

## FISCAL POLICY IN THE ACCESSION COUNTRIES

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This paper is part of a wider research program on Taxation in EU New Members, carried on at University of Pavia, under the direction of L. Bernardi, M. Chandler and L. Gandullia, and the supervision of V. Tanzi.

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# FISCAL POLICY IN THE ACCESSION COUNTRIES

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## **Abstract**

This paper is part of a larger research concerning the EU New Members' tax systems, carried on at the University of Pavia, under the coordination of L. Bernardi, M. Chandler and L. Gandullia, and the supervision of V. Tanzi. The analysis of the future fiscal policy which will prevail in an enlarged Europe must encompass a couple of aspects concerning the macroeconomic and public finance characteristics of accession countries, i.e. their first best strategy in managing the transition towards the Union and the weak points emerged in the design of fiscal rules governing the EU 12. This paper considers all these elements in the design of the optimal fiscal rule governing both the transition and the steady state phases of an enlarged Europe. We state that, given the small and open nature of accession countries' economies, an optimal policy should avoid at first glance a prolonged transition time, before the adoption of euro. Therefore a well-suited fiscal rule shouldn't be concerned about short-run shocks. In particular, we propose that a no-transition hypothesis to join the euro should be accompanied by the adoption of the actual Stability and Growth Pact (SGP). Hence, the question arises whether the SGP is a good fiscal rule for the EU12 countries or it needs a substantial revisiting. A review of main criticisms and proposals suggests that to improve the present situation an internal revision of the SGP should be sufficient, by adopting a multiple targeting criteria in the spirit of Maastricht accession rules. Specifically, the rule of 3 per cent should be maintained but weighted by the level of debt to GDP ratio and, where available, by the cyclically adjusted primary balance. Moreover the new SGP should be addressed towards a golden rule conditional on debt to GDP ratio in order to promote public investments without putting into risk the fiscal sustainability in the long run. The rationale underlying this setting would resemble that one used in the conduction of monetary policy by ECB, based on a single target but with two pillars. The "enlarged" European Commission could adopt a similar strategy by declaring the "targets" in terms of deficit and the debt to GDP ratio, but not revealing ex ante in which way it evaluates the sustainability of national public finances. Of course, this proposal would involve some procedural adjustment in order to make more accountable and more powerful in its role the Commission, but this would seem to be an unavoidable price to grant stability, flexibility and co-ordination to fiscal policy in an enlarged Europe.

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## **1. Introduction, contents and main conclusions**

The analysis of the future framework which will prevail in an enlarged Europe must encompass a couple of aspects concerning the macroeconomic and public finance characteristics of the accession countries, their first best strategy in managing the transition towards the Union, and the weak points emerged in the design of fiscal rules governing the EU 12 zone. Only by taking in account these elements, it is possible to discuss and propose some guidelines for the design of new rules that fit the needs of a very heterogeneous and decentralized group of countries.

Even though the accession countries don't represent a homogeneous group, it is still possible to remark some aspects of their macroeconomic structure. They are generally small and open economies, so that most of shortcomings of financial and market liberalization apply to these countries, i.e. a critical exposure to financial and currency crises. With respect to this point, an optimal policy should avoid at first glance a prolonged transition time before the adoption of euro. With respect to macroeconomic figures, the new comers countries show, and will show in the future, GDP growth and inflation rates higher (and more volatile in the past years) than those experienced in the early EU countries. This will happen both for catching-up and Balassa effects. Giving the hypothesis of a single monetary policy, a corollary to the previous assumption is that accession countries will benefit of low real interest rates. A non-secondary aspect in defining a fiscal rule concerns the public finance of these States, since they are generally low debt, high deficit and high capital expenditures countries.

All these elements must be taken into account in the design of the optimal fiscal rule governing both the transition and the steady state phases of an enlarged Europe. Given the excessive output volatility showed in the past, fiscal rules based on output gap measures could be unfeasible or too weak as constraint in the short run, even if appropriate in the steady state hypothesis, when output volatility could be removed in the calculation of output gaps. Furthermore, rules based on debt sustainability wouldn't have an effective binding effect during the transition, since almost all countries will access to EU with a starting debt to GDP ratio very low.

Therefore the trade-off between a transition-focused and steady state-focused rule is evident. The softer the budget constraints in the transition, the higher the risk of weak

sustainability in the long run. Then the fiscal rule should be coherent with the general macroeconomic strategy that will be adopted to manage the enlargement. If the enlargement will be conducted with a strategy of long transition, then fiscal rules must be soft constraining to avoid financial turbulence to the accession countries, i.e. fiscal rules based on debt concept should prevail.

Conversely, a no-transition strategy would not necessitate by definition of rules that will soften the transitional period. So nominal ceilings to the deficit to GDP ratio could be maintained as binding constraints for national fiscal policies, and cyclically adjusted measures moderately used to address the decisions of the (enlarged) European Commission in its judgements on the respect of the rule. In short, a no-transition hypothesis should be accompanied by the adoption of the actual Stability and Growth Pact (SGP). Therefore, the question is whether the SGP is a good fiscal rule for the EU 12 countries or it needs a substantial revisiting.

The implementation of the SGP started in a favorable situation of high growth with the belief that all divergence phenomena should have been removed in a few years, without generating significant role for asymmetric effects of SGP during the transition. Problems started with the economic slowdown of late 2000. The need for reforming the SGP became more and more obvious in the course of 2002, when some (the most important) countries experienced pro-cyclical policy mix due to extremely simple and homogeneous rules for the European Union, which is instead still heterogeneous and characterized by persistent inflation differentials (Creel and Le Cacheux 2003; De Novellis and Parlato 2004). The violation of the deficit ceiling of three per cent on GDP by half of total EU countries expected for 2004 (European Commission 2004) have made the debate on the rewriting of the Pact no more deferrable. Furthermore, the persistence of low GDP growth in Europe has renewed the hard criticism about the consistency of the SGP with policies aimed to stimulate growth. Then the choice of a fiscal rule for accession countries passes through the reform of the SGP, since the latter couldn't be used in its actual form as above suggested. The paradox relies on the fact that although the SGP could be shown to be an optimal fiscal rule it couldn't necessarily work in the EU 15 (or 25) group since the EU doesn't converge spontaneously in the medium term towards an (optimal) economic union. To reach a solution for the design of a fiscal rule in an enlarged Europe, it's necessary to jointly treat the problems that

characterize EU 15 and accession countries. The optimal fiscal rule should be able, on one hand, to ensure more flexibility to the EU 15 countries, given the existing inflation differentials, and to free resources to finance capital public expenditures, in order to promote growth both in EU 15 and in new comer countries; on the other hand, to impose fiscal severity and ensure fiscal sustainability of each member State and of the enlarged area as a whole, once established that non transitional period is required for accession countries to join euro.

