

OPTIMAL MONETARY STRATEGIES FOR CENTRAL AND EAST EUROPEAN EU CANDIDATES

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ABSTRACT

The author argues that the high real interest rate policy pursued in the Central and Eastern European Countries (CEEC) carries a risk of currency devaluation and recession when they join the European Monetary Union. Fear of demand-pull inflation has led the monetary authorities in the fast-growing CEEC to reduce the demand for credit by raising real interest rates, exceeding the interest parity relation with major EU markets. This policy has caused speculative capital inflows, distortion of capital allocation, real currency appreciation and trade deficits. Currency overvaluation will require a corrective devaluation vis-à-vis the Euro during the final stages of accession to the EMU. Such a "last minute" correction is likely to destabilize CEEC banks and businesses by upsetting the balance between short-term foreign currency liabilities and long-term domestic assets. The author proposes that the CEEC EMU candidates adopt flexible inflation targeting instead of focusing on interest rates as a main disinflationary tool. This would assure accumulation of the proper amount of foreign currency reserves, reduce the current account deficit and ensure a smooth transition to the EMU. The new policy should be focused on defining and adopting a band of acceptable inflation rate targets and a "step down" path to alignment with the Euro.

In the early 1990s the Czech Republic, Poland, Hungary and the Slovak Republic established the basic institutions needed for monetary policy implementation: full-function central banks, capital and money markets. The objectives of the monetary authorities in these countries were to reduce double-digit inflation, introduce currency convertibility and provide financial services to a growing private sector and consumer market. In 1993 all four countries (the Visegrad group) signed "Europe Agreements" which laid out the framework of association with the European Union (EU). Joining the EU early in the next century requires a credible commitment to meet the Maastricht criteria of the European Monetary Union (EMU). EMU membership is not required of new EU entrants; nevertheless, eligibility to enter the Euro zone is a useful benchmark in assessing the monetary policy of potential new Union members. The Maastricht criteria are:

- a) The candidates must have inflation rates no more than 1.5 percent above the average of the three countries with the lowest inflation rates in the Community;
- b) Long-term interest rates should be no more than 2 percent above the average of the three lowest inflation countries;
- c) The exchange rate of the country should remain within the "normal" band of the Exchange Rate Mechanism (ERM) for two years. At the time of the Maastricht Treaty, the "normal" band was +/- 2.25 percent;
- d) The public debt of the country must be less than 60 percent of GDP;
- e) The national budget deficit must be less than 3 percent of GDP.

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Formally, all Visegrad countries are obliged to follow a "pre-accession strategy", which is to help them attain EU and later EMU membership. During the first phase of the negotiations, which started on April 1, 1998 it became apparent that the Central European candidate countries had very different monetary and exchange rate policies. In such a situation proposing a uniform monetary strategy to arrive at a target Euro exchange rate became practically impossible (see table 1).

This paper is an attempt to analyze monetary policy in EMU candidate countries which were centrally planned only a decade ago. Since the phenomenon of economic transition has no precedent this author does not attempt to build formal models to test alternative monetary policies but wants to show the opportunities and perils of such policies in countries where true central banks have just begun to apply market-based monetary tools and academic economists hired by the government year-by-year acquire better monetary management experience. This paper is a critique of the CEEC preference for a high interest rate policy as the main anti-inflationary tool. The author wants to prove that while high interest rates had some justification in the early 1990s they became quite dysfunctional in the late 1990s when the CEEC became the candidates to EU and EMS II. The critique presented here is based both on contemporary research and empirical studies of rules-based vs. discretionary monetary policies as well as examples of recent successful and unsuccessful monetary policies in transforming economies. The author hopes to make some contribution to a better understanding of the difficult task of finding a suitable monetary policy for economies making the transition from centrally planned to market systems.

Table 1. Exchange Rate Regimes in Selected CEEC (1998)

Country	Currency	Exchange Rate Regime	Description
Czech Republic	Czech koruna	Managed Floating	The Czech National Bank manages the rate of koruna, which is pegged to the German mark. The band of fluctuation was widened from +/-0.5 percent to +/- 7.5 in 1996. Since May 1997 the koruna is under a managed floating regime.
Hungary	Forint	Crawling Band	The National Bank of Hungary adjusts the official exchange rate in accordance with a desired crawl against a basket consisting of German mark (70 percent) and the U.S. dollar (30 percent), within margins +/- 2.25 percent.
Poland	Zloty	Crawling Band	The Polish National Bank devalues the Zloty at a preannounced devaluation rate. The crawling band margin is +/- 10 percent around the central rate. The zloty is pegged to a basket of the US dollar (45 percent), the German mark (35 percent), the British pound (10 percent), the Swiss franc (5 percent) and the French franc (5 percent).
Slovakia	Slovak koruna	Managed Floating	The Slovak koruna is pegged to a basket consisting of the German mark (60 percent) and the US dollar (40 percent) within margins of +/- 7 percent.

