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INTEGRATION OF THE ACCESSION COUNTRIES INTO THE EURO ZONE

The purpose of the article is an attempt to define to what degree the conditions necessary to introduce the euro into the countries of Central and Eastern Europe are possible to fulfil in the first years of their membership in the EU, and also the consequences of monetary integration for their economic policy. These issues will be analysed regarding some of the experiences of the present euro zone countries.

Keywords: EU integration, monetary policy, EMU, monetary integration, euro zone

INTRODUCTION

The integration of the countries of Central and Eastern Europe with the European Union implies also the accession to the EMU (Economic and Monetary Union). In contrast to the present EU members, entrance to the euro zone will be compulsory for the candidate states. The accession treaty has not however defined the schedule for the introduction of a common currency in these countries. Monetary integration requires fulfilling the fundamental conditions formerly specified in the Treaty of Maastricht, however the good functioning of the EMU depends not only on meeting the criteria of convergence, but also on what degree the extended euro zone will correspond with the conditions of the optimal currency area. Fulfilling these conditions influences both the advantages from introducing a single currency and the costs of losing monetary autonomy.

1. CONDITIONS OF MONETARY INTEGRATION

Monetary integration requires fulfilling certain economic conditions in order to ensure the stability of currency exchange rate in the economic and monetary union, which is a source of many micro-economic advantages, and also that giving up monetary autonomy does not result in excessively high costs (Rollet and Huart 1995). These conditions are

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constituted both by the criteria of convergence from Maastricht and the criteria of optimal currency area, which were not considered in the treaty at all. Nevertheless the conditions defined by the theory of optimal currency area are indirectly taken into consideration in various EU policies, above all in the policy of the internal market and in the regional and structural policy. The former influences the functioning of the internal market and so the ability of markets to neutralize the results of economic shocks. The latter, reinforcing the economic structures of poorly developed regions, leads to a greater diversification of production and at the same time to lowering the risk of the occurrence of specific sector shocks.

The Treaty of Maastricht made the introduction of the euro dependent on fulfilling the following conditions (Article 121 TWE and the protocol attached to the Treaty of Maastricht concerning the criteria of convergence, Protocol nr 6):

- achieving the high level of stability of prices (the rate of inflation not exceeding the average rate of inflation of the three countries with the lowest inflation by more than 1.5 percentage points),
- the permanent stability of public finances (budget deficit lower than 3% of GDP, public debt not exceeding 60% of GDP),
- observing the normal boundaries of fluctuation of changes in the exchange rate predicted by the mechanism of exchange rates of ERM, for at least two years without introducing devaluation in regard to the currency of another member state,
- permanence of convergence achieved by a member state and its participation in the mechanism of ERM currency exchange rates reflected in the levels of long term interest rates (long term interest rates not exceeding interest rates in the three countries with the lowest inflation by more than 2 percentage points).

Conditions of monetary integration resulting from the theory of optimal currency area (criteria OCA) can be presented as follows:

1. Potential benefits from establishing the optimal currency area are determined by the degree of openness of the economy. The greater the openness, the greater the benefits from the introduction of a single currency (McKinnon 1963).

2. Membership of the monetary union requires a similarity of shocks and business cycles. Asymmetrical shocks and cycles require specific adaptation policy but in the single currency area it is not naturally

possible to conduct monetary policy adapted to the specific conditions of a given country.

3. Sufficient elasticity of labour markets makes adapting to asymmetrical shocks easier and decreases the pressure on adapting via currency exchange rate (Mundell 1961).

4. In a monetary union, diversification of production is important. Countries exporting very diversified products are therefore less sensitive to specific sector shocks (Kenen 1969).

5. Financial integration and budgetary transfers may contribute to a partial neutralising of the consequences of asymmetrical shocks in a single currency area (Ingram 1969).

6. Integration of economic policy and the convergence of inflation rates result in lowering the costs of monetary integration. The differences in the rates of inflation cause a loss of competitiveness in countries with the highest inflation, increasing the need to adapt currency exchange rates. The high degree of integration of economic policies will, however, lower the costs of participation in a currency area: firstly, the real costs of losing monetary instruments of economic policy will be lower; secondly, integration of various areas of macro-economic policy will result in a smaller risk of the appearance of shocks originating from the asymmetry of domestic policies.

