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Alternative Options for the Monetary Integration of Central and Eastern European EU Accession Countries

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Abstract

The final destination of monetary policy and integration for the Central and Eastern European EU accession countries is the joining of the euro area. The European Union has affirmed that, according to the EC Treaty, this will be possible, at the earliest, two years after EU accession. Against this background, the most important issue for the accession countries to decide is whether to aim for an early introduction of the euro a few years after EU accession or to opt for a more gradual strategy of monetary integration. This paper reviews the main arguments for and against either of these approaches. Thus, the focus is on the question of how speedily to introduce the euro in the accession countries, within the standard path laid down in the EU accession negotiations.

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Keywords: Monetary policy, monetary union, EU enlargement.

Foreword

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Alternative Options for the Monetary Integration of Central and Eastern European EU Accession Countries

Peter Backé and Cezary Wójcik

Introduction

Monetary integration in the European Union (EU) has advanced very far, based on the Maastricht Treaty, which outlined a staged approach towards the creation of an Economic and Monetary Union (EMU). Within this framework, eleven EU Member States formed a monetary union in 1999 and the euro was introduced as the single currency in this newly formed monetary area. In the meantime, the euro area has been enlarged to twelve countries and, furthermore, the three remaining EU Member States, which have not yet adopted the single currency, have increasingly been attracted to the euro area, in particular by the successful introduction of euro coins and banknotes at the beginning of 2002.

Against this backdrop, the final destination of monetary policy and integration for the Central and Eastern European EU accession countries is obvious: at some point in the future, eight or even more accession countries are set to join the euro area. The **European Union** has outlined a **three-step approach** to the monetary integration of accession countries. The applicants will first join the EU, then enter the Exchange Rate Mechanism II (ERM II) of the European Union. Finally, after fulfillment of the Maastricht convergence criteria, they will accede to the euro area, i.e. participate fully in the Economic and Monetary Union. This means that the euro is to be introduced in today's accession countries in a consensual manner, based on the standard convergence examination procedure and not sooner than at least two years after the EU accession. The latter aspect results, in particular, from the convergence criteria that include, as a legal requirement for the adoption of the euro, a two-year participation in the ERM II, without a devaluation of the parity rate against the euro during this period (see Ecofin, 2000). ERM II, in turn, is solely open to EU member states and participation in this mechanism can thus begin only after accession to the European Union.

The EU has made it clear that an introduction of the euro as a legal tender in an accession country without the consent of the European Union is not an appropriate way to move ahead towards full monetary integration with the euro area. The main argument is that such a **unilateral euroization** "would run counter to the underlying economic reasoning of EMU in the [EC] Treaty, which foresees the eventual adoption of the euro as the endpoint of a structured convergence process within a multilateral framework" (Ecofin, 2000). In taking this stance, the European Union reacted to a discussion that got momentum in 1999 and early 2000 whether a fast, if not instant, introduction of the

euro in the accession countries would economically be more advantageous, in particular for the candidates, than the monetary integration path outlined by the European Union [1].

Given the position of the EU, it is evident that such a rapid or even immediate adoption of the euro, if it were to occur, could only be done unilaterally by the accession country, which would – hypothetically – opt for such an approach. Backé and Wójcik (2002) argue that the institutional considerations that are usually invoked to validate the European Union's objection to unilateral euroization by accession countries are supported by economic considerations. Unilateral euroization would bring fewer benefits than joining the euro area on the standard pathway: no seigniorage revenues and no lender of last resort function under the former option. At the same time, the adoption of a foreign currency as legal tender, while eliminating the risk of exchange rate crises, does not do away with the balance of payments constraint. In addition, if nominal convergence is not far advanced at the point in time of the introduction of the foreign currency, major swings in real activity may ensue, with negative knock-on effects on financial stability and catching-up perspectives.

Another point the EU has underlined is that the Maastricht **convergence criteria** will not be changed for the accession countries and that these criteria will be applied in the same manner as in the convergence examinations so far. This is to "ensure equal treatment between future Member States and the current participants in the euro area" (Ecofin, 2000). Again, the European Union's emphasis on this point has been a response to a debate of whether the Maastricht criteria should be adapted for accession countries, mainly to take into account that these countries have embarked on a catching-up path towards average EU income-per-capita levels [2].

