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Exchange Rate Policies and Institutional
Arrangements in the Transition Process to European
Monetary Union

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*Exchange Rate Policies and Institutional Arrangements in the Transition
Process to European Monetary Union*

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1. Introduction

After their accession to the European Union the countries in Central and Eastern Europe will be confronted with the difficult task to design an exchange rate strategy for their transition to European Monetary Union (EMU). This requires above all a timetable for the major institutional steps, the membership in ERM II and the final entry into EMU. In addition, countries have to decide on the exchange rate policy, which they will follow in the pre-ERM II period and given the wide ± 15 % margin to some extent also during their ERM II membership.

For both questions—the timetable and the overall design of exchange rate policy after EU membership—it seems useful to start with an analysis of the experience of the candidate countries in the last few years. Such an assessment has the important advantage that three completely different approaches were adopted so that a very broad comparison is possible.

2. The Experience since 1999

Chart 1 shows that since the start of EMU in 1999 the exchange rates of countries in Central and Eastern Europe have developed in a quite different way.

Chart 1: Exchange Rates of Candidate Countries vis-à-vis the Euro (January 1999 =100)
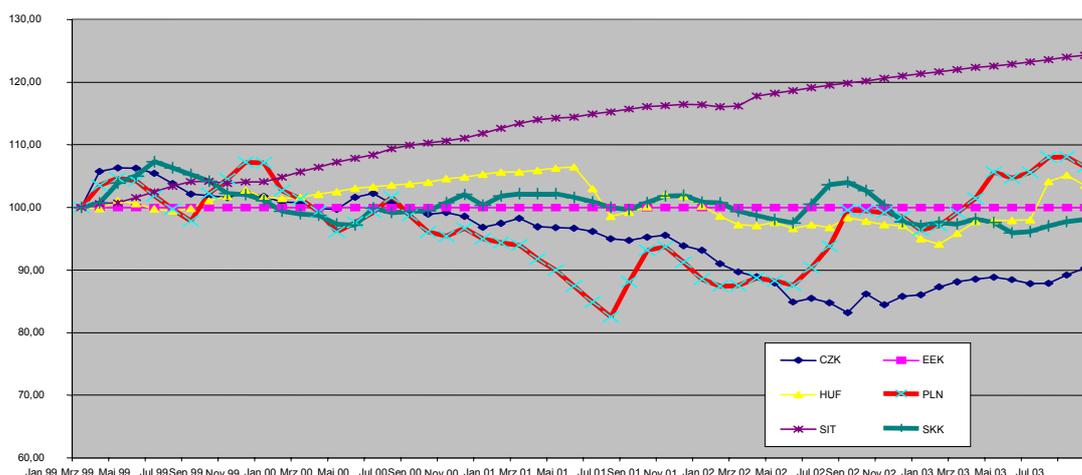
The group of countries that decided for *fixed exchange rates* (Bulgaria, Estonia and Latvia) has by been to maintain a completely constant exchange rate vis-à-vis the Euro or the SDR (Latvia) .

The group of countries with *flexible exchange rates,* which includes the Czech Republic, Poland and Hungary (since May 2001), has experienced rather strong fluctuations in their bilateral Euro exchange rates. The Czech Koruna appreciated vis-à-vis the Euro until summer 2002. Since then massive interventions (Chart 2) have led to a partial correction so that the Koruna is 10 % above the value in January 1999. Thus, the Czech National Bank can now also be regarded as a managed floater. The Zloty appreciated until May 2001, since then it has depreciated so that its Euro rate is today about 8 % weaker than in January 1999. Polish foreign exchange reserves show that this country is the most consequent free floater in the area. The Forint appreciated strongly after the crawling peg was abandoned, but since autumn 2002 this process was completely reverted again with the support of foreign exchange market interventions.

Chart 2: Foreign Exchange Reserves in the Candidate Countries (1/1999=100)
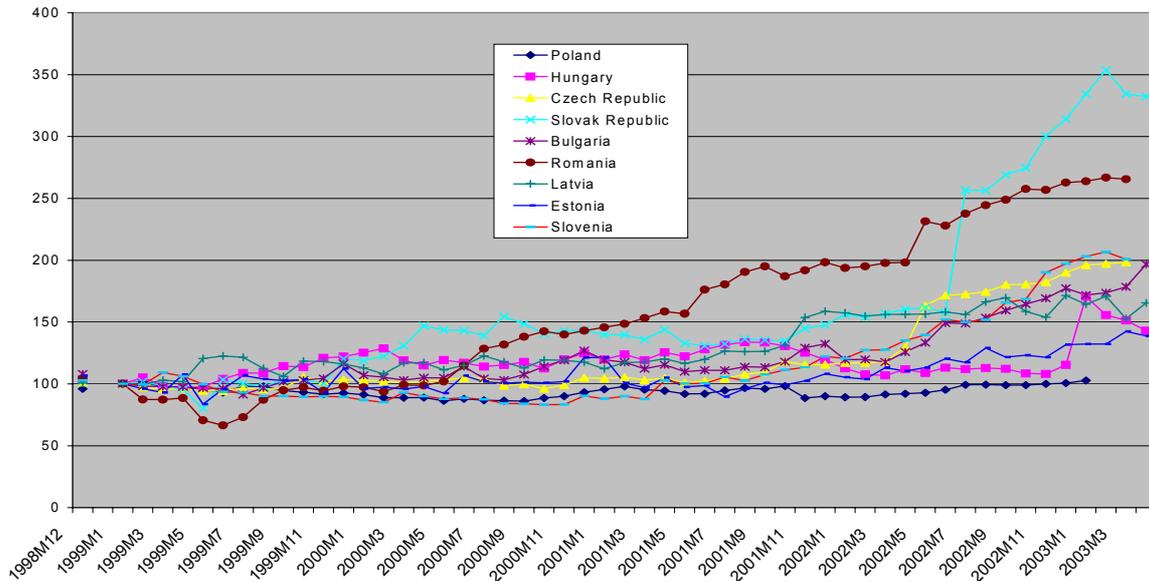
The group of countries with a pronounced *managed floating* includes Slovenia and Romania. Since 1999 both currencies have followed a very stable depreciation path vis-à-vis the Euro. However, as Chart 3 shows, from month to month the fluctuations of the Tolar were much more controlled than those of the Lei. Slovakia can be also regarded as a managed floater. In contrast to Slovenia and Romania, it allowed its currency to fluctuate around a constant level vis-à-vis the Euro.

