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Exchange-Rate Policies in Central Europe and Monetary Union

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Abstract:

This paper examines the relationship between exchange-rate and monetary policies in transition economies (TEs) bent on entering the European Union (EU) and eventually acceding to the EU's monetary union. After detailing the present exchange-rate systems and monetary regimes in the central European TEs, currently practiced targets of monetary policy are reviewed and some proposed policy changes in response to the requirements of monetary union are discussed. Thereafter the question whether the candidates are likely to have to resort to a final currency devaluation no more than two years prior to acceding to monetary union is examined. This is followed, by way of conclusion, with some further suggestions for desirable adjustments in short- and long-term monetary policy.

Full Text :

Introduction

The inception of monetary union among the majority of members of the European Union (EU) on 1 January 1999 will exert a strong impact on the design of the ongoing economic reforms in the five transition economies (TEs) - Czech Republic, Estonia, Hungary, Poland, and Slovenia - that are currently negotiating for entry into the EU. These candidates for EU accession have opened their economies to a large degree and in the process engaged in fostering active trade and capital transactions with EU members. They will therefore have to adjust their exchange-rate and monetary policies in response to the introduction of the euro and monetary union. Not only that, at some point in the future, after their accession to the EU, they will have to align their monetary policies with exchange-rate obligations and prepare for accession to the monetary union.

This paper suggests a set of precepts for guiding future adjustments in macroeconomic policies in the above-cited TE candidates for EU entry. Several general recommendations can be suggested: (i) the TEs need to elaborate long-term plans for full accession to the EU; (ii) the pre-accession strategy of these countries needs to focus on coordinating the national legal systems with the EU's acquis communautaire (henceforth acquis) and on completing the structural reforms and the institutional changes agreed upon within the frame-work of accession negotiations; (iii) their post-accession strategies are likely to focus on preparations for entry into the monetary union; (iv) these countries are well-advised not to rush to an early, premature accession to the monetary union as their underlying rate of inflation is still too high and their financial markets and institutions unprepared for early accession (Fink, Haiss, Orlowski, and Salvatore, 1998); and (v) before entering monetary union, these countries need to complete structural and institutional reforms leading to an efficient banking system and to the creation of modern financial markets.

Monetary and fiscal convergence in the candidate countries consistent with the nominal convergence criteria specified in the Maastricht Treaty is not a precondition for EU accession. However, the entrants will be held to rigid requirements of low inflation and a minimum ratio of the consolidated fiscal budget deficit to gross domestic product (GDP), certainly once they approach eventual accession to monetary union by joining the new Exchange Rate Mechanism or ERM II. Even at an early stage, however, these macroeconomic convergence benchmarks will serve as helpful policy guidelines in order to generate the degree of price and income stability that is essential for securing eventual entry into the EU. This analysis assumes that the desirable disinflation and the required institutional and structural tasks of transformation can be better accomplished if central banks in TEs apply money-based monetary policies and a more flexible exchange-rate regime. For those to bear fruit, the monetary authorities need to enhance the credibility and consistency of their policies. Therefore, it is not advisable for them to pursue a discretionary monetary policy based on interest-rate targeting. Rather, direct targeting of inflation offers an attractive alternative that may improve the credibility and transparency of monetary policies in the TEs.

Preparations for accession to monetary union will require strict adherence to policies that can lead to fulfilling the Maastricht Treaty convergence criteria. The final stages of approaching entry into the monetary union will require a change in monetary policy from a money-based one into one based on maintaining the exchange rate. This monetary-policy change is called in this study a "return-to-peg strategy." A fixed exchange-rate system is familiar to these TEs since their heterodox programs of economic transformation in the early 1990s were mostly based on a pegged currency. These countries have since then gradually departed or "exited" from fixed exchange rates in favor of pursuing more autonomous monetary policies by applying more flexible exchange rates (Desai, 1998; Orlowski, 1997a; Sachs, 1996). The strategy of returning to the currency peg will be gradually shifting responsibility for disinflation to fiscal policy since monetary flexibility will be curbed. It is therefore essential for TE governments to adhere to strict fiscal convergence. Since inflation attributable to backward-looking expectations is still firmly rooted in these economies, it seems advisable for the candidates to follow even a tighter benchmark than the maximum 3 percent fiscal deficit-to-GDP criterion specified in the Maastricht Treaty (Orlowski, 1997b). If the required disinflation is not accomplished, an early application of the currency peg to the euro will lead to a considerable real appreciation of the TEs' currencies, to chronic current-account deficits, and to an unfavorable risk structure of capital inflows. The real appreciation of currencies of these countries has already contributed to a gradually deteriorating "pecking order" of incoming external capital or the faster growth of portfolio capital over foreign direct investment (FDI) inflows (Orlowski and Corrigan, 1997). Consequently, prolonged balance-of-payments problems may undermine the TEs' further economic transformation and integration into the EU.

The paper is organized as follows. After an examination of present exchange-rate and monetary regimes in the five cited TEs, I review their prevailing monetary-policy targets and discuss some proposed policy changes warranted by entry into the monetary union. Then I deal with the question of whether the candidates are likely to experience a "last devaluation syndrome" (Grauwe, 1997); that is, will they be forced to devalue their currencies at least two years prior to accession to the monetary union? In conclusion I present further suggestions for monetary-policy adjustments in the short- and long-term.

I. Present exchange-rate systems in central Europe

Both the academic literature on the economics of transition and policy makers of TEs have strongly emphasized the role of the exchange rate as a policy tool aimed at solving some of the economic imbalances inherited from central planning, such as the monetary overhang and corrective inflation, nonexistent policy credibility, depleted savings, and deteriorating current-account deficits (Bruno, 1992; Sachs, 1996). To accomplish these tasks, most TEs applied fixed exchange rates at the beginning of their economic transformation. The currency peg was primarily aimed at containing corrective inflation stemming from liberalization of previously fixed or rather inflexible prices for most goods, services, and intermediate materials, causing deep market imbalances and an excess supply of money.