Posed in these terms, the proposal that arises implies an internal revisiting of SGP, by adopting a multiple targeting criteria in the spirit of Maastricht accession criteria. Specifically, the rule of three per cent should be still maintained but weighted by the level of debt to GDP ratio and, where available, by the cyclical adjusted primary balance. Moreover the new SGP should be addressed towards a golden rule conditional on debt to GDP ratio, in order to promote public investments without putting into risk the fiscal sustainability in the long run. The rationale underlying this setting would resemble that one used in the conduction of monetary policy by ECB. As the European Central Bank uses two pillars in conducting monetary policy in EU 12, one simple and easily accountable (the 2 per cent limit of inflation rate), the other not defined but considered (money growth), the “enlarged” European Commission could adopt a similar strategy, by declaring the “targets” in terms of deficit and the debt to GDP ratio, but not revealing *ex ante* in which way it evaluates the sustainability of national public finances. Given a deficit and a debt to GDP ratio, sustainability would depend on judgments about GDP growth, the composition of revenues and expenditures, the launch of structural reforms, an so forth.

If the ECB has been successful in conducting monetary policy without curbing inflation under two per cent, in the same way European Commission could ensure fiscal stability allowing some country to breach the three per cent limit. Of course, this proposal would involve some procedural adjustment in order to make more accountable and more powerful in its role the Commission, but this would seem to be an unavoidable price to grant stability, flexibility and co-ordination to fiscal policy in an enlarged Europe.

## **2. Growth and inflation in the accession countries**

From the beginning of the the accession countries shared a common economical development. With the start of the transition period they experienced a deep recession, followed by a period of rapid growth starting from the half of the past decade. At the end of the 1990s they also suffered for the Russian crisis. More marked were the negative impacts on Baltic countries, which however rapidly recovered in the successive two-year period. Even though at the beginning of the new decade the phase of deceleration of the international cycle weakened the performance of these countries, starting from 2003 they have already shown a cyclical recovery, in spite of the economic weakness of the demand in the Western Europe economies.

Regardless the evolution of the cycle, these economies have experienced high growth rates since the second part of the 1990s, although, as showed in the table 1, the rhythms of growth were rather differentiated.

TABLE 1A-D HERE

All in all the economic performance observed during the 1990s can be evaluated positively, once we take into account the not easy macroeconomic environment outside these economies. The western European countries, especially Germany, that could have offered a support to growth, showed a weak internal demand. The difficulties of the Russian economy must be added, which experienced high output volatility during the last decade.

It's soon to draft a definitive judgement on the results of the first phase of the transition, being the evidence still mixed. First, countries that joined EU in 2004 show on average high rates of development, higher than those observed in other transition economies.

The second aspect is related to the high output volatility. This instability comes partly from the specific shocks coming from the Russian crisis at the end of the 1990s, but is largely due to widespread changes occurred in the productive structure at the beginning of the decade. During the 1990s it was also observed a reduction in output growth dispersion among different economies. Therefore, the high output volatility does not necessarily constitute a structural feature of these economies.

Third and strictly connected to the previous, it is difficult at the moment to quantify, on the basis of the most common techniques, the growth trend that characterizes these economies. As a consequence, being extremely uncertain the measurement of the dimension of the cyclical component of the growth, it's hard to impose fiscal targets based on structural balances to these countries.

As concerns prices dynamics, the general tendency with respect to the 1990s was clearly declining. As open and small economies, the accession countries are exposed to exchange rate volatility. Therefore it is straightforward to notice how any policy aimed to curb inflation must be focused on the control of the exchange rate. In this case it's not secondary to recognize that, especially for the Baltic countries, even if the euro constitutes the most important currency as reference for fixing the exchange rate, the Russian ruble could have an important role in influencing the domestic prices. This factor could represent a further element of instability once New Member States will adopt euro as their national currency.

However, in the last years monetary and exchange rate policies were not entirely successful in curbing inflation, thus implying a real appreciation of the exchange rate. Such phenomenon reflects the high productivity achieved in the tradable sectors, which entails the so-called Balassa effect. The economies experience a rise in price dynamics notwithstanding a stable competitive position as the productivity differential in the tradable sectors is higher than that registered in the no-tradable sectors. This phenomenon could well persist when euro will be adopted, thus entailing a systematic inflation differential compared to the others European countries and a constant real appreciation of the exchange rate. In the figures 1.a-c two real exchange rate measures based on consumer prices and on the manufacturing unit labor cost are represented. The cumulated distance between the two variable is caused by the part of real appreciation of the exchange rate deriving from the Balassa effect and thus is not attributable to a loss of competitiveness for the sector exposed to the competition.

FIG 1A-C HERE

Finally, the accession countries have generally showed during the last years, with the exception of Slovenia, high current account deficits so that they have accumulated high levels of foreign debt. Generally it is normal that current accounts register some

deficits in the economies in the early development stage, as they attract foreign capitals to compensate insufficient internal savings to finance investments. If such development would materialize, there are no problems for repaying external lenders and the foreign debt is not a concern. Nevertheless, it remains difficult to evaluate whether the competitive position or the sustainability of current account deficit could influence the opinions of financial markets, thus putting under pressure the debt sustainability. Such characteristics expose these countries to the risk of a currency or financial crisis.

Starting from the tendencies emerged in the last decade, we are able to propose a rapid description of some structural features of the accession countries and to compare them with the Western European countries. In particular, the Table 2 shows the relevant levels of income and prices for these countries.

The implicit relative prices are calculated on the basis of the relation between the GDP expressed in terms of effective nominal exchanges and GDP expressed in terms of Purchasing Power Parity. The accession countries are compared with the Eurozone. Generally, the correlation between the relative levels of per capita GDP and the relative prices is maintained. The accession countries present levels for both variables relatively low, but higher than those of the other three Eastern Europe economies included in the table. Only the Slovenia presents per capita income and relative price levels close to those of some countries of the Eurozone, like Greece and Portugal.

TABLE 2 HERE

The brief analysis of economic features of these countries allows us to point out some stylized facts, which will be useful for drawing indications about the perspectives of these economies. The tendencies of the last years showed a sustained path of development for the accession countries, indicating that a catching up process is happening. This allows us to forecast a phase of high growth also for the next years. Notwithstanding, an extreme caution is necessary, before drafting indications about the dynamic of potential output. In fact, the development path observed during the last years resulted extremely unstable, mainly in the early stages of the transition. The GDP growth was accompanied by a gradual increase of the relative level of both the per capita GDP and the relative prices. Therefore real exchange indicators show a tendency toward appreciation and the phenomenon seems to be persistent.



### **3. The optimal strategy to join the euro**

The analysis in the previous paragraph has shown that the target for nominal and real convergence entails internal conflicts. The catching up could require a phase with relatively high inflation, but the attainment of Maastricht criteria would impose to these countries restrictive economic policies aimed at reducing inflation. According to some studies, the priority would be attributed to the real convergence: the adherence to the euro and the attainment of the parameters of Maastricht should be deferred. An opposite view emphasizes that joining the euro could facilitate a faster economic development. Therefore the accession to the euro should be achieved quickly.

