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Jacek Rostowski

When Should the Central Europeans Join EMU?

W a r s a w , O c t o b e r   2 0 0 3

Contents

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Abstract

The paper first considers why central European countries wish to join EMU soon. The main reasons are the risk of macroeconomic instability they face outside the euro zone if they wish to grow quickly. At the same time, Central Europe is highly integrated as regards trade with EMU, so it is little exposed to asymmetric shocks that would require a realignment of exchange rates. Finally, it is argued that there is no cost in terms of slower growth from EMU accession, so that there is no trade-off, as has been claimed, between nominal convergence to EMU and real convergence to EU average GDP levels. Second, the paper assesses whether Central European accession to EMU would be disadvantageous to current members. It concludes that accession cannot increase inflationary pressure on existing EMU members, as has been claimed, but that slow growing members of EMU might suffer increased unemployment, unless they increase the flexibility of their labour markets. Incumbent members may also be unwilling to share power with Central Europeans in EMU institutions.

1. Introduction[1]

With EU accession now assured, the candidate countries are actively considering when to join the EMU. Unlike Britain and Denmark the new members will not have an "opt-out" - the right to remain outside the EMU indefinitely. The question is therefore only one of timing. A number of countries have already declared that they want to join EMU as soon as possible after EU accession. The costs of such a move are minimal for Estonia and Lithuania, which already have their currencies "hard-pegged" to the euro through a currency board [Sulling 2002][2]. Hungary and Poland have also announced that their aim is to satisfy the Maastricht criteria for EMU accession in 2005, which would allow them to join during 2006 or January 2007. On the other hand, the Czech government has declared that it does not foresee early EMU accession[3]. The European Commission [Financial Times, 10 Oct. 2002] and the Bundesbank [Bratkowski and Rostowski 2002, Financial Times, 26 Sept. 2000] have also made clear their lack of enthusiasm for new members joining the EMU quickly.

What are the reasons pushing many applicant countries towards early EMU entry, and why are some key players in Western Europe opposed to it? We divide the discussion into seven sections. Section 2 describes the macroeconomic risks to which central European countries are exposed while they remain outside the EMU. Section 3 assesses the standard optimum currency area (OCA) criteria for whether these countries are ready for EMU accession. Section 4 considers whether there is a trade-off for central Europeans between joining EMU and real economic convergence with the EU. Section 5 addresses some arguments which claim that Central European accession to EMU would be bad for current EMU members. Section 6 considers institutional issues and Section 7 concludes.

2. Risks of Macroeconomic Instability Outside the EMU

In earlier papers we have analysed the difficulties faced by the more advanced central and east European countries (CEECs) in achieving macroeconomic stability in the run-up to EU and EMU membership [Rostowski 2000], and have presented the case for unilateral euroization as a

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[1] I wish to thank a referee for very useful comments.

[2] Estonia has argued that it should be able to join EMU earlier than 2006, since it has satisfied the Maastricht Treaty's exchange rate criterion ever since the ratification of the Treaty and the interest rate criterion for many years. These are the two criteria which need to be satisfied for two years. The exchange rate criterion requires that the value of the applicant country's currency remain within the range required by the ERM2 relative to the central parity (plus or minus 15%) for a period of two years, without a devaluation of the central parity. The interest rate criterion requires that interest rates on long term (ten year) government bonds not exceed the average of the three countries with the lowest inflation by more than 2 percentage points. The remaining criteria are: (1) that inflation should not exceed the average of that in the three best performing members of the EMU by more than 1.5% for one year; (2) that the fiscal deficit should not exceed 3% of GDP, and (3) that gross public debt should not exceed 60% of GDP.

[3] This is because of the government's desire to maintain fiscal deficits above 3% of GDP.

solution to these problems [Bratkowski and Rostowski, 2000]. At present, unilateral euroization seems unlikely to be adopted by any of the front runners for EU accession in 2004. Nevertheless, the problems we have identified remain, and in the absence of unilateral euroization, rapid adoption of the euro becomes the best remedy.

The argument goes as follows: successful market reforms in the transition applicant countries (CEECs) and the perspective of EU accession leads to expectations of rapid economic growth. This in turn means that domestic residents wish to save less so as to smooth consumption, while foreign investors are willing to provide the financing needed to bridge the gap between savings and investment. The result is high capital account surpluses and their corollary high current account deficits. This, in turn, makes the CEECs very susceptible to capital inflow "stops" (reversals are not necessary) possibly leading to currency crises. In the case of Poland the current account deficit has been around 4-8% GDP over the last four years, which is usually considered well within the "danger zone" in which a currency "stop" may threaten due to fears of un-sustainability by investors.