The accession countries have essentially accepted the EU position in the course of the **accession negotiations**, and the negotiation of the chapter on Economic and Monetary Union has been concluded with all accession countries (but Romania, in the case of which it has not been opened yet). Discussions about rapid unilateral euroization or an adaptation of the Maastricht criteria have not impinged upon the basic policy line to stick, in principle, to the three-stage approach proposed by the European Union. The awareness about the risks and costs of a rapid and unilateral introduction of the euro has increased in the accession countries. There is a growing perception in the candidate countries that the predominantly nominal Maastricht convergence criteria form an acceptable set of criteria to qualify for monetary union, in particular if compared with other potential sets of benchmarks, which could also include real convergence requirements.

This being so, the most important issue for the accession countries to decide is whether to aim for an **early introduction of the euro two or three years after EU accession or** to opt for a **more gradual strategy** of monetary integration. This paper reviews the arguments for and against either of these approaches. Thus, the focus is on the question of how speedily to introduce the euro in the accession countries, within the standard path laid down in the EU accession negotiations.

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[1] For a review of this discussion see Backé and Wójcik (2002).
[2] For the main features of this debate see the discussion part in Backé (2002).

This issue of what is the appropriate pace of monetary integration is being intensely discussed in the accession countries. Several countries, notably Hungary, Slovenia and Estonia, are aiming at joining the euro area as soon as possible after the EU accession. In the other countries, the decision-making process is still evolving. Within this group, the central banks of Poland, Slovakia and Latvia are more or less clearly leaning towards going for a swift participation in the euro area after having joined the European Union, but an official policy statement on the issue (accorded between the government and the central bank) has not been reached yet [3].

What are the issues that arise when assessing the merits and disadvantages of a (relatively) fast monetary integration versus a more gradual approach? Joining a monetary union holds considerable potential benefits, but also substantial potential risks if undertaken prematurely. However, there are **severe limitations to** making an economic **cost-benefit analysis** of a country's participation in a monetary union and, even more so, in using cost-benefit analysis for determining the optimal speed towards full monetary integration. This is so mainly for two reasons. First and generally, there is no uniformly accepted basis among economists for assessing the costs and benefits of joining a monetary union. Second and more specifically, in the case of the accession countries, there is no satisfactory model to estimate all relevant effects jointly within a unified framework. In this latter respect, the situation in the accession countries differs from the state that prevailed in the incumbent EU member states when they did their cost-benefit assessments in the run-up to the creation of the euro area [4].

Against this backdrop, a pragmatic approach is to focus on the presumably **most important effects** only and to assess these factors individually. In doing so, the key factors, which have to be discussed are the costs and benefits of giving up the monetary and exchange rate instruments; trade and growth gains; and credibility effects. Other aspects, like, for example, the role of monetary integration as a potential catalyst to fiscal consolidation and to structural reforms, are also relevant but appear, in overall terms, to be less central and are therefore not discussed further [5]. In the analysis, a dynamic perspective has to be taken which considers how the effects change over time. This is particularly important if the costs of full monetary integration tend to decrease over time, as structural convergence proceeds. Based on this line of reasoning, what has to be assessed is at what point in time the costs and risks of full monetary integration are sufficiently contained so that they are outweighed by the benefits of participation in the euro area. Obviously, the downside of this approach is that it essentially neglects possible linkages among the single effects and that it takes a very simplistic line on the aggregation of individual factors. Still, these shortcomings have to be accepted, as there is apparently no other feasible approach at this stage.

[3] For a selective review of the monetary policy integration strategies of the accession countries see Moser, Pointner and Backé (2002).

[4] For two of these country studies on the costs and benefits of euro area accession, pertaining to Austria and Sweden respectively, see Baumgartner et al. (1997) and Calmfors et al. (1997).

[5] For a review of these further effects see Backé and Wójcik (2002).

The Cost Side

The diversity of views among economists about the potential effects of joining a monetary union is particularly pronounced for the **cost side**. The standard approach to assess the costs of the adoption of a foreign currency as a legal tender is, or has until recently been, the **optimum currency area theory** (OCA theory).

The OCA theory considers a common currency optimal for countries which are exposed to mainly symmetric shocks or which have mechanisms in place for the adjustment to asymmetric shocks. The latter include, according to the theory, wage and price flexibility, factor mobility and/or fiscal transfers. The smaller the exposure to asymmetric shocks, the less is there the need to resort to such adjustment mechanisms. In order to lower the probability of asymmetric shocks, it is crucial that the trade of participating countries is highly integrated and that their exports are well diversified in terms of the structure of exported goods and services, which in turn will contribute to fostering business cycle synchronization [6].