THE MONETARY STRATEGY OF CEEC CENTRAL BANKS

The Czech Republic

Between 1991 and 1997, Czech policymakers chose to maintain an overvalued exchange rate supported by foreign exchange controls. After the division of the country in 1993, a newly introduced Slovak koruna was devalued and pegged to the German mark. With a fixed exchange rate the increase in Czech inflation caused the Czech koruna to appreciate in real terms. By the beginning of the 1997 maintaining an unrealistically high value of the Czech currency was no longer defensible. In May 1997, the Czech National Bank (CNB) abandoned the fixed exchange rate regime after which the Czech koruna depreciated by 12 percent against the German mark. In order to defend the koruna, the CNB decreased the money supply and raised the real interest rate. The lombard rate¹ was raised from 14 to 50 percent and the interbank short-term borrowing rate peaked at above 400 percent after which koruna regained some of its value. The intermediate operating target for the Czech CNB was the one-week Prague Interbank Offer Rate (PRIBOR).

By adopting a managed float for the koruna and maintaining a high real interest rate, the Czech National Bank succeeded in reducing inflation in 1997. However, it again lost control over prices in late 1998 and 1999. The Czech economy paid a steep price for setting an unrealistic exchange rate for the koruna. After strong 6.4 and 3.9 percent real GDP growth rates in 1995 and 1996 respectively, the growth rate fell to 1.0 percent in 1997 and was negative in 1998 (- 0.5 percent). Expected real GDP growth in 1999 is 2.0 percent².

Hungary

Until 1995 Hungary was troubled by a large external debt, fiscal deficits, high inflation, declining domestic investment, and a steady erosion of the current account. The situation began to improve in 1996 when the fiscal deficit and inflation began to fall. Despite wage increases between 1996 and 1998, inflation fell from almost 24 percent to 14 percent. The National Bank of Hungary (NBH) committed itself to maintaining the exchange rate within the plus-minus 2.5 percent band and countered inflationary expectations with frequent adjustments of the base (discount) rate. For example between January 1996 and November 15, 1999 the rate was changed 19 times. The NBH's operational target is to keep a positive interest differential vis-à-vis EU financial markets. The NBH claims that it is able to monitor short-term capital inflows more effectively as a result of this policy.

Poland

Between 1991 and 1997 the Polish central bank - Narodowy Bank Polski (NBP) - devalued the zloty at the rate of 1 percent per month in relation to a basket of five currencies (see table 1). At the beginning of 1998, the devaluation rate was reduced to 0.8 percent per month. The NBP's policy of maintaining a positive interest differential with the EU resulted in a rapid increase in banks' dollar reserves (see table 2) and the erosion of the country's current account (see tables 3, 4).

To keep the money supply and inflation under control, the NBP raised the real interest rate from 6.3 percent in 1997 to 10.5 percent in 1999 (see table 5). The NBP used short-term interest rates as an operational target in the first half of 1996. When the current account deficit started to deteriorate rapidly in 1997 the bank formally selected the monetary base as its target. In 1998, it switched to targeting interest rates again. The NBP's intermediate target is to maintain the exchange rate within the plus-minus 10 percent band. The NBP directives state that the spread between the one-month Warsaw Interbank Offer Rate (WIBOR) and the lombard rate is their operational target.

Table 2. Foreign Official Reserves (billions of US\$)

Year	Czech Rep.	Hungary	Poland	Slovakia
1995	13.9	11.9	14.7	3.4
1996	12.3	9.7	18.0	3.5
1997	9.7	8.4	20.7	3.0
1998	12.6	9.4	27.4	2.9
1999	12.9	11.4	25.5	3.4

Source: CESTAT Statistical Bulletin, GUS, Warsaw 1999, BSE 1999 (<http://www.czso.cz/eng/figures/select/select.htm>)

Table 3. Current Account (billions of US\$)

Year	Czech Republic	Hungary	Poland	Slovakia
1995	- 1.4	- 2.5	5.5	0.4
1996	- 4.3	- 1.7	- 1.4	- 2.1
1997	- 3.2	- 1.0	- 4.3	-1.9
1998	- 1.0	- 2.3	- 6.9	- 2.1
1999	-0.8	-2.1	- 11.7	-1.0

Source: CESTAT Statistical Bulletin, GUS, and Warsaw 1999

Table 4. Trade Balance (billions of US\$)

Year	Czech Republic	Hungary	Poland	Slovakia
1995	-3.7	-2.5	-6.1	-0.2
1996	-5.8	-3.1	-12.7	-2.3
1997	-4.2	-2.7	-16.5	-2.0
1998	-2.5	-2.7	-18.9	-2.3
1999	-2.0	-2.9	-18.0	-2.0

