not collide.

During the early phase of transition, bringing down inflation from high levels and establishing a basic degree of credibility was a top priority for economic policymaking. In this phase, the exchange rate was a “natural” nominal anchor for a substantial number of transition economies. However, there is no clear evidence that exchange rate stabilization was associated with better growth and inflation performance than money-based stabilization. There are cases of successful disinflation with exchange-rate and with money-based strategies both. Slovenia (managed float since 1991) and Latvia (float from 1992 to 1994) are the two prime examples.<sup>1)</sup>

After initial stabilization had been achieved, the case for retaining the exchange rate as a nominal anchor became less compelling, mainly for three sets of reasons which have been pointed out recurrently in the debate on CEE exchange rate policies over the recent years: exposure to country-specific shocks, further increasing capital mobility and trend real appreciation (as well as other arguments related to the ongoing adjustment of relative prices).<sup>2)</sup>

*Exposure to country-specific real shocks* tends to be costly, if the given economy does not dispose of a sufficient degree of fiscal and price/wage adjustment capability. It is intrinsically difficult to assess the exposure of CEE countries that are undergoing comprehensive structural change in an exhaustive and forward-looking manner.<sup>3)</sup> In any case, the picture in the ten applicant countries is quite diverse. Nevertheless, even in the most advanced transition economies, convergence in production structures and foreign trade patterns with the euro area will take time. The flexibility of most CEE economies, in turn, appears to be bounded (though it is higher than in Western Europe), with the Baltic States constituting positive outliers so far. This would seem to call for prudence in exchange rate policies, keeping away from premature moves towards rigid exchange rate commitments, while putting a particular stress on preserving or even enhancing economic flexibility where tight exchange rate regimes are in place (and, if it became clear that this could not be appropriately achieved, exiting such arrangements in a timely manner).

A second line of argument relates to the potential vulnerability of intermediate exchange rate regimes to *speculative attacks*. As shown in sections 2 and 3, Central and Eastern European EU applicant countries have so far been able to contain such vulnerability where ever the commitment to the monetary and exchange rate framework in place was strong and other policies were supportive. However, capital mobility will increase further in the runup to EU accession, as the remaining capital controls are removed (which is a precondition for joining the European Union), market confidence grows and financial sector development progresses. Will intermediate regimes remain viable options under such circumstances? Generally, coping with capital mobility calls for a multipronged policy response, which may but does

1 For a brief record of the main contributions to the debate on this issue, see Cotarelli and Doyle (1999).

2 See e.g. Wagner (1998), Masson (1999), Beaumont (1999).

3 For some further exploration of this issue, see Backé and Radzyner (1998). Empirical studies on the subject have been done by De Grauwe and Aksoy (1999) and by Gros and Vandille (1999).

not necessarily have to involve changes in exchange rate regimes. Clearly, one of its possible features could be to throw risk into the wheels of speculation by moving towards a flexible or largely flexible exchange rate regime. It has been increasingly advocated to make use of this option and adopt wide-band pegs or loosely managed floating regimes.<sup>1)</sup> However, in contrast, the introduction of currency board arrangements for Central European countries like Hungary, Poland and the Czech Republic has been proposed on the very same grounds.<sup>2)</sup> Conversely, it may well be possible to stick to limited or even zero exchange rate flexibility under a standard-type exchange rate regime, if the overall policy framework in place is successively strengthened further, in particular the fiscal position, the resilience of the financial sector and its supervision. Under such a strategy, the exchange rate regime could actually be designed in a number of ways. One approach could be to emulate unilaterally the post-1993 ERM approach, i.e. combining hard outer fluctuation bands with soft inner bands. This would mean a commitment to keep the exchange rate within narrow margins over a longer time horizon while tolerating wider fluctuations in the short term. Thereby “one-way bet” situations could be largely prevented and a fairly high degree of exchange rate stability within wide outer bands could be achieved, as the ERM I experience after 1993 showed. Other conceivable approaches are unilateral fixed pegs without formal bands (Austria before EU accession had such a system) or with narrow bands.

