

## **A Mixed Blessing: Monetary Enlargement within the Maastricht Policy Framework**

By Waltraud Schelkle\*

**Summary:** Governments of most accession countries in Central and Eastern Europe initially expressed keen interest to adopt the Euro as soon as possible. The fervour seems to have cooled somewhat in the meantime. This paper will argue that there are good reasons for mixed feelings. While monetary enlargement would have considerable advantages for accession countries, present conditions create unwarranted risks for the prospective member states. These risks could be contained by changing the Maastricht conditions.

**Zusammenfassung:** Die meisten mittel- und osteuropäischen Beitrittsländer bekundeten ursprünglich, sie wollten sobald wie möglich nach dem EU-Beitritt auch der monetären Union beitreten. Der Eifer hat inzwischen nachgelassen. In diesem Beitrag wird argumentiert, dass es gute Gründe für diese gemischten Gefühle gibt. Einerseits verspricht die monetäre Osterweiterung erhebliche Vorteile für die Volkswirtschaften in den Beitrittsländern. Andererseits beinhalten die derzeit geltenden Beitrittsbedingungen große Risiken für diese Volkswirtschaften. Diese Risiken könnten durch eine Reform der Maastrichter Beitrittskriterien deutlich verringert werden.

### **1 Introduction**

The governments of most accession countries in Central and Eastern Europe (CEE) have expressed keen interest to adopt the Euro as soon as possible (European Parliament 1999: 13–14). The fervour seems to have cooled a bit by now (Economist 2003). This paper will argue that there are good reasons for mixed feelings. While monetary enlargement would have considerable advantages for accession countries, present conditions create unwarranted risks for the prospective member states. These risks could be contained by changing the Maastricht conditions.

This argument requires to distinguish between preconditions for and results of entry into EMU. Also, some of these results, such as lower inflation due to stability-oriented monetary policy, may already be anticipated while others, like risk premia, will significantly change only with actual entry because it is not predominantly the policy regime that accounts for their behaviour. Based on this distinction of preconditions and results, as well as results that can be more or less fully anticipated, I take the corresponding empirical observations to argue that it is unwarranted to stipulate a condition to be fulfilled in advance if it will be an outcome of integration.

\* London School of Economics, European Institute, London, email: w.schelkle@lse.ac.uk

The paper proceeds as follows: Section 2 answers the question why the immediate macro-economic effects of EMU accession may further economic development and transition. This begs the question, answered in section 3, whether the preconditions for accession, i.e. the notorious Maastricht criteria, facilitate that process. I argue that enlargement within the Maastricht policy framework is likely to destabilise EMU and outline reforms of the Maastricht policy framework that would make it more conducive to enlargement. I conclude in section 4.

## 2 How Does EMU Membership Impact on Economic Development?

The tangible macroeconomic effects of entering EMU are the ones through which EMU has an impact, if any, on longterm development and cohesion. They are lower inflation and interest rates. In this, both the future and the present EMU members have an enlightened self-interest since economic stability and convergence ultimately further political security in Europe.

### 2.1 Lower Inflation Rates

Why is it desirable for a transition economy to achieve low inflation faster by joining EMU? First, low inflation favours a more equitable income distribution. It has a direct impact on the living standards of households whose income is contractually fixed in nominal terms. Such incomes are wages, salaries and pensions which must not be fully indexed to prevent inflationary cycles. By contrast, interest or real income from holding assets with variable returns that compensate for inflation are disproportionately owned by better off households. Second and consequently, low inflation makes holding monetary (in contrast to real) assets more attractive to households and thus facilitates investment from the supply side.

A broad economic consensus suggests that EMU membership will lead to lower inflation in the candidate countries. The basic theoretical argument for why the inflation rate of any member country will come down to the EMU level is that inflation is *ultimately* a monetary phenomenon.<sup>1</sup> Inflation describes the *process* of rising prices and rising wages. This process has to be accommodated by an increase in money supply as a by-product of the additional credit to finance rising production costs. This gives the central bank a grip on inflationary processes. The central bank can refuse to accommodate rising credit demand which is just fuelling a price-wage spiral and not a reasonably balanced expansion of real demand and supply (Riese 1986: 94–114).