Chart 3: Monthly Fluctuations of the Euro Exchange Rate of the Tolar and the Lei
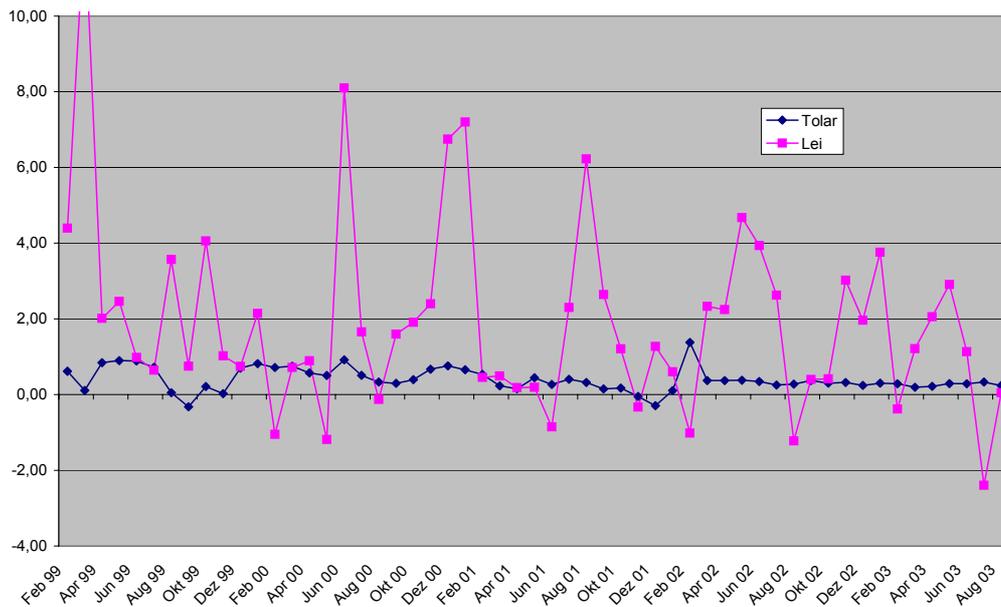
Given these quite different approaches, it seems useful to compare the macroeconomic performance of these countries. Table 1 provides a survey of important macroeconomic indicators where serious imbalances are noted in bold, less serious cases are noted by italics.

Table 1: Macroeconomic Indicators European Union Candidates (2003)

Country	Real GDP (2001-03)	Inflation rate	Current account in % of GDP	Fiscal balance in % of GDP	Unemployment (2002)
Bulgaria	4.6	2.4	**-4.6**	0.8	**17.9**
Czech Republic	**2.3**	0.6	**-5.7**	**-6.8**	**7.3**
Estonia	5.3	1.5	**-12.6**	0.4	**9.1**
Hungary	3.4	**4.5**	**-5.7**	**-5.6**	5.6
Latvia	6.5	2.7	**-7.3**	**-3.1**	**12.8**
Poland	**1.8**	0.9	*-3.3*	**-5.3**	**19.9**
Romania	5.1	**15.4**	**-4.8**	-2.7	**6.9**
Slovakia	3.9	**8.4**	**-6.3**	**-3.5**	**18.6**
Slovenia	2.8	*5.6*	0.9	-1.5	*6.0*

Source: IMF World Economic Outlook September 2003, DB Research Data Bank, Eurostat.

The result of this comparison is obvious. There is no candidate country which has been able to achieve an overall record of macroeconomic stability. Unemployment and a high current account deficit are a serious problem in almost every country. The only country without a major disequilibrium of the overall macroeconomic targets is Slovenia.

In the country group with *fixed exchange rates* inflation is close to the ECB's inflation target of 2 % and growth is very high. Fiscal balances are also compatible with the 3 % benchmark of the Maastricht Treaty. However, especially in Estonia the current account shows a very strong deficit and unemployment is very high in Bulgaria.

The countries which have opted for *flexible exchange rates* suffer from a relatively low growth, this applies above all to Poland and the Czech Republic. In these two countries the inflation rate is below the ECB's target which can already be regarded as a weak form of deflation. Hungary which adopted flexible exchange rates much later has a better growth performance and a more healthy inflation rate. In spite of the weak growth performance, the Czech Republic has a strong current account deficit, this applies to some extent also to Poland. All three countries have fiscal deficits that are incompatible with the 3 % threshold. Unemployment is very high in Poland, high in the Czech Republic and only in Hungary at an acceptable level.

In the group of *managed floaters* the growth performance is satisfactory, but inflation is a major problem in Romania and Slovakia, while Slovenia has been able to reduce its inflation rate somewhat. In Slovakia the current account is in a deep deficit. All three managed floaters are able to meet the 3 % criterion. Like in most candidate countries, unemployment is a problem, above all in Slovakia.

3. Implications for the Official Dogma

After the Asian crises official and academic circles came to the conclusion that intermediate exchange rate systems are prone to currency crises. According to so-called 'unholy trinity' in a world with free capital movements the only viable options are absolutely fixed or freely floating exchange rates. The experience of the EU candidate countries does fully confirm this view.