We also argue that neither monetary nor fiscal policies can be *counted on* to keep these developments in check. Under a floating exchange rate regime, contractionary monetary policy will cause the domestic currency to appreciate, which **may** increase the CA deficit even further. In fact, very contractionary monetary policy has led to a significant reduction in the current account deficit in Poland over the last three years. Our argument is not that this cannot happen, merely that it cannot be counted on to happen. Furthermore, the reduction in the CA deficit has occurred at a very high cost in foregone output (growth had to fall sharply so as to reduce the motive for consumption smoothing). Expansionary monetary policy will lead to faster inflation and is likely to make the achievement of the Maastricht criteria impossible. Under a fixed exchange rate, monetary policy is not available as an instrument. Turning to fiscal policy (which can be used with either floating or fixed exchange rate regimes), this may also prove ineffective in improving the CA. A tightening of the fiscal stance may simply make foreign lenders more willing to lend to domestic private sector borrowers (we know that foreign investors do nowadays look at the overall indebtedness of a country's residents, both public and private)[4]. In any event, even assuming a very high (one to one) correspondence between fiscal and current account changes, reducing a current account deficit by three percentage points would involve a politically improbably large fiscal adjustment. Expansionary fiscal policy would, in the traditional way, increase aggregate demand and thus tend to increase the CA deficit.

Given the difficulty of reducing high CA deficits, many CEECs are very exposed to the risk of a sharp depreciation of their currency, commonly called a currency crisis. In countries with high levels of "liability euroization" [Calvo, 1998] such crises will lead to increases in the real debt burden and to depression (Indonesia post-1997 is a recent example). Many CEECs do not have a very high level of liability euroization (e.g. the Czech Republic, Hungary, Poland) but even in these

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[4] The US experience in the 1990s is instructive in this context.

the need to offset the inflationary effect of a sharp depreciation through higher interest rates could well lead to a strongly recessionary effect. In the absence of unilateral euroization, rapid accession to EMU is the only way of escaping the choice between slow growth and high exposure to the risk of currency crisis (possibly followed by a prolonged period of slow growth, as occurred in the Czech Republic after the 1996 crisis)[5].

Thus, the period before CEECs have joined the EMU exposes potentially fast growing applicant countries to either a high risk of currency crisis, or forces them to grow far more slowly than they could. Since real convergence is one of the purposes of EU accession for the CEECs, the orthodox path is at variance with the ultimate goal, something which cannot be desirable. This is the crux of my argument for early EMU accession for CEECs.

3. Optimum Currency Area Considerations

Asymmetric shocks are a danger if a country and the monetary union it proposes joining are not part of an optimum currency area (OCA). Our view is that many CEECs satisfy the OCA conditions *to the same degree as present members of EMU*, or are very close to doing so. Since the CEECs are committed by their acceptance of the *acquis communautaire* to joining the EMU at some stage, what is good enough for the EMU's current members should be good enough for the CEECs. Even if some of the CEECs satisfy OCA conditions a little less than current EMU members, this merely exposes them to slightly higher risks from idiosyncratic shocks than current EMU members are exposed to. In making a choice on EMU accession, these slightly higher risks must be set against the very high costs described above of keeping one's national currency in the pre-accession period.

The main reason we think that many CEECs are close to satisfying OCA requirements to a similar degree as current EMU members is their very high level of trade integration with EMU countries. Trade with other members of a currency area as a share of GDP is a good indication of the extent to which idiosyncratic shocks to a country's economy are likely to be amortized by its trade with the rest of the currency area. Table 1 shows that in 1999 **all of the CEECs** traded a higher share of their GDP with EMU countries than six of the current 12 EMU members (including the four largest Germany, France, Italy and Spain) in the year preceding the launching of the euro[6]. Trade with other members of a currency area as a share of total trade is a good indication of

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[5] For a balanced assessment of the benefits of "hard peg" exchange rate regimes such as currency boards or dollarization see Ghosh et al. 2000.

[6] Most of the CEECs are small countries in terms of population and very small in terms of GDP, and small countries tend to have less diversified foreign trade. With the exception of Finland and Greece it is the larger EMU members that have lower levels of international trade (and therefore of EMU trade/GDP). They may, therefore offset their lower levels of trade with higher levels of diversification. However, it is not clear whether in CEECs the extent of diversification depends on GDP or population. Also, small countries may be less affected by a *given* asymmetric shock than large ones. Usually OCA theory assumes that all goods produced by a given sector are identical, irrespective of which country they were produced in. However, if there are specificities to the goods produced by different countries, each country will face a somewhat downward sloping demand curve for its exports. Such demand curves are likely to be more elastic in the case of smaller countries, since they supply a smaller share of the market for their own produce and that of close

the extent to which a country would be exposed to movements in the exchange rate of the common currency against the currencies of "third countries": **all of the CEECs** traded a higher share of their total trade with EMU countries than two EMU members, and **six** of the CEECs traded a **higher** share of total trade with EMU than **all but two** current EMU members. Thus, if these ratios were the only criteria for satisfying OCA requirements, we could already conclude that many CEECs satisfy them[7].

It is argued [e.g. Fidrmuc and Schardax, 2000] that a higher share of intra-industry (II) trade within a currency area will lead to more synchronous business cycles, because industry specific supply or demand shocks are then more likely to be symmetric across countries. We therefore measure intra-industry trade with EMU/GDP for EMU members and applicant countries, and find that seven CEECs have a share of II trade with EMU/GDP which is higher than that of three EMU members.