However, the OCA theory that was long "the organizing framework" (Eichengreen, 1997) for the analysis of monetary unification has recently met with **increasing criticism** within the economists' profession, mostly on three grounds. The first argument is that the OCA criteria are **endogenous**. Frankel and Rose (1998) maintain that joining a currency union (or a credible fixing of the exchange rate) will eliminate exchange rate uncertainty and reduce currency transaction costs, which will stimulate bilateral trade and hence deepen the economic integration between trade partners. This will foster business cycle synchronization and reduce the exposure to asymmetric real shocks that in turn will validate (ex post) the adoption of the common currency.

Second, **risk-sharing arguments** suggest that, under full financial market integration, countries, which are exposed to asymmetric shocks, may profit from monetary unification. The idea is that using a common currency will facilitate portfolio diversification, which allows countries to adjust more smoothly and at lower costs to asymmetric real shocks, due to mutual claims on each other's resources. This view was first put forward by Mundell (1973) and has increasingly been echoed in the recent debate on the OCA theory (see McKinnon 2001, Buiter, 2002).

A third proposition is that the exchange rate tends to be a **source of shocks** rather than a **shock absorber**, in particular for small open economies. Thus, even if there were a potential for asymmetric real shocks to occur, the exchange rate would either be ineffective as an adjustment tool and/or any beneficial effects from retaining it may be more than offset by the costs caused by nominal exchange rate volatility and, in the worst instance, exchange rate crises (see e.g. Buiter, 2000). This stance, which can be traced back to Friedman (1968), challenges the view that structural considerations are important for the choice of exchange rate regime – a view that at least implicitly assumes that monetary and exchange rate policy is an effective tool of economic policy. This criticism of the OCA theory also features in the "fear of floating" literature (see

[6] For a detailed review of the OCA theory see Horvath (2001a).

Hausmann et al., 1999, Calvo and Reinhart, 2000) which essentially argues that emerging market economies cannot effectively utilize the nominal exchange rate to absorb shocks from abroad – due to credibility deficits, a strong inflation pass-through of exchange rates and/or wide-spread currency substitution.

How **valid** are these arguments and, consequently, how **relevant** does the OCA theory remain as a tool for assessing the costs of monetary integration? The **endogeneity** of the OCA criteria appears to be fairly well established by the recent empirical literature. Still, reliance on endogeneity should not be taken too far, when evaluating policy choices about monetary strategies and monetary integration, at least for two reasons.

First, the endogeneity proposition may not hold in each and every case. In extremis, the effects may even go into the opposite direction. Krugman (1993) develops a theoretical model, which shows that more trade due to the use of a common currency could result in countries becoming more specialized in the goods in which they have a comparative advantage. As a result, the sensitivity of countries to industry-specific shocks could increase and business cycles could become less synchronized. A second and probably more important caveat is that it may take a long time for the endogeneity to work its way through the economic system. The experience of the euro area since 1999 is a case in point. Gaspar and Mongelli (2001) conclude that "looking at the matrix of intra-euro area trade, such integration effects have not (yet?) become apparent". Thus, the transition period to the new equilibrium, in which the potential for external shocks would become much smaller, may well be fairly lengthy. During the intermediate period, the exposure continues to persist (or goes down only very gradually) and adjustment mechanisms remain particularly important. At the same time, it is notoriously difficult to increase an economy's adjustment capabilities quickly and, thus, to reduce the exposure to shocks in the transition period to the new steady state.

The second argument against the traditional OCA theory, relying on **risk-sharing considerations**, presupposes a complete portfolio diversification in order to be effective. While a common currency removes one obstacle to diversification, there are other factors that make for a home bias. Market segmentation tends to be nurtured by national borders, and the full harmonization of regulations on financial services is an arduous process, as the EU experience shows. Differences in tax laws, difficulties in assessing credit risks adequately (partly due to divergent insolvency laws) and the not-yet-completed consolidation of financial infrastructure (in particular settlement systems) constitute further barriers to full integration in the euro area.

A recent ECB study shows that diversification in the euro area has increased only slowly and in a limited manner since 1999 (see European Central Bank, 2001) [7]. While accession countries have made major strides in aligning their regulations of financial services and capital movements to EU standards, full integration and thus a substantial degree of diversification will only be reached in the medium to longer term (partly also due to transition periods for some accession countries, for example, via

[7] An alternative explanation for home bias is put forward by Obstfeld and Rogoff (2000) who argue that equity portfolio with home biases result from trading costs of goods from which these securities derive.

limitations for domestic pension funds to invest abroad). Risk-sharing arguments, therefore, do not alter the cost-benefit equation substantially at this stage or in the near future.