Frankel and Rose (1998) draw attention to the endogenous nature of the first two criteria. Openness of the economy should be favourable for the convergence of business cycles. However, according to Krugman (1993) economic integration is also accompanied by a development of specialization, which increases the risk of the occurrence of sector shocks. All this implies that a high degree of openness of an economy, while helping the greater synchronization of business cycles, does not necessarily result in lowering the degree of asymmetry of shocks.

Not all the criteria of optimal currency area have to be met at the same time in order to enable establishing a monetary union. The EMU may function well even when the shocks are asymmetrical. High elasticity of labour markets and the existence of fully integrated financial markets enable avoiding serious adaptation problems; for example, a decline in production and employment as a result of the occurrence of demand shock.

2. ACCESSION COUNTRIES AND THE OCA CRITERIA

To what degree do the accession countries meet the criteria of the optimal currency area? We shall start with comparing the degree of openness of the economies of the EU countries and the adherent countries. The results of these comparisons are presented in Table 1.

Table 1

Export of goods and services in % GDP in EU countries and accession countries

Euro zone countries		Other EU countries		Countries of Central and Eastern Europe	
Austria	50.3	Denmark	42.4	Bulgaria	58.5
Belgium	88.1	Sweden	47.7	Czech Republic	71.5
Finland	42.5	Great Britain	27.2	Estonia	83.7
France	28.7			Hungary	62.5
Germany	33.4			Latvia	45.8
Greece	25.0			Lithuania	45.2
Ireland	95.6			Poland	27.4
Italy	28.4			Romania	34.1
Luxembourg	119.6			Slovakia	73.5
Holland	67.2			Slovenia	45.2
Portugal	31.4				
Spain	29.9				

Source: UNCTAD (2002)

The figures in this table show that the countries of Central and Eastern Europe are at least as open as the EU countries. The degree of their integration with the EU is even greater than that of Denmark, Sweden and Great Britain which at present remain outside the monetary union (De Grauwe 2003). The degree of openness of the Polish economy is close to the degree of openness of the economies of Spain, France and Italy. Among the accession countries, Poland has the highest share of exports to the EU which constitutes an argument for integrating its economy with the euro zone. The membership of the European Union will tighten these connections and at the same time will increase the potential advantages of stability of the currency exchange rate at lowering the costs of the loss of monetary autonomy.

Commercial integration contributes to the higher convergence of business cycles. In the euro zone countries, these cycles are already synchronized to a large degree with the exception of Ireland and Greece (Fidrmuc 2001).³ Among the five countries of Eastern and Central Europe the equally high

synchronization of these cycles can be observed in Hungary and Slovenia and to a much lower degree in Poland, Slovakia and the Czech Republic. Integration in the European Union, while increasing the co-dependency of the economies of this region with the economies of the present member states, will also result in the greater convergence of their business cycles. However, the experiences of some of the cohesive countries shows that such synchronization is also influenced by structural factors (commercial ties with the EU) and differences in dynamics of economic growth.

Table 2

Correlation coefficients of business cycles in the countries accessing the EU

	Industrial Production			GNP	
	1994-1997	1997-2001	Change	Corr. coeffs.	Period
Bulgaria	.	.	.	0.47	1995-2001
Czech Republic	0.32	0.58	0.26	-0.16	1995-2001
Estonia	.	0.63	.	0.19	1995-2001
Hungary	0.57	0.66	0.09	0.79	1996-2001
Latvia	-0.10	0.62	0.72	0.29	1994-2001
Lithuania	.	0.24	.	0.08	1996-2001
Poland	0.46	0.64	0.19	.	
Romania	-0.25	0.12	0.14	.	
Slovakia	0.32	0.57	0.25	-0.28	1994-2001
Slovenia	0.41	0.64	0.22	0.50	1994-2001

Source: European Commission (2001, page 13)

As far as shocks are concerned, Table 3 shows that they are relatively weakly correlated with the shocks in the euro zone which is not however a feature of the economy of just that region because it also concerns many of the present EMU members, for example, Ireland, Greece and Portugal.

The high asymmetry is a characteristic of both the demand and supply shocks. The research of Frenkel and Nickel points out the greatest asymmetry of these shocks in Poland. According to Fidrmuc this asymmetry is smaller but still very high. Among the euro zone members these shocks were more asymmetrical only in Greece and Ireland. The high asymmetry of supply shocks should not however present any serious obstacle in the integration of Poland and the remaining accession countries with the euro zone, since these shocks require the application of various means of adaptation. The role of monetary policy in the adaptation is essentially limited to creating stable macro-economic conditions. Membership in the

euro zone may even ensure a higher level of such stability, necessary for speeding up structural changes in the economy.