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competitors. A negative asymmetric supply shock to one sector can be compensated by an expansion in a country's other exports, and this is likely to be easier in the case a smaller country. Further empirical study of this question is needed. This problem is likely to have less relevance for the second measure of trade with EMU/total trade, where it is the largest CEECs which score highest, and they do so against almost all EMU members.

[7] CEECs' scores on both measures would be somewhat higher if we were considering their exposure to shocks after all of them had joined EMU, since CEECs also trade with each other. I am grateful to a referee for this and the preceding point.

Table 1. Degree of trade integration of CEECs with EMU compared to that of EMU countries

	EMU trade/GDP	Intra-industry EMU trade/GDP(estimated)*	EMU trade/total trade
Belgium-Lux.	81.4	59	56.8
Hungary	**73.2**	**43**	**68.7**
Czech Republic	**65.1**	**43**	**61.7**
Estonia	**62.0**	**24**	**45.1**
Slovenia	**61.8**	**37**	**67.1**
Slovakia	**58.9**	**29**	**56.8**
Netherlands	48.8	38	47.9
Ireland	44.2	22	33.2
Bulgaria	**39.3**	**13**	**54.2**
Portugal	38.5	19	67.1
Austria	37.6	26	63.2
Romania	**34.7**	**10**	**66.4**
Latvia	**30.9**	**7**	**46.8**
Poland	**27.6**	**12**	**58.5**
Lithuania	**26.5**	**6**	**36.0**
Spain	25.5	17	58.3
France	21.7	18	51.9
Germany	20.8	17	43.8
Finland	20.7	10	34.0
Italy	19.5	12	49.3
Greece	17.4	5	53.4

Source: Eurostat. Data is 1999 for accession countries and 1998 for EMU countries.
* The shares of intra-industry (II) trade with EMU countries in GDP were estimated by taking the 1997 shares of II trade with the EU in Fidrmuc and Schardax [2000] and applying them to columns 2 and 4.

Intra-industry trade is often classified as coming in one of two varieties. "Horizontal II trade" where almost identical goods are exchanged between two trading partners and "vertical II trade", where the goods traded although they come under the same IST classification, differ in some important respects. It is usually assumed that a given amount "vertical intra-industry trade" assures less correlation between business cycles than the same amount of "horizontal intra-industry trade" of almost identical goods. This is not clear for two reasons: (1) if vertical trade depends on the supply of components by one side and of finished products by the other, then the two countries' trade and output flows are likely to be very highly correlated indeed; (2) if vertical trade depends on exchanging similar products of differing quality, then if CEECs export the lower quality, cheaper variants, the income elasticity of demand for these is likely to be lower than for that of the corresponding EMU country products. In that case, aggregate or sectoral demand shocks in EMU economies are likely to affect CEECs less (falls in demand in the EMU will result in smaller falls in demand for CEECs exports, increases in demand in EMU will result in smaller increases in demand for CEEC exports). Thus thanks to "vertical II integration" of this kind, CEECs would be less affected by EMU demand shocks than equally II integrated EMU members[8].

Moreover, it needs to be remembered that **inter-**industry trade also contributes to the convergence of business cycles in a currency area in the presence of aggregate shocks, be they supply or demand shocks. Thus, an increase in aggregate demand in EMU (but not in a particular CEEC) will spill over to the CEEC through increased demand for its exports, whatever the nature of these. And an asymmetric increase in aggregate costs, constituting a negative aggregate idiosyncratic supply shock (for instance as a result of increased energy prices which affects the CEEC more than EMU) will be partly cushioned by the smaller fall in EMU output and therefore demand[9].

Thus, it is hardly surprising that studies show that business cycles are more correlated between the advanced CEECs and Germany than between important EMU members. Boone and Maurel [1999], using de-trended unemployment, show that between 55% (Poland) and 86% (Hungary) of the advanced CEECs' cycles are explained by German cycles, whereas only 43% of Spanish and 18% of Italian cycles can be explained in this way. Fidrmuc and Schardax [2000] find that Poland's industrial production is as closely correlated with Germany's as is Austria's, and more so than those of Switzerland or Italy. Hungary and Slovenia's industrial outputs are more closely correlated with Germany's than is that of Italy, although those of the Czech Republic and Slovakia are far less correlated.

More recent work by Karhonen and Fidrmuc [2001] improves on previous research by correlating EMU members' and CEECs' supply and demand shocks with those of the EMU as a

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[8] On the reasonable assumption that any monetary policy response to such a shock for the EMU as a whole would not fully offset the effects of the shock.

[9] This is not to deny that the effects of such a shock might be even more muted if the CEEC's currency could depreciate in such a situation. But we are not talking here of the choice between accession or not for the CEECs, but rather about whether they are less suited to accession than current EMU members. It is in this context that it is important to remember the role of **inter-**industry trade in muting the effects of shocks even in a currency union.

whole[10]. The research shows that Hungary and Estonia seem to have least to loose by giving up their domestic currency, followed by Poland. The remaining CEECs either have very low correlations on both kinds of shock, or reasonable ones on one kind of shock but negative ones of a similar size on the other kind. Finally, Lithuania seems to have quite large negative correlations on both kinds of shock. However, much of the data used in the research comes from quite a few years ago, and since trade integration has proceeded apace, one may suppose that the correlation of CEECs' shocks to EMU shocks (of both kinds) has increased.