A long transition could have several advantages, if one considers that a real convergence could imply a reduction in the differences of the economic structures. Economic structures of the accession countries more similar to those of the Western Europe countries would concur to reduce the risks of asymmetric shocks, and therefore to make easier the participation of these countries to the European single currency. Moreover it must also be observed that the behaviors that the accession countries will exhibit in the next years are of difficult appraisal. For the next years greater opportunities will be introduced on the European markets, but also greater exposure of the local industries to competitive pressures. The transition could create a context of uncertainty extremely elevated (Issing 2003). In such conditions, it would seem more appropriated to maintain the availability of one economic policy instrument like the exchange rate.

On the other side, the advantages of a no-transition strategy could be extremely high. First, as the differences among incumbent and new comers countries are too pronounced, the advantages of real convergence disappear as well, since the convergence would require an infinite horizon to be completed. Moreover this imply that the fulfilling of Maastricht criteria would impose an excessive cost to the accession countries. Furthermore, if mechanisms such as the Balassa effect were in action, then a group of countries would experience inflation rates systematically higher than others, rendering such a policy partially incoherent. Finally, since curbing inflation should be inevitably based on pegging the exchange rate, such policy could be difficult to

implement in small and open economies where capital inflows play a significant role (Wyplosz 2003).

On the basis of these considerations, an alternative option should allow for an immediate access to the euro, without imposing restrictive policies aimed to fulfill the Maastricht criteria, since a no-transition strategy would be actually incompatible with such requirements.

This exception would also be opportune, once taking account that the monetary instability of the new members countries would not be without effects also for the other economies of the Union. The choice to delay the adhesion to the euro produces uncertain and risky outcomes. Another argument in favor of a fast entry in the euro is represented by the fact that the same transition towards the euro can be rendered more unstable from the lack of sufficient reputation of the national Central Banks, since in some cases their independence is not still complete. If a greater independence of the national Central Banks should be required as essential for the adhesion to the single currency (Padoa Schioppa 2002), this could be deferred for a too long time. The road of the fast adhesion to the euro concurs also to encompass this type of problem.

There exist also intermediate options to loosen ties for the adhesion to the euro, although of not easy application. As an example, the inflation requirement could be maintained, but in a lesser restrictive manner in order to take account of the catching-up stage. Moreover it is clear that the adhesion to the euro could be facilitated if the structure of parameters were modified by rendering them less tightening. The increased probability of adhesion would entail at least two benefits: on one hand it would stimulate virtuous policies, since the greater probability of succeeding associated to them. On the other hand these same policies would be less onerous, because they could be accompanied by a reduction in interest rates.

#### **4. The fiscal position of the accession countries**

The budget position of the accession countries is illustrated in the country chapters of this research. As it is shown, the situation is not homogenous and each country presents even marked differences with respect to the other countries. In general terms, these are the main elements that emerge from the reading of the data.

The role of the public sector is wide. The incidence of revenues and expenditures as percentage of the GDP is relatively high, comparable with that of the EU countries and higher than that observed in the other transition economies. This reflects an historical inheritance of the accession countries that, at the beginning of the transition already presented a high weight of the public sector. Since the early stages of the transition, the weight of the public sector on the GDP has been drastically reduced on the wave of privatization of public held industries.

The reduction was evident in Hungary, where the amount of total outlays has been lowered starting by the early 1990s from around 60 per cent of GDP to 50 percent at the beginning of the new millenium. In Poland expenditures dropped from 54 percent to 46 percent of GDP in the last years. In both countries, however, data show that the reduction of the public expenditure has been interrupted in the last years. In Poland, the recent increase in public expenditure is mainly due to a growth in the current disbursement in part offset by a reduction in the capital outlays. In the Slovak Republic the route of curbing expenditure is more recent: still in 2000 the expenditure attested on an utmost of 65 percent of GDP, having then recorded a strong reduction in 2001 and 2002.

It seems that in the economies where the greater programs of expenditure cuts were experienced, a relaxation in the plans of reforms happened later. The strategy followed in the last years by the Czech Republic, Slovenia and the three Baltic countries are different. These countries, in fact, at the half of the 1990s presented already small levels of public expenditure and since then they have not realized expenditure reductions. On the contrary, in the case of the Czech Republic an increasing trend in public expenditure is observed, starting to the end of the past decade. The three Baltic economies share the same path: it is pointed out an upsurge of the public expenditure in the '98-'99 and a strong reduction in the following years. This evolution, influenced by the Russian crisis, testifies a strong reactivity of the budget to the cycle also from the side of the expenditure.

As concerns interest expenditure, this can be approached from the "property income paid by Government" according to the definition proposed by the OECD. Interest payments on debt have been strongly reduced in Poland and Hungary, thanks to the fall of the interest rates caused by the reduction of inflation. Interest expenditure has

been small in the Czech Republic, a country characterized from a low level of the stock of public debt as a percentage of GDP, but it increased in the Slovak Republic, coherently with the contextual increase of the debt to GDP ratio. Considering that the reductions of the expenditure involved much more the expenditure in capital account, is mattering to point out that the four greater economies experienced a stable current primary spending as percentage of the GDP, with the exception of the Slovak republic, where it has been realized a solid reduction.

Therefore, on the expenditure side of the budget, accession countries show a deterioration of composition, since capital outlays decrease while current ones remain stable or increase.

This is above all the case of the Poland, where the level of the net capital outlays has been reduced on values close to 2 percent of GDP. In Hungary this voice of expenditure goes from values of the 6/7 percent of GDP in the half of nineties to values around 4.5 percent in the last years.

Even if these values of capital expenditure are high on average they show a problem in perspective. In fact, the efforts to balance the budgets in order to join euro could be concentrated on capital expenditure, thus preventing these economies to pursue a welcome level of investments in infrastructures to accelerate the catching up process.

The revenues show a not very different structure with respect to the euro countries. Dynamically, revenues show an evolution close to that of expenditures. However, their incidence on the GDP has reduced less than the expenditure did, thus favoring a deficit reduction. The reduction involved generally the indirect taxes. Only Poland registered a fall in the direct taxes as a percentage of GDP.

Generally, making reference to the reclassification of the OECD, the main divergence in the structure of revenues with respect to the euro countries regards the low level of the direct taxes on personal income. Conversely indirect taxes are not low, even in comparison with euro countries. Hungary and Slovakian Republic show an enough contained level of the social contributions.

Since revenues structure is similar to that experienced by European countries, one can suppose that accession countries budgets would show in the future the same response to the cycle registered in Europe. Even if it would be the case, it remains open the problem of measuring correctly such elasticity given the high output volatility

observed during the past. However, once this lack of stability would be removed, it's arguable that budget elasticity in accession countries will be very close to that of European states.

