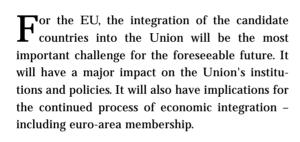


# **EXCHANGE RATE REGIMES** AND ECONOMIC INTEGRATION: THE CASE OF THE ACCESSION COUNTRIES

JÜRGEN KRÖGER DENIS REDONNET\*

### Introduction: How EMU was achieved



It should be recalled that the creation of EMU followed a long period of economic integration. Trade integration has intensified progressively since the earliest years, fostering greater competition and efficiency in the Member State economies. From moderate beginnings as a customs union of six Member States, the EU has graduated to a unified internal market for most goods and services comprising 15 Member States and a population of

more than 350 million.

The process of monetary integration, an objective Union exposed the Member States to the now

well-known "inconsistent trinity" of fixed-butadjustable exchange rates, independent monetary policy and liberalised capital movements. As financial-market discipline on economic policymaking gained in importance, the failure to correct policy inconsistencies within and among the Member States culminated in the ERM crises of 1992/93. In spite of - and in many ways because of - this negative experience, the process of European monetary integration scheduled in Maastricht in 1991, continued and was completed with the introduction of the euro on the 1 January 1999.

All in all, EMU and the euro reflect 40 years of economic and monetary integration. The degree of integration already achieved made it possible for policymakers to focus primarily on the fulfilment of nominal - rather than real - convergence criteria as necessary conditions for participation in a monetary union.

The experience of EMU should be a guide to managing the integration process of the accession countries. Thus the question arises whether integration into the Union - and particularly the euro area - can be compressed without resulting in severe economic difficulties jeopardising the benefits of integration. Anyway, it is generally agreed that each country must follow its own path towards full integration. This path will be determined by historical experiences and current achievements.

### Accession countries: What kind of exchange rate regime?

The debate of the appropriate exchange rate regime for developing countries appears to be never-ending.1 Recently, the advocates of corner solutions - either completely flexible exchange rates or the "euroisation from the Atlantic to the Urals"2 - appeared to have gained some accep-

The experience of EMU as a guide to monetary integration of the accession countries

of the Community from at least December 1969, has been less smooth. Serious setbacks were experienced along the way to the launch of the euro. In the 1970s, asymmetric policy responses to the oil price shocks undermined European efforts to maintain stable exchange rates following the breakdown of the Bretton-Woods framework. In the 1980s, capital-market liberalisation within the

Directorate General for Economic and Financial Affairs of the EU Commission. The views expressed in this article do not necessarily correspond to those of the Commission.

<sup>&</sup>lt;sup>1</sup> In fact, there is a vast body of literature, the presentation of which is beyond the scope of this paper. On this issue see for instance Frankel (1999), Edwards and Savastano (1999).

<sup>2</sup> Gros (2000). Of course, this should also comprise currency boards

or genuine EMU-membership.

tance. But at the same time, others argue that each country should consider its specificities when it chooses its exchange rate system, taking into account its size, state of development, initial conditions of integration and the choices it has made as regards internal and external liberalisation of capital movements. It appears difficult to reconcile both views.

The exchange rate is an important macro-economic variable and policy instrument. Apart from the two important prices for production factors, i.e. the (real) interest rate as the price of capital and the (real) wage level as the price of labour, the exchange rate reflects the relative productivity (profitability) between economies. Obviously, the more diverse the adjustment paths of different economies are and the more closely their (tradable) products compete with each other, the greater the need for price flexibility. It appears that, as long as accession countries' characteristics are very different from those prevailing in the EU and given that integration into the single market is proceeding rapidly, there is an a priori case for flexibility in all of the three policy instruments (prices) in order to let markets do their work.

In the case of liberalised capital movements, the choice of the exchange-rate regime predetermines whether there is a degree of freedom for other policies, in particular monetary policy. Credibly fixing the exchange rate removes the freedom to conduct independent monetary policy as the level of interest rates is determined by external needs, i.e., it is determined as well. Therefore, much more of the burden of adjustment is put on the remaining "price", the level of wages. In addition, other policy instruments may be considered for dealing with possible adjustment needs. But fiscal and structural policies usually have different objectives, in particular, in catching-up countries. Using them, may give rise to a sub-optimal policy assignment.