4. Is there a trade-off between Real and Nominal Convergence?

It is clear that if countries were able to use national monetary policy to mitigate the effects of demand shocks (both negative and positive) and to use exchange rate policy to mitigate the effects of negative supply shocks, the path of GDP would be smoother (which would increase welfare somewhat), and the trend rate of growth might even be somewhat higher (less risk could encourage higher investment).

Nevertheless, in general, catch-up is a pretty long-term phenomenon. Convergence between similar regions (US states, Japanese prefectures, European regions) proceeds at between 2% and 4% of the initial gap per annum [Barro and Sala-i-Martin, 1998], which implies a half-life for the productivity gap of between 18 and 36 years. This is not a period over which the availability or otherwise of tools for flexible macro policy is likely to be decisive, even if one were to assume that macro policy smoothes fluctuations rather than augmenting them.

But this is exactly where the "rub" lies. Monetary policy in robust young democracies with strong populist movements and limited human capital at the central bank can easily be pro-cyclical rather than anti-cyclical. Exchange rate movements can also be more of a "shock generator" than a shock absorber. A recent study [Habib 2002] finds that emerging market risk premia had a significant impact on exchange rates in the Czech Republic, Hungary and Poland during the period mid-1997 – mid- 2001, and on interest rates in the Czech Republic and Hungary. The volatility of the Czech and Polish exchange rates was also affected by "volatility contagion" coming from the emerging markets and there was also some "volatility contagion" of Czech interest rates. Csermely and Vonnak [2002] show that in Hungary the main reason for exchange rate and real interest rate movements has been changes in the risk premium Hungary has had to pay. These changes were due to world market increases in the premium required of emerging markets, an effect which would very largely disappear after EMU accession.

Thus, I would argue that a monetary union which eliminated the risk of "emerging market contagion" and made a higher level of capital inflow safe, while at the same time providing a strong, externally guaranteed anti-inflationary framework (which might in turn encourage a higher

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[10] The period covered depends on the availability of statistics, but for EMU countries it is for 1991 Q3 – 2000 Q3 or Q4. For CEECs it ends in 2000 Q4 (except for Slovakia, which ends in 2000 Q3) and begins as early as 1992 Q1 (Romania) or as late as 1995 Q2 (Estonia, Hungary, Latvia and Lithuania).

level of domestic savings), might be expected to increase the long term rate of growth of the CEECs, rather than reduce it.

Another argument which has been put forward is that CEECs need to run fiscal deficits in excess of the limit set by the Maastricht criterion and of the requirements of the Stability and Growth Pact. One justification for this view is that CEECs have poor physical infrastructures, that infrastructural investment can often boost economic growth, and that therefore a higher level of borrowing for public investment needs is justified in the case of CEECs [European Economy, 2002, Part V]. This is an argument for a certain kind of public expenditure rather than for financing that expenditure through borrowing. Such investment can also be financed by reducing other expenditure or increasing taxation. However, **if** we were to accept that borrowing was the best way of financing under the special circumstances which CEECs face, then rather than require that they choose between EMU membership and an optimal investment/financing mix, it is the Maastricht fiscal deficit criterion which should be altered[11]. Finally, it needs to be remembered that the requirements for fiscal prudence in the Treaties apply to non-EMU-participating EU member states as well[12].

5. Should rapid catch-up disqualify CEECs from EMU membership?

Prominent ESCB officials have argued that not just nominal but also "real" convergence should be required of CEECs before they join EMU. Thus Hans Reckers, a Bundesbank Board member, has argued that CEECs should not be allowed to join EMU before they had achieved GDP per capita levels equivalent to 70% of the EU average [Financial Times, 26 Sept. 2000]. In fact, the value or stability of a currency has nothing to do with the income of the people who use it. Were this the case, West European currencies would have been much more stable in the 1970s than in the 1870s, whereas the opposite was the case[13].

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[11] A variant of this argument is that the EU itself requires various expenditures (for instance on environmental protection). These can be thought of as the "admission price" to the EU, which is worth paying because other aspects of accession will boost growth in such a way as to more than compensate for it. **If** the optimal method of financing these expenditures were borrowing, then rather than excluding the CEECs from EMU or forcing them to finance the admission price in a sub-optimal way, it would again be better to adjust the fiscal deficit criterion appropriately.

[12] **All** EU members are obliged to avoid excessive deficits (defined as those in excess of 3% of GDP) under the Maastricht Treaty, whether they are EMU members or not (the sole exception is once again the UK, which is only obliged to "attempt to avoid" an excessive deficit). Only EMU members can be fined for failing, but the legal requirement nevertheless remains. Furthermore, any member state which has an excessive deficit should be unable to obtain financing for any new projects under the EU Cohesion Fund, something which is of great importance for some CEECs, such as Poland [Ecofin 1999, Art 2, Para 4 and Art 6, Para 1]. Finally, **all** EU members are obliged to achieve "a fiscal position close to balance or in surplus" in accordance with the Stability and Growth Pact. Neither EMU nor non-EMU members can be fined for failing to fulfil this requirement either, although again both will loose access to the Cohesion Fund if they are found by the Council to be in breach of the Pact [Ecofin 1999, Art 1, Para 1].

