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INCLUSION OF SLOVENIA IN THE EURO AREA AND PERSPECTIVES OF ENLARGEMENT AFTER THE GLOBAL FINANCIAL CRISIS

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Abstract

The process of convergence in Slovenia was smooth and timely, so that Slovenia could join the euro area at the beginning of 2007, as the first and at that time the only one among the EU new member states. Slovenian national strategy of the euro adoption was for the first time clearly defined in November 2003, when the Program for joining the ERM II and adoption of the euro was prepared. This was the first milestone on the road to Slovenia's inclusion in the euro area. The Program planned an early inclusion in the ERM II, as soon as possible, and an early adoption of the euro at the beginning of 2007. After the adoption of the Program, the priority of all economic policies became the timely fulfillment of the Maastricht convergence criteria; so that the fixed date of the euro adoption could be respected. The second milestone was a surprisingly quick entry in the ERM II exchange rate mechanism, which was a precondition for the adoption of the euro in 2007. The third milestone was Slovenia's request for an individual early assessment of its compliance with the Maastricht criteria. European Commission and the European Central Bank responded positively to this initiative and prepared their Convergence reports on Slovenia in May 2006, in time to enable administrative and technical preparations for the euro adoption at the beginning of 2007. Reasons for Slovenia's success of its plan for an early adoption of the euro are the following: Emphasis on macroeconomic stability throughout the period, gradualist approach to economic reforms in the process of transition, overall (political parties, public opinion, social partners) national support to the project of euro adoption, clear priorities of economic policies, and firm target date of the euro adoption.

The global crisis increased the attractiveness of the membership in the euro area for the NMS (new EU member states). In the ongoing crisis it is extremely difficult for the euro candidates to prepare rational, sound and safe strategies of their euro adoption, particularly on the optimal timing of the ERM II and euro area inclusion. Fulfillment of the Maastricht convergence criteria will, due to the crisis, most likely become more difficult. Participation in the ERM II without a clear perspective (and the timing) of the euro adoption might be particularly dangerous. Probably, there is not much they can do themselves to speed up their euro adoption, if they want to remain within the Maastricht rules. The European Commission and the European Central Bank on the other hand do not seem to be willing to change any of the Maastricht rules (including the mandatory two years' participation in the ERM II. At this moment it is hard to say whether the crisis will actually speed up or delay the euro enlargement process. Both options are possible, but the second one seems more realistic. Euro candidates still have the possibility to speed up their euro adoption by unilateral euroization. This almost forgotten idea could become revived, although the European Commission and the European Central Bank are for various reasons strongly against it. However, the crisis is an additional argument in support of the unilateral euroization, as an emergency measure for the extraordinary times, in order to avoid further destabilization of these countries. If they acted together, rather than emphasizing their differences, their claims would have a stronger political backing.

Keywords: monetary union, exchange rate mechanism, eurozone

JEL classification: E42, F15, F33

ECONOMIC CONVERGENCE IN SLOVENIA BEFORE THE EURO ADOPTION

The process of convergence with the euro area can be approached either from the viewpoint of nominal convergence or from the viewpoint of real convergence. Ideally, both approaches should point in the same direction, showing how a country in the process of its economic development is becoming more and more similar to incumbent members of the euro area, both in terms of its structural characteristics and its macroeconomic policies.

Nominal convergence is embodied in the Maastricht convergence criteria which are the explicit formal requirements to be fulfilled before a country is admitted to the euro area. Real convergence, usually understood as catching up with the EU in terms of GDP per capita, is an implicit, informal expectation before a new EU member country can adopt the euro. Both measures of convergence, nominal and real, can be used to assess the readiness of a country to join the euro area.

When preparing itself for joining the EMU (European monetary union) Slovenia was in the first place closely monitoring developments in its nominal convergence in time, in order to assess its readiness for the euro adoption. Regarding real convergence, Slovenia throughout the period had the highest per capita GDP among the group of transition countries and was slowly but persistently catching up with the EU average level. In parallel, in Slovenia due attention was also paid to the optimum currency area (OCA) criteria, as those structural characteristics of the economy which show longer-term suitability of a country to join the EMU, in terms of its exposure to possible asymmetric shocks and of the flexibility of its adjustment mechanisms.

Data presented in the Appendix show the pace and degree of convergence process. In the case of Slovenia, several periods should be distinguished:

a) period of five years preceding the EU accession (1999-2004),
b) period from the EU accession (and the entry in the ERM II) to the entry in the euro area (2004-2007),
c) period from the euro adoption to the outburst of the global financial crisis (2007-September 2008) and
d) period since the outburst of the global financial crises (September 2008-).

In the case of Slovenia, since it had joined the ERM II (in June 2004) almost immediately after its accession to the EU (in May 2004), it would make no sense to distinguish between the period from the EU accession to the entry in the ERM II and the period after the entry in the ERM II and before the euro adoption, since the first of these periods was simply too short (less than two months) to be analytically meaningful.

The data on convergence speak for themselves. However, some comments on the process of nominal and real convergence should be presented in order to emphasize some characteristic developments in the above mentioned sub periods in Slovenia. We start with the nominal convergence, concretely with the fulfillment of the Maastricht convergence criteria.

Although there are five well known Maastricht convergence criteria, in practice it turned out that two of them (longer-term interest rate and public debt) are less important, since the European Commission interpreted them rather flexibly, so that in Slovenia (as well as in most other euro candidate countries) these two convergence criteria were rather easily met early in the process of convergence. Therefore, we concentrate of the remaining three Maastricht convergence criteria.

The inflation criterion was the decisive one for Slovenia. It turned out later that the success of its plan for an early adoption of the euro in fact depended exclusively on the timely successful fulfillment of the inflation criterion. But first we have to go back in the recent past. Slovenia after its independence in 1991 inherited from Yugoslavia its very high inflation, in fact hyperinflation (more than 20% monthly at the beginning). As restoring macroeconomic stability was the priority at that time, supported by responsible monetary, exchange rate and fiscal policies, in the next couple of years inflation rate kept persistently falling, to reach the level of close to 5% in 1998. After that period, due to the introduction of the VAT and some other measures, beginning in 1999 inflation started to increase again and in fact stayed at relatively high single-digit levels until 2003. From then on, after the adoption of the Program of the euro adoption in November 2003, inflation again started continuously falling, finally to come close to the level of the reference value of the Maastricht inflation criterion in 2005.

Only half a year after the adoption of the euro in 2007 inflation started to increase again. For about a year, until mid 2008, Slovenia recorded the highest inflation rate among all euro area countries and would accordingly considerable exceed the Maastricht inflation criterion. Only towards the end of 2008, inflation, as a consequence of the global financial crisis, subsided again and approached the average euro area figures.

The story of public finance deficit is less dramatic. Throughout the period public finance deficit was more or less modest, at least when compared to some other EU countries, and definitely remained with a margin within the Maastricht or SGP (Stability and growth pact) limits of 3% of GDP. At the time of the assessment of the readiness of Slovenia for the adoption of the euro, fiscal deficit was around 1% and this Maastricht convergence criterion was easily met. After the adoption of the euro Slovenia even succeeded in bringing the fiscal deficit close to zero. Of course, as in other EU countries, global financial crisis will strongly increase fiscal needs and will also in Slovenia in the near future require much higher fiscal deficits, close to or above the Maastricht threshold of 3% of GDP.

The third important Maastricht convergence criterion is the exchange rate stability. From its independence, Slovenia relied on a system of a managed floating of the exchange rate and in this framework slowly but continuously nominally depreciated the exchange rate of its currency (the tolar). Slovenia succeeded in joining the ERM II surprisingly quickly, in June 2004, just less than two months after its EU accession. Participation in the ERM II for the required two years was very smooth. There was no change in the central rate (which later became the conversion rate for the euro) and the market rate deviated from the central rate for less than 0.1% (although formal margins of permissible fluctuations were +/- 15%). In short, Slovenia had no problems in meeting the convergence criterion on exchange rate stability.

After reviewing nominal convergence developments, we can turn to the real convergence issue. In line with the fact that in the observed period the growth rate in the Slovenian economy was constantly somewhat higher than in the EU (or euro area), it is not surprising that Slovenia continuously progressed in real convergence, i.e. in the process of catching-up with the EU GDP per capita average. In 2007 GDP per capita in Slovenia was at the level of almost 90% of the EU average. Slovenia now as the result of the process of its real convergence has already caught-up with some of the southern EU countries.

STRATEGIES OF EURO ADOPTION IN SLOVENIA

First reflections on the inclusion of Slovenia in the process of European monetary integration started early, still in the framework of the former common federal state. As Yugoslavia already had the ambition to join the EU, even at that time this indirectly opened perspectives for Slovenia's inclusion in the European monetary integration mechanisms, including in the longer run in the EMU.

In the period after the independence the emphasis was naturally on the creation of the Slovenian monetary system. Starting from a difficult situation at the beginning, Slovenia created a specific monetary system, based on a managed floating of the exchange rate. It has to be reminded that Slovenia had to do the pioneering work, as in the recent history this was the first case of the introduction of the new national currency. In this period, up to the middle of the nineties, inclusion of Slovenia in the European monetary integration process was quite understandably somehow in the second plan. Macroeconomic stabilization, in which Slovenia's monetary policy played the key role, was a precondition for any further steps in the direction of inclusion in the European monetary integration mechanisms.

The interest for joining the European monetary integration was revived again in mid-nineties, when Slovenia prepared its strategies of economic development and of foreign economic relations, which included the chapter on Slovenia's inclusion in the EMU. On the basis of comparison between the expected benefits and costs of joining the EMU, Slovenia – to put it simply – decided for the inclusion in the EMU and defined its orientation for an early inclusion of Slovenia in the EMU as its strategic goal.