Fast-growing (catching-up) economies typically experience a *trend real exchange rate appreciation*, due to higher productivity advances in the traded than in nontraded goods sectors (Balassa-Samuelson effect). Here the argument is that, under such circumstances, price stability can hardly be achieved unless there is some room for nominal appreciation, as this real appreciation can manifest itself either through nominal appreciation or through higher inflation. In order to discuss this issue further, it is important to gauge the magnitude of the effect – which depends on the share of the nontraded goods sector and the productivity differential in the traded goods sector at home and abroad. As a rule of thumb, for dynamic small, open economies which are in the early stages of the catching-up process, its magnitude typically tends to be somewhere on the order of 2 to 3 percentage points of real appreciation per annum. This effect will persist also in the longer run, as differences in price levels between EU applicant countries and the European Union are still significant, but it will probably ease off somewhat, as the dynamics of productivity advances in CEE will tend to decelerate relative to other countries during the later catching-up stages. Given the extent of the prospective trend real appreciation, either approach – low inflation cum trend nominal appreciation or somewhat higher inflation cum nominal exchange rate stability – appears economically feasible. Modest positive inflation differentials of CEE countries with the euro area under a fixed rate regime should not be seen as a problem, if they result from real convergence. However, a tightly fixed exchange rate regime (be it a currency board or a

1 See e.g. Begg and Wyplosz (1999), Masson (1999).

2 See Dornbusch and Gavazzi (1999).

standard rigid fixed peg) may become problematic in a more distant perspective, when a country seeks to meet the inflation and the exchange rate convergence criteria simultaneously. Like the ERM II compatibility issue, this is a potential problem which will require a careful weighing of economic and institutional aspects.<sup>1)</sup>

When determining the *proper degree of exchange rate flexibility* over time, the arguments in favor of more flexible regimes will have to be pondered against the benefits which are associated with limiting exchange rate variability, in particular that more fixed regimes foster trade and investment but also that an exchange rate anchor may play a disciplining role for monetary and fiscal policies as well as for wage formation. Moreover, dropping an exchange-rate based framework and opting for a domestic monetary policy anchor may raise a number of implementational problems.<sup>2)</sup> Under direct inflation targeting, as adopted by the Czech Republic and Poland, a central bank must be in the position to forecast inflation and to assess the relationship between monetary policy instruments and the inflation target. Besides, in a context of swift structural change and productivity increases, it is difficult to identify the proper disinflation path and the appropriate medium-term inflation target – a choice which is further complicated by measurement problems.<sup>3)</sup> Moreover, the selection of the target is made more difficult through the incomplete process of price liberalization and adjustment. Apart from the challenges that are involved in making a monetary framework function in a transition context which does not rely on an exchange rate anchor, it should also be noted that there are diverging views on whether such a strategy will make disinflation to low levels more easily achievable than an exchange rate-based arrangement.<sup>4)</sup>

To sum it up, there is no single path for exchange rate regimes during EU and EMU integration. While a certain degree of exchange rate flexibility appears reasonable for most applicant countries during the remaining years of the preaccession period, alternative strategies relying on a fixed or quasi-fixed exchange rate appear to be feasible, too, provided that the demanding preconditions for their viability are met. Tight exchange rate regimes, notably currency boards, will raise some questions about ERM II participation and the concurrent fulfillment of the inflation and exchange rate criteria which will have to be addressed at the appropriate time.

The question of the *appropriate anchor currency* for CEE can be answered much more briefly than the convoluted issue of the proper degree of exchange rate flexibility. The “natural” anchor currency for the EU applicant countries from Central and Eastern Europe is the euro, because it underlies a

1 Further arguments for some exchange rate flexibility relate to the fact that the disinflation from moderate to low levels may take time (e.g. due to inertial factors or due to a phased process of price liberalization or the adjustment of regulated prices to full cost-recovery levels). This may require some (downward) flexibility of the nominal exchange rate during the process in order to maintain a reasonable degree of price competitiveness.