[13] It may be the case that a certain minimum level of income is required for a society to be able to support various sophisticated institutions, such as advanced forms of banking supervision, which may be helpful in protecting the political system from demands for inflationary finance. However, the more advanced CEECs already have such institutions in place.

One argument that has been made is that the Harrod-Balassa-Samuelson (H-B-S) effect means that CEECs are likely to have inflation rates 0%-2% above the average of the present EMU. On top of this there may be a demand effect resulting from the demand for non-tradeables being more income elastic than the demand for tradeables. As incomes rise, demand for non-tradeables rises faster, and unless productivity in the sector rises faster than in the whole economy (which is unlikely) non-tradeable prices will rise faster than tradeable prices. This phenomenon of "growth related relative price changes" also happens in current EMU members, but with faster income growth, it would presumably happen faster in CEECs. Adding faster growing countries with higher H-B-S and "demand effect" inflation to EMU must increase EMU inflation for any given degree of tightness of monetary policy it is argued. This seems to confront the EMU with an unpleasant dilemma: if the 2% ceiling on inflation is to be maintained for the EMU as a whole, interest rates will have to be higher and inflation in slow growing countries will need to be lower than at present. On the other hand, abandoning the 2% ceiling on inflation and allowing CEECs to have inflation rates well above the average of present EMU members (without reducing inflation in the current member states) would, it is claimed, undermine price stability in the whole zone.

However, we have to take a number of other considerations into account.

First, both the H-B-S effect proper and the demand effect, are as likely to occur in ***any rapidly growing economy*** as in a CEEC. Indeed, these effects have appeared quite strongly in Ireland, and to a lesser extent in Spain. They are not particularly the effect of *catch-up*, but simply of *faster growth* in the country concerned than the EMU on average. Thus, in order to prevent these effects from raising the average inflation rate in the EMU, members should not only refuse to accept CEECs, but *they should also prevent current members from **unilaterally** undertaking structural reforms which would accelerate their growth*[14]. Indeed, such a moratorium on reform would be particularly important since the CEECs represent only about 6.5% of EMU GDP. Thus, structural reforms that increased the growth rate by half in France and Italy (which together account for about 40% of EMU GDP) would be likely to have a much larger effect on EMU inflation than the accession of the CEECs.

Therefore, unless the EMU wishes to remain a low growth zone, there can be no argument for excluding CEECs on such a basis. Indeed, it may be in recognition of this fact, that the Maastricht inflation criterion only needs to be fulfilled for one year. Although the reduction in inflation does need to be sustainable to satisfy the MIC, it is hard to imagine that expectations of "growth generated relative price changes" of the kind we are discussing after the conclusion of the "reference period", could be held to violate this condition[15].

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[14] This would be particularly vital if countries are to avoid the "demand effect".

[15] The "reference period" is that for which the conformity of a country with the criteria is assessed. What **could be** targeted by the sustainability requirement, would be various tricks such as "delaying" administered price or negotiated wage increases into "post-examination" years, or the fulfilment of the criterion thanks to an unsustainable nominal appreciation.

Second, the CEECs are so small economically that their accession to EMU would not in fact require any change in the ECB's inflation target, even if their "growth inflation" were relatively high. Thus, if CEEC inflation were an improbably high 3 percentage points above the average of current EMU members, this would mean an increase in enlarged EMU inflation of 0.2%, on the assumption that there were no offsetting effects. If France and Italy increased their long-term growth rate by half, the effect could be twice as large (if we assume that the inflation effect of a growth acceleration would be about half of the acceleration)[16]. Of course, *even if the EMU-wide inflation target **were** adjusted upwards* to take "growth inflation" in parts of the zone into account, there would not be any need to adjust the ECB's monetary policy, and therefore *there should not be any effect on the inflation rate in slow growing countries.*

Third, it is not in fact clear that either the H-B-S effect or the demand effect on non-tradeables prices in the faster growing countries, would in fact increase the inflation rate in EMU as a whole, once we take the impact of the higher growth on the nominal exchange rate of the euro into account.

To see this, let us imagine that all EMU countries increase their growth rates by half. Would this lead to higher inflation within EMU? Assuming a stability- oriented monetary policy there are four ways of thinking about what would happen:

- To the extent that the higher growth was mainly generated by productivity increases in the traded sector (leading to an H-B-S effect), it would lead to a nominal appreciation of the euro against other currencies (we assume that the growth acceleration would be limited to the EMU). Domestic EMU prices of tradeables would fall (or fall more rapidly than they are in any case doing before the acceleration), compensating for the increase in the prices of non-tradeables and overall inflation would remain roughly constant[17].

- To the extent to which the productivity growth occurred in non-tradeables, prices in this sector would not rise in the first place[18].