As the inclusion in the EMU for the new EU member states later turned out to be mandatory, the balance of expected benefits and costs of the EMU has in a sense become irrelevant, at least from the point of decision-making, although it has remained analytically interesting. As the matter of fact, it could be said that the focus of the benefits and costs analysis has shifted. A different question has now become important: What are the expected benefits and costs of an early inclusion in the EMU, compared to a delayed one, and what is the optimal dynamics of inclusion in the EMU?

Regarding the fulfillment of the Maastricht convergence criteria, in the second half of the nineties some of the comparable acceding countries caught up with Slovenia and showed better results, so they started to appear better prepared and at first sight perhaps closer to joining the EMU. Slovenia had been using the system of a floating exchange rate and had in the framework of a managed floating exchange rate regime conducted an active exchange rate policy with constant small depreciations of the nominal exchange rate of the tolar. This was in contrast with the requirements of inclusion in the European monetary integration which were based on the successive fixing of the exchange rate. Following the period of lower inflation rates, after 1999, when the value added tax was introduced and some corrections of the administrative prices carried out, Slovenia's inflation rate increased and got stuck in the high single-digit figures. Furthermore, in some of the following years, Slovenia even had the highest inflation rate among comparable transition countries. In comparison with this group of countries, Slovenia in the period between 2000 and 2003 certainly did not exactly look like a favorite in the competition for an early adoption of the euro, rather just the opposite.

After a preceding analysis of the suitability of Slovenia for the inclusion in the EMU on the basis of optimum currency areas criteria and the assessment of readiness for the EMU on the basis of expected dynamics of compliance with the Maastricht convergence criteria, the Bank of Slovenia, together with the Government of the Republic of Slovenia, in November 2003 adopted the Program for joining the ERM II and adoption of the euro[1]. The Program envisaged an early inclusion in the euro area and accordingly planned the entry in the ERM II in 2004, soon after Slovenia's accession to the EU, and inclusion in the EMU and adoption of the euro at the beginning of 2007.

The preference for an early euro adoption was at that time not so self-evident as it may seem today, after the successful adoption of the euro. There were also different opinions which favored a slower and more cautious approach, with the aim of prolonging Slovenia's monetary sovereignty. However, the arguments of the proponents of an early inclusion in the EMU prevailed in the discussion and resulted in the above mentioned official view on the desired dynamics of Slovenia's adoption of the euro.

Milestones on Slovenia's road to the euro adoption were those critical moments which had a decisive influence on the quick adoption of the euro. In our view, the Program of 2003 was the first of the three milestones, decisive moments on the Slovenian road to the euro adoption. From then on, fulfillment of the Maastricht convergence criteria became the first priority of economic policies in Slovenia. Monetary and fiscal policy started to operate more consistently and their better co-ordination almost immediately resulted in considerable lowering of the inflation rate which began approaching the Maastricht reference value. Firm commitment to the target date for the euro adoption undoubtedly had a favorable effect on the decline of inflationary expectations.

In the preparations for the inclusion in the EMU, special attention was paid to the exchange rate mechanism ERM II. The European Commission presented this interim exchange rate mechanism to the acceding countries as a stable and safe arrangement, which would help their nominal and real convergence in the transitory period before their adoption of the euro. On the other hand, acceding countries saw the ERM II more or less as a necessary evil, not as a fitness club, but as an imposed mandatory waiting room before the adoption of the euro. The ERM II as a potentially unstable and dangerous intermediate regime of a fixed, but adjustable peg was quite critically evaluated in the academic circles[2]. However, a country like Slovenia, wanting to join the EMU as soon as possible, had practically no other choice but to enter the ERM II as soon as possible, since this was a precondition for an early adoption of the euro. However, the strategy was also to exit the ERM II as soon as possible, after just mandatory two years' participation, by adopting the euro.

The second milestone, another decisive moment in the run-up to the euro adoption was a surprisingly fast entry of Slovenia in the ERM II (together with Estonia and Lithuania), in June 2004, almost immediately, less than two months after the EU accession. This was in fact much earlier than at the end of 2004, as was beforehand officially announced in Slovenia. Such an early entry in the ERM II was important, since it enabled the adoption of the euro already at the beginning of 2007. If the entry in the ERM II was postponed and delayed

[1] Banka Slovenije in Vlada Republike Slovenije (2003).
[2] For a critical assessment of the ERM II and the Maastricht exchange rate criterion see Lavrac (2008a), Ch.9.

towards the end of 2004, the euro for just administrative reasons could not be adopted before 2008. Although this is not a formal rule, in practice the entry in the EMU and adoption of the euro (probably for fiscal and statistical reasons) in practice always happens on 1 January, and not sometime within a year. Anyway, quick inclusion of the three best prepared new EU member states in the ERM II could be interpreted as an indication that the European Commission and the ECB actually meant to allow an early inclusion of the new member states in the EMU, if only they could demonstrate sufficient readiness in terms of meeting the Maastricht convergence criteria.

Participation of Slovenia in the ERM II in the required two-year period was surprisingly smooth, the market exchange rate remained extremely close to the central rate and there were no tensions on the foreign exchange market, so that Slovenia fulfilled the Maastricht exchange rate stability convergence criterion at the time of assessment without any problems. It could be argued that Slovenia's successful experience in the ERM II was the result of a combination of "wisdom and luck", the right choice of macroeconomic policy measures and favorable domestic and external circumstances. This of course does not mean that in the future, in the period of other new member countries' participation in the ERM II, the built-in instability of this exchange rate mechanism would not cause serious problems.

It should be reminded that Slovenia was also exposed to some risks in its run-up to the euro adoption[3]. In the period before the end of 2005 Slovenia was more or less on the verge of meeting the Maastricht convergence criterion on inflation which was the only one unfulfilled yet. At that time the process of disinflation in Slovenia speeded up, while the reference value of this convergence criterion – due mostly to oil price increases - increased somewhat, so that Slovenia met the inflation convergence criterion even earlier (in November 2005) than expected (it was officially planned that the inflation convergence criterion would be fulfilled sometime in the spring of 2006). This led to a change in Slovenia's attitude towards the desired timing of the assessment of its compliance with the Maastricht criteria. Before it was in Slovenia's interest that the Convergence reports would be prepared as late as possible (as usually in October), so that Slovenia would have enough time to meet the convergence criterion on inflation. Afterwards it was just the opposite, Slovenia's interest became that the Convergence reports would be prepared as soon as possible, while Slovenia would still with certainty meet the convergence criterion on inflation. With this in mind, Slovenia asked for an earlier individual convergence report on its fulfillment of the Maastricht convergence criteria. For Slovenia, a lucky coincidence was that the EU was also in favor of an earlier individual Convergence report for this country. As it was estimated that Slovenia would most likely be assessed as complying with all the Maastricht convergence criteria, it was also in the interest of the EU to give Slovenia enough time for the demanding technical preparations before the introduction of the euro.

In our view, this was the third milestone, the last decisive moment on the Slovenia's path to an early euro adoption. As it was believed that Slovenia complied with all the Maastricht convergence criteria and that the assessment would definitely be favorable, the European Commission and the ECB responded positively to Slovenia's initiative and prepared their Convergence reports already in May 2006. Not surprisingly, both reports[4] for Slovenia were positive. The conclusion was that Slovenia fulfilled all Maastricht convergence criteria and was ready for the inclusion in the EMU. Based on this recommendation in the next two

[3] Detailed analysis of economic policies in Slovenia before and after its inclusion in the ERM II can be found in Bole and Mramor (2006).

[4] European Commission (2006a), European Central Bank (2006).

months, in June and July, political acceptance to the euro area was confirmed for Slovenia in relevant EU institutions. On 1 January, 2007 Slovenia became the thirteenth member of the EMU, as the first and until 2008 the only country adopting the euro among the new EU member states.

Why Slovenia succeeded in the early adoption of the euro and others candidates failed? Or, to put it differently, in what way the Slovenian path to the euro adoption, which later turned out to be a success, was specific, different from the others?

- In Slovenia, throughout the period of preparations for the inclusion in the EMU, economic policies were focused on sustaining main macroeconomic stability, such as (at least relative) fiscal and balance-of-payments equilibrium.

- Gradualist approach to transition which implies a successive and patient longer-term process of structural reforms (instead of the so-called "big bang" approach of quick and radical economic reforms), as the main characteristic of Slovenia's transition process, was often criticized by international institutions, but in the specific Slovenian circumstances obviously worked well.

- Project of the inclusion in the EMU and adoption of the euro in Slovenia had a wide support among the most important political parties as well as in the public. According to public opinion surveys, the support to the adoption of the euro was in Slovenia constantly among the highest, if not the highest. The project of the euro adoption was also supported by the social pact, i.e. by the labor unions and income policies. The program of inclusion in the euro area which was initiated by the preceding government was taken over and continued by the new government that came into power in 2004. In short, the euro adoption was an overall national project which united Slovenians rather than separated them, as had been the case with some other major national economic programs.

- After the adoption in 2003 of the program for the inclusion in the ERM II and adoption of the euro, an early adoption of the euro became the key priority in the conduct and co-ordination of economic policies. All economic policy measures, including key longer-term structural reforms, were first judged from the point of view of the timely fulfillment of the Maastricht convergence criteria and of enabling the planned euro adoption at the beginning of 2007.

- Decision for an early inclusion in the EMU and in particular a firm target date of the euro adoption on January 1, 2007 were accepted by the markets and, more generally, by economic agents, as realistic and credible. This assessment positively influenced inflationary expectations and resulted in the lowering of the inflation rate which led to the timely fulfillment of the Maastricht convergence criterion on inflation, as the only serious hurdle in Slovenia's run-up to the euro adoption.

With the advantage of hindsight it can be concluded that the chosen way towards the euro adoption in Slovenia was broadly speaking the right one for this country. This can be argued since Slovenia succeeded in joining the euro area in the theoretically shortest possible time after its accession to the EU. Slovenia along with the other new member states joined the EU in May 2004 and considering the fact that after the EU accession a country has to participate for at least two years in the ERM II, as well as the fact that according to an unwritten rule the inclusion in the euro area always takes place at the beginning of the year, the first theoretically possible date for the adoption of the euro for the new EU member states was 1 January, 2007.