3.1 The Experience with Fixed Exchange Rates

The candidate countries that have adopted absolutely fixed rates were relatively successful. Their experience is in line with the view that a fixed exchange rate strategy is useful for relatively small and open countries. This can be shown with a very simple model for monetary macroeconomics in closed and open economies:[1]

The output gap (y^d) is determined by the real interest rate (r) and the change of the real exchange rate (Δq):

(1) $y^d = a - br + c\Delta q + \varepsilon_1$.

The inflation rate (π) is determined in the short-run only be domestic inflation expectations,

which for simplicity are assumed to be identical with the central bank's inflation target (π_0) and by the output gap:

(2) $\pi = \pi_0 + dy + \varepsilon_2$.

In a world of fixed rates and free capital movements the UIP condition is:

(3) $i = i^* + \alpha$.

Thus the domestic real interest rate becomes

(4) $r = i^* - \pi + \alpha$.

One can see that this implicit real interest rate rule is identical with a *Taylor rule* that violates the Taylor principle, since the real interest rate declines if the inflation rate increases:

(5) $r = (i^* + \alpha) + (-1)\pi + 0y$.

However, this destabilising effect can be avoided if the country is so small that changes in the real exchange rate have a stronger effect on aggregate demand than changes in the real interest rate, i.e. if $c > b$ in equation (1).

The change of the real exchange rate is given by

(6) $\Delta q = r - r^* - \alpha$.

By inserting equations (6) and (4) in (1), one gets the aggregate demand which depends on the inflation rate:

(7) $y^d(\pi) = a - b(r^* + \alpha) - (b - c)\pi^* + (b - c)\pi + \varepsilon_1$.

Thus, the destabilising effect of inflation on aggregate demand via the implicit Taylor rule can be compensated if $c > b$. In this case, in a π/y-space the aggregate demand declines if the inflation rate increases, which is the same result as with a stabilising Taylor rule in closed economy.

The required high degree of openness can be observed above all in Estonia where exports are 50 % of GDP, and imports make up almost two thirds of GDP. In Latvia and Bulgaria the openness is somewhat less pronounced with exports of about 30 % of GDP, and imports of 50 % (Latvia) and 43 % (Bulgaria).

3.2 The Disappointing, but not Surprising Experience with Flexible Rates

In retrospect the performance of *flexible rates* was not convincing. Poland, the Czech Republic and later Hungary suffered from a strong nominal appreciation of their currencies which can hardly be

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1   The complete model is in Bofinger et al. (2002).

explained by underlying macroeconomic fundamentals. This outcome is not astonishing, but rather confirms the well-known evidence for flexible exchange rates in all other areas and periods, which is summarised e.g. by Isard (1995) as follows:

> In short, neither the behavioural relationships suggested by theory, nor the information obtained through autoregression, provided a model that could forecast significantly better than a random walk. And furthermore, while the random walk model performed at least as well as other models, it predicted very poorly.

Thus, especially in the case of Poland and Hungary it was a very risky strategy to abandon a functioning crawling peg for freely floating exchange rates. While the Samuelson-Balassa-effect is often mentioned as a justification for strong real appreciation, is certainly not sufficient to explain a nominal appreciation in Poland or the Czech Republic, which reached almost 20 % while the inflation differential vis-à-vis the euro area was still relatively high (Table 2). In the case of the Czech Republic the productivity differential vis-à-vis the euro area is not more than 2 percentage points per annum. The high current account deficit of the Czech Republic is also a clear sign for an overvalued currency.

Table 2: Inflation Differential vis-à-vis the Euro Area

Country	1999	2000	2001	2002	2003
Bulgaria	1.5	8.3	5.2	3.5	2.6
Czech Republic	1	1.8	2.5	-0.5	-1.4
Estonia	2.2	1.9	3.5	1.3	-0.3
Hungary	8.9	7.7	6.9	3	2.7
Latvia	1.3	0.5	0.2	-0.4	1
Poland	6.2	8	3.2	-0.4	-1.2
Romania	44.7	43.6	32.2	20.2	13.1
Slovak Republic	9.6	9.9	5	1	6.5
Slovenia	5.1	6.8	6.1	5.2	3.9

Source: IMF World Economic Outlook, September 2003

In the framework of our simple model, the situation in these countries can be described as follows. In contrast to fixed rates, the central bank can now base its policy on a standard loss function:

(8) $L = (\pi - \pi_0)^2 + \lambda y^2$.

If one assumes that the exchange rate is not determined by fundamental factors the real exchange rate can be described as a very simple random walk

(9) $\Delta q = \eta$,

where η is a random white noise variable. Inserting (9) in (1) allows together with the loss function to derive the optimum real interest rate for the central bank:

(10) $r^{opt} = \dfrac{a}{b} + \dfrac{1}{b}\varepsilon_1 + \dfrac{d}{b(d^2 + \lambda)}\varepsilon_2 + \dfrac{c}{b}\eta$.

Thus, the optimal policy requires that the central bank reacts to demand and supply shocks *and* also to the changes in the real exchange rate, which can be regarded as an additional shock. In contrast to this approach, Poland, the Czech Republic and Hungary conducted an interest rate policy which disregarded the exchange rate movements and thus created a deflationary bias. As a result, especially in Poland monetary policy became excessively tight by the end of 2001 (Chart 4).[2]

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2 MCI1 is based on deviations of the real exchange rate from the average of 1995, MCI2 is based on the yoy-change of the real exchange rate.

In sum, the Polish experience since 1999 and the actual macroeconomic situation do not support the rather positive assessment made by Borowski et al. (2003, p. 3):

> From the perspective of the last 3 years it can be said unambiguously that the floating exchange rate was good for the Polish economy. Not only did it solve the problem of long run inconsistency of monetary policy, but also immunized the economy against external shocks that could have otherwise caused a currency crises.