Source: CESTAT Statistical Bulletin, GUS, Warsaw 1999, BSE 1999 (<http://www.czso.cz/eng/figures/select/select.htm>)

The targeting practices of the Central European monetary authorities indicate that **all of them use interest rate based discretionary policy as a main disinflationary tool**. Their central banks want to exercise a high degree of influence over financial markets and institutions through high real interest rates. Between 1998 -1999 the real interest rate rose in the Czech Republic by 3.8 percentage points, in Hungary by 6.3 percentage points, in Poland by 5.4 percentage points and in Slovakia by 2.6 percentage points. The CEEC's monetary authorities argue that this approach is an effective way to control inflation given the current conditions of rising foreign direct investment (FDI), especially in Poland, high demand for credit, and large capital inflows and fiscal deficits (Orlowski, 1998). (See tables 5 and 6).

Table 5. NOMINAL INTEREST RATE, INFLATION, REAL INTEREST RATE

Year	Czech Republic			Hungary			Poland			Slovakia		
	IR*	INF	RIR	IR	INF	RIR	IR	INF	RIR	IR	INF	RIR
1995	12.8	9.1	+3.7	32.2	28.2	+4.9	25.0	27.8	+2.8	13.3	9.9	+3.4
1996	12.5	8.8	+3.7	24.0	23.6	+0.4	22.0	19.9	+2.1	13.4	5.8	+7.6
1997	13.2	8.5	+4.7	20.8	18.3	+2.5	24.5	14.9	+9.4	18.4	6.1	+12.3
1998	12.8	10.7	+2.8	17.3	14.3	+3.0	18.1	11.8	+6.3	19.4	6.7	+5.7
1999	8.7	2.1	+6.6	19.3	10.0	+9.3	19.0	7.3	+11.7	18.8	10.5	+8.3

Source: CESTAT Statistical Bulletin, GUS, and Warsaw 1998

*IR = interest rate = refinancing rate or average bank lending rate

INF = annual inflation rate

RIR = IR – INF = real interest rate:

Table 6. Foreign Direct Investment to CEEC (billion US \$)

Year	Czech Rep	Hungary	Poland	Slovakia
1995	2.7	4.9	1.1	0.3
1996	1.1	2.8	2.8	0.3
1997	1.3	1.4	3.0	0.2
1998	1.4	1.9	7.5	0.3
1990-99*	13	15	41	3

Source: CESTAT Statistical Bulletin, GUS, Warsaw 1999

The National Bank of Poland, 1999, <http://www.nbp.pl/en/statistics/index.html>

* Estimate, various resources.

Heller (1997) and Laurens and de la Piedra (1998) have discussed the proper policy response to capital inflows and inflation. The essence of their argument is that the central bank can only successfully pursue a disinflationary monetary policy when the policy is well understood and accepted by the government and the public. Therefore if discretion dominates rules in monetary policy and if the government does not support a deflationary monetary policy with appropriate fiscal policy, its effectiveness is going to be very low.

The evidence from Latin America in the early 1990s, the Czech Republic in 1996, and Poland in 1997-1998 clearly shows that restrictive monetary policy alone cannot cope successfully with large capital inflows, inflation, and maintenance of a stable currency value. Also, while the economic conditions are not quite similar, this author believes that there exists a real danger of triggering in the CEECs a crisis similar to those in Malaysia and Indonesia. In those countries, high real interest rates and overvalued domestic currencies led to current account deficits of crisis proportions and subsequent currency devaluations. In addition, high real interest rates raised the cost of public debt servicing causing a public finance crisis³.

If real interest rates in the CEEC continue to rise in as they did in 1999 (see table 5), the anti-inflation policy may fail and fiscal deficits might start growing again. The CEEC countries might then have a fundamental problem in qualifying for EMU membership, which is expected sometimes between 2004-2005.

The unique characteristics of the CEEC economies are the costly legacy of the "socialist welfare state" (a large state sector payroll combined with farm, social security and health care subsidies) and a weak tax base (Heller, 1997). While in the first half of the 1990s all four of the countries experienced inflationary pressures of mostly fiscal origins, in the second half of the decade they succeeded in controlling spending, increasing privatization revenues and, finally, lowering their budget deficits and inflation (see table 7). However, this progress could be lost due to the increased cost of debt financing, and fall of tax revenues due to a very restrictive monetary policy. Given this situation a proper response to inflation should be a policy of lowering real interest rates, tightening government spending, accelerating privatization of state-funded services and a gradual easing of monetary policy. Tightening government spending would decrease the pressure on the current account and create some fiscal space for tax cuts and job-creation while eased monetary policy would result in lower interest rates. Lower interest rates, in turn, could ease the pressure on the domestic currency and prices.