Project of the inclusion in the EMU and of the adoption of the euro in Slovenia was well prepared and executed which has finally been proven by the result, successful and rapid inclusion in the euro area. The introduction of the euro was technically very smooth and people quickly got used to its practical use, although the mental switchover to the euro is naturally going to be a longer-term process. In spite of expectations of the possible price increases as a result of the adoption of the euro, these fears failed to be realized. Price increases due to the euro adoption have not been of an important magnitude[5]. The story is similar to that of the other euro-area countries. People felt price increases, while official statistics did not detect and record them. Price increases were in fact concentrated only in certain groups of expenses, particularly some goods and services which are more visible in the everyday life so that people are more sensitive to their price developments.

THE IMPACT OF THE GLOBAL CRISIS ON THE DYNAMICS OF EURO AREA ENLARGEMENT

Global financial crisis has shifted the ratio between benefits and costs of the membership in the EMU. It has undoubtedly increased the attractiveness of the participation in the euro area, which accordingly resulted in speeding up the plans of joining the euro area in those new EU countries, which have not yet adopted the euro. However, perspectives of the enlargement of the euro area in the nearer future remain for the moment uncertain. There are several issues to be discussed here: First, the readiness and ability of the euro candidate countries to meet the Maastricht convergence criteria in the light of the crisis, second, the willingness of the present euro area members to admit newcomers at times of tensions and uncertainty, and third, the willingness of the EU to adjust the Maastricht convergence criteria to the new circumstances, in order to allow for an earlier enlargement of the euro area. At the moment both scenarios seem equally possible: That the inclusion of the new members in the euro area would be speeded up or postponed.

The global financial crisis has changed both benefits and costs of the EMU membership. It could be argued that it increased both, but an overall balance is that benefits have increased more. This resulted in the increased attractiveness of the participation in the euro area at times of crisis. Although it is of course clear that the single currency can not protect countries from the main consequences of the crisis (credit crunch, recession and unemployment), it can protect them from additional problems, related to the existence of their own national currencies. The main advantage of being in the euro area is exactly in sharing the single currency, or, to put it differently, in giving up the national currency. Euro area countries do not anymore have their national currencies and the exchange rates which the speculative capital could attack. The main channels[6] through which the euro as the single currency protects euro area countries from the negative consequences of the crisis are the following:

- prevention from speculative attacks against national currencies,
- prevention from having to change the interest rates in the wrong direction,

[5] It is officially estimated that the adoption of the euro in Slovenia contributed around 0.3 % points to the inflation rate (Banka Slovenije, 2007; see also Urad RS za makroekonomske analize in razvoj (2007).

[6] These channels are analysed in more detail in Lavrac (2008b).

- prevention from major shifts in the currency structures of portfolios,
- the use of the euro as the second most important world currency,
- easier access to financing on the international financial markets,
- easier access to financial support from the EU and EMU.

On the other hand, possible drawbacks from the euro area participation at times of crisis could be an easier contagion, due to deeper integration in the euro area financial markets, and the loss of flexibility of adjustment mechanisms[7] (loss of the interest rate and exchange rate instruments) to deal with the impact of the crisis. However, this may be an argument for the large countries, but not for the small open economies, such as those of the new EU member countries.

Global financial crisis will have an impact on the dynamics of inclusion in the euro area of those new EU members, which have not yet adopted the euro. Although their individual positions are different, it can be generalized that most likely they will not be in a position to adopt the euro in the next couple of years, simply because they will not be able to meet the Maastricht convergence criteria in the near future. Some have problems with inflation, others with their fiscal positions, which will undoubtedly worsen during the crisis, and some with both. Some have problems with sustaining their currency boards, while others will have problems with their future participation in the ERM II. This inherently unstable exchange rate mechanism might prove to be particularly dangerous at times of crisis-induced volatility. It seems that the strategy is to delay the ERM II entry to »T-2«, just two years before their planned inclusion in the EMU. Since at the moment the planned date of the euro adoption is for most of these countries not known, it is equally hard to define the optimal timing of their entry in the ERM II.

Most of these countries as the consequence of the crisis want to speed up the accession to the EMU and the adoption of the euro. The European Commission and the ECB would on the one hand want to speed up the euro area enlargement, in order to better protect these countries from the consequences of the crisis. EU would have to help them anyway, even if they remained outside the euro area. On the other hand, at times of crises the euro area countries would be probably reluctant to accept new – supposing more problematic - members and to assume additional responsibilities, burdens and risks, as they already have enough problems with themselves. Which of the views will prevail is at this moment hard to predict, it depends on the depth and duration of the present crisis. However, the pessimistic scenario seems perhaps more likely.

Even if the EU wanted to help the euro candidates by softening the Maastricht convergence criteria, this would be against the principle of equal treatment of the old and new EMU members. Also, even if assuming political willingness, convergence criteria are part of the EU Treaty, and can be changed only by complicated and lengthy procedures. Before such changes could become operational, the crisis would hopefully already be over. However, the EU so far explicitly rejected the ideas for any softening of the Maastricht convergence requirements (which so far have concentrated only on one aspect – shortening of the period of participation in the ERM II).

[7] Systematic analysis of alternative adjustment mechanisms available to the EMU member countries is given in European Commission (2006, 2006b).

What is left for the new EU countries which have not adopted the euro yet? One possibility is the unilateral euroization, which is a short cut to the adoption of the euro, as it avoids the need to meet the Maastricht convergence criteria. It can be expected that in the circumstances of the crisis the ideas for unilateral euroization will intensify in these countries, although the European Commission is strongly against this solution, for various economic, legalistic and political reasons. On the other hand, the crisis is exactly an argument, upon which these countries can build their case for the unilateral euroization. The crisis calls for quick solutions, which the regular path via Maastricht criteria does not enable. An additional argument could be that some of the unstable or potentially crisis-prone areas (Kosovo, Montenegro) were allowed such solution and were even actively supported by the EU in their euro adoption.

PERSPECTIVES OF EURO AREA ENLARGEMENT AFTER THE GLOBAL CRISIS

Before the introduction of the EMU, the European Commission's views on the dynamics of inclusion of the candidate countries in the mechanisms of the European monetary integration have not been much elaborated yet. It was simply too early for them to have a strong opinion on the subject or even to seriously consider the issue. Only after the creation of the EMU and introduction of the euro in 1999, the European Commission successively formulated its strategy towards dynamics of inclusion of the candidate countries in the EMU. For the next couple of years it was characteristic that the European Commission was not in favor of an early inclusion of the candidate countries in the EMU. In fact it was even not in favor of their early entry in the ERM II, shortly after their membership in the EU. Various pessimistic messages and negative signal were sent to these countries concerning expected speed of their entry in the ERM II and in the EMU. The European Commission warned them of their transition-specific differences, claiming they should concentrate on meeting the Copenhagen criteria for the accession to the EU, rather than focus on complying with the Maastricht criteria for joining the EMU. Beside nominal convergence, embodied in the Maastricht convergence criteria, they were also reminded to pay attention to the so-called real convergence, catching-up with the EU countries in their economic development. This gave rise to an interesting academic debate: Is the similarity in the level of economic development a necessary precondition for a successful participation in a monetary union? If this was true, the candidate countries would have to wait for decades in front of the door of the EMU and the European Commission would have strong arguments for delaying their ambitions for an early entry in the EMU, even in case they succeeded in fulfilling the Maastricht convergence criteria relatively soon after their accession to the EU.

Approximately in the period 2003-2005 a shift in the European Commission's views on the dynamics of inclusion of the candidate countries in the EMU could be noticed. Instead of a reluctant attitude, a more neutral approach could be detected concerning an early entry of the candidate countries in the euro area. It could be concluded that the European Commission actually would not prevent quick inclusion of new members in the euro-zone if they succeeded in fulfilling the Maastricht convergence criteria on a healthy and sustainable basis. It was also to be understood that the new countries would actually join the EMU according to their individual readiness, and not jointly as a group. Those candidate countries which would be best prepared, should go first, without having to wait for the other less prepared candidates.

This approach was actually adopted, as Slovenia, was the first euro candidate country to be treated individually when assessed for its readiness to adopt the euro. This individual approach was in fact the basis for Slovenia's request for an individual early assessment of its fulfillment of the Maastricht convergence criteria.

Later on, it could be noticed that the emphasis shifted particularly to the issue of sustainability of compliance with the nominal convergence criteria, while the issue of real convergence seemed to become less pronounced. The concept of »sustainability« of the nominal convergence was a rather ambiguous issue. The underlying idea was rightly to expect that the candidates would not just concentrate on meeting the Maastricht convergence criteria at the time of the assessment, but also be able to sustain them in the future. There are a couple of problems here. First, how to define and measure sustainability and, particularly, how to enforce future sustainability of the nominal convergence? Second, euro area countries, once in the EMU, actually do not always comply with the individual Maastricht criteria, but in many cases breach them, without being seriously sanctioned.

Presently, in the circumstances of global crisis, the views of the European Commission and the ECB can be interpreted as saying that the residual euro candidate countries are not yet ready to join the EMU, and furthermore, will not be ready to join it even in at least the next few years. Concerning the timing of their ERM II entry, these European institutions are at the moment less explicit, but is seems that they are not exactly putting pressure on the euro candidate countries to join the ERM II as soon as possible. It is quite understandable that, at least for the countries with floating exchange rates, at times of turbulences in foreign exchange markets, joining the ERM II might be a rather risky option.