2 For the problems related to direct inflation targeting in transition economies, see e.g. Krzak and Ettl (1999).

3 The CPI in transition economies typically exhibits a tangible upward measurement bias (see Skreb, 1998, and Beaumont, 1999). On the debate of the optimal pace of disinflation, see several contributions to Cottarelli and Szapáry (1998).

4 See Surányi and Vincze (1998) and Beaumont (1999) for diverging views on this issue.

large and rising proportion of trade and capital flows. The share of the euro in foreign trade invoicing, for example, ranges from 45% to 65% of CEE exports and is only slightly lower on the import side. Moreover, the appeal of the euro is rising, as the financial market of the single currency area is becoming increasingly deep and liquid. Still, a degree of caution may be warranted: The external balances of some applicant countries appear to be quite sensitive to real effective exchange rate fluctuations.<sup>1)</sup> In these cases it may make sense to advance to a clean euro link or orientation in a more gradual manner.

#### 4.3 The EU Candidate Countries' Monetary and Exchange Rate Integration Strategies

Against this backdrop of institutional and economic arguments, what are the monetary and exchange rate integration strategies of Central and Eastern European EU applicant countries?

*Estonia* and *Bulgaria* intend to retain their currency board arrangements until full monetary unification, while *Lithuania* plans to move to a more standard-type fixed peg over the next few years (while retaining some currency board principles, especially the full backing of base money by official foreign exchange reserves), coupled with a repegging of its currency from the U.S. dollar to the euro in the second half of 2001.

Is Estonia's and Bulgaria's strategy the best economic choice? This depends on whether the two economies continue to demonstrate sufficient strength and flexibility to prosper under the constraints of their currency board arrangements over an extended period of time and in fact whether they prove their readiness and capability to smoothly sustain a nominally fixed exchange rate and to adjust without having a monetary policy of their own. If this is the case for either of them, the institutional feasibility issue will have to be resolved, as outlined above.

*Hungary* will replace its EUR/USD basket by a clean euro peg as of January 2000 and plans to further reduce the rate of the crawl in a gradual manner and exit into a fixed peg, within a wide fluctuation band of  $\pm 15\%$ , as soon as inflation differentials between Hungary and the euro area are fully offset by differences in productivity growth. Whether the widening of the band will be phased in before the crawling peg is abandoned is still an open issue.

In the case of Hungary, the question about the timing of the band widening has dominated the debate about exchange rate policy choices and options. However, equally if not more important is the question what monetary framework will be put in place after the widening of the band: Will it essentially be an exchange rate-based framework of the hard outer band/soft narrow band-type (like the ERM I between 1993 and 1998), or will a wide band be complemented with alternative anchors for inflation expectations, e.g. through a more prominent and direct role for the authorities' inflation target? Either approach would appear to be feasible with respect to EU accession and subsequent ERM II participation.

1 See Feldman et al. (1998).

*Poland* intends to float the zloty sometime in the year 2000 to determine its “equilibrium level” by market forces before fixing it, at a subsequent stage, to the euro within a band of  $\pm 15\%$ .

Here, the question is how the intermediate floating phase will affect exchange rate developments. Given that inflation developments in Poland show some sensitivity to exchange rate movements, the intended continuation of gradual disinflation under a direct inflation targeting strategy and a floating exchange rate will presumably not entail overly wide exchange rate swings.

*Latvia* is retaining the SDR as the anchor basket currency for the near future (as currency shares in trade invoicing are seen to broadly correspond to the weights the individual currencies have in the SDR basket) and will probably not switch to the euro until it joins the EU. The narrow band is to be maintained until eventual integration into the euro zone.

In this case, two questions will arise, namely whether the timing of the intended repegging to the euro is indeed appropriate or whether it should be undertaken earlier in the process and, after EU accession, whether the narrow bands can and should be preserved when entering ERM II.