THE CONSEQUENCES OF TARGETING SHORT-TERM INTEREST RATES AS A MAIN DISINFLATIONARY TOOL

One could ask: what is wrong with controlling inflation with high real interest rates, which create an incentive for foreign investors to bring in capital. This policy has a number of adverse effects which in the long run may impede the transition process.

A) Inadequate control of money supply

While interest rate targeting does allow the central banks to hit short-term targets relatively precisely, it makes it practically impossible to control the money supply in the long-run.

The problem is that currently the CEEC's real interest rates exceed the interest parity condition with EU money markets and stimulate an additional inflow of capital which raises banks' reserves⁴. A common practice among the CEEC commercial banks has been to swap dollar and EU currency deposits for bonds with the central bank. These interbank transactions increased banks' reserves and thus their ability to create money. In such a situation, neither the velocity of money nor the supply of loanable funds can be adequately controlled by the CEEC central banks.

It has been observed that in both transition and mature market economies central banks which have attempted to sterilize the foreign currency inflow by buying it back from the commercial banks have actually ended up losing control over the money supply (Dornbusch, et.al, 1998).

B) The disruption of rational capital allocation and interest rate dualism

Generally, in a high interest rates environment, those who need loans cannot afford to borrow. Therefore, the use of credit decreases and the banks lose customers. Recently many foreign-owned

banks operating in the CEEC started offering dollar or Euro denominated loans at lower interest rates, comparable to those in EU loan markets. Attractive as they are, such loans shift all risk to the borrowers whose accounts receivables are in local currency.

In mature market economies, an inflow of foreign capital generally reduces interest rates. However, this is not the case in transition CEECs where monetary authorities use high interest rates to control inflation. If this monetary policy is applied on a more or less permanent basis, job-creating small businesses are denied access to low cost capital and the current account deficit goes out of control as happened in Poland in 1998 and 1999.

Some parallels can be made between the conduct of the Russian and Polish economic transitions. The August 1998 default on Russian short-term government bonds (GKOs) and the devaluation of the ruble may serve as a good illustration of the consequences of an ill-conceived monetary policy. In anticipation of the ruble devaluation, the country's private banks decided to export capital to avoid overexposure. At the same time, foreign opportunity-seeking investors continued to buy short-term Russian government bonds which offered annual yields of 80 to 150 percent. After the commercial money rate skyrocketed to 70 percent, many Russian businesses, both state and private, were unable to borrow and thus stopped paying taxes and wages. Finally, the budget deficit deepened and the federal government was no longer able to service its short-term debt. On August 17, 1998 the government suspended payments on GKOs and devalued the ruble.

Today, in some CEECs one can already observe the adverse effects of crowding-out. In Poland and the Czech Republic, the bulk of new capital is directed to high-risk office and luxury apartment construction, rather than small businesses, utilities, power generation, or the highway system⁵. The high interest rates put pressure on the emerging business sector, erode support for liberal, pro-market political parties and provide arguments to the advocates of subsidies and price control⁶. The monetary authorities in transition economies should be aware of all the political consequences which are associated with a highly restrictive monetary policy.

At this stage, the key to a successful economic transition is to generate public support for more privatization, tax and subsidy cuts and market-based funding solutions for health care and retirement systems. To stimulate private saving and investment monetary authorities must put a top priority on creating a low inflation - low interest rate environment. Given this macroeconomic goal, the governments and the central banks should control inflation using all available fiscal and monetary tools among which high real interest rates could be one tool but definitely not the main one.

C) Excessive reserve accumulation due to exporters' hedging practices

A higher real interest rate in the CEECs than in the EU may contribute to the accumulation of excessive foreign currency reserves and overvaluation of the domestic currency.

To better understand this type of hedging strategy let's use an example of a Polish exporter who signed a contract to sell 1 million German marks (DM) worth of goods to a German buyer. The goods are scheduled for delivery in November 1999 and payment is to be made in March 2000. Since the November 1999 spot rate (R) was 2.02 Polish zloty (PLN) per German mark (DM). The Polish exporter could immediately borrow DM 1,000,000 from a German bank at a 7 percent (annual rate) and repay the loan with receivables expected in March 2000. The loan could be converted in November 1999 to Polish zloty and invested for four-months in a Polish bank deposit paying an annual rate of 21 percent. The money market hedge yields PLN 2,112,186 in March 2000. Unhedged receivables would yield only PLN 1,880,000 at the available March 2000 spot rate of R (PLN/DM) = 1.88⁷.

Exporters' hedging practices were responsible for an inflow of \$2.7 billion (1.9 percent of the GDP) in January and February of 1998 alone. Since 1997, when the Polish National Bank raised the real

interest rate, there have been strong capital and FDI inflows which have continued through 1999 (see table 6). As a result the current account deficit was \$16.5 billion in 1997 and almost \$19 billion in 1998.⁸ Despite the current account deficit the Polish zloty continued to appreciate and in March of 2000 hit its 14 - month high vis a vis the dollar and the Euro proving beyond doubt that its value is primarily defined by interest rates and the demand for local assets.