Exchange rate and interest rate developments are determinants of the stance of monetary policy. Should there be a need for tighter monetary conditions, – e.g. due to overheating or strong capital inflows – then the real exchange rate should be above equilibrium, while the real interest rate should be relatively high. However, if a country with fixed exchange rates were to require tight monetary conditions, this could only be achieved by a real appreciation induced by higher inflation

or by deflation, which would raise the real interest rate. Obviously, the former would imply a more expansionary interest-rate impact as the real interest rate would decline in view of accelerating inflation while the latter would improve cost competitiveness. The dynamics of such distorted monetary conditions could have long lasting structural implications (see below). As the financial markets of the accession countries are still at an early stage of development, the importance of inappropriate monetary conditions during the integration process might be underestimated for the time being.

# Monetary implications of the Balassa-Samuelson effect

We assume that a candidate country has credibly fixed its exchange rate vis-à-vis the euro. The country concerned is in a situation where productivity growth in the exposed sector is high, while wage pressures lead to high inflation in the sheltered services sector. Therefore, relatively high inflation, i.e. rates above those in the euro area should not affect competitiveness (Balassa-Samuelson (BS) effect).<sup>3</sup>

The exchange rate is an important macroeconomic variable and policy instrument

However, the real short-term interest rate would be low as the country would be importing the relatively low level of short-term nominal interest rates of the euro area, so monetary conditions as for instance measured by a monetary conditions index (MCI)4 would be too expansionary. Without any compensating measures, the MCI would only become neutral if the currency were to appreciate to above its equilibrium level. If, for example, the BS-effect implies an inflation rate exceeding that of the area to which the exchange rate is fixed by 2 percentage points and the ratio of weights in the MCI between the real interest rate and the real effective exchange rate is 1:3, then the real effective exchange rate has to appreciate by 6% for the MCI to return to a neutral level. If the adjustment period were three years, then the inflation rate would be 4% above the euro area (see Box 1).

<sup>&</sup>lt;sup>3</sup> See Balassa (1964), Samuelson (1964). Recently empirical evidence has been presented indicating significant inflation differentials vis-à-vis the euro area, e.g. Sinn and Reutter (2001), Björnstén (2000), Pelkmans, Gross and Nuñes Ferrer (2000). Some authors have interpreted these results as indicating inconsistency between the Maastricht criteria and catching-up (e.g. Szapéry 2000).
<sup>4</sup> The MCI is a weighted average of the real short-term interest rate

<sup>&</sup>lt;sup>4</sup>The MCI is a weighted average of the real short-term interest rate and the real effective exchange rate. It is used here as an illustration of the stance of monetary policy, but not as an intermediate target for monetary policy.

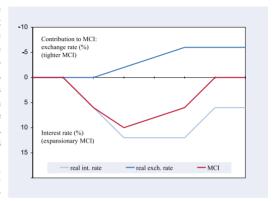
### Box 1 Monetary conditions and the Balassa-Samuelson Effect

We assume an economy with a catching-up potential has an inflation rate p=4%, a nominal interest rate  $i^n=7\%$ , thus the real interest rates is  $i^r=3\%$ . The relation between the interest rate and exchange rate impact on the MCI is 1:3, i.e., a 100 basis point reduction in the real interest rate would be neutralised by an appreciation of the effective exchange rate by 3%. We assume the country credibly fixes (currency board, euroise, enter to EMU) its exchange rate to the currency of an economy which has an inflation rate of 2% and a nominal interest rate of 5%, i.e. the same real interest rate. If the country fixes the exchange rate, interest rates would fall to the lower level of 5% and the real interest rates would drop to 1%.

Given no other policy response, monetary conditions would have to return to the initial level, i.e. the reduction in real interest rates would have to be compensated for by a real appreciation. We assume a 3 year adjustment period, i.e. a higher inflation of 2%, p.a. will lead to the initial level of the MCI. The following graph shows the development of the MCI during the adjustment period and the respective contribution of the interest rate and exchange rate component.