Price liberalization induced a one-time inflation shock of unpredictable duration and depth. At the outset of the transformation, the new TE governments were not sure whether the disturbance would be self-correcting or more persistent. They chose to actively fight corrective inflation using fixed exchange rates as a tool of policy discipline. The currency peg helped to rebuild national savings, which had been eroded by the corrective inflation, and to restore credibility of policy makers and public confidence in economic reforms.

The modern literature on exchange-rate policies within the context of economic stabilization in emerging market economies generally supports the view that successful stabilization programs anchored to the exchange rate require a predetermined, early "exit strategy" from fixed exchange rates. Such an approach was variously pursued, both in time and in intensity of the policy commitment, by the TEs under consideration here (Orlowski, 1997a).

Among the five candidates for EU accession, Poland departed from the dollar peg in May 1991, after having held it for 16 months. The government applied first a crawling-peg strategy against a basket consisting of five currencies (dominated by the dollar) and replaced it later with a crawling-band regime, whose room for fluctuation was expanded in May 1995. This regime is still in effect. In May 1998, the dollar's weight stood at 45 percent, the band at 10 percent on either side of parity, and the monthly rate of crawling devaluation at 0.8 percent compounded daily.

Czechoslovakia devalued its currency against the dollar in two rounds (in October 1990 and in January 1991) by 50 percent. As part of the January 1991 comprehensive economic reform, the authorities applied a fixed exchange rate against a basket of five currencies. After the breakup in 1993, the Czech Republic assumed a fixed exchange rate of the koruna against a basket of two currencies (the deutschmark and the dollar) with a narrow band (0.5 percent around parity) for fluctuation. The fixed exchange rate was maintained until the end of February 1996, when the band was expanded to 7.5 percent around parity. As a result of intense attacks on the koruna and capital outflows in the second quarter of 1997, the Czech National Bank on 27 May 1997 allowed the currency to float, implying a devaluation of the currency, albeit with a commitment to switch to a deutschmark peg after reaching a "satisfactory" exchange rate against that currency. Managed floating continues, however.

In contrast, Slovenia has consistently pursued a managed float since the introduction of the tolar in October 1991. The currency experienced a considerable nominal depreciation in the second half of 1995 (9 percent in dollar terms). It has been fairly stable in nominal terms since then. On the other extreme, Estonia has maintained a currency board at 8 kroons to the deutschmark since June 1992.

Finally, Hungary did not experience major problems stemming from a significant monetary overhang and it therefore did not commit to a firm currency peg. Since the beginning of 1990 and until March 1995, it pursued an adjustable peg and since then a crawling peg. The country's central bank enacted a sharp 15 percent devaluation in January 1991. The forint has been pegged to a dual-currency basket whose specific composition and weights have changed several times. The most significant currency adjustment was enacted on 13 March 1995, when the forint was devalued by 9 percent and the crawling devaluation was introduced at a monthly rate of 1.9 percent. The dual-currency basket consists presently of 70 percent for the deutschmark and 30 percent for the dollar. As of May 1998, the regime provides for a 2.5 percent band around central parity with a monthly rate of crawling devaluation of 0.8 percent.

The three larger candidates for EU accession (Czech Republic, Hungary, and Poland) have in the meantime joined the Organisation for Economic Co-operation and Development (OECD). One of the accession-agreement requirements was for these countries to introduce considerable currency convertibility on capital account. From the beginning of 1999, these TEs will fully liberalize portfolio investments by domestic residents abroad and capital transfers from abroad into their economies, allowing cross-border branching in the banking sector. Estonia has maintained full current and capital-account convertibility as required by the currency board, after some initial restrictions. The tolar is fully convertible for current-account transactions, and foreign investors are permitted to repatriate profits and capital.

In sum, the candidates for EU accession are presently maintaining a variety of exchange regimes, thus varying monetary-policy regimes. The currency flexibility ranges from the fixity under the Estonian currency board to the Czech and Slovenian managed floats. Also the reference currencies, whether a basket or otherwise, vary considerably. If these countries desire to join the EU's monetary union at some future point in time, their specific plans for adjusting monetary policies and exchange-rate regimes will need to be centered on the target of reaching currency stability within narrowing bands of fluctuations in terms of the euro. The analytical literature on the experience with economic stability in the TEs broadly agrees that fixed exchange rates have successfully fulfilled the task of reducing corrective inflation, building policy credibility, and restoring national savings. But their anti-inflationary role ought to be deemphasized at the present stage of transformation.

More flexible exchange rates are perceived to be a better policy at the present stage of transformation. They allow TE monetary authorities to cushion real appreciation of their national currencies and, consequently, to prevent the deterioration of current-account deficits. Perhaps most importantly, by lowering expectations of a further real appreciation of the national currencies, flexible exchange rates may improve the risk structure of capital inflows, such as by favoring FDI over portfolio capital inflows. The advantage of such a course is particularly visible in the case of the Czech Republic, where the current-account deficit stopped deteriorating and

the risk structure of capital inflows was improved as a result of the introduction of the crawling band system and, later, the managed float (Orlowski and Corrigan, 1997).

Variant monetary regimes, different degrees of currency convertibility for current-account and capital-account transactions, and, most importantly, diverse degrees of institutional development and efficiency of financial markets have given rise to a variety of problems such as real currency appreciation, current-account deficits, and the inflationary consequences of capital inflows. Table 1 reflects the present stage of these variables in the three largest candidates for EU accession.

Table 1 Balance of Payments, Exchange Rates and Macroeconomic Stability Indicators for Poland, Hungary, and the Czech Republic.