- To the extent to which we have a shift in the structure of demand from tradeables to non-tradeables, the euro zone's balance of payments will improve *ceteris paribus*, leading to nominal appreciation of the euro, reducing the euro price of tradeables and thus compensating for the increase in non-tradeables prices[19]. The nominal appreciation also increases the marginal costs of producing tradeables in the EMU

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[16] The same assumption applied to an excess of CEEC inflation of 3 percentage points above the EMU average inflation during 2000-2002 of 2.5%, would imply improbably high CEEC-wide growth rates of 7-8% per annum.

[17] As long as the domestic price elasticity of demand for both categories of goods (tradeables and non-tradeables) were the same.

[18] As long as the "structure of demand" effect on the demand for non-tradeables, resulting from the higher income the accelerated growth brings, is not larger than the growth in productivity in non-tradeables.

[19] The shift is in the structure of demand, so euro zone demand for tradeables is likely to grow in *absolute* terms. This is because the shift itself results from overall growth in the economy.

relative to their world price (in dollars) and leads to resources being transferred inside the euro area to non-tradeables production.

- To the extent to which higher growth is balanced across sectors and there is no "demand effect", prices of non-tradeables would not rise. However, higher growth would lead to pressure for higher real interest rates, which would also lead to nominal appreciation of the euro, which would cause the price of tradeables to decline, and overall inflation actually to *fall*.

We can now consider what happens when the increase in growth is not EMU-wide. In the case when it is limited only to France and Italy, we would have weaker H-B-S or "demand effect" impacts on EMU-wide non-tradeables prices, more or less compensated by an equivalently weaker nominal appreciation of the euro. In the last case above, of "fully balanced" growth acceleration[20] in France and Italy, the real interest rate effect on tradeables prices would also be weaker than in the case of an equally large EMU-wide growth acceleration.

In all of these scenarios the impact of such a "geographically unbalanced" growth acceleration on slower growing countries within EMU could nevertheless be quite unpleasant. Nominal appreciation of the euro would make some part of their tradeables output non-competitive at previously expected wages. We can see this if we initially assume the existence a single homogeneous tradeable good, for which world demand and world supply are perfectly elastic. This good is produced in different currency areas of the world according to production functions which differ between areas in the short term, and which generate increasing marginal costs in production. Area output is determined at the level at which the world price $P_T = MC_T$ (domestic marginal cost). Resources (at least two factors) used in the production of the tradeable good are also used in the production of each area's non-tradeable good. An increase in productivity in the production of the tradeable good in an area leads to an increase in area income and therefore to a change in the structure of demand. Assuming that this causes a greater increase in demand for the non-tradeable good in the area than for the tradeable, the price of the non-tradeable good will rise. This implies a real appreciation of the area's currency, and in a non-inflationary environment, a nominal appreciation of the currency as well. Resources are then transferred from production of the tradeable to the non-tradeable good, which will additionally benefit the suppliers of the factors of production which are used more intensively in the production of the non-tradeable good (by the Rybczyński Theorem).

"Regions" within the currency area (in the EMU case these could be countries such as Germany) in which productivity in the production of the tradeable good does **not** increase, will find that with nominal appreciation, domestic P_T will fall. If domestic factor prices are flexible in such a region, this may cause a fall in nominal returns to factors of production which are relatively immobile out of the region (labour). If domestic factor prices are downwardly sticky, it will cause a fall in the *output* of the tradeable good in the region, and a reduction in *employment*. Thus, in order

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[20] Fully balanced on both the demand and supply sides **in both sectors**.

to avoid an increase in unemployment, expected wage increases might have to be foregone, or in the case of a relatively strong effect, real (or even nominal) wages might have to fall. This latter case is made the more likely by the low level of the ECB's inflation target.

Of course, on average even the inhabitants of slow growing EMU-members will benefit from faster growth anywhere in EMU (or indeed in the world). But these gains are likely to be unevenly distributed, with consumers of tradeable goods benefiting more than their producers. Thus, if we assume **two** tradeable goods are produced in the world, the currency area and the region we have been considering, and that productivity increases in the production of only **one** of the two tradeable goods in one of the regions of our area (but not in the other region or the rest of the world) then we get the following effects: (1) the area's currency still appreciates; (2) in the region in which productivity has increased, resources are transferred from the production of the **both** tradeable goods to the non-tradeable good; (3) in the region in which productivity has **not** increased, there are two rounds of effects. The first round involves, as before, a reduction in the profit maximizing level of output of **both** tradeable goods at given factor prices. This requires either a fall in output and an increase in unemployment, or a fall in regional factor prices (relative to other regions and in nominal terms in a non-inflationary environment). The second round is a consequence of the overall currency area growth which has resulted from the increased productivity in the production of one of the tradeable goods in the other region of the area. This increases area demand for the other tradeable good (in whose production productivity has not increased), which increases demand for the factors used intensively in the production of this second tradeable good. The non-growing region should benefit from this, as it can increase exports of the second tradeable good to the growing region. Which of these two (first or second round) effects will predominate depends on the size of the slow growing region relative to the area and on the various elasticities involved. If factor prices are highly flexible downwards, then the region will **not loose** from the first round effect and will gain (albeit maybe only slightly) from the second round effect.