The ongoing financial crisis has seriously shaken the fundamentals of the global financial system. It is more than clear that the global financial architecture will have to be rearranged or even basically reconstructed[8]. This involves redefining the roles of the main international players, such as the IMF, World Bank, BIS and many other international institutions, as well as the national key players in the financial markets (central banks, ministries of finance, banks, other financial institutions, etc.). In terms of substance, the financial sector will be as the result changed in its quantitative and qualitative dimensions. Among main issues to be redefined are national and international regulation and supervision, financial instruments (such as derivatives), moral hazard issues in the financial sector and many others. At this moment it is still hard to say in which directions these changes will finally go.

The crisis itself is not responsible for the concentric monetary structure of Europe; however, the impact of the crisis causes additional concerns in this respect. There are several »levels« of monetary integration in Europe at the moment. First, the euro area countries, which seem to be best protected against the crisis, due to the single currency, easier access to finance on the financial markets and support and solidarity among themselves and from the ECB. Second level is the euro candidate countries which participate in the ERM II. On the one hand, they are perhaps in the most vulnerable position, since they are exposed to inherent instability of this exchange rate mechanism, which is particularly dangerous at times of increased financial volatility and uncertainty in the financial and exchange rate markets. However, as most of them apply the system of a fixed exchange rate in the form of a currency board, they seem somehow protected from the exchange rate instability at least in the short-term. Here, the question is if they can sustain the unchanged parity of the currency board in the circumstances

[8] This will also include some changes in the governance structure of the EMU (see European Commission, 2008).

of economic and financial instabilities, which call for testing their willingness and ability to sustain the parity of the currency board. There is also the question whether the ERM II countries will have a better treatment in terms of solidarity and support than the other euro candidate countries outside the ERM II, which are at the moment due to their flexible exchange rate systems obviously even more exposed and vulnerable. These countries form the third circle of the EU countries. Although they are less than the first two groups of countries the responsibility of the ECB, they are at the moment the least stable ones. Their instability has a feedback impact on the stability of the overall euro area and the EU, so the ECB and the European Commission (or the national states behind it) have to support them financially, whether they like it or not. There is a certain division of tasks here between the European institutions and the IMF. While the ECB is directly in charge of the euro area countries, and the European Commission of all the EU countries, the IMF focuses on supporting those among the EU members, which are not yet part of the euro area (both participants and non-participants in the ERM II). The fourth circle are the non-EU countries, EU candidate countries and other potential future EU member countries which the EU also has to support, in order to prevent contagion from their vulnerabilities and possible collapse to other EU countries. At the moment, the approach and organization of various levels of engagement and support to these different levels of monetarily integrated EU countries seems rather ad hoc and not based on a clear strategy and firmly established rules.

There is a certain paradox in the discussion on the enlargement of the euro area at the moment. On the one hand, the crisis calls for a rapid inclusion of the euro candidate countries in the euro area. On the other hand, in the circumstances of ongoing crisis, this seems rather risky, both from the point of view of the euro candidates themselves and from the point of view of the incumbent members of the euro area. The latter are preoccupied with their own problems and are unwilling to take additional risks and responsibilities. The former are in a situation where it has actually become difficult to prepare a rational strategy on the timing of the euro adoption. It is not just the fact that concentrating on preparing the strategy of joining the euro area diverts political and administrative attention from the currently more pressing issues of »survival« in the crisis. The other, more demanding issue is how their national strategies of the inclusion in the euro area should be adjusted to the realities of the new circumstances.

It is not difficult to agree upon the fact that the attractiveness of the euro area has increased after the outburst of the global financial crisis, which by itself speaks strongly in favor of an earlier adoption of the euro, in fact as soon as possible. But for the euro candidate countries, at the moment there are also considerable risks involved in their attempts to speed up the process.

Trying to meet the Maastricht convergence criteria hastily, as soon as possible, may at times of crisis be self-defeating. The fiscal needs will increase significantly due to the crisis, so trying to keep them within the limits of Maastricht (and/or SGP) benchmark would be not just very demanding, but also very costly in terms of flexibility of counter-crisis measures and social stability in the country. Fiscal expansion which the crisis measures will require will also result in their worsened public debt figures. Inflation rates, although now due to the crises generally low, might increase in the near future, shortly after the crisis, as current monetary measures worldwide contain the seeds of the future price increases. However, according to the Maastricht rules, their relative performance regarding inflation will be crucial.

The ERM II entry is a kind of »Catch 22« issue, at least for those euro candidates with the floating exchange rate systems. Theoretically, optimal strategy would be to enter the ERM II just two years before the planned inclusion in the euro area, i.e. when a country can assume that all other Maastricht convergence criteria would be met. The other side of the same strategy is of course to exit this exchange rate mechanism as soon as possible, i.e. after just two years, by adopting the euro. But in practice, in the current circumstances it is very difficult for these countries to have a firm plan of joining the euro area – the fixed date of the euro adoption. If they wait and see and stay out of the ERM II, they are actually prolonging the time of their euro adoption. If they jump in the water and enter the ERM II, they will get exposed to its volatilities and remain particularly vulnerable in the interim period before the adoption of the euro. As the timing of their euro adoption is not guaranteed, they can for an indefinite time remain caught in the ERM II without being able to adopt the euro, which might be the worst of all possible outcomes. The conclusion is that obviously at this time it is extremely difficult to prepare a rational, sound and safe strategy regarding the timing of the entry in the ERM II and the euro area. There are simply too many uncertainties, both externally and internally, at the moment.

Probably, in the last instance there is not much that the euro candidates can do by themselves at the moment to speed up their euro adoption, at least if they want to keep on playing by the Maastricht rules. They will have to be supported also (or mostly) from the outside, by the relevant European political players and institutions, including by incumbent countries.

CONCLUSIONS

Even before the outburst of the crisis, national EMU goals of the euro candidate countries turned out to be rather unsustainable. This can be seen from the fact that in some of these countries, the plans of their euro adoption have been postponed, even in some cases several times, and from the fact, that some of them at this moment even do not dare to come up with a clear strategy on the dynamics of their inclusion in the euro area, which would include also the target date of the euro adoption. The main problems are their insufficient results in meeting the Maastricht convergence criteria. Some of them had prevailing problems with inflation, others with fiscal deficits (or both) and some have not yet joined the ERM II.

Changing realities after the outbreak of the crisis even made matters much worse. If anything, the Maastricht criteria will be harder to achieve, while the early membership in the euro area is a more pressing objective. As discussed above, in the circumstances of the crisis it is extremely difficult even to prepare a rational strategy on the timing of the euro adoption. At this moment it is also difficult to say which of the currently adopted regimes (currency boards, floating exchange rates with inflation targeting etc.) is more adequate in the sense of bringing individual countries closer to the euro adoption.

There are probable just two main lines of what can be done in order to speed up the inclusion of the euro candidate countries in the euro area. The first is in the hands of the European Commission and the ECB. They should first agree that it is in the overall interest of the EU as a whole to speed up the dynamics of the euro area enlargement. Instability of the euro candidate countries is not in anybody's interest, and these countries will have to be financially supported anyway. In this light, Maastricht criteria – if not rules, than their interpretation – should be softened in order to adjust them to new circumstances. Throughout the world, many present rules have been changed, abandoned or made more flexible. Maastricht inflation criterion should be reviewed in its »three best performing« benchmark, fiscal deficit criterion should be changed from the present absolute benchmark to an average (or something like »three best performing ones«) and there are many technical details which could be changed in the Maastricht exchange rate stability criterion (rules and interpretations of the ERM II and their application in the exchange rate stability assessment).

At the moment, most of the ideas concentrated on the ERM II rules, concretely, that the required time spent in this interim exchange rate mechanisms before the euro adoption should be shortened from two years to a year or even less. However, for the moment the European Commission and the ECB showed no understanding for any change in the rules in the direction of their increased flexibility, including for the duration of the mandatory participation in the ERM II. The argument is that in present unstable times any changes in the rules would just lead to more instability, which would in the last instance hurt back the euro candidate countries themselves. To conclude, the perspective for any softening of the Maastricht criteria seem at the moment very week.

The second line of action is in the hands of the euro candidate countries themselves. They could revive the idea of unilateral euroization as a way to speed up their euro adoption. In this case they would simply bypass the EU rules and altogether avoid the need for meeting the Maastricht convergence criteria. Technically, this step is not extremely difficult and can be prepared in a relatively short time. The European Commission and the ECB are strongly against the ideas of unilateral euroization, but in case that some euro candidate countries actually decided for it, they could not do much about it. However, such countries would risk some possible retaliation of the EU institutions somewhere along the way. The argument for the unilateral euroization can be that the crisis is the situation of emergency, which calls for urgent, quick and decisive steps. If in the pre-crisis time euroization was allowed to some problematic regions (Kosovo, Montenegro), just to prevent their further instability, the same argument could now be applied for the present euro candidate countries.

There is also a sensitive political issue involved in this discussion. If all the euro candidate countries joined their forces and acted unanimously, it would be easier for them to defend their arguments. However, some of them are more and some less vulnerable to the impact of the global crises, so not all of them are willing to be seen as being in the same boat. As this seems to be the case, the consensual approach is not very likely, which makes individual countries' arguments for unilateral euroization much weaker.

REFERENCES

Banka Slovenije in Vlada Republike Slovenije (2003): Program vstopa v ERM II in prevzema evra, Ljubljana.

Banka Slovenije (2007): Letno porocilo 2007, Ljubljana.

Bole V. and Mramor D. (2006): »Soft Landing« in the ERM2: Lessons from Slovenia, in Prasnikar J. (edit.): Competitiveness, Social Responsibility and Economic Growth, Nova Science Publishers, Ljubljana.

European Central Bank (2006): Convergence Report May 2006, Frankfurt.

European Commission (2006a): 2006 Convergence Report on Slovenia:Technical Annex, Brussels.

European Commission (2006b): Adjustment Dynamics in the Euro Area: Experiences and Challenges, The European Economy Review 2006, Brussels.

European Commission (2008): EMU@10: Successes and Challenges after 10 Years of Economic and Monetary Union, Brussels.

Lavrac V. (2008a): Euro Adoption in Slovenia and Other New EU Member States, Institute for economic research, Ljubljana.