	Poland		Hungary	
	1996	1996	1997	1996
Real rate (REER), Jan 1990=100(a)	143.6	147.7	109.4	121.3
Nominal depreciation against dollar (percent)(b)	-16.5	-22.4	-18.3	-23.8
Reserve inflows (percent of GDP)	0.1	1.5	-3.3	4.0
Current Account (percent of GDP)	-1.4	-4.3	-3.8	-2.2
Real GDP growth	6.1	6.9	1.3	4.0
Change in CPI	19.9	14.9	19.8	18.4
Gross Domestic Investments/GDP	20.4	22.9	25.0	24.9
Gross National Savings/GDP	19.4	19.7	23.2	23.0

	Czech Republic	
	1996	1997
Real rate (REER), Jan 1990=100(a)	142.7	144.7
Nominal depreciation against dollar (percent)(b)	-2.7	-23.1
Reserve inflows (percent of GDP)	0.1	-2.3
Current Account (percent of GDP)	-8.6	-6.6
Real GDP growth	3.9	1.0
Change in CPI	7.4	13.0
Gross Domestic Investments/GDP	33.0	30.2
Gross National Savings/GDP	25.4	23.9

Notes:

(a) The real effective exchange-rate index based on consumer price deflators (January 1990= 100) as compiled by J.P. Morgan.

(b) Based on year-end exchange rates.

Sources: International financial statistics. Washington, DC: International Monetary Fund, various issues; World financial markets. Morgan Guarantee Trust Company, 27 March 1998, p. 52; and monthly reports of the CNB, NBH, and NBP, various issues.

In all three countries, inflation in 1996 was higher than the nominal depreciation of the currency, thus contributing to rising real exchange rates. The data for 1996 confirm the point advanced by Halpern and Wyplosz (1996), as well as by Begg (1996), that with quasi-fixed exchange rates (crawling pegs and bands) the primary cause of the real currency appreciation in the central European TEs is high inflation; appreciation will stop only with the completion of the transformation.

The inflation picture changed in 1997 in that the pace of inflation was lower than the nominal appreciation, at least in dollar terms. To some extent, this results from the overall appreciation of the dollar in terms of other key international currencies. Yet, the slowdown of the real appreciation of TEs' currencies also stems from the expanded flexibility of exchange rates, primarily in the case of the Czech Republic and Poland. It is worth noting that the real effective exchange rate (REER) of the forint increased significantly in 1997. It is possible that greater flexibility of the forint's exchange rate would alleviate this rise.

The strong real appreciation of the zloty along with fast GDP growth and the lagging of national savings behind gross fixed capital formation in Poland have all contributed to the rising current-account deficit. The Czech Republic experienced similar problems even more severely in 1994-1996, leading to the peak ratio of the current account to GDP of 8.6 percent in 1996. Halting the koruna's real appreciation by raising exchange rate flexibility successfully reduced this ratio in 1997. Pressures on the current account in Hungary are considerably lower due to the lower GDP growth rate, the ratio of national savings to investment, and the previous stability of the REER. However, inflation remains excessive in Hungary and may call for further real appreciation of the currency in the foreseeable future, thus possibly worsening the current-account deficit.

The above empirical evidence suggests key tasks for exchange-rate policies in the TEs. Their monetary authorities are encouraged to find ways to slow down the ongoing real appreciation of their currencies in order to improve the balance of payments. This can be achieved best by applying flexible exchange rates and money-based monetary policies. At the same time, they need to pursue rigorous fiscal and monetary discipline in order to reduce inflation more decisively. As stated by Mishkin (1997), price stability is essential for financial stability of economic systems. It expands the maturity of debt contracts, thus making it easier for financial- and business-sector institutions to borrow long-term capital in domestic currency. At the end, it helps to reduce fragility of financial systems. More flexible exchange rates also favor the development of domestic foreign-exchange markets, which are essential for the future integration of these countries into the EU's financial system. Moreover, flexible rates provide clear signals about macroeconomic-policy fundamentals. If market exchange rates are not distorted, a sharp depreciation of the nominal exchange rate normally serves as a warning sign for possible corrective policies to adjust macroeconomic imbalances.

In sum, the ongoing transformation in TEs could benefit from the introduction of more flexible exchange rates as an integral component of money-based monetary policies. If these TEs were to base their monetary policies on the exchange rate as a result of an overhasty entry into the ERM II and monetary union, at least prior to cutting inflation to a sustainable low level, they risk generating a further real appreciation of their national currencies and extending severe balance-of-payments problems. Furthermore, it is widely argued in the literature that a high degree of

exchange-rate flexibility, such as a managed float or crawling peg with wide bands, are helpful for absorbing both demand- and supply-side shocks in the economy (Halpern and Wyplosz, 1996). Assuming that the early phase of monetary union may inflict asymmetric shocks on the "outs," or the countries remaining outside the euro zone (see Grauwe, 1996; Wypiosz, 1997), more flexible exchange rates will provide a better cushion against such shocks.

Market-determined exchange rates are advantageous for the development of emerging financial markets and institutions in TEs because they require the development of complex derivative instruments for hedging risks. They tend to more accurately reflect current supply and demand equilibria in foreign-exchange markets and monetary-equilibrium positions with respect to international currencies. That is to say, just like current exchange rates of TEs reflect equilibrium positions of domestic currencies in terms of international currencies in foreign-exchange markets, reaching for the financial-market equiequilibria that reflect interest-parity conditions and represent sentiments of traders to sell or to buy foreign exchange would only strengthen the desirability of moving toward more flexible exchange rates.