Table 3

Correlation coefficients of demand and supply shocks in European countries

Country	Demand shocks		Supply shocks	
	Fidrmuc (2001)	Frenkel & Nickel (2002)	Fidrmuc (2001)	Frenkel & Nickel (2002)
EMU	1,00	1,000	1,00	1,000
Austria	0,08	-0,037	0,38	0,178
Belgium	0,00	0,941	0,53	0,996
Finland	0,06	-0,099	0,30	0,536
France	0,30	0,353	0,69	0,737
Germany	0,18	0,307	0,66	0,622
Greece	-0,01	-0,006	0,05	-0,104
Ireland	0,13	.	-0,14	.
Italy	0,57	0,546	0,52	0,756
Holland	0,04	-0,581	0,47	-0,069
Portugal	0,09	0,114	0,45	-0,179
Spain	0,16	0,031	0,22	0,415
Other EU countries	.	-0,091	.	0,699
Denmark	0,18	0,386	0,13	0,469
Sweden	0,24	0,334	0,09	0,595
United Kingdom	0,21	-0,215	-0,13	0,682
Central and Eastern European countries	.	-0,277	.	-0,159
Bulgaria	0,13	-0,277	-0,03	-0,159
Czech Republic	-0,15	-0,224	0,04	0,280
Estonia	0,12	-0,241	0,25	0,339
Hungary	0,25	0,122	0,46	0,726
Latvia	-0,49	-0,428	0,30	0,333
Lithuania	-0,49	.	-0,11	.
Poland	0,28	0,217	0,08	-0,690
Romania	0,03	.	0,02	.
Slovakia	-0,04	-0,433	0,07	0,182
Slovenia	-0,18	-0,147	0,15	0,658

Note: Frankel and Nickel research regards the period of 1995 to 2001, while the research of Fidrmuc, the period of 1991 to 2000 (the EU) and 1995 to 2000 (countries of Central and Eastern Europe)

Source: Fidrmuc (2001), p. 34; Frenkel & Nickel (2002), p.14–16

Demand shocks, with the exception of Poland, show an even smaller correlation with the euro zone. According to Fidrmuc, a higher correlation than in Poland occurred only in Italy and France. Frankel and Nickel estimate the correlation of these shocks in a similar way. However, such a correlation is not sufficiently high so that a monetary policy of ESBC could be adapted to the economic situation particular for a member state. This will complicate conducting a monetary policy in an extended euro zone, because an interest rate desirable for the EMU as a whole does not have to be such for a member state when taken separately. This has been confirmed by – among others – De Grauwe (2003), who recalling the Taylor rule defined the spread of the desired interest rate in 2002 among the present euro-zone member states. Such rate amounted to 2.75 % in Germany, and up to 7.5 % in Ireland. In the extended Union such differences will be even higher due to the Samuelson-Balassy effect. Rogers (2001) thinks that such an effect will greatly stimulate inflation in countries trying to obtain membership in the EMU. A similar conclusion has been reached by Halpern and Wyplosz (2002), who estimated the potential appreciation of the real currency exchange rate at about 3% annually.

The differences in business cycles among EU and accession countries will be decreasing, however, under the influence of European integration. Frenkel and Nickel (2002) list three factors promoting the greater convergence of these cycles. Firstly, the processes of real convergence will find their reflection also in the similarities of shocks and reactions to them. Secondly, the increase of diversification of production and trade will increase the risk of occurrence of the specific sector shocks. Thirdly, the accession process requires from the members the acceptance of common Union principles, standards and policies, which will also support similar reaction to such shocks.

The high degree of asymmetry of shocks requires the existence within the monetary union of other effective mechanisms of regaining economic equilibrium. One such mechanism is the elasticity of labour markets, understood in two ways: as mobility of labour force and as elasticity of remuneration. In the majority of traditional interpretations of the theory of optimal currency area, these two aspects of elasticity of labour markets are presented as quasi-interchangeable variables (for example Mundell 1961). In the latest interpretations, it is pointed out that these two instruments, depending on the permanence of a shock, play different roles. When the shocks are temporary, the low mobility of labour force is beneficial

because it prevents a labour drain. Temporary shocks require rather stabilization than adaptation and in the case of such shocks the relocation of production factors should be avoided. Short-term mobility of labour is not economically justified due to the high and irreversible costs of migrations. This kind of international mobility necessary to recompense the loss of monetary autonomy does not exist anywhere in the world. The relocation of production factors may turn out to be necessary in the case of permanent shocks. The use of the currency exchange rate in order to soften the results of such shocks may be unsuitable because it would include the risk of slowing down the inevitable structural adaptation (Melitz 1996).