The budget deficits are on average higher than in other European countries, but within the accession countries there is a certain differentiation. Some countries as Hungary and the Czech Republic exhibit rather high deficit, while others share more contained imbalances. The target of the three per cent of GDP is breached almost elsewhere in the greater economies. Instead it's achieved by Slovenia and the three Baltic countries. On average Central Europe countries show higher deficits than the Baltic countries, although the reversal is true when we consider economic growth. In particular, the Baltic countries have been heavy hit by the recession conveyed by the Russian crisis, but their fiscal position has been quickly strengthened in the successive phase of expansion of the economic cycle. Central Europe countries instead have largely adopted pro-cyclical fiscal policies (Zogada 2003).

The main feature of fiscal position of the accession countries relies on the low levels of debt they share. It's worthwhile to notice that the low levels of public debt reflect widely the initial conditions of the transition. Economies that exhibited an elevated public debt at the beginning of the 1990s, as Poland and Hungary, still have debt to GDP ratio higher than other countries. However they are not exceptional values, and are reducing. Poland reduced its debt to GDP ratio from over 50 to 46 per cent, while in Hungary debt to GDP ratio declined from 80 per cent in 1995 to 55 per cent at the beginning of this decade. Similarly, countries that initially had contained debt levels still have a low degree of indebtedness. An exception is constituted by the Czech Republic and the Slovakian Republic that have shown an increasing debt to GDP ratio (Zogada M. 2003). In Slovenia and in the Baltic republics the debt to GDP ratio is negligible.

## **5. The choice of fiscal rule**

A binding starting point in selecting the fiscal rule that best fits the needs of new comers countries relies on the macroeconomic strategy pursued to join euro. As stated above, the strategy to adopt euro is twofold. One prescribes a prolonged transition, the other

implies no transition at all. Inevitably, the choice of a fiscal rule depends on the strategy it will be adopted. If joining euro is conditioned to satisfying Maastricht parameters along the convergence period, the optimal fiscal rule would be that one ensures a soft constraint to budget policies in order to facilitate the transition. Conversely, if the euro is adopted without fulfill any entry criteria, then the optimal fiscal rule should focus on steady state by ensuring a balanced budget policy coherent with long run equilibrium.

If this would be the case, because the steady state is a situation in which countries have accomplished the transition towards medium term positions of close-to-balance, a fiscal rule will not provide a ready-made recipe for tackling the problems that countries with deficits still close to the upper ceiling face in the event both of a cyclical downturn or of a financial crisis. Such fiscal rule should be only devoted to guarantee budget flexibility in a close to balance framework (in cyclically adjusted terms). On the contrary, if the transition period implies new comers countries to be out of long run equilibrium, the budget flexibility allowed by a fiscal rule should be ensured regardless the cyclical position or the budget condition of a country.

Therefore the trade-off emerging from the above-discussed scenarios (long transition vs. no transition) is between flexibility and severity of fiscal rules. The more the fiscal rule is flexible, i.e. it doesn't interfere with national fiscal policy whatever the economic shock is, the less it will be severe in ensuring fiscal sustainability in the long run. Conversely, the more the fiscal rule is well suited for steady state equilibria, the less it will be useful to help governments to avoid financial or currency crises, eventually generated by adverse shocks during the transition towards the euro. Given this framework, an optimal fiscal rule should maximize both flexibility and sustainability of fiscal policy conditional on the macroeconomic strategy that has been chosen, i.e. long transition or no transition.

Even though we don't provide an analytical derivation, it's still possible to draft some prescriptions on the optimal rule by using stylized facts above described regards to budget conditions, economic structure and cyclical position of candidates countries.

First, many of these countries share a high deficit to GDP ratio. This should discourage to condition their entry in EMU to the fulfilling of the close to balance criterion, since it could never allow these countries to adopt euro. In fact they would be exposed too much to the risk of breach the ceiling and thus incurring into financial

turmoil during the transition. For more fragile countries such strategy could entail a never-ending transition. Under this condition there would be two feasible solutions: to eliminate the transition period, thus allowing the accession countries to adopt immediately the euro as their currency, or to change the target used in the fiscal rule. If the latter would be the case, a shift from deficit to debt to GDP ratio as a target for fiscal rule could be optimal, given the low indebtedness shared by candidate countries.

Of course, this solution could entail a fiscal laxity by allowing the new comers countries to enlarge their public deficits. Moreover, given their actually high nominal GDP growth rates, a such solution would make the budget condition of accession countries very fragile in the medium term.

Therefore, once taking in account the above discussed optimality of a no-transition strategy from a macroeconomic point of view, the best choice for accession countries seems to fall in the adoption of a fiscal rule based on deficit to GDP ratio. In order to allow an immediate entry in the Eurozone the target on deficits could be substantially relaxed in the early stage of the enlargement, being the fiscal sustainability ensured by high growth, low real interest rates and small debt to GDP ratios. Of course, the laxity of initial conditions shouldn't prevent the fiscal rule to impose credible paths of deficit reduction in the medium term.

The choice of entry parameters softer than those used in the Maastricht Treaty would be also desirable as it reduces the risk of breach the ceiling thus lowering the risk that a disruptive capital flight hits the accession countries more than a legal penalty could do.

In the design of the optimal fiscal rule also the concept of structural balances matters. The use of such measures is justified by the necessity to avoid that national governments were induced to pursue pro-cyclical policies in order to respect the fiscal rules. Defining the budget targets in structural terms helps the automatic stabilizers to function freely, when the economic is hit by an adverse shock without easing fiscal control on national public finances.

The adoption of such indicators within the rule governing the fiscal policy in the accession countries would be also desirable, but the transition they experienced towards free market signed a structural break in the statistics. As a consequence, actually we dispose of reliable data neither to calculate output trend nor to know rapidly effective

GDP growth (they are frequently revised). Therefore output gap measures, which are not univocally determined and subject to periodical revisions also in the industrialized countries, are far from being unambiguous indicators to be used for the accession countries, at least in the early stage of the enlargement. Consequently, the use of structural balances as target of fiscal rules could be greatly misleading. However, looking at structural balances as reference values could be a complementary strategy in evaluating the respect of fiscal rules based on nominal targets. Of course, once the problems in calculation of output gaps will be removed, a shift of the targets from nominal to structural balances would be desirable within the fiscal rule suited for the accession countries.

Finally, once the optimal fiscal rule has been defined as regards nominal targets and speed to reach them, qualitative properties of the rule have to be investigated. One of the most recurrent criticisms against fiscal rule based on nominal deficit concerns the disincentive that they pose in developing public capital accumulation. To alleviate this problem the so-called golden rule has been proposed. According to the golden rule of deficit financing, borrowing is allowed to finance public investment. Implementing the golden rule requires establishing a dual budget separating investment spending from current spending.

The main advantages of the golden rule are those of spreading the burden of capital projects over the different generations of taxpayers benefiting from them and avoiding the efficiency loss caused by distortionary taxation, if the tax rate fluctuates over time. The lack of this possibility may negatively affect capital spending.