In contrast, fixed exchange-rate regimes turn off the informational function of currency rates, thus becoming policy-steering parameters rather than market variables. Currency derivatives are not needed in this case. Flexible rates are required for monetary systems that focus on stability of money balances and interest rates. They provide valuable information on foreign-exchange positions to central banks, leaving interest rates or money balances as intermediate or operational targets of monetary policy. Under a fixed exchange rate, stable currency rates themselves become a key operational target of monetary policy. As a result, exchange-rate systems need to be analyzed in the broader context of choosing among alternative monetary-policy systems that depend on a proper selection of policy targets. Specifically, a currency peg implies that a stable exchange rate should be set as an intermediate policy target. It may be accompanied by a pre-determined difference between domestic and foreign interest rates as an operating target. A flexible exchange-rate system is consistent with a growth of money balances or a forecast rate of inflation chosen as intermediate targets.

II. Monetary-policy targeting: is the euro-peg on the horizon?

With the prospect of eventually joining the EU, the TE candidates have to choose among a variety of intermediate and operational monetary-policy targets for, as set forth earlier, their monetary-policy systems vary significantly, complicating the design of a uniform "return-to-peg strategy" at this juncture. However, the ultimate targets of their monetary policy show greater similarities (Krzak and Schubert, 1997). Recently published monetary-policy directives of central banks in all five countries emphasize a long-term commitment to disinflation and to safeguarding currency stability. However, the Czech and Polish central banks in their directives state also the goal of supporting "economic policy of the governmental targets." Interest-rate targeting is based on observed variables, and it is thus a backward-looking policy. The targeting horizon becomes very short and the policy is frequently reset. While applying discretionary changes of interest rates as operational targets, central banks still need to apply some intermediate targets.

The central banks of the five TEs under discussion do not apply uniform targets for monetary policy. Moreover, there has been considerable inconsistency in their choices of monetary targets. Until the end of 1997, the Czech National Bank (CNB) claimed to aim at controlling M2 balances as an intermediate target and the one-week Prague Interbank Offer Rate (PRIBOR) as an operating target (Krzak and Schubert, 1997). Since the beginning of 1998, it has applied core-inflation targeting. The new system allows to integrate intermediate and operating targets by setting a predetermined level of core inflation with a fairly narrow band of tolerance. The CNB has applied a 6.0 percent core inflation target with a 0.5 percent band on either side for 1998, and a 4.5 percent target with a 1.0 percent tolerance band for 2000, which is the date planned by policy makers for entry into ERM II, however unlikely that may actually be; perhaps the policy commitment would be to shadow ERM II until entry into the EU, and thus ERM II, becomes feasible. The new Czech system offers an attractive alternative for monetary policy in TEs. It is a forward-looking monetary policy with a transparent commitment to disinflation. However, it can be viewed also as a temporary, more sophisticated tool of gaining policy credibility and generating price stability. The CNB is applying a managed float for the koruna as an exchange-rate policy fully consistent with the monetary regime based on direct inflation targeting. The system will have to be gradually changed into a currency peg to the euro, at the latest when the country enters the ERM II.

The National Bank of Hungary (NBH) states as intermediate targets maintaining the exchange rate within the current 2.5 percent band on either side of parity and M2, and as operational target the interest-rate differential vis-a-vis European financial markets. These permit the NBH to monitor short-term capital inflows more effectively. The system indicates a backward-looking, discretionary policy of the NBH.

The National Bank of Poland (NBP) still claims to aim at controlling broad money and hold the exchange rate within the broad 10 percent band (without publishing any implicit target zones, that is, internal narrower bands) as intermediate targets, although the 1998 monetary-policy directives of the NBP seem to strongly emphasize the latter. The NBP states the need for controlling the spread between the one-month Warsaw Interbank Offered Rate (WIBOR) and the Lombard rate as an operational target in the 1998 policy directives, thus introducing the policy instrument as a targeting device. Moreover, there has been a considerable degree of inconsistency in the choice of monetary-policy targets in recent years. Specifically, the NBP followed short-term interest rates as an operational target in the first half of 1996 and, later, domestic credit expansion when the GDP growth rate accelerated and the current-account deficit started to deteriorate. In 1997, it formally announced targeting the monetary base and in 1998 it switched again to targeting interest rates.

The targeting practices of the NBH and NBP indicate that these central banks are pursuing a discretionary, rather than a rule-based policy. Discretionary reactions to changes in price and income variables demonstrate the banks' willingness to exercise power over financial markets and institutions by changing frequently the interest targets, and to do so without pre-announcement and by adhering strictly to the targets at all times. Interest-rate targeting is hardly transparent and predictable for the financial community since it allows for an unannounced resetting of targets. The financial sector's foresight, in the sense of its ability to forecast market conditions, becomes more difficult, thus inducing banks to hold excess reserves with the central

bank for precautionary reasons. Moreover, the TEs are likely to experience large fluctuations of transactions and in broad money balances while being exposed to double-digit inflation in combination with fast economic growth. Consequently, the velocity of money becomes very unstable. Targeting interest rates rather than money balances exacerbates the instability of money velocity. There is always a tradeoff between choosing the targets that a central bank can control exactly and those that are most closely related to its ultimate goals. The main positive aspect of interest-rate targeting is a high likelihood of hitting the target most of the time, which helps to improve monetary-policy accountability.

In order to enhance policy credibility and to pursue disinflation more effectively, TE central banks would be better off abandoning the current practice of interest-rate targeting and considering a system of direct inflation targeting (Orlowski, 1998). That would better prepare them for the monetary convergence and stability of the domestic currency in terms of the euro, particularly if they plan to lock their exchange rates to the euro either unilaterally, at a later stage of the pre-accession period, or through formally joining the ERM II upon entry into the EU. An early application of the euro-peg is advocated by Barysch (1997) who views it as a tool of facilitating disinflation and reducing excessive volatility of currencies of the present EU candidates. However, deferring application of the euro-peg until it becomes sustainable is the option preferred by this author. Relatively flexible exchange rates at the present stage of transformation are to be preferred until inflation is reduced to a level where it would no longer exert upward pressure on the real exchange rate of the TEs' currencies. To this observer, it seems preferable to reduce inflation while maintaining fiscal discipline and applying a monetary policy directly targeting inflation rather than using a currency peg as a disciplining tool.