Chart 4: Monetary Conditions Index in Poland
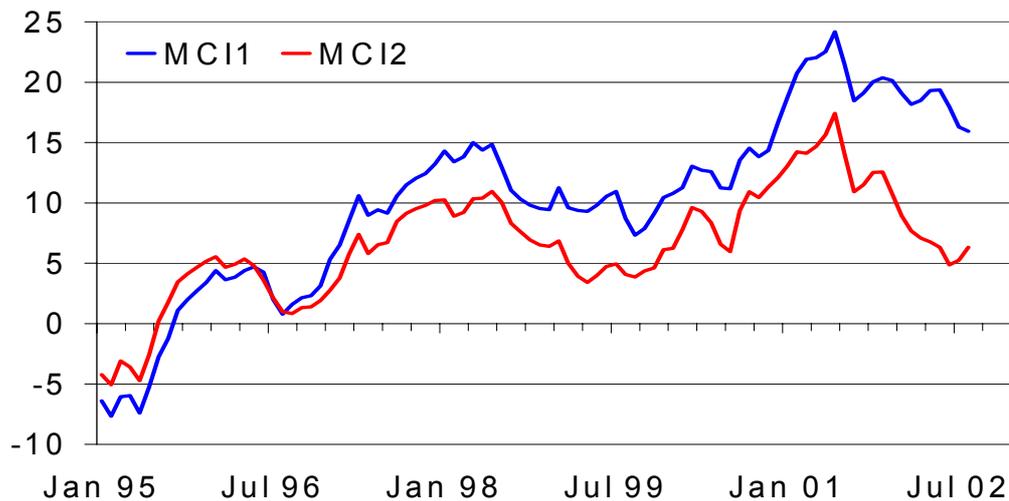
3.3 Intermediate Solutions Better than Expected

The most important contradiction to the 'two corner solution' ideology is the rather successful performance of Slovenia. This country follows since several years a very stable path for the exchange rate vis-à-vis the Euro. In contrast to the mainstream view[3] this policy was not prone to the capital inflows although it had liberalised its financial markets by the end of the 1990s. Interestingly proponents of the mainstream simply disregard the experience of Slovenia. For instance Wyplosz (2003, p.4) states: 'Central banks can intervene to lean against the wind, but the accumulated experience is that such interventions invite speculative attacks more often than they discourage them'.

Consequently his paper completely neglects the Slovenian experience. The success of managed floating in Slovenia was not a coincidence but rather the result of a comprehensive strategy for the simultaneous management of the interest rate and the exchange rate. The elements of such a strategy are explained in detail by Bofinger and Wollmershäuser (2001). It requires that the interest rate and the exchange are targeted in a way as to achieve at the same time

- an internal equilibrium which minimises a loss function and
- an external equilibrium which is defined as an exchange rate path that is in line with the uncovered interest parity.

The latter safeguards a country from strong portfolio inflows which are in most cases driven by excess returns, i.e. a domestic interest rate that exceeds the foreign rate and a the same time a constant exchange rate. Such an exchange rate path has at the same time the important advantage that the

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3 See, e.g. Begg et. al (2003, p. 25): 'A—if not the—major challenge for accession economies attempting to navigate the transition to membership in the euro area is the capital inflows problem. Large capital inflows would seem inevitable when capital markets are open, exchange rate flexibility is limited, and interest rates are still coming down to EU levels.'

central bank can sterilise capital inflows without costs. If the domestic interest rate exceeds the foreign rate, sterilisation is associated with interest rate costs since the foreign assets that are acquired provide a lower return that the domestic assets that have to issued to absorb the excess liquidity. At the same time the depreciation of the domestic currency increases the value of the central bank's foreign assets which compensates for the interest rate costs. Thus, Wyplosz (2003, p. 5) is also wrong if he states: 'There is no known solution to the capital inflow problem'.

The solution is an exchange rate path that is determined by UIP. Chart 5 shows the interest rate differential between Slovenia and the euro area and the change in the Tolar/Euro rate.

Chart 5: Changes in Tolar/Euro Rate and Tolar/Euro Interest Rate Differential
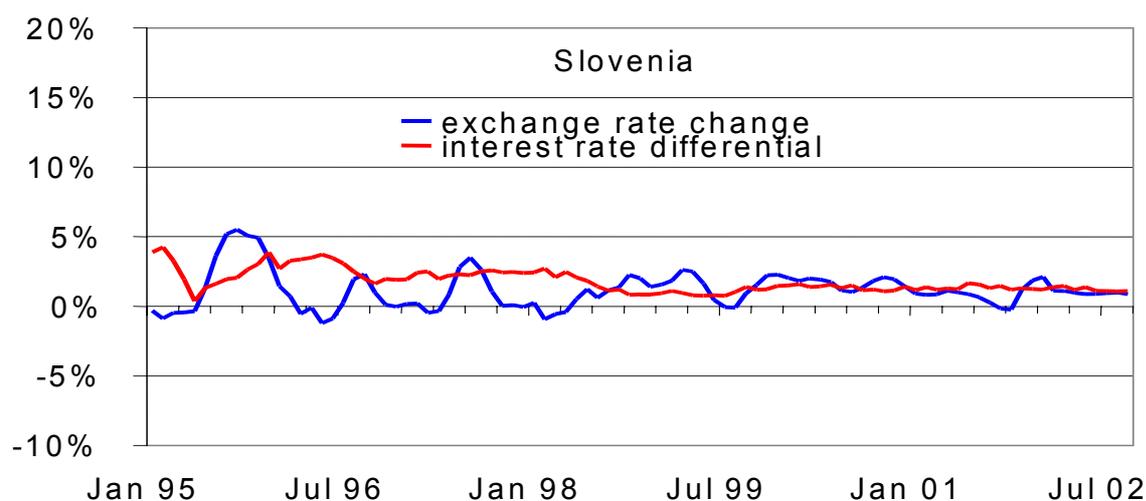
The experience of Slovenia also refutes the view that countries are unable to target their currency with sterilised intervention. Its central bank targets the exchange rate with interventions on the foreign exchange market and the interest rate with interventions at the domestic money market. As the Slovenian banking system exhibits a net debtor position vis-à-vis the central bank, the money market rate is targeted by the issuing short-term money market paper.