In the 1st year, monetary conditions become more expansionary (by 6%) as real interest rates drop by 200 b.p. In the 2<sup>nd</sup> year the interest rate component becomes again more expansionary as inflation is assumed to increase by 2% and the real interest rate drops to -1%. However, the impact on the MCI is mitigated by the loss of competitiveness which reduces the impact on the MCI by 2%. The adjustment continues until the 5th year when inflation drops to 4% and the MCI has returned to its initial level.

The assumed relation of 1:3 in the MCI characterises a relatively open and well integrated economy. Should integration be



less advanced, the distortionary effect on the composition of the MCI would be larger. In contrast, to the extent that the interest rate channel of monetary policy transmission is relatively inefficient, the distortionary effects would be reduced. The analysis also abstracts from secondary effects. If wages were to respond, there could be a more significant overshooting. The real exchange would appreciate above the level that is required by the BS effect, while the real interest rate would fall more and for a longer time period.

The Balassa-Samuelson effect, monetary conditions and real appreciation

During the adjustment, the MCI would of course become even more distorted as the level of real interest rates is further reduced. Therefore, while monetary conditions would be characterised in the long term by too expansionary interest rates and too tight exchange rate components during the adjustment period after the credible fix, monetary conditions would necessarily become too accommodative. Even if a neutral stance of monetary conditions were to be achieved quickly, the long-run implications of expansionary interest rates and low competitiveness in terms of external sustainability are unclear.

## Real catching-up in an integrated financial market

The BS-effect reflects a steady, medium-term adjustment path. In contrast, real catching-up could be a very dynamic process. This is especially true for an economy that successfully integrates with a high-income economy. Real catching-up begins with creating the conditions for a high expected real rate of

return for fixed investment. This attracts foreign direct investment, probably exceeding the absorption capacity of the country's potential. Domestic demand will be stimulated by high income expectations. Thus the private sector savings ratio might be low. Fiscal policy, if it wants to support the catchingup process, should provide adequate infrastructure investment and may accelerate structural reform in order to shift labour from unproductive jobs to new ones. In this scenario, demand will outstrip supply and the currency would have to appreciate in real terms. If the exchange rate were fixed, this would happen through higher inflation. Higher inflation would set in motion a wage-price spiral and the country's competitiveness would be eroded, with real appreciation overshooting the real equilibrium exchange rate.

In this initial phase of catching-up, there is nothing wrong with an appreciation of the exchange rate.<sup>5</sup>

 $<sup>^{5}</sup>$  See e.g. Krajnyák and Zettelmeyer (1998) and Halpern and Wyplosz (1997).

It would stabilise domestic demand relative to supply through a current account deficit. As an aside, it would render imported (investment) goods cheaper. It is also a normal compensation for the estimated initial under-valuation at the beginning of the transition and the set-up of the pegs that have been used to achieve the initial "gross" disinflation at the beginning of the 1990s.

A successful catching-up process is in principle facilitated by the liberalisation of financial markets. Financing productive investment is not constrained, and private households could consume ahead of higher income thus inter-temporally optimising consumption. However, the combination of free capital movements and a credibly fixed exchange rate will almost inevitably expose the integrating country to asset market bubbles. There is no reason to think that the candidate countries will be immune to the pitfalls experienced in the context of the Nordic banking crisis of the 1990s.

While the expected real rate of return will be high at the initial stage of catching-up, high inflation, the perceived absence of an exchange-rate risk, and low nominal interest rates will imply that many (too many) investment projects will be considered profitable. Investment will spill over to sectors which are prone to bubble dynamics such as equity markets and the real estate sector, notwithstanding improvements in the supervisory framework for the financial sector. The implied mis-selection of investment projects according to a risk-return evaluation, which does not include the impact of the real exchange rate appreciation on the real rate of return, will further accelerate overheating, fuelling inflation and real appreciation further. With hindsight, investments would prove less profitable than expected at the time they were planned. As the exchange rate cannot depreciate in nominal terms, subsequent deflation would further contribute to an actual rate of return which is below the previously expected one.

Therefore, the dynamics of successful catching-up would add to pressure on the real exchange rate and thus distort the MCI even more. In addition, a wage-price spiral might then imply an overshooting of the real exchange rate. E.g., a loss of competitiveness relative to the equilibrium exchange rate of 20% has been witnessed in previous cases, i.e. in Portugal and Spain. Both countries were forced to devalue by such magnitudes in the early 1990s (see Box 2).