Direct inflation targeting is consistent with a higher degree of exchange-rate flexibility. It can therefore be applied at the present stage of economic transformation in TEs that have already expanded the flexibility of their exchange rates. Such a new monetary system brings attractive advantages to TEs. It implies a forward-looking policy in contrast to the backward-looking character of interest-rate targeting. It further permits monetary authorities to concentrate on the predetermined path of disinflation, thereby enhancing the commitment of central banks to monetary discipline and to price stability. The effectiveness of the new system depends strictly on the width of the effective tolerance bands on which the deviation of actual inflation rates from those targeted is predicated. Wider bands allow more time for policy-decision lags, while shorter bands require rather quick policy responses leading to frequent discretionary reactions to observed disturbances in actual income and price levels. In this respect, the present 0.5 percent band applied by the CNB may be viewed as too narrow. The bands of permitted currency fluctuation closely correspond to "inflation tolerance bands," circumscribing the maximum allowed deviation of actual inflation from the targeted level. Specifically, a short-term increase in inflation to the upper bound of the tolerance band is normally accompanied by nominal depreciation of the domestic currency, thus moving toward the lower support level of the exchange-rate band.

At the future stage of active preparations for accession to the EU's monetary union, central banks will have gradually to move toward basing their monetary policy on the exchange rate. This will require a gradual narrowing of inflation tolerance bands and closing exchange rate bands as the domestic-currency values in euro terms converge to a stable level. But the close connection

between the inflation path and the exchange rate implies that a stable market exchange rate can be reached only when inflation approaches a low level consistent with the Maastricht benchmark. The new system of direct inflation targeting may prove to be very effective in reaching such a low inflation environment within a period of four to five years for Hungary and Poland and by the year of 2000 for the Czech Republic. Moreover, the system permits the elimination of some of the questionable elements of current Hungarian and Polish monetary policies, namely, the crawling devaluation and the frequent changes in policy instruments, mainly reserve-requirement ratios and central-bank lending rates. The removal of the crawling devaluation is urgent since it is viewed as a key factor presently contributing in TEs to wage and price indexation (Rosati, 1996). Upon entry to the EPM II, crawling devaluations will have to be discontinued. The system of direct inflation targeting seems to be effective for meeting the key prerequisites for a successful entry into the ERM II.

III. Toward monetary union: a "return-to-peg strategy"

TE fiscal and monetary authorities need to encourage changes in exchange-rate regimes and operating procedures to prepare the ground for a smooth transition toward joining the euro regime. Generally speaking, it will be beneficial to these countries to enter the ERM II for as long as they cannot effectively join the monetary union (Bernard, 1997), that is, for at least two years after they are admitted as EU members. The governments of the three larger TEs have already expressed intentions to join the ERM II, thereby reaffirming their commitment to full EU integration and adding credibility to their preparations.

However, the euro-peg should not come too early and entry into the ERM II may well have to be deferred, although TEs will be encouraged to join the ERM II upon accession to the EU. The candidates need flexible exchange rates in order to build and protect an autonomous monetary policy. A premature "return-to-peg" will undercut the potency of monetary policy, shifting the primary responsibility for disinflation to fiscal policy. The actual entry into the ERM II depends on the permitted exchange-rate flexibility within the new system, that is the width of the fluctuations band. The exchange rate band within the ERM II is likely to remain wide for the foreseeable future: 15 percent around central parity. However, TE central banks are likely to apply narrower internal bands or implicit target zones as a tool of monetary discipline. Depending upon the specific policy approach, the moment of entry to the ERM II will have to correspond to the width of the bands. With a wider band, the entry to the ERM II is more readily feasible at an earlier stage, as soon as inflation reaches a low, sustainable level. With a narrower band, however, entry into the ERM II needs to be delayed to the time when inflation can be effectively managed at a level consistent with the Maastricht benchmark. In any case, it is not advisable for the TEs to lock their exchange rates to the euro upon its inception in January 1999 and the decision to join the ERM II should be formulated with caution. The TEs need sufficient time to monitor their currency's exchange rates in euro terms and to reduce the exchange-rate volatility stemming from high inflation differentials and still-unstable domestic financial markets.

Several benefits accrue for the TEs from delaying entry into the ERM II. The move is likely to enhance credibility of the TEs' monetary policies and to improve fiscal and monetary discipline, since these countries will be expected to adhere to strict macroeconomic convergence criteria. It

will further benefit the credibility and sincerity of the whole integration program since the candidates will show in this way that they are committed to full integration. There are also visible benefits for the ongoing transformation process and for the needed modification of exchange-rate regimes. Entering the ERM II will probably reduce inflation expectations in these countries. It is, therefore, likely to reduce indexation of wages and prices, which is still considerable and contributes to the inflation inertia at the present stage of transformation. In technical terms, the ERM II will prompt monetary authorities in TEs to discontinue crawling devaluations that are believed to be adding to the automatic indexation of prices and wages (Orlowski, 1997a; Rosati, 1996). It will also encourage the NBP to change the basket of reference currencies in preparation for entry into the ERM II, thus lowering the dollar's weight in favor of placing the overwhelming weight on the euro. Upon entry into the ERM II, the euro will have to be the exclusive reference currency. This alignment will enhance the integration of Poland's financial markets into the EU's.