In the case of CEEC accession and subsequent catch up, the direction of the effects on EMU slow growers would be the same as in the two cases examined above, but their magnitude is likely to be far smaller[21]. Thus, to summarise, the problem with CEEC accession to EMU is *not* that it will cause *higher inflation* in the whole euro zone, but rather that it may cause *higher unemployment* in slow growing countries such as Germany *if they fail to increase the flexibility of their labour markets.*

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[21] Throughout the analysis we assume that the EMU does not face a downward sloping demand curve for its products. If it does, then productivity growth in the tradeables sector will lead to a nominal **depreciation** of the euro rather than an appreciation, whether it is balanced by equal productivity growth in non-tradeables or not. Nominal depreciation will put upward pressure on EMU inflation, which would need to be offset by higher nominal interest rates. If the tradeable goods produced by all EMU countries were homogeneous, producers in countries with slow productivity growth would be hit by competition from their neighbours and by higher real interest rates. To the extent to which the tradeables produced by different countries differed, producers in slower growing EMU countries would face only the second problem of higher real exchange rates. However, only areas with largely undiversified exports (such as raw materials producers) are likely to face demand curves which are downward sloping in the medium to long term (the time horizon which concerns us, as we are considering issues of differential growth rates).

6. EMU institutional issues

One reason for the Maastricht criteria for EMU accession is that EMU membership gives a country voting rights in the ECB and the Eurogroup of the Ecofin, and *existing members would not want countries that have not demonstrated a commitment to low inflation to have such a vote.*

This is especially important in the case of the ECB. Although the ECB is supposed to make policy for the EMU as a whole, and therefore small economies should have a small weight in its considerations, each member of the interest rate setting ECB Governing Council (GC) has one vote at present. Apart from the six Executive Board (EB) members, the governors of all the NCBs are members of the Governing Council (giving a total of 18 members in the GC). This is a concern given that there are at present 12 potential new members from central, eastern and southern Europe. The Nice summit of December 2000 asked the ECB to make proposals for the restructuring of the Governing Council, and the ECB has now done this.

The current member states of the EMU may be concerned that most of the potential new members have recent histories of far higher inflation than Western Europe. The fear could be that they would not have the same commitment to price stability as existing members. We have called this the "price-stability culture problem" [Bratkowski and Rostowski, 2002]. This problem is partly offset by the fact that central bankers are not as a breed prone to be inflation lovers. Second, all European System of Central Banks (ESCB) member banks now have to be highly independent for countries to qualify for EU, let alone EMU, accession. Indeed, the opposite fear has *also* been expressed: central bankers of CEECs might vote for short-term interest rates which kept inflation under control in their own countries, but were too high for core countries such as Germany.

It has also been claimed that a Governing Council of 28 members would be far too large for serious discussion of the merits of monetary policy issues, which are best decided in a small group. It is said that in the ECB the tradition has been not to vote but to reach consensus and, it has been argued, reaching consensus in a group of twenty odd could be time consuming. Neither of these arguments seems to have any real merit. It is impossible to believe that consensus is at present arrived at in the 18 member Council through general discussion. What seems far more likely is that there is a smaller group with a clear view, and the rest go along with that. Compared to this, voting at least has the advantage of transparency. Moreover, the practical irrelevance of this argument has been demonstrated by the ECB's own proposal for the reform, which foresees a GC of 21 voting members, and that all "National Central Bank Governors will continue to participate in the discussions of the Governing Council and attend the meetings…" - which implies up to 33 participants [ECB, 2002].

Third, there is the serious matter of the unfairness of the present arrangement, which with its "one governor one vote" principle, favours small countries enormously, even if all the members of the executive board were drawn from large countries (which has not been the case). The admission of the present applicant countries merely exacerbates and highlights the problem. Nevertheless, this problem has now been largely solved by the ECB's proposal for the reform of

the GC. This envisions 6 board members and 15 rotating country representatives. The 5 largest countries in terms of their shares of GDP will have 4 votes rotating among them[22]. The remaining countries will be divided into two groups as follows: the next largest one half of all the EMU-participating countries by GDP will have 8 votes to rotate amongst themselves, while all the remaining countries will have 3 votes to rotate among themselves[23].

Membership in the eurogroup of the Ecofin Council of Finance Ministers may therefore be a more sensitive issue for some within the present EU. The European Commission (EC) and the twelve eurozone members have put forward proposals to the EU's Constitutional Convention that the eurogroup should cease being an informal forum for discussion, and should be allowed to take binding executive decisions and pass legislation for the eurozone in the same way that the wider Ecofin does for the EU as whole [Financial Times June 10, 2003]. Indeed, one might expect that as regards macroeconomic issues the importance of the decisions that would be taken by the new "EMU-Ecofin" may prove to be even greater than those that are at present taken by the EU-wide Ecofin. Thus, it has been argued that, because it shares a single currency, the EMU needs a far greater degree of co-ordination of fiscal policies than does the EU as whole [Jacquet and Pisani-Ferry, 1999]. If CEECs were admitted to the EMU they would be entitled to participate in any strengthened "EMU-Ecofin". Voting rights in Ecofin are roughly determined according to population, with an additional advantage being given to smaller countries[24]. There are also quirks in the allocation of voting rights. Thus, according to the rules adopted in the Treaty of Nice, Poland will have 27 votes compared to Germany's 29 in all the "chambers" of the Council of the European Union", despite having half of its population and a tenth of its national income[25]. These proportions would hold within any "EMU-Ecofin" as well. Thus it is not surprising that large and rich states within EMU might not be enthusiastic about poor states, that would contribute a small proportion of EMU GDP, joining EMU.