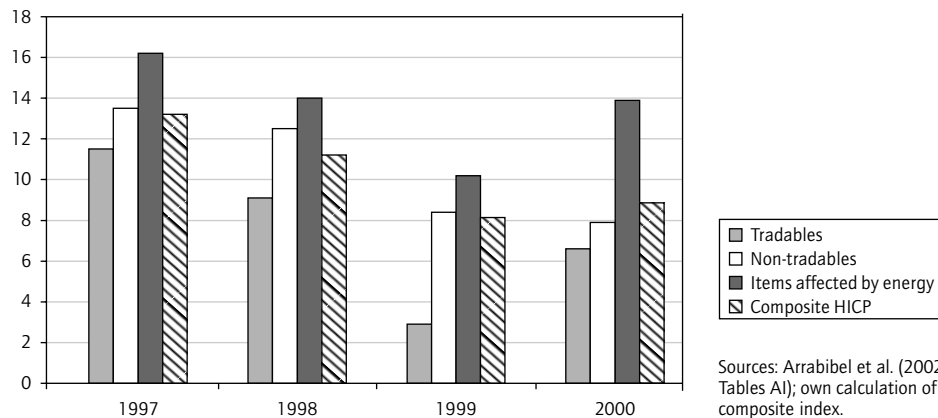
A common price dynamic in a monetary union does not preclude regionally different price levels, largely due to the cost of housing. It is even compatible with a differential price dynamic that stems from catching-up.<sup>2</sup> But as soon as the catching-up has taken place, a differential price dynamic is unlikely to be sustained since a region in which prices and

<sup>1</sup> Cf. Buiter and Graefe (2002: 27) and De Grauwe and Polan (2001). This consensus implies that there is no such thing as *regional* inflation or deflation which motivated Wim Duisenberg's irritation about the IMF's warning that Germany may slip into deflation.

<sup>2</sup> Since January 1999 when the Euro rates were fixed, rather different price dynamics within EMU prevailed, most spectacularly in Ireland (CESifo 2002: 53).

Graph

### Composition of Inflation Rates in the CEEC-5



wages rise continually faster than on average prices its firms out of the market. Thus, market forces work in favour of a convergence of inflation rates. This happens even before actual entry, namely, if economists' consensus is right, when market participants believe that the central bank strives for inflation rates compatible with accession.

However, many commentators on EMU accession see this downward convergence of inflation rates as a drawback.<sup>3</sup> Transition economies, it is argued, that gradually open up to world markets and liberalise their distorted price systems will for some time require higher inflation rates than EMU countries to let the Balassa-Samuelson (BS) effect run its course (Welfens 1999).

The BS effect invokes a kind of structural or non-monetary "catching-up inflation". It captures the phenomenon of a continuous rise in the measured price level which is caused by convergence of domestic prices and productivity to world market levels. Poorer countries start out with lower average price levels, in particular for non-traded goods such as domestic services which should therefore rise faster. Price convergence with EMU is thus compatible with higher price increases that are not driven by monetary expansion.<sup>4</sup> The difference between non-tradable (NT) and tradable (T) "inflation" is estimated to be about 3% for the CEEC-5 in an ECB study, the results of which are reproduced in the graph (taking also price liberalisation in the energy sector into account).

Given the inflation target of the European Central Bank (ECB), cohesion countries may thus be forced to suppress the BS effect to materialise. This gave rise to concerns that the

<sup>3</sup> I am indebted to Jochen Mankart for very helpful discussions on this section and numerous hints to the literature.