There are also some disadvantages for TEs of joining the ERM II, especially when entry precedes the satisfactory completion of the appropriate institutional wherewithal for ensuring the appropriate functioning of financial markets and constructing an efficient system of bank supervision and monitoring. As argued by Wyplosz (1997), entering the ERM II upon its inception would add considerable volatility to the TEs' exchange rates in euro terms since it remains uncertain how stable the new currency will initially be. Central banks may attempt to reduce this volatility through active sterilization. But the duration of such sterilization cannot be too long, if only because of the high fiscal costs associated with it. As a result, it seems preferable to replace sterilization with some degree of currency appreciation whenever conditions invite sizable capital inflows. It can be further argued that expectations of a nominal appreciation of the currency tied to the stability of the euro in combination with the ongoing inflation among the "outs" will accelerate real appreciation of their currencies.

The overall benefits of joining the ERM II seem to outweigh the expected disadvantages more and more as the TEs' policy makers succeed in stabilizing prices and exchange rates and as the euro gains stability in world financial markets. It would therefore seem advisable that the candidates join the ERM II at some future point, after they become EU members and once they can sustain monetary stability. This timing does not relieve the TEs' monetary authorities from preparing soonest a comprehensive, long-term strategy of eventually joining monetary union. Having such a strategy in place already during the early stages of accession negotiations would be an asset to TE negotiators.

TE negotiators need to address several important issues regarding exchange-rate policies. One is the scope of application of the "safeguard clause" by the European Central Bank (ECB). The clause permits the ECB to suspend intervention and financing in the ERM II framework if these were to impinge on the objective of price stability. Another issue for the negotiators to ponder is the need to work out rules for monitoring exchange rates to assure full transparency and compliance between the EU and ECB preferences, on the one hand, and the TEs' exchange rate and disinflation policies, on the other.

A broad and critical problem for the negotiators is to define the precise nature and procedures of the bilateral pegging system within the ERM II framework. This system is based on bilateral

currency arrangements between the "outs" and the ECB, which makes it different in that it is asymmetric from the expiring ERM I, which is symmetric. In the new ERM, there will be a large center in the form of the euro zone and several countries remaining outside the monetary union. As a result, currencies of the "outs" will be linked through bilateral, rather than multilateral, arrangements with the euro; hence the asymmetry within the system. The new system is frequently labeled a "hubs-and-spokes" currency system (Gros, 1996).

The bilateral rates will be fixed in a confidential joint manner involving the governors of central banks of the "outs," the ECB, and the European Commission. The present band of permitted currency fluctuations of plus-minus 15 percent is likely to be sustained in order to sanction a sufficiently large room for exchange-rate flexibility of the "outs." However, narrower official bands or unpublished internal bands are possible, but such solutions will be based on the "convergence situation" of the individual country. As the "outs" successfully pursue the path to monetary union, narrowing bands around the euro-peg can be applied if only to demonstrate the TE's ability to converge smoothly to the common currency system and to reduce fluctuations of market exchange rates. The gradual narrowing of the official band has been advocated by Klein (1997). A similar effect can be achieved also by gradually narrowing the unpublished inner bands, which would also be consistent with flexible inflation targeting. This solution seems to be more favorable since the official wide band would still leave enough room for flexibility in foreign-exchange markets and thus reduce expectations of a real currency appreciation. This approach is therefore likely to reduce the risk of speculative attacks against the currency. In any case, a gradual closing of exchange-rate bands is advisable and this is fully consistent with the narrowing of inflation targets proposed in our advocacy of direct inflation targeting.

The steps and procedures of approaching the ERM II have been discussed in the literature by Bernard (1997) and Orlowski (1997c). At the beginning of the road toward joining the ERM II and, later on, the monetary union, the candidates are likely to restructure their currency reference baskets, increasing the euro's weight. At the same time, they will gradually phase out crawling devaluations. At a later stage, they need unilaterally to lock their exchange rate to the euro. A direct euro-peg with large bands is the most desirable solution at this stage. The move will be beneficial for reducing inflation expectations and for enhancing monetary-policy credibility. Moreover, the adjustable euro-peg would entitle the TEs to receive short-term financing upon locking their exchange rate to the euro once they join the ERM II. There is, however, a danger of moving TE currencies onto a unilateral peg. If one or more TEs were to experience unbalanced fundamentals and face a risk of speculative attacks against their currency, the bilateral system within the ERM II would cushion the better-balanced economies against possible contagion effects, as defined by Eichengreen, Rose, and Wyplosz (1996).

The determination of a desirable spread between domestic and foreign interest rates will be one of the most critical issues in retooling monetary policy in preparation for the introduction of the regime based on the exchange rate. Direct inflation targeting allows financial markets to generate the equilibrium spread between interest rates. Interest-rate targeting would very likely distort the alignment between the interest-rate spread and the macroeconomic fundamentals, thus causing a deviation from the uncovered interest-parity condition.

Monetary authorities in TEs are presently inclined toward targeting interest rates. They justify this approach because they deem it to be more effective under the current conditions of fast growth with high demand for credit. To contain credit growth, central banks apply very high interest rates, excessive in relation to the uncovered interest-parity condition. These high interest rates generate incentives for strong capital inflows to investors, speculators, and even exporters. Excessive interest rates are posing dangers for advancing further with economic transformation because they lead to adverse selection. The problem arises when borrowers with low credit risk do not wish to borrow, while those with the riskiest investment projects are still willing to borrow (Mishkin, 1997). Consequently, lenders are likely to provide credit to the riskiest allocations if interest rates are irrationally high. Higher interest rates do not necessarily reduce an excess demand for loans due to adverse selection, as argued by Stiglitz and Weiss (1981). This is because at high interest rates lenders provide credit to the riskiest institutions. However, lenders should not become overexposed to the riskiest loans. They are therefore likely to make high-risk loans selectively, in the process reducing the aggregate supply of credit and aggravating the excess demand for credit.