D) Currency appreciation and corrective devaluations.

According to the advice given by the European Commission, EMU candidates should avoid excessive foreign exchange accumulation. Large reserves would be unnecessary since the Euro reserves would have to be surrendered to the European Central Bank (ECB) upon accession to the EMU. Moreover, in accordance with the framework specified by the Maastricht Treaty if a candidate's currency is overvalued in real terms, it has to undergo a **corrective devaluation** no later two years prior to its entry to the EMU.

Although it is not certain that large devaluations would be necessary for all CEEC currencies, the possibility is quite high. There are two basic reasons why currencies of the CEEC countries tend to be overvalued: a political one and an economic one. The political argument is that NATO membership and progress in the EU accession negotiations (and eventually accession itself) will trigger much larger capital inflows and subsequently increase the demand for CEEC currencies early in the next decade. The economic argument is that productivity growth in the CEEC countries in their initial years of EU membership will be significantly higher than in the "older" EU countries while their ability to devalue their currencies would be limited by the ERM II⁹.

Even if the economic situation did not warrant devaluation, the rational expectations of financial institutions and the foreign trade sector could force the monetary authorities to actually devalue the domestic currency¹⁰. This phenomenon has been described as "the last minute devaluation syndrome". For instance, exporters are likely to lobby for currency devaluation to help their cause. That scenario is likely to occur since the exporters' lobby is strong everywhere in Central Europe.

Acting on the assumption of unavailability of last minute devaluation, financial institutions are likely to start lowering their holdings of domestic currency assets and buying foreign currencies, thus creating a pressure for devaluation of the domestic currency. Today, many CEEC banks are encouraged to borrow short-term in foreign currency and offer a longer-term maturity loans in the domestic currency¹¹ (Mishkin, 1997). After a corrective "last minute devaluation", many banks would be seriously exposed since the domestic currency cash flows might not cover the costs of their short-term foreign currency liabilities. For example, after the 1998 ruble devaluation massive bank defaults in Russia were attributed to a gap between banks' short-term dollar liabilities and their medium-to-long term ruble assets. In case of the CEEC, it may cause a serious deterioration of the balance sheets of the CEEC firms.

In sum, the "last minute devaluation" may be caused by rational expectations and thus become practically non-discretionary for the monetary authorities. Therefore, the Central European monetary authorities would be well advised to change the monetary policy objective from interest rate and exchange control to floating exchange rates and flexible inflation targeting while at the same time applying fiscal restraint (see table 7).

Table 7. BUDGET BALANCE (percentage of GDP)

Year	1991	1992	1993	1994	1995	1996	1997	1998	1999
Czech Republic	-1.9	-3.1	0.5	0.9	0.5	-0.1	-0.9	-1.6	-1.6
Hungary	-2.9	-6.8	-5.5	-8.1	-5.5	-1.9	-4	-3.6	-2.9
Poland	-6.7	-6.7	-3.1	-2.7	-2.4	-2.4	-1.3	-2.4	-2
Slovakia	na	na	-7	-5.2	-1.6	-4.4	-2.6	-2.7	-1.9

Source: Business Central Europe: <http://www.bcemag.com/>

This policy mix would ensure a better balance between domestic and foreign interest rates reducing the incentive for uncontrollable capital inflows and current account deficits.

ALTERNATIVE MONETARY POLICY: DIRECT INFLATION TARGETING

In order to enhance policy credibility and to pursue disinflation more effectively, the central banks of the CEEC transition economies should abandon a high interest rate policy and adopt a system of **direct inflation targeting**. That would better prepare them for monetary convergence and stabilize their domestic currencies in terms of the Euro, if they opt to join the new Exchange Rate Mechanism II (ERM II)¹². The literature supporting direct inflation targeting systems has been both extensive and forceful in its arguments (Spaventa, 1996; Wyplosz, 1997; Orłowski, Krzak and Schubert, 1997; Orłowski, 1997, Fischer, 1997, Halpern, Laszlo and Wyplosz 1996; Klein, 1997, Mishkin and Posen, 1997; Cechetti, 1996; Svensson, 1997; DeGrauwe, 1996; Bernanke and Mishkin, 1997). What are the main advantages for the fast growing transition economies in switching to direct inflation targeting?

A) It is a rules-based, non-discretionary policy¹³

Direct inflation targeting is a rules-based policy, meaning that the central bank may reduce inflation through diminished volatility of money balances and the reduction of inflationary expectations.

Rules-based policy making involves implementation in each period (or in each case) of a formula for a monetary policy or fiscal policy, whereas discretionary policy treats each situation as a new case which requires the application of a newly conceived plan.