<sup>4</sup> Immediate competitive pressures push the *traded* (T) goods sector to have higher productivity growth than the *non-traded* (NT) goods sector. Prices must then rise faster for NT-goods so as to make up for this differential, that is to maintain an equilibrium or the law of one factor price in NT- and T-activities. Since money prices for T-goods are given by world markets, one way of this happening is that money prices for NT-goods rise faster. Outside of EMU, a cohesion country could achieve the same effect by allowing for nominal appreciation of the exchange rate at constant domestic prices. This real appreciation would have the same effect as "structural" inflation: Domestically, NT-goods became more expensive relative to (importable) T-goods.

contrived acclimatisation to EMU hinders economic convergence and thus social and economic cohesion (Welfens 1999: 23). One way out could be that the ECB takes this effect into account when assessing its inflation target (Sinn and Reutter 2001).

There is debate among economists, however, on how valid the BS effect is theoretically and empirically.

- The relative price movements driving “inflation” in the Balassa (1964) and Samuelson (1964) models are required to maintain the full-employment equilibrium in both sectors. But the candidate countries are transition economies for which EMU accession is one way to accelerate the restructuring and development process, that is to *change* economic structures.
- Suppressing or containing the BS effect can be seen as a strategy to accelerate – rather than inhibit – catching-up. Empirical research on Germany and Japan indicated that the BS effect was not allowed to play itself out in their catching-up processes (Coorey et al. 1998: 235). Lags in the rise of NT-prices may render the NT-sectors so competitive that they themselves start exporting.
- The causation between sectoral productivity growth and the real exchange rate may then be the reverse of what the BS effect suggests (Begg et al. 1999: 17–20). Rising productivity in its surviving parts is rather a *consequence* of real appreciation.
- The BS effect relies on an outdated theory of the exchange rate, namely the purchasing power doctrine. But exchange rate changes are driven by financial transactions and the real economy adjusts to these changes (Liargovas 1999: 309–315).
- The real economy’s adjustment varies characteristically with the exchange rate regimes, the latter apparently making a difference that productivity developments cannot explain. Countries that maintain a fixed exchange rate regime but start out with an undervalued rate, as the Baltic states did, “inflation” of T-prices may be higher than that of NT-goods until T-prices have converged to world market levels (Arratibel et al. 2002: 19).

In sum, the downward convergence of inflation rates – as a consequence of accession and not as a precondition – is unlikely to hinder catching-up, rather to the contrary. Yet, the resulting low or even negative real interest rate may create problems.

## 2.2 Lower Interest Rates

Why are low interest rates important to transition economies? Interest rates are barriers to investment and therefore employment, so that lowering them also lowers these barriers. A decrease in interest rates also signals that the pay-off from an investment needs to be less immediate which lengthens the time horizon of investments. This in turn favours technical progress and a less exploitive use of resources. Finally, interest rates have a direct impact on living standards. Lower interest rates imply that – in equilibrium – a higher share of each unit value added, that is of the income generated in a particular production process, goes to wages rather than to interest and profit income. Thus, real wages in the accession countries could and would rise without jeopardizing competitiveness and employment.

Table 1

**Real Interest Rate in CEEC-5**

In %

	Czechia	Hungary	Poland	Slovakia	Slovenia
<b>Average lending rate</b>					
1995	12.8	32.6	33.5	16.8	23.4
2002	6.2	10.2	12.2	10.3	13.2
<b>Consumer price inflation</b>					
1995	9.2	28.3	28.0	9.9	13.5
2002	1.8	5.3	1.9	3.3	7.5
<b>Difference</b>					
1995	3.6	4.3	5.5	6.9	9.9
2002	4.4	4.9	10.3	7.0	5.7

Sources: EIU; IMF International Financial Statistics; own calculations.

The interest rate should come down, first, because inflationary expectations adjust to those relevant for EMU and, secondly, because currency risk premia are reduced. The reasoning for expected inflation follows from what in the last sub-section has been outlined with respect to actual inflation if expectations are (at least weakly) rational. This section therefore sketches only the lowering of interest rates that results from the reduction of risk premia.