To substantiate the claim that excessive interest rates cause incentives for capital inflows, one may invoke the significant advantage of money-market hedging strategies of export receivables in Poland observed recently. For instance, assuming that a Polish exporter signed a contract to sell DM 1 million to a German buyer at the end of November 1997, when the spot exchange rate was ZL 2.02 per deutschmark. The exporter could immediately borrow in deutschmark at a 7 percent annual rate and repay it with receivables expected to be satisfied in March 1998. The credit could be switched in November into zloty and invested in a four-months' deposit with a Polish bank paying an annual rate of 21 percent. The money market hedge yields ZL 2,112,186 in March 1998. Unhedged receivables would yield only ZL 1,880,000 at the available March spot rate of 1.88 and the forward-rate hedged contract could generate ZL 2,080,000 since the four-months' forward selling rate of the deutschmark in November 1997 was ZL 2.08. This example could be easily generalized to other transactions and financial manipulations elicited by high domestic interest rates.

High interest rates in Poland promote borrowing abroad and investing in Poland not only by investors and speculators, but by exporters as well. This results in large capital inflows as reflected by the NBP's data on the balance of payments, which show a capital-account surplus of $2.7 billion (1.9 percent of GDP in 1997) generated only during the first two months of 1998. In addition, borrowing in foreign currency while swapping it into domestic currency further contributes to an increase in demand for the domestic currency and leads to the latter's nominal appreciation. Money-market hedging causes immediate large inflows of foreign capital. In the above example, it brings foreign capital already in November, while both forward-hedged and unhedged export receivables are transferred only in March. Furthermore, the money-market hedge in relation to the forward hedge would no longer be feasible if Polish deposit rates fell to the annual rate of approximately 16 percent. Under such conditions, incentives for large short-term capital inflows would erode. Poland's central bank would accordingly be well advised to lower the targeted interest rates rather than to continue the current practice of targeting excessive rates and sterilizing corresponding capital inflows.

In sum, one of the prime tasks for TE monetary authorities is to avoid maintaining excessively high interest rates with a view to reducing fast-growing domestic demand. TEs are therefore well-advised to change the monetary policy into flexible inflation targeting. This will ensure a better equilibrium between domestic and foreign interest rates, thus removing incentives for large capital inflows.

Another problem to be addressed by the TEs is the optimal accumulation of foreign reserves at central banks. At the present time, strong positive interest-rate differentials lead to a significant accumulation of foreign reserves. The excessive level of reserves may be pro-inflationary, but it is necessary to reduce the risk of speculative attacks on the domestic currency. In the future, large foreign-exchange reserves will become less necessary since the TEs will have to transfer some of their reserves to the ECB upon accession to the ERM II and even more upon entry into the monetary union.

It is essential that TEs prepare for entering the monetary union by first achieving an equilibrium exchange rate against the euro. If their currencies are overvalued in real terms, they may be facing expectations of the currency devaluation, at the latest two years prior to the intended accession to monetary union as per the framework set forth by the Maastricht Treaty.

IV. The last devaluation syndrome - a lesson from Greece?

Before the final preparation for accession to monetary union, actors may expect that the TEs will enact one last devaluation. These expectations may lead to a number of effects and repercussions that can generally be described as "the last devaluation syndrome." Financial institutions and foreign-trade companies are likely to assume positions consistent with expectations that the national currency will soon be devalued. Their actions may force monetary authorities to devalue the currency. For instance, exporters are likely to lobby for the currency's devaluation, particularly if they foresee a continuous real appreciation of the domestic currency due to prolonged, excessive inflation. This scenario is likely to occur since the exporters' lobby is strong throughout the TEs. Financial institutions are likely to start lowering their assets in domestic currency and buying foreign currencies, thus causing the domestic currency to depreciate in nominal terms. This will put additional pressures on monetary authorities to devalue the currency.

A "return-to-peg strategy" can bring some unpleasant consequences for TEs if they are not able to implement far-reaching institutional changes in their financial systems soon. If TE currencies are continuously experiencing real appreciation at the final stages of preparation for entry into the EU's monetary union, the monetary authorities will be expected to arrange for a final devaluation. This may prove to be disastrous when debt contracts have a predominantly short-term maturity and when substantial amounts of debt are still denominated in foreign currencies (Mishkin, 1997). Such a devaluation may induce a deep financial crisis with financial institutions no longer able to allocate funds to the most productive investment opportunities. Such a devaluation may entail a needless recession. Moreover, a possible devaluation may cause a deterioration of balance sheets of banks and firms in domestic currency terms. This may result in a bank run. The devaluation will deteriorate the gap between short-term liabilities of banks denominated in foreign currencies and medium- to long-term assets in domestic currencies. The

mismatch between assets and liabilities hurts the liquidity position of banks, which they may or may not be able to overcome. If interest-rate differentials are high prior to devaluation, meaning that domestic interest rates are considerably above foreign rates, there are strong incentives for banks to borrow short-term in foreign currency and make longer-term maturity loans in domestic currency. Devaluation will make it more expensive to service the short-term debt in relation to cash flows from domestic-currency loans. In sum, an emerging market economy considering devaluation cannot afford to have a fragile banking system and large short-term debt in foreign currency.

A possible devaluation on the road to a currency peg may also reduce confidence in the ability of central banks to control inflation. Certainly, devaluation will induce a lagged, one-time inflation shock that ought to be contained with a discretionary increase in interest rates by the central bank. Under such circumstances, flexible inflation targeting is beneficial. It allows the shock to expire by itself.