The actual debate on the exchange rate policy in China and Japan additionally proves that countries are able to target their exchange rate above all if it is under an appreciation pressure.

4. What Strategy for EMU Entry?

After their accession to EMU the new member countries have to decide on

- the final date for EMU entry,
- and if the time until transition exceeds two years on their exchange rate regime in the pre-convergence-test period.

As far as the first topic is concerned, all new entrants are well advised to wait with the start of the convergence test period. Our survey of the macroeconomic situation in Table 2 shows serious imbalances in all countries, above all current account deficits are very high. Thus, it would premature to adopt in the near future an exchange rate parity that would have to be applied for the final EMU entry. The risk of an overvalued parity is especially high in the case of Czech Republic where the real exchange rate has appreciated by 25 % from 1999 to 2003. Of course, this analytical uncertainty also speaks against the solution of an early unilateral euroisation.

In the case of a waiting period before the convergence test countries have to decide on an exchange rate strategy and on a possible membership in ERM II. In its resolution 'on the establishment of an exchange-rate mechanism in the third stage of economic and monetary union' the European Council has declared:[4]

> Participation in the exchange-rate mechanism will be voluntary for the Member States outside the euro area. Nevertheless, Member States with a derogation can be expected to join the mechanism. A Member State which does not participate from the outset in the exchange-rate mechanism may participate at a later date.

We shall discuss the pre-convergence-test period first before we analyse the specific problems of the last two years of the transition process to EMU.

4.1 Exchange Rate Strategies for the New Members in the PCTP

EU membership requires that the new member countries observe Article 124 of the Treaty:

> Until the beginning of the third stage, each Member State shall treat its exchange rate policy as a matter of common interest. In so doing, Member States shall take account of the experience acquired in cooperation within the framework of the European Monetary System (EMS) and in developing the ECU, and shall respect existing powers in this field.

Given the very general character of this article, each new member country is still confronted with the three alternatives of fixed rates, free and managed floating. My assessment of the experience of the last five years clearly speaks against market-determined exchange rates in this waiting period. Strong fluctuations of a freely-floating exchange rate do not only create unnecessary macroeconomic frictions, they make it also difficult to find out whether a given exchange rate level can be regarded as a sustainable equilibrium for a later EMU entry. In this respect, the experience of the ERM I is very useful. As Chart 6 shows, several EMU members had maintained a very stable rate vis-à-vis the D-Mark—and thus also among each other—for many years before they finally determined their EMU entry rate.

Chart 6: D-Mark Exchange Rates in the ERM I
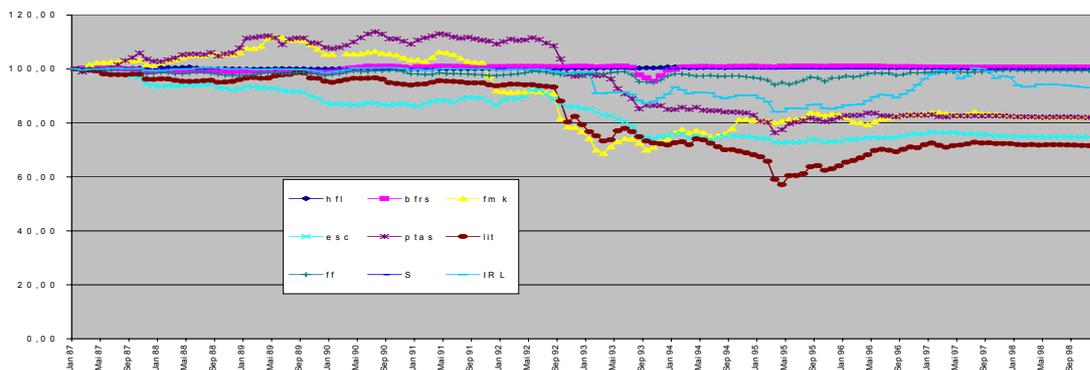
Thus, Poland, Hungary and the Czech Republic would have to redefine their exchange rate strategy in order to avoid serious macroeconomic risks on their path to EMU entry. Since euroisation has to be excluded, the only viable option is the strategy of managed floating. Chart 2 shows that the Czech Republic and—to some extent—Hungary have already adopted a more active exchange rate

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4   Resolution from 16 June 1997 (97/C 236/03).

management in the last year. As already mentioned, a successful management of the exchange rate requires that the exchange rate path follows the interest rate differential vis-à-vis the anchor currency. The prevailing interest rate differential of Poland and Hungary vis-à-vis the Euro would allow a gradual depreciation of these currencies until ERM II entry. This could provide a substantial correction for existing macroeconomic imbalances. The situation of the Czech Republic is more difficult since its interest rate differential to the euro is close to zero. Thus, it would not possible to target a gradual depreciation without causing major currency outflows. Given the serious imbalances in the Czech macroeconomic situation, the only solution would be a managed floating that starts with an outright devaluation of 10 % and then targets a constant Euro exchange rate.

Of course, the strategy of managed floating is not a panacea. Its most important flaw is the asymmetry of the constraint of foreign exchange reserves: While a country can cope with an appreciation pressure on its currency (as long as the exchange rate path follows UIP), its ability to defend an exchange rate path against depreciation pressure is very limited. A second major flaw of managed floating is its unilateral perspective, which provides a leeway for a beggar-my-neighbour policy. Both flaws could become relevant after EU membership:

- a candidate country could come under the pressure of foreign exchange markets which forces it to devalue strongly although a such an adjustment is not warranted by its macroeconomic situation,

- a candidate country could try to manipulate its exchange rate downwards in order to achieve a more competitive exchange rate in EMU.