Table 1 gives a rough idea about the risk premia involved. The difference between inflation and the average of short- and medium-term lending rates in the last row is the real interest rate and can be interpreted as a proxy for the risk premia. Interestingly, between 1995 and 2002 inflation rates have come down considerably<sup>5</sup> but nominal rates have not followed suite so that real interest rates have gone up in each country except Slovenia. The most dramatic case is Poland. In April 2002 the reference rate for the interest rate criterion was 7.0%, defined as the average of the three best-performing member states in terms of price stability plus 2% (ECB 2002: 19). Obviously, only the Czech Republic would have met that criterion.

There is not one theory of what determines currency risk premia (Baldwin et al. 1997: 139–140). For some time, they have been taken as constants, only to make interest rate parity hold. But for currencies that recurrently experience devaluations, one finds the domestic interest rate typically to be even higher than the actual devaluations justify, i.e. if they were fully anticipated. The difference between the actual interest rate and the one required for parity was interpreted as a risk premium. Yet, empirical research found that these risk premia are typically not constant but rather volatile (Kaminsky and Peruga 1990).

A time-varying risk premium may capture various uncertainties such as:

- The volatility of inflation rates and therefore the exchange rate, a source of uncertainty that is particularly relevant for high-inflation countries because it has been found that

<sup>5</sup> Differences in Czech and Polish inflation rates for 2002 between Table 1 and the data in Fritz and Wagener (in this volume) seem to be due to a difference between average and end-of-year measurement.

Table 2

**Foreign Debt, Current Account Deficit and EU Trade Share<sup>1</sup>**

	Czechia	Hungary	Poland	Slovakia	Slovenia
<b>External debt</b> (% of GDP)					
1995	31.2	70.9	34.8	30.0	16.4
2002	34.1	50.9	34.0	52.6	40.0
<b>Current account balance</b> (% of GDP)					
1995	-2.6	-3.6	0.7	2.0	n. a.
2002	-6.6	-4.0	-3.5	-8.2	n. a.
<b>Trade with EU</b> (% of total)					
Exports 1999	69.2	76.1	n. a.	59.5	66.4
Imports 1999	64.5	65.1	n. a.	51.7	68.9

<sup>1</sup> Differences in foreign debt figures between this table and that provided in Fritz and Wagener (in this volume) is due to different sources but do not affect the basic message.

Sources: IMF International Financial Statistics; EIU; European Commission.

there is a positive correlation between the level and the fluctuation of inflation (Taylor 1981, Schelkle 2001: 194–204).

- Foreign debt of a country since it is denominated in a currency that the domestic central bank cannot supply so that even the most honest and solvent borrowers may be unable to meet their obligations if a major devaluation leaves them overindebted over night.<sup>6</sup>
- Sovereign credit risk, i.e. the likelihood that a government declares a debt moratorium and cannot be legally sanctioned.
- The expectation of an unfavourable policy shift should the exchange rate peg be successfully attacked, for instance the fiscal and monetary authorities then pursuing a more inflationary policy hoping that the floating rate will compensate for the resulting losses in competitiveness (Gerlach und Smets 1995: 46).

All four causes of a positive risk premium will be favourably influenced by entry into EMU. In particular, a large part of the foreign exchange debt of transition countries will become domestic debt, namely to the extent that it is debt accumulated vis-à-vis EMU member states. This will considerably reduce the risk of speculative attacks and current account crises. Table 2 gives an idea how much of CEECs would become less of a macro-economic problem.

<sup>6</sup> This and the former cause of a positive risk premium can be combined in a portfolio theoretic approach to the exchange rate (Branson and Henderson 1985). The premium is then a function of foreign exchange debt relative to domestic debt as well as relative inflation and exchange rate volatility. Borrowers from countries which are indebted and where inflation rates fluctuate more than in the reference country have to pay higher interest rates that do not simply reflect the likelihood of devaluation.

For the very same reason, namely by transforming a large share of foreign exchange debt into domestic debt, the sovereign credit risk should at least be diminished if not eliminated. Governments would feel less pressure and have less incentive to default on their debt (Tirole 2002: 49–50).