Expectations of devaluation may be subdued if the candidates exercise a considerable degree of exchange-rate flexibility prior to the declaration of final preparations for entry into monetary union. This will allow for a linear depreciation of the domestic currency and for a smooth convergence to the equilibrium exchange rate. If flexibility is restrained, for instance, by a narrow band of permitted fluctuations or frequent interventions, foreign-exchange markets will likely embrace expectations of a one-time devaluation, thus a nonlinear move toward exchange-rate equilibrium. They will likely foresee even a one-time move to a considerably undervalued currency (in relation to purchasing-power parity), particularly if the underlying inflation is still high and thus contributing to expectations of a real appreciation of the currency. As argued earlier, this may devastate the financial stability of the national economy.

Even if the macroeconomic fundamentals are met and the exchange rate is in equilibrium with respect to the uncovered interest-parity condition or the purchasing-power parity, financial markets may still expect a candidate for accession to the monetary union to devalue at the latest two years prior to the intended entry. This is because of the Maastricht Treaty requirement for that stipulates that a country's exchange rate must have been unchanged within the ERM for at least two years. This precludes any sizable inflation within the two years preceding accession to the monetary union. It is these expectations of a one-time devaluation approximately two years before the intended entry to the monetary union that give rise to the "last devaluation syndrome." Once in the ERM II, any devaluation will have to be approved by the ECB after in-depth consultations. In extreme cases, when macroeconomic fundamentals in an ERM II country are not met, the ECB may force the country to devalue the currency.

It is useful to avoid by all means the last devaluation's syndrome, especially if the banking system has extensive short-term liabilities in foreign currency coupled with longer-term assets in domestic currency. Interest payments on foreign-currency liabilities would sharply rise, causing a liquidity problem in the banking sector and a danger of bank runs. Devaluation may induce large capital outflows from the country. It will further hurt the credibility of monetary authorities.

If the candidate countries opt to undergo devaluation in spite of the dangers for the financial stability of their economies, they will have to plan it very carefully. The last devaluation should be unannounced so that it will not induce large speculative attacks on the currency. In addition, it would have to be supplemented by a temporary introduction of controls on capital outflows. This solution is again consistent with the requirements of undistorted currency convertibility on capital account stemming from OECD and EU accession agreements. But that final devaluation can be undertaken only after consultation with the authorities of these organizations. Moreover, the size of the last devaluation needs to be carefully assessed. It cannot be excessive for otherwise it would cause much harm to financial stability.

It remains rather ambiguous whether the TEs will have to follow the Greek program of the final stage of preparations for monetary union. Knowing that it will not meet the Maastricht convergence criteria at the time of examination for entering the monetary union upon its inception in January 1999, the Government of Greece announced in mid-March 1998 a two-year program for acceding to the monetary union. Put briefly, the deadline for entering the system was set for the beginning of 2001 and the Greek drachma was devalued 14 percent against the ecu. The inflation target for 2001 was set at 2 percent. Financial markets did not fully anticipate the last devaluation, since between the beginning of January and 15 March 1998 the drachma traded within a 285-290 range to the dollar. It fell 12.2 percent (from 288 to 323 to the dollar) within the two days following the devaluation. Thereafter it gradually appreciated to 315 by the end of April. This particular experience does not prove the occurrence of the last devaluation syndrome, and there were no major speculative attacks on the Greek currency prior to devaluation.

However, if the TEs follow the Greek program, they may encounter some market pressures on their currencies prior to the expected time of devaluation. Specifically, the Polish Government has disclosed intentions to join monetary union in 2006. If the fundamentals are not fully met in 2004, currency traders in financial markets are likely to sell zloty expecting the last devaluation to take place, regardless of its size. However, the likelihood of such a development remains to be seen.

Conclusions

The preceding analysis of exchange-rate policies in TEs in preparation for joining the EU's monetary union is consistent with the overall framework of monetary policy. Exchange rates are no longer direct instruments of government policy affecting trade balances and capital inflows. This role of the exchange rate evaporated with the dissolution of central planning and later with the exit strategy from stabilization anchored to the exchange rate. Exchange rates are now important market variables that provide crucial information on external balances for fiscal and monetary authorities. More flexible exchange rates are superior for accomplishing the economic stability and the institutional tasks of transformation. They help to augment monetary-policy autonomy and credibility.

Gradual preparations for joining the monetary union will require a dynamic "return-to-peg strategy" for the exchange rate. Application of a monetary policy based on the exchange rate should be accomplished as soon as feasible. Fixing the TE currencies in terms of a stable and

strong euro will only be feasible when inflation is reduced to a low, sustainable level and when domestic financial institutions and markets function efficiently within the new currency system. A premature rush to the euro-peg would generate expectations of real appreciation of domestic currencies if inflation were to remain too high. It is likely to cause asymmetric information and liquidity problems, and possible bank runs for the reasons elaborated upon here.

This analysis has emphasized that the exchange-rate policy of the TE candidates for accession to the EU could best be tied to a monetary policy that targets inflation in a flexible manner. The TEs can enter the ERM II as their inflation rates fall to a low, sustainable level. Functioning within the ERM II framework will bring a number of advantages to their stabilization efforts, including enhancing policy credibility, expanding access to euro-zone credit markets, and augmenting fiscal and monetary discipline.

Governments of the candidate countries will be well advised not to delay preparations of specific plans for gradually moving toward joining the EU's monetary union and designing an optimal "return-to-peg strategy." Such plans ought to be incorporated in overall, comprehensive strategies of full integration within the EU. They would help accession negotiators for both the EU and the candidates by ensuring consistency of specific tasks for the TEs in effectively preparing themselves for full EU integration.

Notes

(1.) The amount borrowed immediately is DM 1,000,000 x 1/1.0233 or DM 977,230.53. It is swapped into ZL 1974,005.67 (that is, 977,230.53 x 2.02) and then invested at a Polish bank for four months at 7 percent, yielding ZL 2, 112,186.07 (that is, 1974,005.97 x 1.07).

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