The mobility of the labour force in the EU is generally low, much lower than in the US. Will its expansion to the East increase the size of flow of labour force in Europe? Initially such expansion due to temporary restriction on movement of persons will not significantly change the migration among the member states. However, with the elimination of these temporary limits, such migrations should be relatively greater, further encouraged by the differences in the level of income and the processes of ageing of the population in the majority of the present member states.

In comparison with the mobility of the labour force, the elasticity of remuneration offers greater possibilities for adaptation. Such elasticity in Europe is however relatively low and does not present a real substitute for the currency exchange rate. This regards both the present and future members of the EU. These markets function similarly in the EU and in Central and Eastern Europe (IMF 2000). Low elasticity of remuneration, while weakening the market adaptation mechanisms, creates not only a barrier for monetary integration, but also hinders the effective adaptation with the use of currency exchange rates. When real wages are inflexible, the valuation of the currency will not cause permanent improvements in the competitiveness of the economy. An increase in import prices will lead then to a general increase in prices and wages, the result of which will be the loss of competitiveness connected with the valuation. The renouncement of currency exchange rates in the accession countries will not carry a high cost. One can assume that the inability to fall back on the monetary instrument should force public authorities, employers and trade unions to search for alternative ways for adaptation, including above all, increased elasticity of labour markets. Such evolution of labour markets should also be supported by the high level of unemployment connected with changes in the behaviour of social partners. Membership in the EU will also create good conditions for the improvement of elasticity of these

markets because economic integration will be accompanied by different types of activities leading to the better functioning of a single European market.

Membership of the Union enables referring to European financial market in the case of the occurrence of different types of shocks. The introduction of the euro has already had a positive influence on the functioning of this market (ECB 2002). In addition, the American experiences show that in a monetary union the financial market is that adaptive mechanism which contributes in the highest degree to the neutralization of the effects of different types of shocks (Asdrubali, Sorenson and Yosha 1996).

Despite restructuring and consolidation, the financial sector in the accession countries is still relatively poorly developed. There are two reasons justifying the necessity of strengthening this sector. On one hand, the structure and functioning of the financial sector strongly influences the macroeconomic evolution. A healthy financial sector supports structural changes in the real economy and also contributes to the growth of economic potential and to the convergence of real income with income in the euro zone. On the other hand, financial stability in the accession countries constitutes a significant condition for carrying out a harmonious monetary policy in an extended euro zone. The shortcomings of the financial sector would make conducting monetary policy more difficult, and would also undermine the credibility of central banks and their main objective (BCE 2002).

Membership of the Union is also connected with the transfers from structural funds and from a cohesion fund. These transfers do not obviously stabilize the economic situation, however, because of their influence on the economic structure, they have a positive influence, especially long-term one, on the functioning of the EMU since they contribute to a higher diversification of production and to the decrease of susceptibility of the economy to the effects of sector shocks. The accession countries will naturally be the main beneficiaries of these funds.

3. CRITERIA OF CONVERGENCE

The condition of the EMU membership for the accession countries is the meeting of criteria set in Maastricht. To what degree do these countries already meet the criteria of convergence? The relevant data is contained in Table 4.

Table 4
Criteria of convergence in the accession countries

	Inflation rate 2002	Interest rate 1-X 2003	Budget deficit in % of GDP 2002 ^[1]	Public debt in % of GDP 2002 ^[1]	Maximum level of fluctuations in currency exchange rates (in %) ^[2]
Reference value	3.0	5.5	-3.0	60	±15
Czech Republic	1.8	3.8	-6.8	29.9	-2.7
Estonia	3.6	2.8	1.2	5.2	-1.6
Hungary	5.3	8.0	-9.3	49.2	-8.8
Latvia	1.8	7.4	-2.5	14.6	-12.4
Lithuania	0.3	6.4	-1.2	27.0	-3.5
Poland	1.9	6.6	-5.1	46.1	-18.6
Slovakia	3.3	5.0	-1.5	44.3	-5.6
Slovenia	7.5	5.1	-1.0	30.5	-4.9
Bulgaria	5.8	5.8	0.2	60.7	-0.4
Romania	22.5	20.2	-2.2	25.7	-29.7

^[1] Different definitions in the EU and in accession countries.