The empirical and theoretical evidence has been that these two policies lead to different money growth rates. The rules – based policy usually leads to lower money growth than the discretionary policy. If the policy focus is on the avoidance of inflation and unemployment, a rules-based policy has a clear advantage over discretionary policy (McCallum, 1996).

Direct inflation targeting can be pursued in two different ways. On the one hand, central banks can adopt a narrow band and strict inflation targeting. However, strict inflation targeting is seldom used in practice. It requires frequent intervention in the foreign exchange market, crawling devaluation, or adjusting the spread between the required reserves ratios on domestic and foreign currency deposits.

The empirical literature proves that strict inflation targeting may lead to considerable fluctuations of exchange rates and interest rates generating instability in the money market (Bowen, 1997, Svensson, 1997).

Poland, Hungary and the Czech Republic may consider applying a reasonably wide band of + / - 4.5 percent with a midpoint level of 5 percent over a three year period, until inflation is lowered to a “safe”, more sustainable level. Such a band would be sufficiently wide to allow for recognition and decision lags, yet, it would be narrow enough to permit more efficient control of interest rates and exchange rate volatility.

Flexible inflation targeting is likely to enhance the policy credibility of the banks, extend firms' investment horizons, and increase the maturity of forward contracts. Under such conditions, real interest rates would become more predictable and would help ensure consistency between assets and liabilities in the banking sector. Flexible inflation targeting permits the exchange rate to fluctuate over a wider range, allows more time for policy decisions and enables central banks to better focus on the long-term goal of disinflation. The literature on inflation targeting and the empirical experiences of central banks applying this system are very helpful for designing a path of monetary system adjustments that would bring the CEEC closer to the EU and, eventually, to EMU accession (Mishkin and Posen, 1997).

B) *The Inflation targeting will avoid last minute corrective devaluations*

As argued, it is very likely that the CEEC central banks will have to conduct last minute corrective devaluations of their currencies. The causes of such real overvaluation of the CEEC currencies could be: high interest rates policies, high inflation rates, productivity growth rates higher than those in the EU countries, as well as rising FDI.

In the final stage of preparations for accession to the EMU, financial institutions and exporters following their rational expectations are likely to exchange domestic currency assets for foreign currencies causing both real and nominal currency depreciation. This scenario can be avoided if the monetary authorities shift their focus from strict adherence to predetermined exchange and interest rates to a disinflationary policy.

Expectations of devaluation may be reduced if the candidates exercise a considerable degree of exchange rate flexibility prior to the entry to the EMU. Even if the macroeconomic fundamentals are met and the exchange rate is in equilibrium with respect to the purchasing power parity criterion, financial markets may still expect a candidate for accession to the EMU to devalue. Alternatively, flexible inflation targeting would allow for a linear depreciation of the domestic currency and for a smooth convergence to the equilibrium exchange rate. However, it is advisable that the fluctuation band be wide enough to avoid one-side betting¹⁴. If flexibility is restrained, for instance, by a narrow band of permitted fluctuations or frequent interventions, foreign exchange markets will likely develop expectations of a one-time devaluation.

C) *The inflation targeting allows a smooth approach to the Euro*

According to ERMII rules, new members are not required to fix their exchange rates to the Euro as soon as they join the Union or even participate in ERMII at all. However, joining the ERMII, say in two years after the admission to the full EU membership, would be very advisable because of its flexibility. Its relatively wide (plus/minus 15 percent) standard fluctuation margins against the Euro provide a perfect opportunity to apply direct inflation targeting.

At present the CEEC monetary authorities should set two goals: first, design and adopt a tolerance band for inflation targeting which would be "narrowed" over time and second, apply a "step down" path for their currencies to meet the target Euro exchange rate. Those two objectives can be combined into set of monetary policy thresholds to be achieved by certain clearly stated dates and announced to all market participants.

The main disadvantage of direct inflation targeting is higher exchange rate volatility (Rosati, 1996, Sachs, 1996). However, such costs would be offset by the lower fiscal cost of sterilization and a decreased risk of speculative capital flows relying on the expectation that the central bank will intervene every time the exchange rate approaches either side of the band. The currency crises of Thailand and Indonesia provide a convincing argument against pegging the exchange rate in high growth emerging markets. On the other hand a semi-fixed exchange rate and high inflation could lead to a gap between the real and the nominal exchange rates and massive speculation. Floating exchange rates would enable

the CEEC central banks to conduct an effective monetary policy and allow the countries to benefit from the disinflationary effects of growing productivity which would be lost under a regime of fixed interest rate targeting and fixed exchange rates.

CONCLUSIONS

This analysis has emphasized that the governments of the CEEC candidate countries should not delay the preparation of specific plans outlining their intentions and policies for approaching integration with the EMU. This would help accession negotiators for both the EU and the CEEC candidates ensure the consistency of their preparations.