The debate on the **merits and costs of** retaining or removing the **monetary and exchange rate policy instruments** has led to a perception that in small open economies monetary and exchange rate policies cannot be effectively used to smooth cyclical fluctuations. On the other hand, there are benefits of retaining the exchange rate as a policy instrument to correct major exchange rate misalignments in cases when adjustment through wages and prices would be much more costly due to the presence of rigidities. In other words, there are advantages of an escape option in a period of substantial distress [8]. In this line of reasoning, removing the exchange rate instrument irrevocably therefore presupposes that any major risks and sources of potential exchange rate misalignments are sufficiently contained. The effectiveness of using the exchange rate instrument in exceptional circumstances to facilitate adjustment hinges to a large extent on the consistency and soundness of the overall policy mix a country has pursued.

Backé and Wójcik (2002) argue that advanced accession countries have established a solid track record in terms of stabilization and reform that may facilitate the effective use of the exchange rate if a major asymmetric real shock hits. Moreover, misalignment risks in accession countries should not be underrated. The completion of price liberalization and adjustments of regulated prices, but also the upward adjustment of agricultural prices due to the prospective integration into the EU's common agricultural policy, may lead to price-wage spirals. Furthermore, demand side effects associated with the catching-up process may affect the competitive position of a country, in particular if they lead to additional wage pressure in the tradables sector or if investment shifts to the non-tradables sector (see Wójcik, 2001).

This leaves the flipside of the argument, namely that the exchange rate can be a source of shocks. How relevant this issue is for the accession countries, will be examined below in the discussion of the benefits of monetary integration. The **overall conclusion** on this issue is that the optimum currency area theory still has some validity to assess costs and thus a fair weight has to be given to OCA-related considerations and conclusions in drawing an overall cost-benefit equation.

What is the **empirical picture** in the accession countries of Central and Eastern Europe with respect to the OCA criteria? First, as regards the **susceptibility** of accession countries **to asymmetric shocks**, several, though not all, accession countries have already achieved a considerable degree of business cycle synchronization, at least in the area of industrial production (see e.g. Fidrmuc and Schardax, 2000). However, if one goes a step further and assesses the likelihood of asymmetric shocks by examining the correlation of supply and demand shocks between countries of the euro area and the Central and Eastern European accession countries, a less encouraging picture emerges

[8] This is also acknowledged by OCA critics such as Buiter (2000) who argues that, in an overvaluation situation, "generating [the needed] differential rates of inflation [between the domestic economy and abroad] is likely to involve greater resource costs than achieving the same relative price or cost realignment through a change in the nominal exchange rate".

(see Horvath, 2001b, Fidrmuc and Korhonen, 2001). The latter study, for example, in which shocks are recovered from estimated structural VAR models of output growth and inflation, finds that only Hungary, Estonia and, to a somewhat lesser extent Poland, display positive correlations of demand and supply shocks with the euro area in the period 1992-1995 to 2000-2001.

Horvath (2001b) examines the correlation of supply and demand shocks of Central European and Baltic accession countries with four large EU economies for 1993-1995 to 2000 and arrives at somewhat different but not very robust results, with Hungary and Slovenia displaying the relatively highest correlations for both types of shocks. Thus, the picture is diverse: some accession countries – Hungary, perhaps also Estonia, Slovenia and Poland – show positive correlations, the others do not. Furthermore, caution is warranted when drawing conclusions from these results, in particular if one considers that the correlations for some euro area countries like Greece and Ireland are not encouraging either.

As for the other side of the OCA coin, i.e. the **functioning of adjustment mechanisms**, the operation of product and labor markets displays considerable variation among candidate countries, and this is particularly true for the wage formation process and wage flexibility. No comprehensive empirical study appears to exist, which would undertake an in-depth assessment of the functioning of product and labor markets in all ten accession countries [9]. In very general terms, it seems to emerge from the limited body of analytical literature available that product markets in accession countries tend to function somewhat less efficiently than those of EU countries, while the accession countries' labor markets tend to be more flexible than those of the member states of the European Union (see IMF, 2000).