Lavrac V. (2008b): Globalna financna kriza in clanstvo v EU, konferenca Globalna financna kriza in svetovno gospodarstvo, 12. december 2008, Ekonomska fakulteta Univerze v Ljubljani in Zveza ekonomistov Slovenije, Ljubljana.

Urad RS za makroekonomske analize in razvoj (2007): Ucinek prevzema evra na inflacijo v Sloveniji, Ljubljana.

Appendix: Economic Convergence in Slovenia before the Euro Adoption

Yearly data, 1999-2007	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
HICP (EU harmonized inflation index)	6,1	8,9	8,6	7,5	5,7	3,7	2,5	2,5	3,8
Budget deficit/surplus - % of GDP (general government budget balance)	-0,6	-1,2	-1,3	-2,8	-1,3	-1,3	-1,0	-0,8	0,3
General government gross debt, % of GDP	22,2	22,9	24,8	25,6	24,5	24,7	24,3	23,7	21,5
Long-term interest rates (10-year government bonds) – end of year	-	-	-	-	6,4	4,7	3,8	3,9	4,5
Exchange rate - % change against the Euro	-4,6	-5,6	-5,6	-4,0	-3,2	-2,2	-0,3	0,0	0,0
Price level compared to the EU average (Eurostat)	74,1	72,8	73,9	74,4	76,2	75,5	76,0	76,8	77,8
GDP per capita at PPS as % of EU average (Eurostat)	80,6	79,8	79,7	82,3	83,4	86,4	87,4	87,6	89,2
GDP growth	5,4	4,4	2,8	4,0	2,8	4,3	4,3	5,9	6,8
Employment rate (15-64)	62,2	62,8	63,8	63,4	62,6	65,3	66,0	66,6	67,8
Export growth	-0,3	18,2	9,0	5,9	2,9	13,3	12,6	16,4	15,8
Current account - % of GDP	-4,0	-3,2	0,2	1,1	-0,8	-2,7	-1,7	-2,5	-4,2
FDI - % of GDP	0,6	0,8	2,0	7,4	1,1	2,5	1,6	1,7	3,0
FDI from EU countries - % of FDI	-	-	87,1	81,7	70,1	73,9	75,6	77,8	83,2
Gros external debt (private + public) - % of GDP	47,7	51,4	50,3	49,8	52,7	56,7	71,4	77,6	100,8
Net external debt (private + public) - % of GDP	1,9	4,3	-6,9	-11,0	-6,8	-3,3	3,2	10,9	18,0
Trade with EU countries, % of total (exports)	66,1	63,9	62,2	59,3	67,0	66,0	67,9	70,2	70,6
Trade with EU countries, % of total (imports)	68,9	67,8	67,6	68,0	75,6	79,5	80,9	81,2	78,9
Bank credit growth (% change)	19,2	16,9	17,6	14,3	13,9	19,7	20,8	21,4	25,2
M1 (% change)	17,9	9,3	29,0	6,4	11,3	10,5	22,8	9,0	4,0
M3 (% change)	10,2	17,2	29,4	10,6	6,5	7,6	-12,0	8,1	-7,7
Interbank interest rates, monthly averages for the corrersponding year	8,6	10,9	10,9	8,7	6,9	4,7	4,0	3,6	4,3
Share of deposits and credits denominated in Euro	-	-	-	-	-	-	-	-	-
EU banks ownership of local banks, % of total assets	-	-	-	34,7	36,0	36,2	38,7	40,1	41,6
Stock market index - % change	5,9	0,1	19,0	55,2	17,7	24,7	-5,6	37,9	78,1

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ECONOMIC CONVERGENCE IN SLOVENIA BEFORE THE EURO ADOPTION

The process of convergence with the euro area can be approached either from the viewpoint of nominal convergence or from the viewpoint of real convergence. Ideally, both approaches should point in the same direction, showing how a country in the process of its economic development is becoming more and more similar to incumbent members of the euro area, both in terms of its structural characteristics and its macroeconomic policies.

Nominal convergence is embodied in the Maastricht convergence criteria which are the explicit formal requirements to be fulfilled before a country is admitted to the euro area. Real convergence, usually understood as catching up with the EU in terms of GDP per capita, is an implicit, informal expectation before a new EU member country can adopt the euro. Both measures of convergence, nominal and real, can be used to assess the readiness of a country to join the euro area.

When preparing itself for joining the EMU (European monetary union) Slovenia was in the first place closely monitoring developments in its nominal convergence in time, in order to assess its readiness for the euro adoption. Regarding real convergence, Slovenia throughout the period had the highest per capita GDP among the group of transition countries and was slowly but persistently catching up with the EU average level. In parallel, in Slovenia due attention was also paid to the optimum currency area (OCA) criteria, as those structural characteristics of the economy which show longer-term suitability of a country to join the EMU, in terms of its exposure to possible asymmetric shocks and of the flexibility of its adjustment mechanisms.

Data presented in the Appendix show the pace and degree of convergence process. In the case of Slovenia, several periods should be distinguished:

a) period of five years preceding the EU accession (1999-2004),
b) period from the EU accession (and the entry in the ERM II) to the entry in the euro area (2004-2007),
c) period from the euro adoption to the outburst of the global financial crisis (2007-September 2008) and
d) period since the outburst of the global financial crises (September 2008-).

In the case of Slovenia, since it had joined the ERM II (in June 2004) almost immediately after its accession to the EU (in May 2004), it would make no sense to distinguish between the period from the EU accession to the entry in the ERM II and the period after the entry in the ERM II and before the euro adoption, since the first of these periods was simply too short (less than two months) to be analytically meaningful.

The data on convergence speak for themselves. However, some comments on the process of nominal and real convergence should be presented in order to emphasize some characteristic developments in the above mentioned sub periods in Slovenia. We start with the nominal convergence, concretely with the fulfillment of the Maastricht convergence criteria.

Although there are five well known Maastricht convergence criteria, in practice it turned out that two of them (longer-term interest rate and public debt) are less important, since the European Commission interpreted them rather flexibly, so that in Slovenia (as well as in most other euro candidate countries) these two convergence criteria were rather easily met early in the process of convergence. Therefore, we concentrate of the remaining three Maastricht convergence criteria.

The inflation criterion was the decisive one for Slovenia. It turned out later that the success of its plan for an early adoption of the euro in fact depended exclusively on the timely successful fulfillment of the inflation criterion. But first we have to go back in the recent past. Slovenia after its independence in 1991 inherited from Yugoslavia its very high inflation, in fact hyperinflation (more than 20% monthly at the beginning). As restoring macroeconomic stability was the priority at that time, supported by responsible monetary, exchange rate and fiscal policies, in the next couple of years inflation rate kept persistently falling, to reach the level of close to 5% in 1998. After that period, due to the introduction of the VAT and some other measures, beginning in 1999 inflation started to increase again and in fact stayed at relatively high single-digit levels until 2003. From then on, after the adoption of the Program of the euro adoption in November 2003, inflation again started continuously falling, finally to come close to the level of the reference value of the Maastricht inflation criterion in 2005.

Only half a year after the adoption of the euro in 2007 inflation started to increase again. For about a year, until mid 2008, Slovenia recorded the highest inflation rate among all euro area countries and would accordingly considerable exceed the Maastricht inflation criterion. Only towards the end of 2008, inflation, as a consequence of the global financial crisis, subsided again and approached the average euro area figures.

The story of public finance deficit is less dramatic. Throughout the period public finance deficit was more or less modest, at least when compared to some other EU countries, and definitely remained with a margin within the Maastricht or SGP (Stability and growth pact) limits of 3% of GDP. At the time of the assessment of the readiness of Slovenia for the adoption of the euro, fiscal deficit was around 1% and this Maastricht convergence criterion was easily met. After the adoption of the euro Slovenia even succeeded in bringing the fiscal deficit close to zero. Of course, as in other EU countries, global financial crisis will strongly increase fiscal needs and will also in Slovenia in the near future require much higher fiscal deficits, close to or above the Maastricht threshold of 3% of GDP.

The third important Maastricht convergence criterion is the exchange rate stability. From its independence, Slovenia relied on a system of a managed floating of the exchange rate and in this framework slowly but continuously nominally depreciated the exchange rate of its currency (the tolar). Slovenia succeeded in joining the ERM II surprisingly quickly, in June 2004, just less than two months after its EU accession. Participation in the ERM II for the required two years was very smooth. There was no change in the central rate (which later became the conversion rate for the euro) and the market rate deviated from the central rate for less than 0.1% (although formal margins of permissible fluctuations were +/- 15%). In short, Slovenia had no problems in meeting the convergence criterion on exchange rate stability.

After reviewing nominal convergence developments, we can turn to the real convergence issue. In line with the fact that in the observed period the growth rate in the Slovenian economy was constantly somewhat higher than in the EU (or euro area), it is not surprising that Slovenia continuously progressed in real convergence, i.e. in the process of catching-up with the EU GDP per capita average. In 2007 GDP per capita in Slovenia was at the level of almost 90% of the EU average. Slovenia now as the result of the process of its real convergence has already caught-up with some of the southern EU countries.

STRATEGIES OF EURO ADOPTION IN SLOVENIA

First reflections on the inclusion of Slovenia in the process of European monetary integration started early, still in the framework of the former common federal state. As Yugoslavia already had the ambition to join the EU, even at that time this indirectly opened perspectives for Slovenia's inclusion in the European monetary integration mechanisms, including in the longer run in the EMU.

In the period after the independence the emphasis was naturally on the creation of the Slovenian monetary system. Starting from a difficult situation at the beginning, Slovenia created a specific monetary system, based on a managed floating of the exchange rate. It has to be reminded that Slovenia had to do the pioneering work, as in the recent history this was the first case of the introduction of the new national currency. In this period, up to the middle of the nineties, inclusion of Slovenia in the European monetary integration process was quite understandably somehow in the second plan. Macroeconomic stabilization, in which Slovenia's monetary policy played the key role, was a precondition for any further steps in the direction of inclusion in the European monetary integration mechanisms.