### 3 Does the Maastricht Strategy Help EMU Enlargement?

The “Maastricht strategy to enlargement” is characterised by a focus on preconditions, the notorious criteria, ideally to be fulfilled before entry into EMU. After entry into EMU, the individual countries have to comply with the Stability and Growth Pact (SGP) which excludes collective risk management deliberately to prevent moral hazard. The strategy is thus based on the stipulation of one-sided adjustment and compliance, not on a notion of burden-sharing and mutual insurance (Schelkle 2002). Thus, the general approach is not conducive to assist CEECs in their monetary development.

#### 3.1 The Problem of Negative Real Interest Rates<sup>7</sup>

It was suggested above that transition economies should try to contain the BS effect for the sake of accelerating their catching-up. But they should not be forced to suppress it by the EU because this is not a prerequisite for the proper functioning of EMU and therefore, according to the subsidiarity principle, none of the Union’s business. However, higher measured price increases plus convergence to the EMU level of interest rates may imply negative real interest rates for firms and consumers in the accession countries which is what happened in Portugal and Ireland (Ardy et al. 2002: Table 2.1). There is then an imminent threat of asset bubbles developing which is clearly “a matter of common concern” for EMU. Yet, this does not necessarily rehabilitate either of the two Maastricht criteria as a precondition for entry.

A negative real interest rate invites overinvestment just as high positive rates lead to underinvestment. This anomaly makes it particularly attractive to households to invest in housing, typically the biggest single expenditure that individuals undertake in their lifetime. A low supply elasticity of housing combined with competing demands for construction sites and services from investing firms makes for strong price responses to vigorous demand. The resulting real asset bubble is likely to create problems for the banks which lend against mortgage. When the bubble bursts, over-indebted households and firms can no longer service their credit so that banks have to liquidate the collateral. Yet, what seemed to be a realistic valuation of the underlying property when the contract was signed, often turns out to be much higher than what the market is willing to pay in less bullish times.

In CEE countries, banks have been saddled with bad debt, partly as a legacy of the planned economy, partly because they engaged in distress lending to their struggling borrowers during transition (EBRD 1998). If they managed to write off large chunks of their non-performing loans, this shows up in low profitability. Either way, buoyant credit demand makes it very attractive to such banks to take a short-cut and engage in risky lending which is a variant of “gambling for resurrection”, a moral hazard problem well-known in the

<sup>7</sup> I am indebted to Richard Bronk (LSE) for alerting me to the relevance of this issue.

Table 3

**Characteristics of Financial Systems in the CEEC-5**

In %

	Non-performing loans <sup>1</sup>	Return on equity <sup>2</sup>		Share of foreign banks <sup>3</sup>
	June 2000	1999	2000	December 1999
Czechia	5.0	-4.3	6.6	43
Hungary	3.2	3.7	15.7	65
Poland <sup>4</sup>	4.6	12.2	16.8	53
Slovakia	8.2	-182.7	6.3	25
Slovenia	13.0	7.8	12.2	11

**1** Share in total assets, in %; Hungary and Slovenia incl. off-balance sheet items.**2** In comparison, the EU banking industry's return on equity was 11.7% in 1999.**3** Foreign owned share in total equity.**4** Commercial banks only.

Source: Schardax and Reininger (2001).

finance literature (Tirole 2002: 56–60). Table 3 gives an idea about the state of the banking systems in the CEEC-5.

Banks in CEE have written off non-performing loans to a considerable extent. This shows up in low profitability (Schardax and Reininger 2001: 40). Given a more uncertain environment and therefore higher risk premia (cf. Table 2), the return on equity or other measures of profitability should be considerably higher than in the EU. Also, the banking systems in CEE countries are now to a large extent owned by foreign commercial banks. This is likely to bring about consolidation, either because they were taken over by these foreign banks and their balance sheets cleaned up in the process<sup>8</sup>, or because domestic banks could not stand the intense competition and went into liquidation. Both ways to consolidate CEE financial systems keep up the incentives for domestically owned banks to “gamble for resurrection” that negative real interest rates provide. This threat to stability is removed only if governments clean up balance sheets by taking them into specialised financial institutions. Yet, this means to turn non-performing loans into public debt.