^[2] Average annual change of currency exchange rate in relation to euro during the last two years.

Source: Deutsche Bank Research (2004), p. 25

The advancement of the processes of convergence in the accession countries runs at an uneven pace. The rate of inflation remained below the level allowed in the euro zone only in the Czech Republic, Latvia, Lithuania and Poland. The long-term interest rate, reflecting the differences in rates of inflation and risk factor, amounted to the levels below the reference values only in: Czech Republic, Slovakia, Slovenia and Estonia. In the latter its level has not however reflected the factors influencing long-term interest rates. The budget deficit in these countries amounted to more than 3% of GNP, but the real level of the deficit is higher due to varying definitions of a budget deficit in the EU and the accession countries. On the other hand, the value of public debt fell below the reference value in all the accession countries. Finally, the currency rates of exchange in majority of the countries were relatively stable during 2000–2002.

None of the candidates for EMU met all the criteria of convergence in 2002. The Czech Republic, Estonia, Lithuania, Latvia, Slovakia and Slovenia met four criteria, the remaining countries two. The situation in

these countries was more favourable than in the EU countries in 1994 when they moved on to the second phase of the EMU (the accession countries will enter the second phase of the union on 1 May, 2004 at the earliest).

How will the accession to the European Union influence the processes of convergence? The rules regarding economic policy should favour greater macro-economic stability in the new member states. However these countries will not be able to avoid stronger inflationary pressure, stemming from price shock and the pressure on public finance. The price shock may create inflation, which may be temporary, but also permanent if the increase in prices will be accompanied by an excessive increase in wages, exceeding beyond the remuneration-price adjustments. EU membership also implies public expenditure connected with adapting the economy to the demands of the single European market and the common policies. Integration with the internal EU market will be accompanied by higher public spending connected with the implementation of laws regulating the functioning of the internal market. Additionally, the Treaty obliged members with the duty to provide high levels of protection in the health service, security, protection of natural environment, and consumer protection. The delays of the accession countries in these areas are significant, which implies a noticeable increase of expenses on them, and the periods of transition make it impossible to space them out sufficiently. Intensifying competition will also result in higher public spending. These expenses will be connected both with activities aiming at increasing competitiveness of the economy, and with the possible negative social effects of the stronger competition in the common market. Furthermore, a participation in Community policies will not be possible without sufficient domestic budgetary effort.

The accession countries will therefore have to reconcile with each other's striving at the EMU, implying budgetary discipline, with the increase in public spending connected with the functioning of the internal market and conducting community policies. It may be impossible to combine these two objectives, especially if the reform of public finance is not successful.

The reform of public finance constitutes therefore the main challenge, which the new member states of the EU have to deal with. It will not be an easy task due to the clash of interests. Possible conflicts are connected not only with the attempts to maintain the necessary budgetary discipline in the conditions of the stronger pressures on the public spending, but also with the need to increase the competitiveness of companies through cuts in rates of taxation, the result of which may be a higher budget deficit.

4. INTRODUCING THE EURO: FOR AND AGAINST

There are many advantages of introducing the euro in the accession countries (Deutsche Bank Research, 2003):

- all these countries, with the exception of Poland, have relatively small, open economy, strongly dependent on foreign trade,
- approximately 60% of their trade exchange relies on the euro-zone countries,
- the main advantage for them will be then eliminating the exchange rate risk in the trade with the euro zone, and lowering transactions costs,
- local investors will be able to take full advantage of the great, liquid capital market of the EMU; the loan interest rates will be lowered, and in particular with relation to public debt,
- the need to adhere to monetary discipline will increase the credibility of economic policy of the accession countries.

The introduction of the euro will bring also some negative consequences for the economic policy.

Members of the EMU will renounce their sovereign monetary and exchange rate policy on behalf of the EBC (European Central Bank). Therefore they will exercise only a small influence on the monetary policy of EBC, even when the chairmen of their central banks will participate in decision-making by the General Board of EBC. There should be pointed out at least four threats to the economic policies of the accession countries.

Firstly, the EBC conducts the monetary policy for the euro zone, whose main purpose is to ensure stability of prices. Stimulating economic growth, which is so vital for the processes of diminishing delays in development of the countries of Central and Eastern Europe, is not the task of the financial authorities of the EMU.