The interest for joining the European monetary integration was revived again in mid-nineties, when Slovenia prepared its strategies of economic development and of foreign economic relations, which included the chapter on Slovenia's inclusion in the EMU. On the basis of comparison between the expected benefits and costs of joining the EMU, Slovenia – to put it simply – decided for the inclusion in the EMU and defined its orientation for an early inclusion of Slovenia in the EMU as its strategic goal.

As the inclusion in the EMU for the new EU member states later turned out to be mandatory, the balance of expected benefits and costs of the EMU has in a sense become irrelevant, at least from the point of decision-making, although it has remained analytically interesting. As the matter of fact, it could be said that the focus of the benefits and costs analysis has shifted. A different question has now become important: What are the expected benefits and costs of an early inclusion in the EMU, compared to a delayed one, and what is the optimal dynamics of inclusion in the EMU?

Regarding the fulfillment of the Maastricht convergence criteria, in the second half of the nineties some of the comparable acceding countries caught up with Slovenia and showed better results, so they started to appear better prepared and at first sight perhaps closer to joining the EMU. Slovenia had been using the system of a floating exchange rate and had in the framework of a managed floating exchange rate regime conducted an active exchange rate policy with constant small depreciations of the nominal exchange rate of the tolar. This was in contrast with the requirements of inclusion in the European monetary integration which were based on the successive fixing of the exchange rate. Following the period of lower inflation rates, after 1999, when the value added tax was introduced and some corrections of the administrative prices carried out, Slovenia's inflation rate increased and got stuck in the high single-digit figures. Furthermore, in some of the following years, Slovenia even had the highest inflation rate among comparable transition countries. In comparison with this group of countries, Slovenia in the period between 2000 and 2003 certainly did not exactly look like a favorite in the competition for an early adoption of the euro, rather just the opposite.

After a preceding analysis of the suitability of Slovenia for the inclusion in the EMU on the basis of optimum currency areas criteria and the assessment of readiness for the EMU on the basis of expected dynamics of compliance with the Maastricht convergence criteria, the Bank of Slovenia, together with the Government of the Republic of Slovenia, in November 2003 adopted the Program for joining the ERM II and adoption of the euro[1]. The Program envisaged an early inclusion in the euro area and accordingly planned the entry in the ERM II in 2004, soon after Slovenia's accession to the EU, and inclusion in the EMU and adoption of the euro at the beginning of 2007.

The preference for an early euro adoption was at that time not so self-evident as it may seem today, after the successful adoption of the euro. There were also different opinions which favored a slower and more cautious approach, with the aim of prolonging Slovenia's monetary sovereignty. However, the arguments of the proponents of an early inclusion in the EMU prevailed in the discussion and resulted in the above mentioned official view on the desired dynamics of Slovenia's adoption of the euro.

Milestones on Slovenia's road to the euro adoption were those critical moments which had a decisive influence on the quick adoption of the euro. In our view, the Program of 2003 was the first of the three milestones, decisive moments on the Slovenian road to the euro adoption. From then on, fulfillment of the Maastricht convergence criteria became the first priority of economic policies in Slovenia. Monetary and fiscal policy started to operate more consistently and their better co-ordination almost immediately resulted in considerable lowering of the inflation rate which began approaching the Maastricht reference value. Firm commitment to the target date for the euro adoption undoubtedly had a favorable effect on the decline of inflationary expectations.

In the preparations for the inclusion in the EMU, special attention was paid to the exchange rate mechanism ERM II. The European Commission presented this interim exchange rate mechanism to the acceding countries as a stable and safe arrangement, which would help their nominal and real convergence in the transitory period before their adoption of the euro. On the other hand, acceding countries saw the ERM II more or less as a necessary evil, not as a fitness club, but as an imposed mandatory waiting room before the adoption of the euro. The ERM II as a potentially unstable and dangerous intermediate regime of a fixed, but adjustable peg was quite critically evaluated in the academic circles[2]. However, a country like Slovenia, wanting to join the EMU as soon as possible, had practically no other choice but to enter the ERM II as soon as possible, since this was a precondition for an early adoption of the euro. However, the strategy was also to exit the ERM II as soon as possible, after just mandatory two years' participation, by adopting the euro.

The second milestone, another decisive moment in the run-up to the euro adoption was a surprisingly fast entry of Slovenia in the ERM II (together with Estonia and Lithuania), in June 2004, almost immediately, less than two months after the EU accession. This was in fact much earlier than at the end of 2004, as was beforehand officially announced in Slovenia. Such an early entry in the ERM II was important, since it enabled the adoption of the euro already at the beginning of 2007. If the entry in the ERM II was postponed and delayed

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[1] Banka Slovenije in Vlada Republike Slovenije (2003).
[2] For a critical assessment of the ERM II and the Maastricht exchange rate criterion see Lavrac (2008a), Ch.9.

towards the end of 2004, the euro for just administrative reasons could not be adopted before 2008. Although this is not a formal rule, in practice the entry in the EMU and adoption of the euro (probably for fiscal and statistical reasons) in practice always happens on 1 January, and not sometime within a year. Anyway, quick inclusion of the three best prepared new EU member states in the ERM II could be interpreted as an indication that the European Commission and the ECB actually meant to allow an early inclusion of the new member states in the EMU, if only they could demonstrate sufficient readiness in terms of meeting the Maastricht convergence criteria.

Participation of Slovenia in the ERM II in the required two-year period was surprisingly smooth, the market exchange rate remained extremely close to the central rate and there were no tensions on the foreign exchange market, so that Slovenia fulfilled the Maastricht exchange rate stability convergence criterion at the time of assessment without any problems. It could be argued that Slovenia's successful experience in the ERM II was the result of a combination of "wisdom and luck", the right choice of macroeconomic policy measures and favorable domestic and external circumstances. This of course does not mean that in the future, in the period of other new member countries' participation in the ERM II, the built-in instability of this exchange rate mechanism would not cause serious problems.

It should be reminded that Slovenia was also exposed to some risks in its run-up to the euro adoption[3]. In the period before the end of 2005 Slovenia was more or less on the verge of meeting the Maastricht convergence criterion on inflation which was the only one unfulfilled yet. At that time the process of disinflation in Slovenia speeded up, while the reference value of this convergence criterion – due mostly to oil price increases - increased somewhat, so that Slovenia met the inflation convergence criterion even earlier (in November 2005) than expected (it was officially planned that the inflation convergence criterion would be fulfilled sometime in the spring of 2006). This led to a change in Slovenia's attitude towards the desired timing of the assessment of its compliance with the Maastricht criteria. Before it was in Slovenia's interest that the Convergence reports would be prepared as late as possible (as usually in October), so that Slovenia would have enough time to meet the convergence criterion on inflation. Afterwards it was just the opposite, Slovenia's interest became that the Convergence reports would be prepared as soon as possible, while Slovenia would still with certainty meet the convergence criterion on inflation. With this in mind, Slovenia asked for an earlier individual convergence report on its fulfillment of the Maastricht convergence criteria. For Slovenia, a lucky coincidence was that the EU was also in favor of an earlier individual Convergence report for this country. As it was estimated that Slovenia would most likely be assessed as complying with all the Maastricht convergence criteria, it was also in the interest of the EU to give Slovenia enough time for the demanding technical preparations before the introduction of the euro.

In our view, this was the third milestone, the last decisive moment on the Slovenia's path to an early euro adoption. As it was believed that Slovenia complied with all the Maastricht convergence criteria and that the assessment would definitely be favorable, the European Commission and the ECB responded positively to Slovenia's initiative and prepared their Convergence reports already in May 2006. Not surprisingly, both reports[4] for Slovenia were positive. The conclusion was that Slovenia fulfilled all Maastricht convergence criteria and was ready for the inclusion in the EMU. Based on this recommendation in the next two

[3] Detailed analysis of economic policies in Slovenia before and after its inclusion in the ERM II can be found in Bole and Mramor (2006).

[4] European Commission (2006a), European Central Bank (2006).

months, in June and July, political acceptance to the euro area was confirmed for Slovenia in relevant EU institutions. On 1 January, 2007 Slovenia became the thirteenth member of the EMU, as the first and until 2008 the only country adopting the euro among the new EU member states.

Why Slovenia succeeded in the early adoption of the euro and others candidates failed? Or, to put it differently, in what way the Slovenian path to the euro adoption, which later turned out to be a success, was specific, different from the others?

- In Slovenia, throughout the period of preparations for the inclusion in the EMU, economic policies were focused on sustaining main macroeconomic stability, such as (at least relative) fiscal and balance-of-payments equilibrium.

- Gradualist approach to transition which implies a successive and patient longer-term process of structural reforms (instead of the so-called "big bang" approach of quick and radical economic reforms), as the main characteristic of Slovenia's transition process, was often criticized by international institutions, but in the specific Slovenian circumstances obviously worked well.

- Project of the inclusion in the EMU and adoption of the euro in Slovenia had a wide support among the most important political parties as well as in the public. According to public opinion surveys, the support to the adoption of the euro was in Slovenia constantly among the highest, if not the highest. The project of the euro adoption was also supported by the social pact, i.e. by the labor unions and income policies. The program of inclusion in the euro area which was initiated by the preceding government was taken over and continued by the new government that came into power in 2004. In short, the euro adoption was an overall national project which united Slovenians rather than separated them, as had been the case with some other major national economic programs.

- After the adoption in 2003 of the program for the inclusion in the ERM II and adoption of the euro, an early adoption of the euro became the key priority in the conduct and co-ordination of economic policies. All economic policy measures, including key longer-term structural reforms, were first judged from the point of view of the timely fulfillment of the Maastricht convergence criteria and of enabling the planned euro adoption at the beginning of 2007.