There appear to be limited options to counteract such detrimental developments. One option would be to adhere to capital controls. This, however, would postpone the catching-up process as capital shortages would emerge. Indeed, domestic savings would remain low and the public sector would not be in a position to run large surpluses. Moreover, liberalised capital markets are a *sine qua non* of full participation in the single market and are part of the "acquis communautaire".

Another option would be to use fiscal policy to absorb excess demand. However, given the potential for excess demand, the magnitude of fiscal retrenchment would be huge and would undoubtedly interfere with the genuine task of providing public goods to society. Moreover, as fiscal policy would no longer be able to accompany the private sector-led catching-up process, it would retard it. The experience of the Member States actually shows that fiscal retrenchment tends to increase the volatility of capital spending - and thereby its effectiveness - unless it forms part of a credible medium-term fiscal framework (cf. UK code on fiscal stability). It would then have similar effects as capital controls as it would make the country a less attractive place to invest. For these reasons, it appears that a sequenced approach to integration is the most preferable one.

#### A sequenced approach to integration

The envisaged enlargement of the EU will bring small open economies into the Union that are in a process of catching-up with the EU. While decisions about the separate stages of accession (accession to the EU, ERM-2 membership/integration, entry into Stage III) have still to be made, the process of transition is already going on. Thus, the subsequent remarks refer mainly to the transition process or economic integration without prejudicing/commenting on the accession stages. The first phase of integration should be to concentrate on establishing an economy firmly based on market principles. This phase will be characterised by policies to ensure macroeconomic stabilisation and structural transformation. In this context, institutional reform is essential and should include wide ranging privatisation programmes and the establishment of legal certainty, i.e. contract rights. Labour market reform should focus primarily on improving investment in human capital so as to

Successful real catching up adds to upward pressure on the real exchange rate

In the case of

appreciation led

Spain, real

to monetary tightening, alle-

viated by the

1993

depreciation of

#### Box 2 Monetary conditions and catching-up: lessons from history

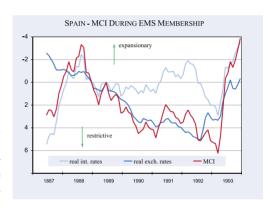
Subsequently to EU accession (1986) and further dismantling of transition clauses, Spain and Portugal created the conditions for successfully integrating into the single market. Both countries benefited from significant capital inflows (FDI) and buoyant investment, reflecting a high expected real rate of return on investment. Spain entered into the EMS in 1987 and participated in the ERM since June 1989.

The process of real catching-up in the initial phase of EU membership is particularly evident over the period 1986 to 1990. Relative income (GDP/per capita) rose from 56% of the EU average to 69% in Spain and from 31% to 37.5% in Portugal. However, inflation was higher than the average of ERM participants, at 2.6% p.a. in Spain and at 7.8% p.a. in Portugal. As expected, the current account balance moved into deficit. In 1990, the current account deficit was 3.7% of GDP in Spain and 1.7% of GDP in Portugal.

As compared to the stylised case described in Box 1, the ERM was not a hard peg (no corner solution) as the ERM was a fixed but adjustable exchange rate system. Thus, the exchange rate risk was not entirely removed. Therefore, interest rates did not fall to the average (or lowest) level of ERM participants but short-term interest rates were on average 300 basis points above that average in Spain and 500 basis points in Portugal. Consequently, the distortionary effects on the MCI were less evident than if the country had entered into a hard exchange rate peg.

Nevertheless, in the case of Spain (we only discuss the Spanish case here, although similar developments occurred in the Portuguese case) monetary conditions (assumed relation in the MCI 1:4) became expansionary in 1988 as rising inflation led to a fall in the real interest rate to 0% at the end of 1988. However, despite further rising inflation, real interest rates fell to a lesser extent. The expansionary impact on the MCI was mitigated by rising nominal interest rates which would not have been the case if the exchange rate were to have been fixed irrevocably.