Secondly, the monetary policy of EBC is not always popular with all the countries. It is implemented regarding the economy of the euro zone as a whole. For example, in 2002 the monetary policy of the EBC was too restrictive for Germany, and too expansive for Spain, Portugal and Ireland. In the German economy the negative deviation of a GDP from a trend was much greater than in the euro zone, and in those three cohesive countries rates of inflation greatly exceeded the inflation target (European Parliament, 2002). In the extended EMU the risk of non-adapting monetary policy to the economic situation of the member states will be even bigger, because the greater dynamics of their economic growth will be accompanied by higher inflation.

This has been confirmed by the experience of the cohesive countries, which in the first years of existence of the monetary union experienced both higher rate of economic growth and higher rate of inflation.

Thirdly, members of EMU retained national control over the main elements of economic policy, such as the structure of taxation and of public expenditure. Nevertheless, the level of their budget deficit cannot exceed 3% of GDP. The sanctions for exceeding the allowed level of deficit, foreseen in the treaty and in the Pact for Growth and Stability, can constitute an additional obstacle in the process of their economic development.

Fourthly, the euro zone extended by the countries of Central and Eastern Europe carries also the risk of slowing down the processes of catching up with the development in the EU. Such a risk is a consequence of the existing conflict between the need to maintain budgetary discipline and the strong pressure on public expenditure, and also the appreciation of the real rate of currency exchange caused by the Balassy-Samuelson effect. Such processes can be already observed in these countries, and their integration with the euro zone could additionally strengthen them, which in turn would weaken the competitiveness of their economies, in effect diminishing the dynamics of their economic growth.

Table 5

Selected results of research regarding real appreciation of currency exchange rate in the accession countries

Study	Real appreciation in relation to the EU relating to the Balassy-Samuelson effect (%)		
	Countries	Period	Real appreciation rate
Pelkmans, Gros & Núñez Ferrer (2000)	CEE-10 (a)	1997-1999	3.8 (b)
De Broeck & Slok (2001)	CEE-10	1991-1998	1.4-2.0
Halpern & Wyplosz (2001)	8 countries (c)	1991-1999	2.0-2.2
Fischer (2002)	CEE-10	1994-1999	1.0-2.6
Égert (2002)	CEE-5 (d)	1991-2001	0.5-1.8

(a) 10 accession countries

(b) in relation to the euro zone

(c) CEE-10 without Romania and Slovakia

(d) Czech Republic, Hungary, Poland, Slovakia and Slovenia.

Source: European Commission (2002)

The introduction of the euro will therefore change radically the conditions of performing the economic and financial policy. Renouncing

monetary policy and exchange rate policy and subordinating budgetary policy to a severe regime of financial discipline will cause their influence on the macroeconomic policy to be small. This implies the increased role of structural microeconomic policy as an important instrument in stimulating economic growth. Experience of the current members of EMU proves however that greater competition in the euro zone does not lead automatically to an increased effort in the area of the supply policy. The main elements of this policy are liberalization of markets (including labour markets), tax cuts and the structure of public expenditure encouraging development. Liberalization of markets, while strengthening competition, contributes to the improvement of effectiveness in allocating resources in economy. However, this is not its only result, since the other side of stronger competition is a temporary increase of unemployment connected with the lack of adaptation of some companies to the new market conditions. Tax cuts imply lowering the general level of public expenditure, therefore they require changes in its structure, in order that the lowering of its levels does not lead to restricting expenditure on investments. The governments of new member states will have to match the investment needs connected with the processes of adapting to the requirements of a homogenous market, removing the delays in the development of infrastructure, and restructuring the economy.

Introducing the euro also implies a greater role of domestic budgetary policy in stabilizing the economy. The experience of the accession countries in that respect is not encouraging. Their budgetary policy so far was business cycle oriented. Due to the greater variability of production in these countries, there will be an increased risk of exceeding the EMU allowed levels of budget deficit. Without changes in the rules of budgetary policy it is very likely that adaptation in these countries will be costly and ineffective (Coricelli and Ercolani 2002).