### 3.2 The Fiscal Maastricht Criteria

The CEEC-5 fare very differently as regards the two fiscal Maastricht criteria. While their budget balances have considerably deteriorated since 2000, they still have some leeway as regards public debt, especially if compared to the Euro area (Table 4).

Alas, these figures are not necessarily comforting. It may indicate that the fiscal criteria do not address the relevant issues. As just indicated, the debt criterion may be too lenient for countries that have a bad debt problem in their banking sector. Governments will have to clean it up before the respective economies enter the low-inflation environment of EMU. The costs of such recapitalization programmes can be formidable, for instance until 2000

**8** The sales price will take care of that since the “price” of a bank is the discounted value of its expected net income which is lower the more non-performing loans are in the books.



Table 4

**Budget Deficit and Public Debt in the CEEC-5<sup>1</sup>**

In % of GDP

	Budget deficit		Public debt	
	2001	2002	2001	2002 <sup>2</sup>
Czechia	-5.2	-6.4	23.3	27.1
Hungary	-4.1	-6.1	53.4	56.3
Poland	-3.9	-4.4	37.3	41.8
Slovakia	-5.4	-6.0	48.1	42.6
Slovenia	-2.5	-1.8	27.5	28.3
Euro area	-1.5	-2.3	69.3	n. a.

<sup>1</sup> Differences in data between this table and that provided in Fritz and Wagener (in this volume) is due to different sources but do not affect the basic message.

<sup>2</sup> Preliminary.

Source: European Commission.

more than 13% of GDP in the case of the Slovak Republic, almost 12% in the Czech Republic, and almost 7% for the Hungarian taxpayer (Schardax and Reininger 2001: 31).

This brings us finally to the SGP: The Pact has made one entry criterion, the 3% deficit condition, to be the only yardstick for compliance with what is deemed necessary for EMU policy coordination. The Broad Economic Policy Guidelines subject non-members to this as well although there is merely blame and shame for them if they do not comply, the Excessive Deficit Procedure applies to EMU-members only. Breaching the 3% budget deficit limit, it is hoped, will therefore occur only under extreme circumstances like a deep recession. This provision also signals a no-bail-out clause to the financial markets. Fiscal policy coordination under the SGP is geared to ensure at each moment a sound fiscal policy of *individual* governments.

There is nothing wrong with having structural balances close to balance or in surplus. But this is true quite independently of EMU and the requirements of policy coordination in a monetary union.<sup>9</sup> In this sense, the SGP is somewhat futile for integration. Moreover, off the steady state, i.e. out of longterm equilibrium, the SGP is destabilising in that it imposes a pro-cyclical sanction, namely to reduce deficits in a recession and possibly even to pay a fine by a country already in fiscal difficulties.

### 3.3 Reform of the Maastricht Framework

To sum up this sketch of the Maastricht criteria: The performance criteria – like the inflation or the fiscal criteria – are either futile or manifestly destabilising. They hold governments, presently in office, responsible for market outcomes that are not necessarily of their own making. And they do not address issues for which they could be held responsible and that

<sup>9</sup> "Structural" here means medium-term, over the course of a full business cycle. Cf. Artis and Buti (2000) for a good defence of the SGP.

are essential for future policy coordination in EMU such as the recapitalisation of the financial system.