The real exchange rate appreciated steadily and significantly. At the beginning of 1993, the real effective exchange rate was around 25% higher than in January 1986 (CPIdeflator). While part of this appreciation was "warranted" by BS effects, the appreciation also reflects monetary tightening. particular, from mid 1991 onwards, the appreciation implied an overshoot as domestic wage-price dynamics eroded the profitability During 1992, tensions of investment. augmented, real interest rates rose accordingly and monetary conditions became even more restrictive. Subsequently, the depreciation in



1993 implied a correction in the distorted MCI, restoring competitiveness and profitability. Otherwise, Spain would have had to go through a long period of deflation with correspondingly (very) high real interest rates.

Should accession countries seek to irrevocably fix their exchange rates, the described processes would probably be even more marked. First, the expansionary phase of the MCI in the early phase of catching-up would be intensified by interest rates as low as the EMU average, and, secondly, in EMU, the period of distortion might be prolonged by easier financing conditions as exchange rate risks are completely removed. Thus financial markets would fail to act as the corrective factor for a longer time period.

provide for growth in labour productivity. Budgetary reform should involve a scaling down of intervention in the economy, while establishing an efficient tax and social security system. Financial reforms should be aimed at creating an efficient banking sector to ensure an effective intermediation of savings and a smooth transmission of monetary policy.

In this initial phase, the exchange rate is a fairly unimportant factor in the overall policy regime. This is because of a low degree of international integration, as regards both trade and financial flows. During this phase, most countries tend to adopt administered exchange-rate regimes, ranging from currency boards to fixed pegs.

Most of the accession countries have made considerable progress in creating a market-based economy.6 These countries could already be said to be in a second phase of integration. In this phase, structural reform remains high on the agenda but is of a

<sup>6</sup> According to the EU Regular Reports of the year 2000, all except Bulgaria and Romania, have already succeeded in introducing a functioning market economy. (see http://europa.eu.int/comm/\_II\_co/index.html).

more advanced nature. For example, this phase is characterised by reform of the agricultural sector, the dismantling of conglomerates in heavy industry, the fostering of SMEs and the development of service industries. The objective of these reforms is to prepare the economy to cope with the competitive environment of the EU's single market. Financial reform will also be important in this phase, so as to prepare the domestic financial sector for the challenges posed by the liberalisation of capital movements. Indeed, it is not surprising that the accession countries that have made most progress in financial sector reform have the highest per capita investment ratio.

In the third phase of integration, the accession countries would be with a derogation for stage III of EMU and perhaps with other transitional arrangements with respect to some elements of the "acquis communautaire". Economic policy would remain supply-side oriented but the authorities might be considering the need for an exit strategy from administered exchange rates. Why? Because it is in this phase that difficulties will emerge in conducting policies that are aimed simultaneously at nominal and real convergence, and that have to be used respecting that exchange rate policy is a matter of common concern. Given that the accession countries will be catching up - hopefully at a rapid speed - it may not be possible to target price stability, sound public finances and exchange rate stability at the same time.

In sum, we are again confronted with the inconsistent trinity of liberalised capital movements, sovereign monetary policies and fixed exchange rates. Given the need for catching up in the accession countries, this inconsistency would seem to be resolved most effectively by surrendering the fixed exchange rate. ERM 2 could provide the framework for managing a flexible exchange rate, allowing for successful catching-up while maintaining a clear orientation toward nominal convergence – and the ultimate adoption of the euro.

A further trade-off may exist between successful catching-up and achieving the budgetary discipline implied by the Maastricht criteria. Catching up can be sustained only if there is an adequate public infrastructure. Provision of this infrastructure may require high rates of public investment. As the rate of return on this public investment would be high, deficit financing would seem justified. In these circumstances, a budget deficit above 3% and certain-

ly above the "close to balance" rule of the Stability and Growth Pact might be optimal.

All of this means that adoption of the euro would need to be postponed for some time after EU accession and ERM-II participation. But this is not necessarily a bad thing for the new Member States. The priority for economic policy in the accession countries must be to build upon their continued transformation to a market-based economy so as to stimulate a successful catching-up process. As described above, there is only a limited chance to fulfil the criteria for the changeover to the euro (Stage III) which have been developed for economies in a more advanced stage of development and integration. In the interim, the accession countries would be expected to conduct their exchange rate policies as a matter of common concern and – if appropriate - to participate in ERM 2.