The problem is particularly relevant in the initial transition period, in which current generations have to tax-finance new projects, while also paying interest on past debts. This argument hardly holds for new comers countries, largely engaged in a catching-up process towards higher per-capita GDP levels.

According to Coricelli and Ercolani (2002), the enlargement of EU should be a good occasion to modify the actual rules prevailing in the Eurozone for the *early comers*. However, there are a number of arguments against the introduction of the golden rule (Buti *et al.* 2003).

First, if applied to gross public investment, the golden rule would be an obstacle to deficit and debt reduction. In particular, given the ratio of public investment as a



percentage of GDP, the long-run equilibrium level of government debt could be very high, especially in an environment of low inflation.

Second, what is important is overall capital accumulation in both private and public capital. For instance, a well-devised tax reform that, by lowering tax burden and distortions, leads to higher investment may be preferable to public investment. Moreover, there is no clear evidence in the empirical literature that investment in public infrastructure always leads to significant positive growth effects.

Third, a dual budget may distort expenditure decisions in favor of physical assets and against spending on intangibles. Moreover, the golden rule provides leeway for opportunistic behavior, as governments would have an incentive to classify current expenditure as capital spending.

Given these shortcomings in the use of a golden rule, the adoption of a not strictly binding target for nominal deficit on GDP, which encompasses the distinction between current and capital spending, don't have to be associated to discretionary power in pursuing such soft budget constraints. Otherwise, soft target and high discretion would entail weak credibility of such fiscal rule.

By summing up all the above assertions and considering that a golden rule scheme could be designed internal to the actual SGP (Buti *et al.* 2003), the policy prescription which emerges for the accession countries is quite obvious. When a no-transition strategy is opted out, namely a entry strategy to the Eurozone which doesn't encompass the fulfilling of Maastricht criteria, then the optimal fiscal rule for accession countries is that actually in force in EU, i.e. the SGP. In fact, all the figures composing the optimal fiscal rule constitute only internal adjustments of the SGP.

On this basis, the next step to evaluate whether a revised version of the SGP could be adopted to manage fiscal policy in an enlarged Union is to test how optimal is such modified rule for early comers countries. This question would appear paradoxical, but recent events testify how difficult it has become to maintain in action the SGP without changing the Treaty.

The implementation of the SGP started in a favorable situation of high growth. Problems started to show with the economic slowdown of late 2000. The need for reforming the SGP became more and more obvious in the course of 2002. The violation of the deficit ceiling of three per cent on GDP by half of total EU countries expected for

2004 (European Commission 2004) and the contextual launch of enlargement of the Union to selected Eastern countries, namely the EEC countries, make the debate on the rewriting of the Pact no more deferrable.

Since the design of a new Pact appears unavoidable in order to correct the adverse effects showed in the past and to prevent divergence phenomena for an enlarged Europe in the future, it's opportune to consider firstly the drawbacks on which rely the main criticisms of the Pact.

Subsequently, it will be possible to verify whether the internal adjustments to SGP above proposed are coherent with such proposals, thus indicating the existence of an uniform as effective fiscal rule for an enlarged Europe, or if a differentiated fiscal rules are required along the Union.

## **6. The main shortcomings of the SGP**

Generally a fiscal rule based on numerical targets is required to share some optimal properties which could be summarized in the so-called Kopits-Symansky's criteria.

According to these criteria, an ideal fiscal rule should be well defined, transparent, simple, flexible, adequate relative to the final goal, enforceable, consistent and underpinned by public finance reforms.

Quoting Kopits and Symansky (1998), as summarized by Creel (2003):

1. "a fiscal rule should be *well-defined* as to the indicator to be constrained, the institutional coverage, and specific escape clauses, in order to avoid ambiguities and ineffective enforcement";

2. "an essential characteristic of a durable fiscal rule is *transparency* in government operations, including accounting, forecasting, and institutional arrangements" in order to gain "popular support";

3. "rules should be characterized by *simplicity* to enhance their appeal to the legislature and to the public";

4. "rules must be *flexible* to accommodate exogenous shocks beyond the control of the authorities";

5. "fiscal rules should be *adequate* with respect to the specified proximate goal";

6. “a fiscal rule should be *enforceable*. (There is) a need for constitutional or legal statutes, possibly accompanied by penalties for non-compliance and authority for enforcement”;

7. “a closely related criterion is for a set of fiscal rules to be *consistent* internally, as well as with other macroeconomic policies or policy rules”;

8. “most rules cannot last for long unless they are supported by *efficient* policy actions. (...) From this perspective, (...) a fiscal rule may be viewed as a catalyst for fiscal reforms that would be necessary anyway to ensure sustainability”.

These eight properties cover a mix of political and economic concepts. Some of them are more political than economic, whereas the reverse is true for the others. A simple way to assess the quality of SGP is to test how it fits the optimal properties listed above (for a complete discussion see Buti *et al.* 2003; Creel 2003).

Regarding to first feature, for example, the SGP appears only partially *well-defined* with respect to the policy variables subject to constraints (budget balance and gross public debt) and the institutional coverage (general government), since a new reference value, i.e. the cyclically adjusted budget balance, was added without an appropriate specification. Indeed, it's not often emphasized that such a rule would be effective in alleviate the strictness of the SGP during cyclical downturns only in an *ex ante* terms, because *ex post* measures of output gap are conditioned by effective output results. The problem here is to share common and unquestionable estimations of potential output for a reasonable period (at least five years). The SGP specifies also the escape clauses (the exceptional conditions under which the three per cent of GDP deficit ceiling can be exceeded) and the penalties to be applied in case of persistent excessive deficits. However, elements of ambiguity remain.

The SGP medium term target of “close to balance or in surplus” remains vague and the exceptional conditions under which the three per cent of GDP deficit ceiling can be exceeded are not well established, since they underline that the medium term target of “close to balance or in surplus” would be related to a potential output concept, thus implying a zero debt rule for EU countries in the long run.

As to *flexibility*, different elements play differently. On the one hand, the SGP includes a tight specification of the escape clauses, thereby reducing the discretion of the Council and the flexibility of the rules. On the other hand, by putting more emphasis

on medium-term targets and highlighting the implications of cyclical fluctuations, it increases flexibility compared with a simple deficit ceiling expressed in present terms. Nevertheless, as discussed above, this flexibility derives from a lack of transparency and from a not well-defined concept of cyclically adjusted budget balance used as a medium-term target.

It seems also quite obvious that the Pact is not enforceable at all, at least until the plausibility of the imposition of sanctions has not been increased. Evidence shows that a country facing a proposition of early-warning mechanism by the European Commission does not face reputational costs under the form, say, of higher long-term interest rates. The adoption by Ecofin council of an early-warning procedure to France has had no impact, at least until mid-2003, neither on long term interest rates nor on the willingness of the French government to reduce deficit at a faster pace. This is heightened by the fact that the Council is in charge of the final decision on the implementation of sanctions and hence a risk of a partisan application of the rules exists. It is not surprising that at the end of 2003 early-warning procedure against France and Germany was interrupted by Ecofin, suspending by no means the SGP enforceability.