Furthermore, the European Commission wants to have the "EMU-Ecofin" granted legislative and executive powers for two reasons. First, this may be the only way in which it would be possible to establish a central authority for making fiscal policy decisions which could be made binding on EMU member states, as these might be unwilling to see non-EMU members participating in such decisions within the wider, presently existing Ecofin [Financial Times, 2003]. Second, the constitutional principle in the EU is that the Council of the Union (of which Ecofin is an embodiment and an "EMU-Ecofin" would be) votes usually on proposals put before it by the Commission.

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[22] The actual criterion is a composite indicator of each country's supposed "representativeness" of the EMU economy as a whole. This indicator is composed in 5/6 of GDP and in 1/6 of the total assets of the aggregated balance sheet of monetary financial institutions (TABS-MFI). It is unlikely that TABS-MFI will significantly affect the allocation of Member States to the three groups.

[23] The third group will only come into existence when the number of states participating in EMU reaches 22.

[24] Since the voting rules are laid down by treaty it would be extremely hard to change them, so as to take account of GDP for example (as we suggested could be done in the case of the ECB by weighting votes by members shares in ECB capital). Such a move would also be seen as profoundly anti-democratic.

[25] Economics and Finance (Ecofin), Agriculture, Environment, Foreign Affairs, etc.

Empowering "EMU-Ecofin" is therefore probably a necessary step for empowering the Commission itself in the sphere of EMU wide fiscal policy making, and therefore also fiscal policy co-ordination within EMU[26]. Thus, the expectation that CEECs will be admitted to the EMU and therefore to the "EMU-Ecofin" undermines the likelihood of large and rich EMU members agreeing to the creation of a powerful "EMU-Ecofin". Knowledge of this may well lie at the root of Commission antipathy to EMU accession by CEECs[27]. However, this antipathy may decline once the Constitutional Convention finishes its work[28].

It should also be pointed out that whereas it is not in fact very dangerous, from the point of view of maintaining the commitment to price stability, to admit CEEC central bankers to the ECB Governing Council (given central bankers usual preferences), the same cannot necessarily be said as regards the effects on sound public finance of admitting CEEC finance ministers to a powerful "EMU-Ecofin". The risk of doing so may be perceived as even greater if the Stability and Growth Pact is seriously watered down[29].

7. Conclusion

Thus, the balance of the argument appears to lie definitely on the side of EMU accession when we look at it from the perspective of the CEECs' interests. However, from the perspective of incumbent EMU members' interests, although we can state that many of the arguments put forward against early EMU accession have been overblown, we cannot avoid the conclusion that the arguments are more finely balanced. This is especially the case when we analyse the situation of slow growing incumbents, who are also likely to be members of any "core" grouping, and that of a Commission that is eager to expand its powers into fiscal policy and fiscal policy co-ordination. Given the opposing interests between the two sides, and the fact that it is impossible to forbid EU members from joining EMU if they fulfil the Maastricht criteria, we can expect to see an intensified effort by the Commission and certain incumbent Member States to dissuade CEECs from joining

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[26] The latter becomes all the more important as the "Stability and Growth Pact" which was supposed to provide a framework for such co-ordination comes under increasing strain.

[27] Strangely, Germany does not seem to oppose the strengthened role of the Commission in EMU fiscal policy, even though under the Nice Treaty the role of small countries in the Commission will be further dramatically strengthened, as not only will 9 new small countries join (and only 1 large country) join, but also all countries (large and small) will have only 1 Commissioner (until now large countries have had 2 Commissioners). Nevertheless, this increased influence may be offset by the influence of the large countries within the Commission's bureaucracy, developing a more hierarchical structure for the Commission (with more power for its President and - probably large country - Vice-Presidents), and by ensuring the appointment of a large country Commissioner to the crucial Economics and Finance Directorate-General. I am grateful to Fabrizio Coricelli for these points.

[28] If the Convention rejects the Commission's proposal. If instead the proposal is accepted, we may expect continued Commission opposition to CEEC accession to EMU until the new EU constitution, which would have to incorporate the proposal, is ratified.

[29] Recent suggestions for watering down the Stability and Growth Pact include: (1) using cyclically adjusted deficits; (2) excluding net investment spending from the deficit; (3) providing an allowance for low public debt/GDP levels; (4) being more lenient towards countries with low inflation; (5) excluding defence spending [The Business, 10/11 November 2002, p.11, London].

EMU. There may even be an attempt to return to the idea of tightening the accession criteria, although this would be hard to square with the principle of "equality between present and future Member States"[30].

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[30] This principle is claimed to be the basis for the Commission's opposition to unilateral euroization [European Commission, 2000].

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