Managing a flexible exchange rate during ERM 2 and postponing adoption of the euro

# The institutional dimension: steps towards the euro area

The choice of exchange-rate regime is primarily an issue for the candidate countries themselves. However, in the recent past it has also been a topic of discussion inside the EU.<sup>7</sup> Candidate countries are in a specific situation because the debate over exchange-rate regime choice is also a debate of the prospects for adoption of the euro. By definition, the enlargement of the Union also implies, at some stage, a widening of the euro area. So the adoption of the euro provides a "terminal point of the trajectory" of the exchange rate strategies of the candidate countries.

Unambiguously, the EU Treaty provides for a clear and unique institutional path towards the adoption of the single currency for the candidate countries. Upon accession, the new Member States will enter the EU and participate in EMU with the status of Member States with a derogation from adopting the euro. New Member States will have to treat their exchange rate policies as a matter of common concern and are expected to join ERM-II at some point after accession. Then, for the adoption of the euro, the Treaty requires that new Member States reach a high degree of sustainable nominal conver-

<sup>&</sup>lt;sup>7</sup> In November 2000 the ECOFIN Council issued a statement saying that the EU does not impose any requirements on monetary policy prior to accession. After accession, however, exchange rate policy will be a matter of common concern.

#### **Currrent Exchange Rate Regimes in the Candidate Countries (12)**

Country	Currency	Regime	Peg/Basket	Rate of Crawl	Band	Monetary policy framework
Bulgaria	lev	fixed peg	euro	-	-	Currency board
Cyprus	Cyprus pound	fixed peg	euro		+/- 2.25%	Additional monetary aggregates targeting
Czech Republic	koruna	managed float	euro target zone	-	-	Inflation targeting
Estonia	kroon	fixed peg	euro	-	-	Currency board
Hungary	forint	crawling peg	euro	0.2 % dep. per month	+/- 15%	Implicit inflation targeting
Malta	lira	fixed peg	56% euro, 22% USD, 22% GBP	<b>-</b>	-	
Latvia	lats	fixed peg	SDR	-	Interven- tion at +/- 1%	Quasi-Currency board Additional monetary aggregates targeting
Lithuania	litas	fixed peg	USD	-	-	Currency board
Poland	zloty	full float	-	-		Inflation targeting
Romania	leu	managed float	-	-	-	Monetary aggregates targeting
Slovakia	koruna	managed float	-	-	-	Monetary aggregates targeting
Slovenia	tolar	managed float	euro shadowing	-	-	Monetary aggregates

Compliance wih the Copenhagen criteria takes precedence over EMU participation

gence. This is the equal treatment principle, and it will be applied in full to the candidate countries. This path excludes the possibilities of either a regular adoption of the euro immediately upon accession, or the adoption of the euro before accession, sometimes referred to as "euroisation".

How does this relate to economic policy choices? The key message here is that even in the countries most advanced in transition, the reform agenda relating to accession must have priority over policy moves inspired by full EMU participation (Stage III). Compliance with the Copenhagen criteria takes precedence over compliance with nominal convergence criteria, and therefore EMU participation, for at least two reasons. First, greater progress towards real and structural convergence should take place ahead of nominal convergence, even though the two can be mutually supportive.

Second, only countries that are functioning market economies capable of coping with competitive pressures can be assessed for nominal convergence; that is, the Maastricht criteria must be applied to "comparable economies".

At some stage after accession, candidate countries are expected to formally participate in ERM 2. ERM 2 is flexible enough to encompass different regimes, provided that the countries' commitments and objectives are credible and in line with those of the mechanism. The only clear incompatibilities with ERM 2 that can already be identified at this stage are fully floating exchange rates, crawling pegs and pegs to anchors other than the euro.

In principle, the option of maintaining a euro-based currency board until the adoption of the euro is available on a case-by-case basis, as an additional unilater-

al commitment to a greater degree of fixity against the euro within an ERM 2 participation. However, when a country with a currency board wants to join ERM 2, the request would have to be examined in the context of the common procedure set out in the ERM 2 Resolution, and the central parity/conversion rate would have to be agreed multilaterally. This implies that some of the countries that prove able to successfully operate a currency board vis-à-vis the euro would not necessarily have to go through a "double regime change" (moving away to some flexibility before going back again to a harder peg and subsequently the irrevocable locking of the exchange rate).