Both outcomes would not be in the interest of present EMU members since they would lead to a deterioration of their competitiveness. While Article 124 addresses these problems in principle, it provides no concrete advice for coping with them. This applies above all, as long as the new member countries stay outside ERM II. In this case, exchange rate policies would be conducted in a conceptual vacuum, especially since academic and political circles have still great difficulties to understand the mechanics of managed floating.

In this context, it is important to note that managed floating is not incompatible with the very popular strategy of *inflation targeting*. As shown by Bofinger and Wollmershäuser (2001), the exchange and the interest rate are targeted together in order to achieve an internal equilibrium. This equilibrium can be defined by a loss function which is based on an inflation target and which attributes a specific weight to the inflation gap.

4.2 ERM II in the Pre-Convergence-Test Period

The conceptual problems in the pre-convergence test period would not change very much with an ERM II membership. This institutional framework is very much shaped by the structures of its predecessor, ERM I, which was designed as a scheme with narrow margins and frequent parity adjustments. In addition, ERM I was characterised by a co-existence of several large players (the Bundesbank, Bank de France, Bank of England, Banca d'Italia). Thus, the ERM II framework suffers from serious inconsistencies which become obvious if we discuss its institutional features in detail. The most important institutional features of the ERM II are

- the definition of central rates and fluctuation bands,

- the rules for marginal and intramarginal interventions,

- the provision of short-term financing facilities for interventions,

- an exit option, especially for the ECB.

Central Rates and Fluctuations Bands

According to the resolution of the Council, an ERM II member country must define a *central rate* vis-à-vis the euro for its currency. This leads to an asymmetric hub-and-spoke structure of the system, since the ECB is not required to do the same for the euro vis-à-vis the currencies of ERM II members. This is the main difference to ERM I which was rested on '*parity grid*', i.e. a matrix of mutual parities which led to a *formal* symmetry of this system.[5]

In line with the regulations for the ERM I since August 1993 the *fluctuation band* of the ERM II is ± 15 %. In the ERM I until July 1993 the 'normal' fluctuation margin was ± 2.25 %; a wide band of ± 6 % was also possible, but it was only used by Italy.

As far as parity definitions and adjustments are concerned, the resolution calls for a co-ordinated procedure:

> Decisions on central rates and the standard fluctuation band shall be taken by mutual agreement of the ministers of the euro-area Member States, the ECB and the ministers and central bank governors of the non-euro area Member States participating in the new mechanism, following a common procedure involving the European Commission, and after consultation of the Economic and Financial Committee. The ministers and governors of the central banks of the Member States not participating in the exchange-rate mechanism will take part but will not have the right to vote in the procedure.

For a strategy of managed floating these regulations are very well suited. First, the *broad fluctuation margins* provide a sufficient breathing space for exchange rate paths that are determined by interest rate differentials. Even if one assumes that a currency exhibits an interest differential of 10 percentage points in relation to the euro, it could be kept within the band at a constant central rate for three years: It would start in the first year at the ceiling of the band and gradually move towards to floor by the end of the third year. Additional flexibility is provided by the possibility of discretionary realignments.

A second positive feature of the ERM II is the requirement that parity adjustments have to be made by *mutual agreement*. This removes one of the main risks of a unilateral managed floating where an individual country is always tempted to use this strategy for a beggar-my-neighbour-policy. Of course, the advantage of a co-ordinated exchange rate management increases with the number of countries in Central and Eastern Europe participating in the ERM II. It is important to note that such an arrangement is not mainly in the interest of the new EU members but above all in the interest of present EMU countries. It gives them a possibility to prevent an exchange rate dumping by CEE countries which could impair their competitiveness.

Rules for Interventions

In line with our assessment of foreign exchange markets the resolution explicitly addresses the problems of purely market-determined exchange rates:

> The mechanism will also help to protect them (ERM II members; PB) and the Member States adopting the euro from unwarranted pressures in the foreign-exchange markets. In such cases, it may assist Member States outside the euro area participating in it, when their currencies come under pressure, to combine appropriate policy responses, including interest-rate measures, with coordinated intervention.

In addition, the agreement between the ECB and possible ERM II members differentiates between *marginal* interventions, i.e. interventions which are required for preventing a breach of the margins, and *intramarginal* interventions, i.e. interventions within the margins. The agreement stipulates:

- 'Intervention at the margins shall in principle be automatic and unlimited. However, the ECB and a ERM II central bank can suspend these interventions if they conflict with the objective of price stability'.

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5 De facto the ERM I was an asymmetric system since the reserve constraint forced countries with weak currencies to adjust their policies to the policy of the Bundesbank which was always the central bank with strongest currency.

- 'The ECB and participating non-euro area NCBs (national central banks; PB) may agree to co-ordinated intramarginal intervention.'

It is obvious that the agreement is still very much shaped by the arrangements of the original ERM I with its narrow ± 2.25 margins. In this system shocks very rapidly forced a currency to the limits of the band so that marginal intervention was required. Nevertheless, intramarginal interventions also played an important role in the original ERM but they were never given an equal treatment with marginal interventions.[6]

If a new member country decides to pursue a policy of managed floating within ERM II, the subordinate role of intramarginal interventions constitutes a major disadvantage. It is obvious that such interventions are necessary for targeting a currency within the ± 15 % band. They are certainly more important than marginal interventions which only come into play if intramarginal interventions were insufficient in stopping a speculative attack. Thus, under managed floating

- intramarginal interventions are required for keeping the exchange rate on a target path, while

- marginal interventions are only needed in an emergency case where intramarginal interventions have failed so that the control over the exchange rate has lost.

Financing of Interventions ('Very short-term financing facility')

Compared with a unilateral managed floating, ERM II membership would provide the CEE countries access to the seemingly generous 'very short-term financing facility' (VSTF). However, the ECB agreement's preference for marginal interventions is also mirrored in the regulations for the financing of interventions:

- In the case of *marginal* interventions the VSTF is 'in principle automatically available and unlimited in amount'.