The first suggestion for reform that follows from the preceding analysis is that EMU enlargement should emphasise structural entry criteria like the implementation of effective banking supervision and consolidation of the financial sector. Such structural criteria would be more appropriate to deal with the adverse selection problem, i.e. suitable to differentiate between the good and bad risks (Schelkle 2002). The performance entry criteria, such as inflation and interest rate convergence or exchange rate stability should be scrapped. If there are strong Samuelson-Balassa effects, they should be dealt with by monetary policy and banking regulation, e.g. of mortgage lending. In particular, the ECB should set its inflation target with respect to *traded* goods and services only so as to avoid a deflationary bias for the incumbent member states (Sinn and Reutter 2001).

Secondly, the problem of asset bubbles due to very low or negative interest rates has to be dealt with by strict banking regulation, in particular as regards mortgage lending. It should be combined with fiscal measures, such as taxing house ownership and real property. Fortunately, the practice of integration policy seems to be ahead of the underlying theory in that it deals with this problem quietly. Yet, it would be much more plausible and less arbitrary to make a sound banking system to be a prerequisite for accession and simultaneously offer assistance for this uphill task. Even from a narrow economic point of view, this assistance makes sense for existing members since any financial crisis in an accession country will have repercussions on EMU and ECB policy.

The last conclusion pertains to the working rules of EMU. It would be more constructive, in particular for transition economies, to apply Golden Rule variants of the fiscal criterion. Differentiating between investment or capital expenditure and consumptive or current expenditure, while admittedly not easy (Buti, Eijffinger and Franco 2003: Section 4.3), allows in principle to disentangle the stabilisation from the consolidation issue. Such rules adjust for cyclical fluctuations and thus prevent a pro-cyclical stance. Structural deficit measures can also take debt levels or future tax liabilities into account. This is a way to reconcile the objective of fiscal consolidation with that of macroeconomic stabilisation.

#### 4 Conclusions

This paper has argued that EMU accession would entail sizable benefits for transition economies. But the Maastricht strategy to enlargement is not very helpful in bringing these benefits about. On the contrary, they expose these countries to the test of financial markets without offering them assistance as prospective EMU members.

Enlargement and the specific situation of transition economies could be used as a pretext to reform the entry criteria of the SGP. Faithful to the Maastricht logic, one could argue that the BS effect allows for a more generous interpretation of the inflation criterion because part of measured inflation is then an equilibrium phenomenon of catching-up. The fiscal and the exchange rate criteria should be replaced or abolished. The general thrust of entry criteria should be to ask for institution building deemed necessary for future policy coordination. An already existing stipulation that is in line with this proposition is that of central bank independence: If there is no political majority in favour of taking monetary policy out

of parliamentary or treasury's control, EMU will prove too divisive. Another entry rule like "a prospective member state has to have a sound banking system in line with international accounting standards" resembles this existing criterion of central bank independence. Both aim at making macroeconomic policy more effective instead of constraining it. This is not only relevant in the short run but is arguably EMU's contribution to economic and social cohesion in the long run.