Increased exchange-rate fixity in the run-up to accession need not be, however, the preferred solution, or more the exception than the norm. For example, with the flotation of the zloty before a future participation in ERM 2, Poland clearly opted for an approach which is consistent with the acquis and which may accommodate capital inflows more easily, provided that exchange rate policy is adequately supported by fiscal policy. Recently, Hungary also widened its exchange rate band in order to allow for greater flexibility in the exchange rates.

Generally speaking, in the run-up to accession and participation in ERM 2, the candidate countries will have to reconcile their ambitions for exchange rate stability and inflation reduction. In this respect, many candidate countries have already indicated, in the context of the accession negotiations, that they intend to join the mechanism only if they can sustain a period of participation without realignments so as to qualify for the adoption of the euro within a minimum period of two years. Whilst it is impossible at this stage to assess whether such expectations are credible (and these assessments will vary on a case-by-case basis), some of the difficulties observed with the disinflation process to low levels should inject caution in the candidate countries' more ambitious exchange rate strategies. In this area, the occurrence of inflation rates exceeding those of the euro area is exactly what economists would expect in a catching-up economy (Balassa-Samuelson). The more ambitious timetables would pre-suppose that inflation in the countries concerned be very close to the level consistent with avoiding significant downward deviations from the chosen ERM 2 central parity upon entry.

Looking ahead, this is particularly important, in view of the precedents for assessing the degree of exchange rate stability against the euro, for the fulfilment of the conditions for the adoption of the single currency. Following the principle of equal treatment, exchange rate stability for future Member States will be judged against significant variations from the *narrow bands* around the central parity, and not against the wide standard bands.

#### **Conclusions**

Exchange rate policy or "regime choice" in transition and in the run-up to EMU is a difficult exercise. It has to take into account several factors of which five are the most important: (1) minimising the cost of disinflation, (2) facilitating economic growth and real convergence, (3) assisting adjustment to real shocks and maintaining external balance, (4) containing exposure to reversible capital flows while (5) preparing for entry into ERM 2 and, in due course, for the full adoption of the euro. Because of the diversity of factors and potential trade-offs, there is clearly a case for heterogeneity of monetary and exchange-rate regimes between now and accession, and possibly beyond, within the framework of ERM 2. In a sense, the EU's approach to the enlargement process and to the process of adopting the euro have much in common: they are both progressive and as much as possible realistic, with clearly-defined stages on the road towards an irrevocable goal.

The degree of exchange-rate fixity before and after **ERM 2 participation** must be a case-bycase decision

#### References:

Balassa, B., "The Purchasing Power Parity Doctrine: A Reappraisal", *Journal of Political Economy*, December 1964, 72(6), 584–96.

Björkstén, N., "Real convergence in the enlarged euro area: coming challenge for monetary policy", Bank of Finland Working Paper No. 00-01, 2000.

Edwards, S. and M.A. Savastano, "Exchange rates in emerging economies: What do we know? What do we need to know?", *NBER Working Paper* No. 7228, July 1999.

"No single currency regime is right for all countries or at all times", *NBER Working Paper* No. 7338, September 1999. Gros, D. "The euro from the Atlantic to the Urals", CESifo *Forum*, Summer 2000, 1(2)

Halpern, L., Wyplosz, C. (1997), "Equilibrium exchange rates in transition economies", *IMF Staff Papers*, December 1997, 44 (4). Krajnyák, K. and J. Zettelmeyer, "Competitiveness in Transition Economies: What Scope for Real Appreciations?", *IMF Staff Papers*, June 1998, 45 (2), 309–362.

Pelkmans, J., Gros, D. and J. Nuñez Ferrer, "Long-run economic aspects of the European Union's eastern enlargement", Scientific Council for Government Policy, WRR, Working Paper No. 1209, The Hague, 2000.

Samuelson, P.A "Theoretical Notes on Trade Problems", Review of

Economics and Statistics, May 1964, 46(2), 145-54. Sinn, H.-W. and M. Reutter, "The minimum inflation rate for Euroland", NBER Working Paper No.. 8085, January 2001.

Szapary, G., "Maastricht and the choice of exchange-rate regime in transition countries during the run-up to EMU", *National Bank of Hungary, Working Paper* No. 00-7, October 2000.