Finally, a good fiscal rule has to be internally consistent and consistent with other policies. Even though the former point is sufficiently satisfied, the latter has been seriously missed two times. First, a strong emphasis on annual targets may have created a tension between fiscal policies and structural policies. For instance, the existing rules may deter pension reforms that enhance sustainability in the long run but may involve a temporary rise in the deficit. During the 2003, in fact, this point was strengthened by including structural reforms in the European Commission judgement on National Stability Programs. Second and by far the most important, the present design of SGP doesn't appear consistent with a single monetary policy set for a group of countries characterized by persistently different rates of inflation. As showed in an our previous work (De Novellis and Parlato 2004) and in Creel and Le Cacheux (2003), this situation could entail divergent dynamics in the public finances of each European country, thus hindering a transition toward a steady state in which member States are economically homogeneous. As a corollary, homogeneous fiscal rules defined in the Stability and Growth Pact are ill suited and might even be counterproductive, exacerbating such diverging paths.

Such critics could be summarized in a couple of issues identifying the weak points of the Pact, on which basis several proposals to replace or radically revise the Pact are put forward.

First, the SGP reduces budgetary flexibility, since the three per cent of GDP reference value is a not so hard ceiling to be breached and not only in exceptional circumstances and for a limited period. As the literature on currency areas (and the recent experience) has shown, higher budgetary flexibility is required to respond to country-specific shocks in absence of national monetary independence. In order to create sufficient room for manoeuvre, a rapid transition to broadly balanced budgets in structural terms is required, but in a situation of subdued growth, such transition would require pro-cyclical policies that may worsen the cyclical conditions.

Second, the Pact does not curb governments' incentives to increase expenditure or cut revenue in favorable cyclical periods. Evidence of a pro-cyclical bias still affecting budgetary policies in euro area countries is provided by fiscal behaviors in the year 2000. In a situation of buoyant growth (3.4 per cent for the euro-area as a whole) and an oil price hike that put upward pressure on inflation, countries with high deficits failed to seize the opportunity to reduce their fiscal imbalances.

Third, unlike the Maastricht convergence, sticking to the rules of the SGP may not pay politically. As argued by Buti and Giudice (2002), under the SGP, the carrot of entry has been eaten while the stick of exclusion has been replaced by the threat of uncertain and delayed sanctions. Moreover, the very success of the SGP in reducing the budget deficits would be in fact to rebuild the capacity of governments to pursue politically motivated fiscal actions. This temptation may prove irresistible in election years.

Furthermore the SGP discourages public investment. Maintaining budget positions "close to balance or in surplus" implies that capital expenditure will have to be funded from current revenues. Hence, it will no longer be possible to spread the cost of an investment project over all the generations of taxpayers who benefit from it. This may imply a disincentive to undertake projects producing deferred benefits and entailing a significant gap between current revenues and current expenditures. The disincentive is stronger during consolidation periods.

Finally, by focusing on short term commitments the SGP disregards structural reforms. This criticism has different nuances. First, the SGP focuses almost exclusively on short term objectives for the budget deficit. As such, it provides incentives for creative accounting and one-off measures which blur the transparency of public accounts. Second, the stock of public debt does not enter the SGP and neither do the contingent liabilities of public pension systems. Hence, the Pact treats equally countries with different medium and long-term prospects and different debt levels. This may imply that the Pact is too demanding for countries in sound fiscal positions. Third, the Pact may prevent countries from implementing policies – such as pension reforms which improve sustainability over the medium and long term at the price of a short term deficit worsening.

## **7. A new Stability and Growth Pact for the enlarged Europe**

By using the above criticisms as starting point, several proposals were put forward to revise the fiscal rules which regulate public governance in Europe. They include procedural reforms, institutional reforms and measures aimed to enhance financial market discipline. All these issues, anyway, don't establish how to change or correct the SGP, but they indicate how to help to ameliorate fiscal policy governance by using non-numerical rules. So, they are not very close with the scope of this chapter, *i.e.* to discuss numerical rules that well fit the public financial needs of EU enlargement.

In this spirit, proposals on how to change the focus of SGP were largely produced. They encompass rules accounting for the composition of the public finance variables or for the long run sustainability. The focus on quality has been translated into two proposals for reforming the SGP: the so-called *golden rule* of deficit financing and the expenditure target/rule. Having just discussed the former it's possible to restrict the judgement to the latter.

Expenditure rules present some positive aspects as they refer to the budgetary items that governments can control and they can be easily defined and monitored. Moreover, they allow stabilizers to work on the revenue side and may prevent expenditure relaxation in upturns.

The use of expenditure rules in a multinational context, however, appears problematic, since uniform spending rules would *de facto* impose homogeneous social preferences to politically heterogeneous countries, while country-specific rules would be difficult to enforce (Buti *et al.* 2003). Furthermore, they would have to be complemented by a deficit or debt rule, since they don't say anything about the revenues behavior.

As regards long run sustainability and heterogeneity, the current EU rules appear not very concerned on these issues. Two solutions have been put forward in the literature: the first is to choose a medium term target that ensures long term sustainability while taking on board country specificities; the second is to focus directly on the public debt ratio.

In a previous work of us (De Novellis and Parlato 2004) we stressed the problem of heterogeneity. The accumulation of public debt depends on the deficit and on the growth of nominal GDP. As catching up countries are characterized by higher potential growth and higher inflation (the latter due to the Balassa-Samuelson effect), they can afford to have higher deficits without endangering the long term sustainability of public finances. Hence the three per cent ceiling and the close-to-balance rule are over-restrictive for these countries. Given the higher public investment needs of less mature economies (especially in an enlarged EU), the current fiscal rules could harm the catching up process.

Even if such reasons could justify a revision of the SGP, it's also true that a rule encompassing all the shortcomings could be unfeasible. Buitert and Grafe (2002), for example, propose what they call a Permanent Balance rule which would ensure sustainability and fiscal prudence while taking into account country differences. Their rule is based on the permanent budget balance which is given by the difference between the constant long run average future values of tax revenue and government spending. While the rule is theoretically rigorous, its applicability appears doubtful, since it requires the estimate of the permanent value of tax and spending, thus likely violating the criteria of simplicity and enforceability discussed above.

However, as above pointed out rules that allow to relax fiscal constraint during the transition phases entail non-secondary problems in the long run. For example, nominal GDP growth can be higher in catching up economies but also highly variable. This

implies a potential conflict between discipline and stabilization. If a country, which maintains a high structural deficit, is hit by a shock, the automatic stabilizers may lead to very high deficits. While in principle these deficits are of a cyclical nature, the risk of spiraling debt and interest payments should not be disregarded. This risk is particularly high in accession countries, which still suffer from limited creditworthiness and may see capital inflows dry up quickly.