The monetary integration strategies of *applicants which operate floating exchange rate regimes* are less explicit. However, several of them have indicated their willingness to undertake certain exchange rate commitments when entering the European Union or perhaps already in the immediate preaccession period. Again, as long as the overall policy framework is stability oriented and, upon EU accession, exchange rate policy is treated as a matter of common concern, floating regimes can be retained until participation in ERM II commences.<sup>1)</sup>

#### **4.4 Beyond EU Accession: The Overall Length of the Monetary Integration Process**

The EMU strategies of most candidate countries also deal with the issue of the overall duration of the monetary integration process, which leads back to the third question raised above on the *optimal timing for giving up monetary independence* fully and irrevocably.

Most peg countries, but also some of the current floaters, have indicated that they want to keep the intermediate phases between EU accession, ERM II membership, and the adoption of the euro as short as possible and to move to full monetary integration within two or three years of having joined the European Union. Undoubtedly, this is a very ambitious objective, in particular if EU enlargement proceeds smoothly and accession of the first applicants indeed takes place in four to five years. Such a strategy would imply tight constraints on fiscal, monetary and exchange rate policies in the immediate post-EU accession period – in a phase in which the newly acceding countries will have to adjust fully to the rigors of the European Union’s internal market and, more broadly, in a stage at which structural convergence will probably still be under way. Under such circumstances, retaining some

<sup>1</sup> There have been three cases in which incumbent Member States – Spain, Italy and Finland – moved from floating regimes directly to the exchange rate mechanism.

leeway in monetary and exchange rate but perhaps also in fiscal policies may, in most cases, be useful to facilitate adjustment during the early years of EU membership. Forgoing this latitude would presumably require a very determined frontloading of wide-ranging structural and institutional transformation; moreover, the required macroeconomic stiffness in the early years of EU membership will have to act as a catalyst, spurring further transformation and real convergence rather than slowing it.<sup>1)</sup> Only under such framework conditions will it be possible to contain the risks of a fast monetary integration strategy, to fulfill the Maastricht criteria in a lasting manner and to reap the economic and financial gains that will accrue once these countries participate fully in EMU. In those cases in which the lead time for achieving a high degree of structural and nominal convergence turns out to be longer, monetary integration will necessarily be a more gradual and drawn-out process.

### Conclusions

Recent changes in exchange rate regimes in Central and Eastern European EU applicant countries do not display a uniform trend. Over time, the cases of typical intermediate exchange rate regimes have become smaller in number. Failures of standard-type exchange rate pegs in the Czech Republic and Slovakia can essentially be explained by shifts in domestic economic fundamentals. Where policies were broadly sound and consistent, intermediate exchange rate regimes performed reasonably well and weathered the storm of financial contagion after the Russian crisis. The Central and Eastern European experience does not support claims that intermediate exchange rate regimes are associated with higher borrowing costs over a longer time horizon than other arrangements; for immediate crisis periods the evidence is less clearcut.

The final destination for EU applicant countries, in terms of the exchange rate regime, is participation in the euro area. The challenge is to formulate and implement strategies for the intermediate period towards eventual full monetary integration which are both economically sound and institutionally fitting to the integration framework of the European Union in general and Economic and Monetary Union in particular. There is no standard single path of exchange rate regimes which would lead from the variety of today's regimes to EU accession, participation in ERM II and finally adoption of the euro. While a certain degree of exchange rate flexibility seems reasonable for most applicant countries during the remaining years of the preaccession period and beyond, alternative strategies relying on a fixed or quasi-fixed exchange rate also appear to be feasible, provided that the demanding preconditions for their viability are lastingly met. Monetary integration will presumably be a long-term process for most, if not all, EU candidate countries from Central and Eastern Europe; it can be completed successfully only after achieving comprehensive and in-depth structural convergence.

*1 In Dabrowski's (1999) view, political economy considerations should be duly considered when the appropriate target date for joining the euro area is defined. In his view, setting a bold target date for full EMU participation will mobilize reforms, which will thus speed up the needed adjustment of the real sphere.*

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