The legacy of the CEEC monetary authorities is a tendency to overemphasize the need to maintain high real interest rates to control inflation, exchange rate stability and currency reserves. They must acknowledge that as the economies are getting more open the use of high real interest rates to control inflation can be highly destabilizing and that exchange rates are no longer direct instruments of central planning (or arbitrary government accounting tools) but important market variables that provide crucial information on external balances for fiscal and monetary authorities. Therefore, the inflationary and exchange rate policy in preparation for accession to the EU and the EMU must be defined within a framework of nondiscretionary monetary policy and fiscal restraint.

The CEEC candidates to the EU should follow a flexible inflation targeting monetary policy system rather than strict interest rate and exchange rate targeting. The exchange rate cannot be mandated or fixed arbitrarily by the central bank but must reflect general consistency with the macroeconomic criteria defined by the Maastricht Treaty. The candidate countries will be able to enter the ERM II when their inflation rates fall to a sustainable level and their interest rates are within an acceptable range of the EU interest rates. The time has come for them to abandon a high interest rate policy and expose their economies to a more flexible disinflationary policy which would put the exchange rate in a desirable range of the Euro at the time of the EMU accession. Joining the ERM II framework would bring a number of advantages to their stabilization efforts, including enhanced policy credibility, expanded access to Euro-zone credit markets, and increased fiscal and monetary discipline.

END NOTES

1. The CEEC central banks use the discount rate, the lombard rate and the refinance rate to control the money supply and the commercial rate. The lombard rate is applied to short-term loans (up to 6 months) issued against collateral of government bonds. The refinance rate is used for government projects and refinancing of the indebted banks.
2. Source: The World in Figures, Economist Intelligence Unit 1999.
3. Assuming that the increase in cost of servicing domestic debt is higher than the saving on reduced external debt servicing costs due to appreciation of the currency.
4. This situation occurs when portfolio return in a home market (CEEC) is higher than the return in the foreign market (EU). Full sterilization should result in nominal devaluation of the domestic currency ($R < F$). The concept is based on the interest rate parity condition (simplified): $i_d - i_f = (F - R)/R$, where i_d = home interest rate, i_f = foreign interest rate, F = forward rate, R = spot rate. The underlying logic of this condition is that in an open economy the government cannot effectively control both interest rates and exchange rates without falling into either real currency appreciation (interest rates are too high for the desired exchange rate) or real currency depreciation (interest rates are too low for the

- desired exchange rate). Interest rate parity condition suggests that monetary policy should target either interest rates or the exchange rate but not both variables at the same time.
5. The 1999 McKinsey report on Poland observed that land prices in Warsaw are 2 times higher than in Stockholm and 2.5 times higher than in Berlin. See: The McKinsey Quarterly, 2000 Number 2: Europe, pp. 88–97.
 6. In Poland 26 percent of the population still works on farms. Understandably, the cost of farm loans cannot be ignored by any government in that country.
 7. The amount borrowed immediately is $DM\ 1,000,000 \times 1/1.0233 = DM\ 977,230.53$. It is swapped to the $PLN\ 977,230.53 \times 2.02 = PLN\ 1,974,005.67$ and invested at a Polish bank for four months which yields: $PLN\ 1,974,005.67 \times 1.07 = PLN\ 2,112,186.07$. An alternative is to sell $DM\ 1,000,000$ in the forward market which could only generate $PLN\ 2,080,000$ since the four months forward DM selling rate available in November was $R(PLN/DM) = 2.08$.
 8. The Polish government attributes much of the 1999 current account deficit to the decline of exports to Russia which followed the August 1998 economic crises in that country. Data: Statistical Bulletin, GUS, Warsaw and The World in 1999, The Economist Publications.
 9. According to the law of one price, a productivity increase leads to currency appreciation over the long run (Gerber, 1999). As noted, the EMU admission guidelines rule out currency devaluation during two years prior to joining the EMU.
 10. The Greek admission to EMU represents a good example for CEECs. Knowing that Greece will not meet the Maastricht convergence criteria upon its inception in January of 1999, the Government of Greece announced in mid-March 1998 a two-year program of accession to EMS. A date for the accession was set, the Greek Drachma was devalued by 14 percent against the ECU, and wage discipline reaffirmed to lower the inflation rate to 2 percent by 2001.
 11. Some authors use the term: “return-to-peg”.
 12. After January 1999, ERM became ERMII.
 13. The distinction between the rules-based and discretionary policy was first clearly developed in a paper by Kydland and Prescott (1977) and later refined by Barro and Gordon (1983).
 14. Typically, this situation occurs when the speculators enter the market expecting the central bank to defend the currency value every time the exchange rate approaches either side of the fluctuation band. In the case of the CEEC, the market participants would act on the premise that the currency would be devalued.