5. SCENARIO FOR INTRODUCING THE EURO

The accession of new member states into the EMU has to be preceded by the evaluation of the fulfilment by these countries of the criteria of convergence which should take place as early as possible. Moreover, these countries will have to enter ERM 2 together with accession to the European Union. The scenario of introducing the euro could be presented as follows:

- 1 May 2004: accession of the countries of Central and Eastern Europe to the EU.
 - At the same time these countries become members of ERM 2.
 - Second half of 2006: EBC and the Commission evaluate whether the criteria of convergence were met; on the initiative of the Commission, the Council and ECOFIN confirm the accession to the EMU after obtaining the opinion of the European Parliament, and following discussion with the Council represented by the heads of states and governments.
 - 1 January 2007: introducing the euro as the domestic currency which may be instantaneous or gradual with a transitory period of up to three years.

However, this scenario does not seem very likely. The main obstacle in the fast introduction of the euro in these countries will be the difficulties in meeting the criteria of convergence and especially those concerning inflation and budgetary deficit. On the basis of the prognosis of the Commission, from April 2003 it transpires that in the majority of the accession countries the rate of inflation in 2004 will be higher than in 2002, and the level of budgetary deficit only in the Baltic States and Slovenia will stay below 3% of GDP (European Commission, 2003). The permanent recovery of public finances will not be easy because the new members of the EU will have to include in their budgetary decisions not only the requirements of the EMU, but also other aspects connected with the adapting of the economy to the requirements of the single European market and the processes of real convergence.

The budgetary criteria as defined in the Treaty of Maastricht were further strengthened in the Pact for Growth and Stability. It determined, among other things, the mid-term target of budgetary policy which is at present reaching the budgetary surplus or the deficit close to a budgetary equilibrium. The accession countries, after joining the EMU, will therefore have to aim at this target which may complicate their processes of adaptation to the requirements of the single market and the processes of catching up (decreasing their delays in development). Both these processes create strong pressure on the growth of public expenditure on investment. At the same time, the strengthening of companies and supporting economic growth imply a reduction of the taxation burden. Budgetary policy will have to take under consideration different targets whose effects on income and budgetary expenditure are not the same. Avoiding conflicts in budgetary policy will not be possible without a radical reform of public finance.

The reform of public finance should also be accompanied by a certain elasticity in procedures of preventing the creation of excessive budgetary deficit. Such elasticity already exists because the Pact for Growth and Stability foresees the possibility of exceeding the allowed level of budgetary deficit in the case of serious recession in the economy in a given member state on which it has no influence. Further elasticity in this procedure could involve taking into consideration also the requirements of the catching-up process. A higher level of budgetary deficit could be allowed if it would result from an increase in investment leading both to greater dynamics of economic growth in the countries delayed in their development, and to the improvement of the competitiveness of the European economy. Exceeding the budgetary deficit could not be permanent because it would undermine the basis of economic growth in the long term.

Such a change to the treaty rules could be justified by aiming at the strengthening of economic, social and spatial convergence of the extended EU. The means leading to this target is, among others, establishing the economic and currency union. The EMU rules concerning economic policy should therefore also take into consideration that target and not only the macroeconomic requirements of the proper functioning of monetary union. The risk of a clash of these two targets relates only to a short period. In the long term, greater economic convergence of the EMU will be accompanied by an improvement in its functioning, and especially its market adaptation mechanisms. The risk of short-term conflicts between aiming at greater economic and social convergence of the Union and macroeconomic stability of the euro zone does not seem large in relation to the countries of Central and Eastern Europe. Their economic potential is too small to make the economic processes undergoing in these countries influence in a significant way the functioning of the EMU, including the stability of the European currency.

The catching-up processes would also require certain modifications in the criterion of stability of prices. The differences in the level of inflation which are allowed at present in the member states of the euro zone are too small to make it possible to reconcile the requirements of real and nominal convergence. The high dynamics of economic growth in the countries of Central and Eastern Europe on which depends the catching-up in the levels of development in the extended EU, could be accompanied by inflation too high in relation to the requirements of the EMU. Such a risk is real, which is proven by the example of Ireland. The pace of economic growth in Ireland amounted to 10% in 2000 and 6% in the period of 2001–2002, while a GDP

deflator was 4.3% in 2000, 5.3% in 2001, and 4.9% in 2002 (OECD 2003 p.17). Countries remaining with the unchanged stability of prices would face the necessity of conducting a restrictive budgetary policy which could bring about negative results for the processes of catching-up in Europe.