- Decision for an early inclusion in the EMU and in particular a firm target date of the euro adoption on January 1, 2007 were accepted by the markets and, more generally, by economic agents, as realistic and credible. This assessment positively influenced inflationary expectations and resulted in the lowering of the inflation rate which led to the timely fulfillment of the Maastricht convergence criterion on inflation, as the only serious hurdle in Slovenia's run-up to the euro adoption.

With the advantage of hindsight it can be concluded that the chosen way towards the euro adoption in Slovenia was broadly speaking the right one for this country. This can be argued since Slovenia succeeded in joining the euro area in the theoretically shortest possible time after its accession to the EU. Slovenia along with the other new member states joined the EU in May 2004 and considering the fact that after the EU accession a country has to participate for at least two years in the ERM II, as well as the fact that according to an unwritten rule the inclusion in the euro area always takes place at the beginning of the year, the first theoretically possible date for the adoption of the euro for the new EU member states was 1 January, 2007.

Project of the inclusion in the EMU and of the adoption of the euro in Slovenia was well prepared and executed which has finally been proven by the result, successful and rapid inclusion in the euro area. The introduction of the euro was technically very smooth and people quickly got used to its practical use, although the mental switchover to the euro is naturally going to be a longer-term process. In spite of expectations of the possible price increases as a result of the adoption of the euro, these fears failed to be realized. Price increases due to the euro adoption have not been of an important magnitude[5]. The story is similar to that of the other euro-area countries. People felt price increases, while official statistics did not detect and record them. Price increases were in fact concentrated only in certain groups of expenses, particularly some goods and services which are more visible in the everyday life so that people are more sensitive to their price developments.

THE IMPACT OF THE GLOBAL CRISIS ON THE DYNAMICS OF EURO AREA ENLARGEMENT

Global financial crisis has shifted the ratio between benefits and costs of the membership in the EMU. It has undoubtedly increased the attractiveness of the participation in the euro area, which accordingly resulted in speeding up the plans of joining the euro area in those new EU countries, which have not yet adopted the euro. However, perspectives of the enlargement of the euro area in the nearer future remain for the moment uncertain. There are several issues to be discussed here: First, the readiness and ability of the euro candidate countries to meet the Maastricht convergence criteria in the light of the crisis, second, the willingness of the present euro area members to admit newcomers at times of tensions and uncertainty, and third, the willingness of the EU to adjust the Maastricht convergence criteria to the new circumstances, in order to allow for an earlier enlargement of the euro area. At the moment both scenarios seem equally possible: That the inclusion of the new members in the euro area would be speeded up or postponed.

The global financial crisis has changed both benefits and costs of the EMU membership. It could be argued that it increased both, but an overall balance is that benefits have increased more. This resulted in the increased attractiveness of the participation in the euro area at times of crisis. Although it is of course clear that the single currency can not protect countries from the main consequences of the crisis (credit crunch, recession and unemployment), it can protect them from additional problems, related to the existence of their own national currencies. The main advantage of being in the euro area is exactly in sharing the single currency, or, to put it differently, in giving up the national currency. Euro area countries do not anymore have their national currencies and the exchange rates which the speculative capital could attack. The main channels[6] through which the euro as the single currency protects euro area countries from the negative consequences of the crisis are the following:

- prevention from speculative attacks against national currencies,
- prevention from having to change the interest rates in the wrong direction,

[5] It is officially estimated that the adoption of the euro in Slovenia contributed around 0.3 % points to the inflation rate (Banka Slovenije, 2007; see also Urad RS za makroekonomske analize in razvoj (2007).

[6] These channels are analysed in more detail in Lavrac (2008b).

- prevention from major shifts in the currency structures of portfolios,
- the use of the euro as the second most important world currency,
- easier access to financing on the international financial markets,
- easier access to financial support from the EU and EMU.

On the other hand, possible drawbacks from the euro area participation at times of crisis could be an easier contagion, due to deeper integration in the euro area financial markets, and the loss of flexibility of adjustment mechanisms[7] (loss of the interest rate and exchange rate instruments) to deal with the impact of the crisis. However, this may be an argument for the large countries, but not for the small open economies, such as those of the new EU member countries.

Global financial crisis will have an impact on the dynamics of inclusion in the euro area of those new EU members, which have not yet adopted the euro. Although their individual positions are different, it can be generalized that most likely they will not be in a position to adopt the euro in the next couple of years, simply because they will not be able to meet the Maastricht convergence criteria in the near future. Some have problems with inflation, others with their fiscal positions, which will undoubtedly worsen during the crisis, and some with both. Some have problems with sustaining their currency boards, while others will have problems with their future participation in the ERM II. This inherently unstable exchange rate mechanism might prove to be particularly dangerous at times of crisis-induced volatility. It seems that the strategy is to delay the ERM II entry to »T-2«, just two years before their planned inclusion in the EMU. Since at the moment the planned date of the euro adoption is for most of these countries not known, it is equally hard to define the optimal timing of their entry in the ERM II.

Most of these countries as the consequence of the crisis want to speed up the accession to the EMU and the adoption of the euro. The European Commission and the ECB would on the one hand want to speed up the euro area enlargement, in order to better protect these countries from the consequences of the crisis. EU would have to help them anyway, even if they remained outside the euro area. On the other hand, at times of crises the euro area countries would be probably reluctant to accept new – supposing more problematic - members and to assume additional responsibilities, burdens and risks, as they already have enough problems with themselves. Which of the views will prevail is at this moment hard to predict, it depends on the depth and duration of the present crisis. However, the pessimistic scenario seems perhaps more likely.

Even if the EU wanted to help the euro candidates by softening the Maastricht convergence criteria, this would be against the principle of equal treatment of the old and new EMU members. Also, even if assuming political willingness, convergence criteria are part of the EU Treaty, and can be changed only by complicated and lengthy procedures. Before such changes could become operational, the crisis would hopefully already be over. However, the EU so far explicitly rejected the ideas for any softening of the Maastricht convergence requirements (which so far have concentrated only on one aspect – shortening of the period of participation in the ERM II).

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[7] Systematic analysis of alternative adjustment mechanisms available to the EMU member countries is given in European Commission (2006, 2006b).

What is left for the new EU countries which have not adopted the euro yet? One possibility is the unilateral euroization, which is a short cut to the adoption of the euro, as it avoids the need to meet the Maastricht convergence criteria. It can be expected that in the circumstances of the crisis the ideas for unilateral euroization will intensify in these countries, although the European Commission is strongly against this solution, for various economic, legalistic and political reasons. On the other hand, the crisis is exactly an argument, upon which these countries can build their case for the unilateral euroization. The crisis calls for quick solutions, which the regular path via Maastricht criteria does not enable. An additional argument could be that some of the unstable or potentially crisis-prone areas (Kosovo, Montenegro) were allowed such solution and were even actively supported by the EU in their euro adoption.

PERSPECTIVES OF EURO AREA ENLARGEMENT AFTER THE GLOBAL CRISIS

Before the introduction of the EMU, the European Commission's views on the dynamics of inclusion of the candidate countries in the mechanisms of the European monetary integration have not been much elaborated yet. It was simply too early for them to have a strong opinion on the subject or even to seriously consider the issue. Only after the creation of the EMU and introduction of the euro in 1999, the European Commission successively formulated its strategy towards dynamics of inclusion of the candidate countries in the EMU. For the next couple of years it was characteristic that the European Commission was not in favor of an early inclusion of the candidate countries in the EMU. In fact it was even not in favor of their early entry in the ERM II, shortly after their membership in the EU. Various pessimistic messages and negative signal were sent to these countries concerning expected speed of their entry in the ERM II and in the EMU. The European Commission warned them of their transition-specific differences, claiming they should concentrate on meeting the Copenhagen criteria for the accession to the EU, rather than focus on complying with the Maastricht criteria for joining the EMU. Beside nominal convergence, embodied in the Maastricht convergence criteria, they were also reminded to pay attention to the so-called real convergence, catching-up with the EU countries in their economic development. This gave rise to an interesting academic debate: Is the similarity in the level of economic development a necessary precondition for a successful participation in a monetary union? If this was true, the candidate countries would have to wait for decades in front of the door of the EMU and the European Commission would have strong arguments for delaying their ambitions for an early entry in the EMU, even in case they succeeded in fulfilling the Maastricht convergence criteria relatively soon after their accession to the EU.

Approximately in the period 2003-2005 a shift in the European Commission's views on the dynamics of inclusion of the candidate countries in the EMU could be noticed. Instead of a reluctant attitude, a more neutral approach could be detected concerning an early entry of the candidate countries in the euro area. It could be concluded that the European Commission actually would not prevent quick inclusion of new members in the euro-zone if they succeeded in fulfilling the Maastricht convergence criteria on a healthy and sustainable basis. It was also to be understood that the new countries would actually join the EMU according to their individual readiness, and not jointly as a group. Those candidate countries which would be best prepared, should go first, without having to wait for the other less prepared candidates.

This approach was actually adopted, as Slovenia, was the first euro candidate country to be treated individually when assessed for its readiness to adopt the euro. This individual approach was in fact the basis for Slovenia's request for an individual early assessment of its fulfillment of the Maastricht convergence criteria.

Later on, it could be noticed that the emphasis shifted particularly to the issue of sustainability of compliance with the nominal convergence criteria, while the issue of real convergence seemed to become less pronounced. The concept of »sustainability« of the nominal convergence was a rather ambiguous issue. The underlying idea was rightly to expect that the candidates would not just concentrate on meeting the Maastricht convergence criteria at the time of the assessment, but also be able to sustain them in the future. There are a couple of problems here. First, how to define and measure sustainability and, particularly, how to enforce future sustainability of the nominal convergence? Second, euro area countries, once in the EMU, actually do not always comply with the individual Maastricht criteria, but in many cases breach them, without being seriously sanctioned.