REFERENCES

- Barro, R. J., and D. B. Gordon, *A Positive Theory of Monetary Policy in a Natural-Rate Model*, Journal of Political Economy 91 (August 1983), pp. 589-610.
- Bernanke, Ben S. and Frederic S. Mishkin (1997). *Inflation Targeting: A New Framework or Monetary Policy?*, NBER Working Paper No 5893. Cambridge, MA.
- Bowen, Alex (1997). *Inflation Targeting*, in: *Monetary Policy in Transition in East and West: Strategies, Instruments and Transmission Mechanisms*. Oesterreichische National Bank. Vienna, Austria, pp. 47-66.
- Cecchetti, Stephen G. (1996). *Practical Issues in Monetary Policy Targeting*, Federal Reserve Bank of Cleveland: Economic Review, Vol. 32, No. 1, pp. 2-15.
- DeGrauwe, Paul (1996). *Reforming the Transition to EMU* in: Kenen, Peter B. (ed.)

- Making EMU Happen, Problems and Proposals: A Symposium*, Princeton University Economics Department: International Finance Section. Essays in International Finance, No. 199, pp. 16-29.
- Dornbusch, Rudiger, Stanley Fischer and Richard Starz (1998). *Macroeconomics* ed. Irwin/McGraw-Hill. Boston, Massachusetts.
- Fischer, Stanley (1997). *Commentary*, in: *Maintaining Financial Stability in a Global Economy*. The Federal Reserve Bank of Kansas, pp. 37-45.
- Gerber, James (1999) *International Economics*, Addison-Wesley, Reading, Mass., p.189.
- Halpern, Laszlo and Charles Wyplosz (1996). *Equilibrium Exchange Rates in Transition Economies*. RAF Working Paper No. 125. Washington, D.C.
- Klein, Martin (1997). *Transition Economies and the European Monetary Union: Convergence Criteria in the Next Millenium* in: *Meeting the Convergence Criteria of EMU: Problems of Countries in Transition*, Polish Economic Society, conference report. Warsaw, September 15-16, pp. 65-88.
- Heller P. (1997) "Fiscal Policy Management in an Open Capital Regime ", IMF Working Paper 97/20.
- Kydland, F.E., and E.C. Prescott, "Rules Rather than Discretion: The Inconsistency of Optimal Plans," *Journal of Political Economy* 85 (June 1977), pp. 473-491.
- Laurens B., E. G. de la Piedra (1998) "Coordination of Monetary and Fiscal Policies", IMF Working Paper 98/25
- McCallum, Bennett T, (1996) *International Monetary Economics*, Oxford University Press, Oxford, pp. 221 – 225.
- Mishkin, Frederic S. and Posen, Adam S. (1997). *Inflation Targeting: Lessons from Four Countries*, NBER Working Paper number 6126. Cambridge, Massachusetts.
- Orlowski L.T., Krzak, M., Schubert, A., (1997). *The Present State of Monetary Governance in Central and Eastern Europe*, Oesterreichische Nationalbank: Focus on Transition No. 1, pp. 28-56.
- Orlowski, Lucjan T. (1997) *Exchange Rate Policies in Transforming Economies of Central Europe* in: Orlowski, Lucjan T. and Dominick Salvatore (Eds.) *Trade and Payments in Central and Eastern Europe's Transforming Economies*, Greenwood Press, Inc. Westport, Connecticut, pp. 123-144.
- Orlowski, Lucjan T (1998) *Exchange Rate Policies in Central Europe in Response to the EMU*, Studies and Analyses, Case, No.130, Warsaw, May 1998.
- Rosati, Dariusz (1996). *Exchange Rate Policies During Transition from Plan to Market*, The Economics of Transition, Vol. 4, No. 1, pp. 159-184.
- Sachs, Jeffrey D. (1996). *Economic Transition and the Exchange Rate Regime*, The American Economic Review: AEA Papers and Proceedings. Vol. 86, No. 2, pp. 147-152.
- Spaventa, Luigi (1996). *Coexisting with the Euro: Prospects and Risks After Verona*, in: Kenen, Peter B. (ed.) *Making EMU Happen, Problems and Proposals: A Symposium*, Princeton University Economics Department: International Finance Section. Essays in International Finance, No. 199, pp. 50-63.
- Svensson, Lars E.O. (1996). *Price Level Targeting vs. Inflation Targeting: A Free Lunch?*, NBER Working Paper No. 5719. Cambridge, Massachusetts.
- Svensson Lars E.O. (1997). *Inflation Targeting in an Open Economy: Strict or Flexible Inflation Targeting?*, Reserve Bank of New Zealand: Discussion Paper Series No. G97/8.
- Wyplosz, Charles (1997). *Monetary Policy Options for the "Outs"* in: *Monetary Policy in Transition in East and West: Strategies, Instruments and Transmission Mechanisms*, Oesterreichische Nationalbank. Vienna, Austria, pp. 104-113.