A possible solution to this drawback could be the adoption of a not uniform ceiling across member States. Under which a nominal deficit is forced to stay whatever is the shock hitting the economy. To fix such maximum allowed deficit for each member, a measure of fiscal sustainability could be adopted. For example, the debt to GDP ratio could be used as a reference value. However, this type of rule, if clearly made explicit, would entail a non-homogeneous target across countries, thus heavily violating the SGP.

Since the cost of abandoning the SGP would be too high (Blanchard and Giavazzi 2004; Buti *et al.* 2003), a more complex rule would be sorted. On the other hand, the enlargement implies that the more the rule must govern it will be more complex.

Posed in these terms, the proposal that arises implies an internal revisiting of SGP, by adopting a multiple targeting criteria still in the spirit of Maastricht accession criteria. Specifically, the rule of three per cent should be still maintained but weighted by the level of debt to GDP ratio and, where available, by the cyclical adjusted primary balance. Moreover the new SGP should be addressed towards a golden rule conditional on debt to GDP ratio in order to promote public investments without putting into risk the fiscal sustainability in the long run. The rationale underlying this setting would resemble that one used in the conduction of monetary policy by ECB. As the European Central Bank uses two pillars in conducting monetary policy in Euro 12, one simple and easily accountable (the two per cent limit of inflation rate), the other not defined but considered (money growth), the “enlarged” European Commission could adopt a similar strategy by declaring the “targets” in terms of deficit and the debt to GDP ratio, but not revealing *ex ante* in which way it evaluates the sustainability of national public finances. Given a deficit and a debt to GDP ratio, sustainability would depend on judgments about GDP growth, the composition of revenues and expenditures, the launch of structural reforms, and so on.



If the ECB has been successful in conducting monetary policy without curbing inflation under two per cent, in the same way European Commission could ensure fiscal stability allowing some country breach the three per cent limit!

Of course, this proposal would involve some procedural adjustment in order to make more accountable and more powerful in its role the Commission, but this would seem to be an unavoidable price to grant stability, flexibility and co-ordination to fiscal policy in an enlarged Europe.

## References

- Blanchard, O.J., Giavazzi, F. (2004) 'Improving the SGP Through a Proper Accounting of Public Investment', CEPR Discussion Paper No. 4220.
- Buiter, W.H., Grafe, C. (2002) 'Reforming EMU's Fiscal Policy Rules. Some Suggestions for Enhancing Fiscal Sustainability and Macroeconomic Stability in an Enlarged European Union', CEPR Discussion Paper no. 3496.
- Buti, M., Eijffinger, S.C.W. and Franco, D. (2003) 'Revisiting the Stability and Growth Pact: grand design or internal adjustment?', CEPR Discussion Paper No. 3692.
- Buti, M. and G. Giudice (2002), 'Maastricht's Fiscal Rules at Ten: An Assessment', *Journal of Common Market Studies*, 40(5): 823-47.
- Coricelli, F., Ercolani, V. (2002) 'Cyclical and Structural Deficits on the Road to Accession: Fiscal Rules for an Enlarged European Union', CEPR Discussion Paper No. 3672.
- Creel, J. (2003) 'Ranking Fiscal Policy Rules: the Golden Rule of Public Finance vs. the Stability and Growth Pact', OFCE Working Paper No. 4.
- Creel, J., Le Cacheux, J. (2003) 'Inflation divergence and Public Deficits in a Monetary Union', OFCE Working Paper No. 5.
- De Novellis, F., Parlato, S. (2004) 'Reducing fiscal pressure under the Stability Pact', in Bernardi, L. and P. Profeta (Eds), *Tax Systems and Tax Reforms in Europe*, London and New York: Routledge, 76-94.
- European Commission (2004) *Economic Forecast Spring 2004*, Brussels: European Commission, April.
- Honohan, P. and P.R. Lane (2003) 'Divergent inflation rates in EMU', *Economic Policy*, 37, Autumn.

- Issing, O. (2003) *Considerations on monetary policy strategies for accession countries*, Budapest: National Bank of Hungary, February.
- Kopits, G. and S. Symansky S. (1998) 'Fiscal Policy Rules', IMF Occasional Paper, No 162, Washington, D.C.: The International Monetary Fund.
- Padoa Schioppa, T. (2002) 'Accession Countries on the Way of the Euro: A Central Banker's View', *Conference on Economic Policy Directions in the OECD Countries and Emerging Markets: Analyzing the Experiences*, Warsaw, March.
- Wyplosz, C. (2003) 'Chi ha paura dell'eurizzazione?', *www.lavoce.info*, 10 Giugno.
- Zogada, M. (2003) 'Fiscal aspects of the UE accession - Poland and Czech Republic' in Zukrowska K., Sobczak D. (2003).
- Zukrowska K., Sobczak D. (2003) 'Estward Enlargement of the Eurozone. Monetary and Fiscal Policy Related Issues', Ezoneplus Working Paper No. 17E.

*Tab. 1 - Selected economic indicators for Accession countries*

*1a - Gross Domestic Product - y o y % ch.*

Year	Poland	Hungary	Czech Rep.	Slovak Rep.	Slovenia	Estonia	Latvia	Lithuania
96	6,0	1,3	4,3	5,7	3,5	3,9	3,7	4,7
97	6,9	4,6	-0,8	5,6	4,6	9,8	8,4	7,0
98	4,8	4,8	-1,1	4,1	3,8	4,6	4,8	7,3
99	4,1	4,2	0,5	1,3	5,2	-0,6	2,8	-1,8
00	4,0	5,2	3,2	2,2	4,6	7,3	6,8	4,0
01	1,0	3,8	3,1	3,3	2,8	6,5	7,9	6,5
02	1,4	3,3	2,0	4,4	2,9	6,0	6,1	6,8
94-'04 average	4,5	3,5	2,1	4,2	4,1	4,4	5,8	5,4

*1b - Consumer Prices - y o y % ch.*

Year	Poland	Hungary	Czech Rep.	Slovak Rep.	Slovenia	Estonia	Latvia	Lithuania
96	19,9	23,5	8,8	5,4	9,9	23,1	17,5	24,6
97	14,8	18,3	8,4	6,2	8,3	10,6	8,5	8,9
98	11,6	14,1	10,7	6,7	7,9	8,2	4,6	5,1
99	7,3	10,0	2,1	10,6	6,1	3,3	2,4	0,8
00	10,1	9,8	3,9	12,0	8,9	4,0	2,7	1,0
01	5,5	9,2	4,8	7,3	8,5	5,8	2,5	1,3
02	1,9	5,3	1,8	3,3	7,5	3,6	1,9	0,3
03	0,8	4,7	0,1	8,5	5,6	1,3	3,0	-0,8

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*Ic - Current account - as % of GDP*