- For *intramarginal* interventions, the VSTF can also be used but it requires an agreement of the ECB and the cumulative amount made available for such interventions is limited to a ceiling which is laid down for each ERM II member country. In addition it is expected that the debtor central bank makes 'appropriate use' of its own reserves.

As the asymmetry of the reserve constraint is one of the main difficulties of a strategy of managed floating, the provision of additional funds is certainly very helpful. However, in the case of intramarginal interventions the *ceilings* laid down by the agreement are very tight. Denmark, which is currently the only ERM II member, could obtain a maximum support of 520 million euro. If one relates the ceilings to a country's GDP, Poland would qualify for about 450 million euro. Compared with Poland's foreign exchange reserves which total about 25 billion dollar, the additional leeway provided by the VSTF is almost negligible.

In both cases the *maturity* of the credits is indeed very short-term. The unlimited facilities for marginal interventions have to be repaid after three months. They can be automatically renewed once, but this is also limited to the narrow ceilings of the agreement. Thus, in the case of an outright speculative attack the whole financing mechanism is not very effective. This became obvious in the ERM crises of 1992/93 when France had to give up the ± 2.25 margin in August 1993 after a strongly increasing debtor balance although its macroeconomic fundamentals were not worse than those of Germany.

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6 A limited access for such interventions was made possible with the Basle-Nyborg agreement of 1987.

The Exit Option

In the view of the Bundesbank one of the main flaws of the ERM I was the lack of a clearly defined exit option for the central bank with a strong currency.[7] This concern was taken up by the authors of the Council resolution:

> However, the ECB and the central banks of the other participants could suspend intervention if this were to conflict with their primary objective. In their decision they would take due account of all relevant factors and in particular of the need to maintain price stability and the credible functioning of the exchange-rate mechanism.

While such a regulation could have been helpful for the Bundesbank in the ERM I where it was confronted with up to nine central banks, some of which with an almost similar size, in the case of the ECB and its relations with CEE countries such a safeguard clause seems no longer appropriate. It is difficult to image that even strong *interventions* for Poland, as the largest CEE economy but with a GDP and a monetary base of only 3 ½ % of the present euro area, could directly threaten the ECB's attempts to maintain price stability.

In the relationship between a hegemonic ECB and its satellites in the CEE the main risk is that some ERM II country is pursuing a non-stability oriented fiscal and monetary policy which causes a strong depreciation of its currency and which in the longer run could impair price stability of the whole currency area. As in this case interventions by itself would not be the right therapy, it would be helpful if the ECB could suspend interventions from the very outset. A simple framework for a modified exit option could be based on the '*broad guidelines*' laid down in Article 99 of the Treaty which were not available when the original ERM was established. In the context of an ERM II exit option the following two paragraphs would be especially important:

- Paragraph 3: 'In order to ensure closer coordination of economic policies and sustained convergence of the economic performances of the Member States, the Council shall […] regularly carry out an overall assessment.'
- Paragraph 4: 'Where it is established […] that the economic policies of a Member State are not consistent with the broad guidelines […] or that they risk jeopardising the proper functioning of economic and monetary union, the Council may […] make the necessary recommendations to the Member State concerned.'

Thus, an exit option could be designed in a way that a country would automatically lose the access to the VSTF if the Council decides according to paragraph 4 that its policies are no longer compatible with the broad guidelines.

Overall Assessment

In its present institutional set-up the ERM II has very little to offer for the candidate countries during the pre-convergence test period. In principle, it mainly limits a country's national discretion in its exchange policy:

- Exchange rates have to be decided mutually.
- Intramarginal interventions require the consent of the ECB.

At the same time ERM II offers very limited financial support for countries that are suffering from a speculative attack, especially if they try to avoid a fall of the exchange rate to the margin of their parity. With this asymmetry of rights and obligations for ERM II members it is not surprising that e.g. the Czech National Bank (2003, p.1) has come to a rather negative assessment:

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7 Otmar Emminger (the Bundesbank's president in the period from 1977-79) in November 1978 wrote a letter to the German Government in which he declared that the Bundesbank would make use of an opting-out in the case of interventions threatening monetary stability in Germany; see Emminger (1986).

> […] the Czech National Bank views participation in ERM II merely as a gateway to joining the eurozone and does not recommend staying in the mechanism for any longer than the minimum required period of two years.

Such a decision, while understandable from a national perspective, has negative implications for the exchange rate policy in an enlarged European Union. By staying outside ERM II countries reserve the ability to determine their euro exchange rate unilaterally which could interfere with the unhindered functioning of the common market. On the other hand, if the Union wants to have a say in a country's exchange rate policy it is also under the obligation to support it in periods of speculative attacks.

A Reformed ERM II

Therefore, it seems useful to reconsider the whole ERM II framework. In our view, it would be possible to modify the Council resolution as well as the ECB agreement in a way that it becomes attractive for the new members to join ERM II as soon as possible.

This requires above all, that a much stronger role is assigned to *intramarginal interventions*. First, it would be necessary to stipulate in article 4 of the agreement that an ERM II member country has a general permission to undertake intramarginal interventions at its own discretion. This would reflect the fact that under a managed floating regime the exchange rate and the interest rate policy are integral elements of an autonomous national monetary policy. Thus, if an ECB agreement is required whenever intramarginal interventions are carried out, this could interfere with an effective national monetary policy and it could blur monetary policy responsibilities.

Second, in order to support a smooth exchange rate policy of accession countries, the *ceilings of the VSTF* would have to be increased considerably. The example of Denmark shows that the amounts have been kept constant in nominal terms since 1979 which explains their very small size compared to present levels of foreign exchange reserves. For Table 3 it is assumed that the ceilings would be about 20 times the size of the present agreement so that Poland would be entitled to an finance volume of 10 billion euro. The ceilings for the other countries were calculated according to the nominal GDP. For all accession countries in Central and Eastern Europe this would lead to an aggregate ceiling of about 23 billion euro.