## References

- Ardy, B., I. Begg, W. Schelkle and F. Torres (2002): *EMU and Cohesion: Theory and Policy*. Cascais, Principia.
- Arratibel, O., D. Rodriguez-Palenzuela and C. Thimann (2002): *Inflation Dynamics and Dual Inflation in Accession Countries: A „New Keynesian“ Perspective*. ECB Working Paper No. 132. Frankfurt a. M.
- Artis, M. and M. Buti (2000): "Close to Balance or in Surplus": A Policy-Maker's Guide to the Implementation of the Stability and Growth Pact. *Journal of Common Market Studies*, 38, 563–591.
- Baldwin, R., J. F. Francois and R. Portes (1997): The Costs and Benefits of Eastern Enlargement: The Impact on the EU and Central Europe. *Economic Policy*, 24, 125–176.
- Begg, D., L. Halpern and C. Wyplosz (1999): *Monetary and Exchange Rate Policies, EMU and Central and Eastern Europe*. CEPR Forum Report of the Economic Policy Initiative No. 5. London.
- Begg, D., B. Eichengreen, L. Halpern, J. von Hagen and C. Wyplosz (2001): *Sustainable Regimes of Capital Movements in Accession Countries*. CEPR Report. London.
- Branson, W. H. and D. W. Henderson (1985): The Specification and Influence of Asset Markets. In: R. W. Jones and P. B. Kenen (eds.): *Handbook of International Economics*, Vol. II. Amsterdam, North-Holland, 739–805.
- Buti, M., S. Eijffinger and D. Franco (2003): *Revisiting the Stability and Growth Pact: Grand Design or Internal Adjustment?* European Commission Economic Papers No. 180. Brussels.
- Buiter, W. and C. Graefe (2002): *Patching up the Pact: Some Suggestions for Enhancing Fiscal Sustainability and Macroeconomic Stability in an Enlarged European Union*. CEPR Discussion Paper No. 3496. London.
- CESifo (2002): *Report on the European Economy 2002*. Munich.
- Coorey, S., M. Mecagni and G. Offerdahl (1998): Disinflation in Transition Economies: The Role of Relative Price Adjustment. In: C. Cottarelli and G. Szapáry (eds.): *Moderate Inflation – The Experience of Transition Economies*. Washington, D.C., IMF, and Budapest, National Bank of Hungary, 230–279.
- De Grauwe, P. M. and M. Polan (2001): *Is Inflation Always and Everywhere a Monetary Phenomenon?* CEPR Discussion Paper No. 2841. London.
- European Central Bank (ECB) (2002): *Convergence Report 2002*. Frankfurt a. M.
- Economist (2003): Patience, Patience. Don't Rush into the Euro, Central Bankers Say. *Economist*, 368 (8334), 73.
- European Bank for Reconstruction and Development (EBRD) (1998): *Transition Report 1998. Financial Sector in Transition*. London.
- European Parliament (1999): *EMU and Enlargement: A Review of Policy Issues*. Directorate-General for Research Working Paper. Economic Affairs Series ECON 117 EN 12/99. Brussels.

- Gerlach, S. and F. Smets (1995): Contagious Speculative Attacks. *European Journal of Political Economy*, 11, 45–63.
- Kaminsky, G. and R. Peruga (1990): Can a Time-Varying Risk Premium Explain Excess Returns in the Forward Market for Foreign Exchange? *Journal of International Economics*, 28, 47–70.
- Liargovas, P. (1999): An Assessment of Real Exchange Rate Movements in the Transition Economies of Central and Eastern Europe. *Post-Communist Economies*, 11, 299–318.
- Riese, H. (1986): *Theorie der Inflation*. Tübingen, J. C. B. Mohr (Siebeck).
- Samuelson, P. A. (1964): Theoretical Notes on Trade Problems. *The Review of Economics and Statistics*, 46, 145–154.
- Schardax, F. and T. Reininger (2001): *The Financial Sector in Five Central and Eastern European Countries: An Overview*. Transition in Focus No. 1. Vienna, Austrian National Bank.
- Schelkle, W. (2001): *Monetäre Integration. Bestandsaufnahme und Weiterentwicklung der neueren Theorie*. Heidelberg, Physica.
- Schelkle, W. (2002): *Disciplining Device or Insurance Arrangement? Two Approaches to the Political Economy of EMU Policy Coordination*. European Institute Working Papers 1/02. London, London School of Economics & Political Science.
- Sinn, H.-W. and M. Reutter (2001): *The Minimum Inflation Rate for Euroland*. NBER Working Paper No. 8085. Boston, MA, National Bureau of Economic Research.
- Taylor, J. B. (1981): On the Relations between the Variability of Inflation and the Average Inflation Rate. *Carnegie-Rochester Conference Series on Public Policy*, 15, 57–86.
- Tirole, J. (2002): *Financial Crises, Liquidity, and the International Monetary System*. Princeton, Princeton University Press.
- Welfens, P. J. J. (1999): Eastern EU Enlargement: Developments, Problems and Policy. In: P. J. J. Welfens (ed.): *EU Eastern Enlargement and the Russian Transformation Crises*. Heidelberg, Springer, 3–35.