Year	Poland	Hungary	Czech Rep.	Slovak Rep.	Slovenia	Estonia	Latvia	Lithuania
96	-2,3	0,6	-7,1	-9,6	0,3	-9,2	-5,5	-9,2
97	-4,0	-1,4	-6,7	-8,5	0,3	-12,1	-6,1	-10,2
98	-4,4	-4,7	-2,2	-9,0	-0,6	-9,2	-10,7	-11,9
99	-8,1	-5,1	-2,7	-4,9	-3,5	-4,7	-9,8	-11,2
00	-6,1	-6,2	-5,3	-3,7	-2,9	-5,7	-6,9	-6,0
01	-2,9	-3,4	-5,7	-8,5	0,2	-6,1	-9,5	-4,8
02	-2,8	-3,9	-6,5	-8,1	1,7	-12,3	-7,8	-5,3
03	-3,1	-6,0	-6,9	-2,2				

*Id - External debt - as % of GDP*

Year	Poland	Hungary	Czech Rep.	Slovak Rep.	Slovenia	Estonia	Latvia	Lithuania
96	35,3	61,9	36,7	38,8	21,1	35,2	41,0	30,5
97	36,6	53,3	40,8	48,5	22,6	55,5	49,0	34,3
98	37,3	58,0	42,7	55,9	25,1	56,0	50,9	34,9
99	42,2	61,1	41,6	53,4	26,9	55,4	57,5	42,6
00	42,4	65,6	42,1	56,3	32,8	58,5	65,6	43,7
01	39,2	65,0	39,1	56,5	34,4	58,8	72,6	44,4
02	43,5	55,4	37,8	55,7	40,0	72,3	83,0	45,0

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Sources : OECD, EBRD

Tab. 2 - Per capita GDP and relative price level

	<i>Per capita GDP</i>		<i>Per capita GDP</i>		<i>Relative price levels</i>	
	<i>Current prices and exchange rates</i>		<i>Current prices and PPP exchange rates</i>		<i>Relative price levels</i>	
	<i>1995</i>	<i>2003</i>	<i>1995</i>	<i>2003</i>	<i>1995</i>	<i>2003</i>
Eu 15	98,6	103,3	100,4	102,1	98	101
Euro area	100,0	100,0	100,0	100,0	100	100
Estonia	10,6	23,3	31,2	43,0	34	54
Latvia	7,6	16,0	26,3	37,3	29	43
Lithuania	7,3	19,1	31,0	42,2	23	45
Poland	14,0	20,3	35,1	42,8	40	47
Hungary	18,4	30,3	44,9	56,3	41	54
Czech Rep.	21,5	32,9	63,3	63,9	34	51
Slovak Rep.	15,4	23,2	40,4	50,0	38	46
Slovenia	42,4	52,2	61,3	70,3	69	74
Malta	36,6	44,9	63,2	65,7	58	68
Cyprus	57,7	71,0	74,9	78,8	77	90
<i>Total AC-10</i>	<i>16,4</i>	<i>25,0</i>	<i>41,3</i>	<i>49,1</i>	<i>40</i>	<i>51</i>
<i>Total Eu - 25</i>	<i>84,8</i>	<i>90,6</i>	<i>90,5</i>	<i>93,5</i>	<i>94</i>	<i>97</i>
Romania	6,7	9,5	27,6	28,4	24	33
Bulgaria	6,6	9,7	28,2	28,8	24	34
Turkey	11,7	12,9	27,3	25,4	43	51

Source : calculations on EC AMECO database

Fig 2-a

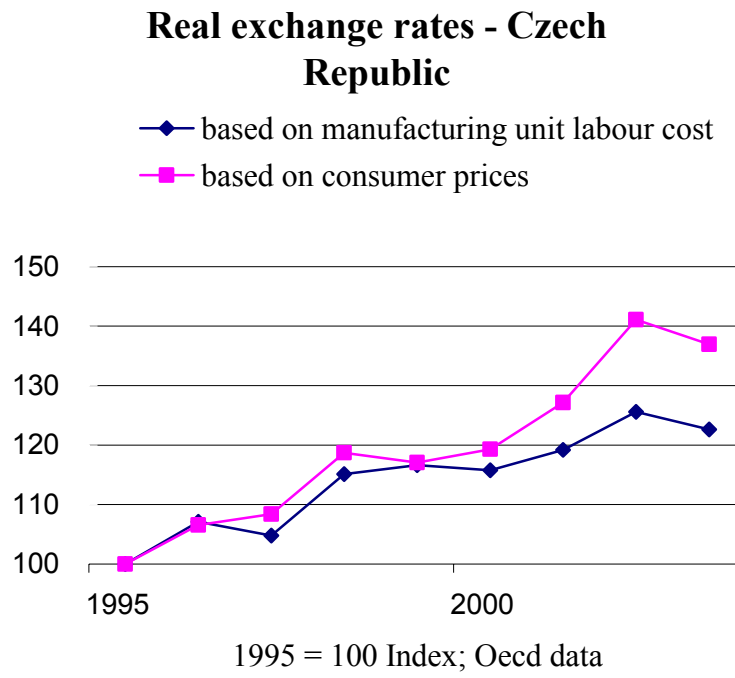


Fig 2-b

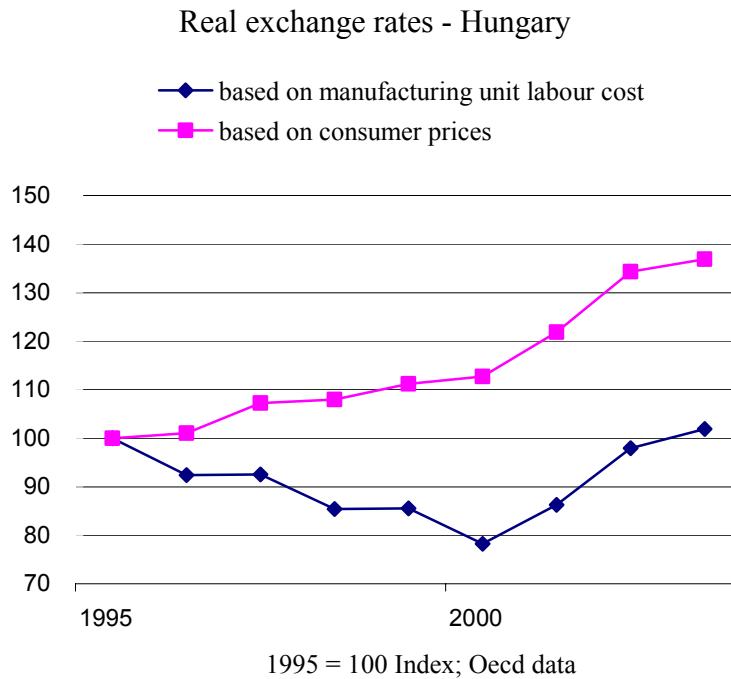


Fig 2-c