Table 3: Ceilings in an Extended VSTF

Country	GDP (€ billion)	Ceiling (€ billion)
Bulgaria	13.0	0.8
Czech Republic	55.0	3.2
Estonia	5.5	0.3
Hungary	49.5	2.9
Latvia	7.7	0.5
Lithuania	12.2	0.7
Poland	171.0	10.0
Romania	40.0	2.3
Slovak Republic	20.9	1.2
Slovenia	19.5	1.1
Sum		**23.1**

Source for GDP data: Deutsche Bundesbank 2001

A comparison of the aggregate ceiling with the amount of refinance credits provided by ECB which total about 200 billion euro, demonstrates that even such a generously extended VSTF would not constitute a problem for the ECB's monetary policy management.

Such a modification of VSTF would not only be in the interest of the accession countries, it could also be helpful for the present EMU members. By making the ERM II much more attractive, accession countries would be more willing to join it than under present conditions. As already mentioned, this gives the old members a say in the exchange rate policy of the entrants which helps to prevent a possible exchange rate dumping.

Additionally, the access to a much more generous VSTF could be made dependent on the observance of the 'broad policy guidelines'. This would create a strong incentive for national policy makers to adhere to these guidelines which fosters macroeconomic stability in the whole European Union.

4.3 ERM II in the Convergence Test Period

In the Maastricht Treaty exchange rate stability is regarded as a necessary qualification for EMU entry. Accordingly, Article 121 requires

> […] the observance of the normal fluctuation margins provided for by the exchange‹rate mechanism of the European Monetary System, for at least two years, without devaluing against the currency of any other Member State.

The economic rationale of this criterion is very weak. Why should a country that is able to meet the inflation and the fiscal policy criterion be excluded from EMU entry, simply because it has been attacked by foreign exchange markets? As already mentioned, it is today rather uncontroversial that market-determined exchange rates do not systematically reflect macroeconomic fundamentals so that it makes little sense to use foreign exchange dealers as judges of a country's EMU qualification.

An additional problem of the exchange rate criterion is the confusion about 'normal' fluctuation margins. When the Treaty was drafted, the word normal was used in order to make clear that the narrow ± 2.25 % margins are required and not the wider ± 6.0 margins. Since the widening of the ERM I the ± 15 % margins have become 'normal'. Given the very weak economic rationale of the exchange rate criterion, a generous interpretation of this criterion is certainly warranted.

But even if this criterion has to be met with broad margins, the newcomers are again confronted with the institutional flaws of ERM 2. Thus, they could suffer from insufficient financial support in situations with unwarranted speculative attacks and they would have to agree with ECB on intramarginal interventions. With the institutional modifications that were suggested in 4.2, the membership in ERM 2 could be made much easier without jeopardising price stability in the euro area.

4.4 ERM II Membership in the Pre-Accession Stage

Given these advantages of a modified ERM II the question arises whether it would be adequate to open it also to countries in Central and Eastern which will remain in the accession stage. Under legal aspects such an opening would be not too difficult since in the tradition of the original EMS and ERM the whole ERM II has be designed outside the EU Treaty. As already mentioned it simply rests on a resolution by the Council and on an agreement between the ECB and national central banks. Both legal documents could be easily amended and modified permitting an ERM II membership already to accession countries.

Again, a more generous treatment of the accession countries we be in the mutual interest the old members and the newcomers. For both sides stable and mutually agreed exchange rate paths are a better solution than unilaterally determined exchange rates that are prone to major shocks.

5. Summary

The experience since 1999 shows clearly that freely flexible exchange rates have been a sub-optimal framework. It also demonstrates that the intermediate solution of managed floating can be managed in a way that the capital inflow problem is avoided. Thus, by pursuing managed floating instead of freely

flexible rates a country obtains an additional degree of freedom which helps to avoid the macroeconomic disequilibria from which Poland, Hungary and the Czech Republic are currently suffering.

Due to these imbalances, all candidate countries should avoid a strategy of introducing the euro as soon as possible. The experience of the ERM I shows that most EMU members had followed a longer trial-and-error process with rather stable rates before they determined the final conversion rates.

For such a longer transition period the strategy of managed floating provides a simple and effective framework that is also compatible with the strategy of inflation targeting. Two main risks are associated with this strategy. For the new members the asymmetry of the reserve constraint limits their control over the exchange rate in situations with strong speculative attacks. For the old members there is a danger that the unilateral targeting of the exchange rate is used for an exchange rate dumping. Thus, both sides should have in interest that such managed floating is operated within a joint framework.

Unfortunately the ERM II in its present form is not very useful for this purpose. It suffers from an institutional structure that was designed for a situation with narrow bands and relatively similar players. As a result, it provides de facto very limited resources for interventions and is almost useless for the most likely case of interventions that are carried before the ± 15 % band is reached. Thus, ERM II restricts the room for manoeuvre of the candidate countries without offering them something real in exchange. So it is not surprising that the Czech National Bank wants to keep the time in this uncomfortable waiting room as short as possible.

Given the mutual interest of old and new members in common framework for exchange rate policies in the transition process to EMU, it would be advisable to reform the ERM II in a way that its main flaws are avoided: Its ceilings could be extended substantially without jeopardising the ECB's monetary policy, the limitations on intramarginal interventions could be abolished and an access to the credit facilities could be made contingent on meeting the broad policy guidelines. Such a more generously designed ERM II would also reduce the attractiveness of euroisation which is the only other alternative to freely floating rates.

In the convergence-test period ERM II membership without tensions is regarded as a necessary qualification for EMU. As the economic rationale for this criterion is very weak, it would again be useful to have a modified ERM II which would make it easier for the candidate countries to keep their currencies on track until the final transition to EMU.

Finally, a modified ERM II could also be considered as a framework for the exchange rate polices of those accession countries which will enter EU later. Again, there is a mutual interest in avoiding excessive currency fluctuations.

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