Whether migration is an effective channel in accession countries for adjusting to idiosyncratic shocks is rather doubtful (see Fidrmuc, 2002). The same is true for the question of whether fiscal transfers can play a major role in easing asymmetric shocks. It should be noted, however, that these channels do not play a major role within the current euro area either. Finally, capital flows may also facilitate adjustment in the short run, but capital mobility cannot solve the adjustment problem in the long term, for example, if there are persistent external imbalances, as there are limits to negative net wealth positions of countries vis-à-vis the rest of the world (see Corden, 1973).

In sum, one can differentiate among accession countries, which have made substantial advances towards "meeting" the OCA criteria – and, in a few cases, progress appears to be about similar to that of some Southern and non-continental EU member states – while others have moved ahead less. Thus, based on the OCA theory, a **diverse picture** emerges, with considerable risks for a number of accession countries.

However, this is only a static snapshot. In a **dynamic perspective**, the correlation of shocks will probably increase with a further deepening of trade and

[9] Nicoletti et al. (2000) has a useful analysis of product and labor market issues for the Czech Republic, Hungary and Poland. Two recent publications, which cover part of the ground for a larger set or all accession countries respectively, are Riboud et al. (2001) and the Transition Report 2000 (European Bank for Reconstruction and Development, 2000), the latter containing a concise overview chapter on labor market issues.

financial integration in the run-up to membership in the European Union and beyond. The inclusion into the EU internal market will lower real trade costs and thereby foster trade. Financial integration will be nurtured by improved confidence and reduced uncertainty associated with EU accession. By a similar token, further reforms of product and labor markets, again in the EU membership context, will tend to increase the adjustment capabilities of accession countries. On the other hand, EU accession itself may constitute an asymmetric real shock for some candidates, giving rise to adjustment processes as a consequence of the full integration into the EU internal market during the early stages of membership in the European Union.

The Benefit Side

Moving to the **benefit side** of monetary integration, there are three major advantages. First, participation in monetary union eliminates the risk of exchange rate crises. This is particularly relevant for cases of sudden shifts in sentiment leading to abrupt stops or reversals in capital flows and thereby to currency crises. Second, monetary integration generates trade and growth gains, which are driven by lower transaction costs and reduced uncertainty. Third, a perspective of joining a monetary union can have positive credibility effects.

When putting the first benefit, the **elimination of the risk of currency crises**, into perspective, two points emerge. First, assessing the risk of future exchange rate crises is notoriously difficult if not impossible. What is a widely shared view is that the risks of excessive capital inflows and sudden capital flow reversals can be mitigated by sound macroeconomic policies, by avoiding "soft" exchange rate pegs, by measures that strengthen financial institutions' risk-management capabilities and by supervisory activities concerning the financial sector and the foreign borrowing of the corporate sector. However, despite such measures, significant risks of nominal exchange rate shocks that are unrelated to any change in fundamentals may remain.

There are different ways to cope with this risk. One is monetary and exchange rate policy cooperation within the European Union upon accession. More specifically, ERM II can, in principle, contain such risks, if it is operated in a way, which provides reasonable shelter against speculative attacks that are not related to changes in fundamentals, i.e. if the mechanism puts off "unjustified" capital flow reversals for those economies which are basically healthy in terms of their fundamentals. It could also be considered to complement existing arrangements by establishing an additional financial facility with automatic access for non-euro area member states of the European Union that have a straight record within intra-EU economic policy coordination and surveillance.

Second, joining a monetary union per se does not contain the risk of financial crises other than exchange rate crises. On the one hand, this underlines how essential financial sector soundness and supervision are. On the other hand, it points at the crucial importance of achieving a high degree of nominal convergence, as embodied in the Maastricht convergence criteria, before adopting a common currency. If progress with nominal convergence were not sufficiently advanced, boom-bust cycles could develop (see Backé and Wójcik, 2002). Such cycles are often associated with banking crises emerging in the bust phase and also with a less dynamic GDP-per capita convergence over the full cycle.

The second main benefit of monetary union relates to **trade and growth gains**. Until recently, these effects were thought to be relatively modest, based on a string of empirical research applying time series methods. During the last two years, a new strand of papers relying on panel date methods has questioned this view. The debate was kicked off by Rose (2000) who found that the trade effects of using a common currency are statistically significant and huge: countries with a common currency are found to trade over three times as much an countries using different currencies. Moreover, Rose concludes that the impact of a common currency is an order of magnitude larger than the effect of reducing moderate exchange rate volatility to zero but retaining separate currencies. Frankel and Rose (2000) also find that potential benefits from the use of a common currency on trade are large and, moreover, that this additional trade has substantial positive effects on growth.