Introducing the euro into accession countries also implies strong ties between the national currency and the currency of the union within ERM 2.¹ At the moment of joining the European mechanism of currency exchange, their policy of exchange rate will be conducted in the common interest. At present the currency systems of these countries are very diverse. Such diversity in the systems of exchange rate reflects the choice between macro-economic stability, that is using exchange rate as an instrument of anti-inflationary policy, and elasticity necessary to maintain the competitiveness of the economy and its adaptation to the external shocks.

Table 6

Systems of currency exchange rate in the countries of Central and Eastern Europe

System of currency exchange rate	Countries
Currency Board	Bulgaria, Estonia, Lithuania
Peg (SDR)	Latvia
Target Zone (EUR)	Hungary
Managed Float (EUR)	Czech Republic, Slovakia, Slovenia
Managed Float (USD)	Romania
Float	Poland

Source: Deutsche Bank Research (2003)

The policy of currency exchange rate in the accession countries will therefore change gradually, undergoing the following stages of development:

1. Pre-accession period. These countries have a great freedom of choice of strategy of currency exchange rate. However, the EBC recommends 'growing degree of orientation towards the euro'.

2. Accession to the EU. Policy of the currency exchange rate is conducted in common interest. New members of the Union coordinate their economic policy with the policy of the Community. Moreover, they have to present their programmes of convergence to the Ecofin Council annually.

3. Entry to the ERM 2 system. In this system the euro plays the role of a currency anchor. The central exchange rate of the currency entering the European exchange rate mechanism is jointly established. The allowed fluctuations of rates of exchange of currencies participating in this,

mechanism amount to $\pm 15\%$. The central exchange rate is therefore quite flexible which is supposed to ease the adaptation in the case of the appearance of asymmetric shocks. This stage lasts at least two years (without devaluation of the currency).

4. Introduction of the euro. This involves the renouncement of national policy of currency exchange rate which in the euro zone remains as an exclusive competence of the Community (Council and EBC).

The most important matter is defining the central exchange rate of the currency. In relation to the present members of the euro zone, the exchange rates of national currencies to a common currency were established on the basis of their bilateral central exchange rates of the ERM. Two countries, Ireland and Greece, opted however for a slight revaluation of their currencies. A decision in the case of defining the central exchange rate of a currency results in certain consequences for the competitiveness of the economy and the dynamics of its development. Here the experience of Portugal may be a warning. This country entered into the EMU with an overvalued currency, the result of which was higher prices of exports, slow economic growth and permanently high level of the balance deficit of the current turnover. Slowing down of economic growth also made its budgetary situation worse, since the deficit in 2001 amounted to 4.1% of GDP, therefore a much higher than the level allowed by the Pact for Stability and Growth.

The biggest number of problems with defining the relevant level the national currency exchange rate to the euro will be encountered by those countries, in which the currency exchange rate is fluid. This above all applies to Poland. Establishing an undervalued exchange rate contains in itself the risk of higher inflation and therefore slowing down the process of monetary integration. On the other hand, the consequence of an overvalued exchange rate will be slower economic growth and, at the same time, slower real convergence. While taking the decision in this case, the premises resulting both from aiming at EMU should be considered which implies a nominal convergence, as well aiming at greater economic and social convergence of the union, implying real convergence. In addition, there is no complete theoretical basis for this decision. Although economic theory defines factors determining currency exchange rate, it has not established so far any method of setting the currency exchange rate on the basis of these factors.

CONCLUSIONS

Membership of the countries of Central and Eastern Europe to the EU also implies the introduction of the euro. Integration with the euro zone however requires fulfilling certain economic conditions, that is, the criteria of convergence and criteria of optimal currency area. Expansion of the EU will further distance it from the optimal currency area. The economies of the new member states are characterized by such features as a greater asymmetry of shocks, very low mobility of the labour force, and shortcomings in the effective functioning of financial markets. For these countries, it will also be harder to meet the duty of observing the rules set up in the EMU regarding the economic policy. It does not just imply observing the requirements of stability of prices and healthy public finance, but also creating opportunities for stabilizing the economy through the budget. In addition, aiming at the EMU cannot obstruct real convergence. Therefore, economic policy will have to stabilize more effectively the economy and ensure its adaptation to the requirements of the single market and European competition, and also create conditions aimed at decreasing their delays in development while at the same time observing the rules set up in the euro zone regarding stability of prices, healthy public finance and the stability of the balance of payments. If it will not be possible to reconcile all these aims, the fast integration of new member states with the euro zone may turn out to be impossible or will happen together with the negative effects for the processes of catching up.

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