Subsequent studies by Rose and Van Wincoop (2001), Melitz (2001) and Persson (2001) look further into the impact of using a common currency on trade and arrive at considerably lower, but still large positive, effects, with trade expanding, according to most estimates, by 40% to 50%.

All this suggests that participation in a monetary union holds potential trade and growth gains, although there is limited knowledge on the issue to what extent these effects vary among countries participating in a monetary union. And what is unknown is the time profile, i.e. how quickly these effects will materialize, as discussed above for the case of the euro area.

The third benefit of joining the euro area pertains to **credibility** effects. The argument is that joining a monetary union solves credibility problems of monetary authorities that stem from the dynamic inconsistency problem and thus eliminates a potential inflationary bias [10]. These credibility gains – together with the reduction of the interest risk premium, due to the elimination of exchange rate risk, and with deepening financial market integration – lead to a reduction of real interest rates that in turn stimulates investments and spurs growth.

Evidently, the significance and the size of these effects depend on the degree of credibility a country's policies enjoy in the first place, i.e. before it engages in a monetary unification process. In this context, two aspects that relate to the accession countries deserve particular attention. First, most accession countries have made substantial headway towards achieving macroeconomic stability. As a result, the credibility of the monetary authorities and the confidence in the national currencies has been on the rise, whereas inflation has been on a firm falling path. It is obvious that the prospects of EU integration have played and will continue to play a fundamental role in this respect.

The external constraints that result from fulfilling the conditions for EU accession are helping to solve the commitment problem of monetary and fiscal authorities and constitute an anchor for macroeconomic discipline, but institution-building/reinforcement and structural reforms have also similar effects. In particular,

[10] Clearly, this is only true if the respective country joins a monetary union like the euro area, which does not itself suffer from a dynamic inconsistency problem.

preparing for EU accession has fostered the creation of domestic institutions dedicated to price stability, as legal provisions on the central bank independence have been strengthened substantially. Cukierman et al. (2001) as well as Dvorsky (2000) show that the legal independence of central banks in accession countries is well developed.

Actual membership in the European Union and, in particular, participation in economic policy coordination and surveillance will further enhance the credibility of accession countries macroeconomic policies and, in general, eliminate any significant inflation bias of monetary policy. A coherent and thoroughly implemented strategy of joining the euro area and, subsequently, participation in the monetary union will further add to this, mostly by consolidating the credibility gains reaped at the earlier stages.

The implications of this discussion of credibility issues for the speed of monetary integration are not straightforward. In essence, credibility is largely endogenous to the soundness and consistency of the overall economic policy-mix over time. Whether the pace of monetary integration has an impact on the quality of the policy mix, is a question that can hardly be answered ex ante. There may be cases where a speeding up of monetary integration (e.g. setting an ambitious target date) will reinforce a virtuous circle of improving economic fundamentals and credibility. Conversely, if the policies pursued are perceived to be or become inconsistent with the pace of monetary integration intended by the authorities, credibility will most probably suffer. All this suggests that credibility effects of the EU and subsequent euro area accession are important; however, it is uncertain whether the pace of monetary integration does affect the build-up of credibility and thus the time profile along which the related benefits can be reaped.

Conclusions

Three **conclusions** emerge from the preceding analysis:

First, the available evidence of the economic **costs and benefits** of a future participation in the euro area is **not uniform** for all accession countries. This implies that, on economic grounds, the appropriate speed towards euro area accession may well be different between individual accession countries. In general terms, the costs of full monetary integration tends to decrease over time, as structural convergence – driven by the completion of transition and the accession to the European Union – proceeds.

Second, from today's perspective, there is a **considerable degree of uncertainty about the optimal date** for joining the euro area. Results depend on what weights one assigns to individual effects, what probabilities one attaches to future events and with what interest rate one discounts future costs and gains, if they materialize at different points in time. Thus, based on economic reasoning, it is not possible, in most cases, to pinpoint a particular optimal target year for euro area accession for individual candidate countries, but most probably there will be a range of several years with similar cost-benefit balances.

Third, joining a monetary union is also a political economy issue. As the economics of accession is not sufficiently clear-cut, the decision about the date will, at the end of the day, hinge upon **political considerations** as well. This, in turn, may tip the balance in favor of a relatively speedy quest for euro area participation for a number of accession countries.

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