Presently, in the circumstances of global crisis, the views of the European Commission and the ECB can be interpreted as saying that the residual euro candidate countries are not yet ready to join the EMU, and furthermore, will not be ready to join it even in at least the next few years. Concerning the timing of their ERM II entry, these European institutions are at the moment less explicit, but is seems that they are not exactly putting pressure on the euro candidate countries to join the ERM II as soon as possible. It is quite understandable that, at least for the countries with floating exchange rates, at times of turbulences in foreign exchange markets, joining the ERM II might be a rather risky option.

The ongoing financial crisis has seriously shaken the fundamentals of the global financial system. It is more than clear that the global financial architecture will have to be rearranged or even basically reconstructed[8]. This involves redefining the roles of the main international players, such as the IMF, World Bank, BIS and many other international institutions, as well as the national key players in the financial markets (central banks, ministries of finance, banks, other financial institutions, etc.). In terms of substance, the financial sector will be as the result changed in its quantitative and qualitative dimensions. Among main issues to be redefined are national and international regulation and supervision, financial instruments (such as derivatives), moral hazard issues in the financial sector and many others. At this moment it is still hard to say in which directions these changes will finally go.

The crisis itself is not responsible for the concentric monetary structure of Europe; however, the impact of the crisis causes additional concerns in this respect. There are several »levels« of monetary integration in Europe at the moment. First, the euro area countries, which seem to be best protected against the crisis, due to the single currency, easier access to finance on the financial markets and support and solidarity among themselves and from the ECB. Second level is the euro candidate countries which participate in the ERM II. On the one hand, they are perhaps in the most vulnerable position, since they are exposed to inherent instability of this exchange rate mechanism, which is particularly dangerous at times of increased financial volatility and uncertainty in the financial and exchange rate markets. However, as most of them apply the system of a fixed exchange rate in the form of a currency board, they seem somehow protected from the exchange rate instability at least in the short-term. Here, the question is if they can sustain the unchanged parity of the currency board in the circumstances

[8] This will also include some changes in the governance structure of the EMU (see European Commission, 2008).

of economic and financial instabilities, which call for testing their willingness and ability to sustain the parity of the currency board. There is also the question whether the ERM II countries will have a better treatment in terms of solidarity and support than the other euro candidate countries outside the ERM II, which are at the moment due to their flexible exchange rate systems obviously even more exposed and vulnerable. These countries form the third circle of the EU countries. Although they are less than the first two groups of countries the responsibility of the ECB, they are at the moment the least stable ones. Their instability has a feedback impact on the stability of the overall euro area and the EU, so the ECB and the European Commission (or the national states behind it) have to support them financially, whether they like it or not. There is a certain division of tasks here between the European institutions and the IMF. While the ECB is directly in charge of the euro area countries, and the European Commission of all the EU countries, the IMF focuses on supporting those among the EU members, which are not yet part of the euro area (both participants and non-participants in the ERM II). The fourth circle are the non-EU countries, EU candidate countries and other potential future EU member countries which the EU also has to support, in order to prevent contagion from their vulnerabilities and possible collapse to other EU countries. At the moment, the approach and organization of various levels of engagement and support to these different levels of monetarily integrated EU countries seems rather ad hoc and not based on a clear strategy and firmly established rules.

There is a certain paradox in the discussion on the enlargement of the euro area at the moment. On the one hand, the crisis calls for a rapid inclusion of the euro candidate countries in the euro area. On the other hand, in the circumstances of ongoing crisis, this seems rather risky, both from the point of view of the euro candidates themselves and from the point of view of the incumbent members of the euro area. The latter are preoccupied with their own problems and are unwilling to take additional risks and responsibilities. The former are in a situation where it has actually become difficult to prepare a rational strategy on the timing of the euro adoption. It is not just the fact that concentrating on preparing the strategy of joining the euro area diverts political and administrative attention from the currently more pressing issues of »survival« in the crisis. The other, more demanding issue is how their national strategies of the inclusion in the euro area should be adjusted to the realities of the new circumstances.

It is not difficult to agree upon the fact that the attractiveness of the euro area has increased after the outburst of the global financial crisis, which by itself speaks strongly in favor of an earlier adoption of the euro, in fact as soon as possible. But for the euro candidate countries, at the moment there are also considerable risks involved in their attempts to speed up the process.

Trying to meet the Maastricht convergence criteria hastily, as soon as possible, may at times of crisis be self-defeating. The fiscal needs will increase significantly due to the crisis, so trying to keep them within the limits of Maastricht (and/or SGP) benchmark would be not just very demanding, but also very costly in terms of flexibility of counter-crisis measures and social stability in the country. Fiscal expansion which the crisis measures will require will also result in their worsened public debt figures. Inflation rates, although now due to the crises generally low, might increase in the near future, shortly after the crisis, as current monetary measures worldwide contain the seeds of the future price increases. However, according to the Maastricht rules, their relative performance regarding inflation will be crucial.

The ERM II entry is a kind of »Catch 22« issue, at least for those euro candidates with the floating exchange rate systems. Theoretically, optimal strategy would be to enter the ERM II just two years before the planned inclusion in the euro area, i.e. when a country can assume that all other Maastricht convergence criteria would be met. The other side of the same strategy is of course to exit this exchange rate mechanism as soon as possible, i.e. after just two years, by adopting the euro. But in practice, in the current circumstances it is very difficult for these countries to have a firm plan of joining the euro area – the fixed date of the euro adoption. If they wait and see and stay out of the ERM II, they are actually prolonging the time of their euro adoption. If they jump in the water and enter the ERM II, they will get exposed to its volatilities and remain particularly vulnerable in the interim period before the adoption of the euro. As the timing of their euro adoption is not guaranteed, they can for an indefinite time remain caught in the ERM II without being able to adopt the euro, which might be the worst of all possible outcomes. The conclusion is that obviously at this time it is extremely difficult to prepare a rational, sound and safe strategy regarding the timing of the entry in the ERM II and the euro area. There are simply too many uncertainties, both externally and internally, at the moment.

Probably, in the last instance there is not much that the euro candidates can do by themselves at the moment to speed up their euro adoption, at least if they want to keep on playing by the Maastricht rules. They will have to be supported also (or mostly) from the outside, by the relevant European political players and institutions, including by incumbent countries.

CONCLUSIONS

Even before the outburst of the crisis, national EMU goals of the euro candidate countries turned out to be rather unsustainable. This can be seen from the fact that in some of these countries, the plans of their euro adoption have been postponed, even in some cases several times, and from the fact, that some of them at this moment even do not dare to come up with a clear strategy on the dynamics of their inclusion in the euro area, which would include also the target date of the euro adoption. The main problems are their insufficient results in meeting the Maastricht convergence criteria. Some of them had prevailing problems with inflation, others with fiscal deficits (or both) and some have not yet joined the ERM II.

Changing realities after the outbreak of the crisis even made matters much worse. If anything, the Maastricht criteria will be harder to achieve, while the early membership in the euro area is a more pressing objective. As discussed above, in the circumstances of the crisis it is extremely difficult even to prepare a rational strategy on the timing of the euro adoption. At this moment it is also difficult to say which of the currently adopted regimes (currency boards, floating exchange rates with inflation targeting etc.) is more adequate in the sense of bringing individual countries closer to the euro adoption.

There are probable just two main lines of what can be done in order to speed up the inclusion of the euro candidate countries in the euro area. The first is in the hands of the European Commission and the ECB. They should first agree that it is in the overall interest of the EU as a whole to speed up the dynamics of the euro area enlargement. Instability of the euro candidate countries is not in anybody's interest, and these countries will have to be financially supported anyway. In this light, Maastricht criteria – if not rules, than their interpretation – should be softened in order to adjust them to new circumstances. Throughout the world, many present rules have been changed, abandoned or made more flexible. Maastricht inflation criterion should be reviewed in its »three best performing« benchmark, fiscal deficit criterion should be changed from the present absolute benchmark to an average (or something like »three best performing ones«) and there are many technical details which could be changed in the Maastricht exchange rate stability criterion (rules and interpretations of the ERM II and their application in the exchange rate stability assessment).

At the moment, most of the ideas concentrated on the ERM II rules, concretely, that the required time spent in this interim exchange rate mechanisms before the euro adoption should be shortened from two years to a year or even less. However, for the moment the European Commission and the ECB showed no understanding for any change in the rules in the direction of their increased flexibility, including for the duration of the mandatory participation in the ERM II. The argument is that in present unstable times any changes in the rules would just lead to more instability, which would in the last instance hurt back the euro candidate countries themselves. To conclude, the perspective for any softening of the Maastricht criteria seem at the moment very week.

The second line of action is in the hands of the euro candidate countries themselves. They could revive the idea of unilateral euroization as a way to speed up their euro adoption. In this case they would simply bypass the EU rules and altogether avoid the need for meeting the Maastricht convergence criteria. Technically, this step is not extremely difficult and can be prepared in a relatively short time. The European Commission and the ECB are strongly against the ideas of unilateral euroization, but in case that some euro candidate countries actually decided for it, they could not do much about it. However, such countries would risk some possible retaliation of the EU institutions somewhere along the way. The argument for the unilateral euroization can be that the crisis is the situation of emergency, which calls for urgent, quick and decisive steps. If in the pre-crisis time euroization was allowed to some problematic regions (Kosovo, Montenegro), just to prevent their further instability, the same argument could now be applied for the present euro candidate countries.

There is also a sensitive political issue involved in this discussion. If all the euro candidate countries joined their forces and acted unanimously, it would be easier for them to defend their arguments. However, some of them are more and some less vulnerable to the impact of the global crises, so not all of them are willing to be seen as being in the same boat. As this seems to be the case, the consensual approach is not very likely, which makes individual countries' arguments for unilateral euroization much weaker.

REFERENCES

Banka Slovenije in Vlada Republike Slovenije (2003): Program vstopa v ERM II in prevzema evra, Ljubljana.

Banka Slovenije (2007): Letno porocilo 2007, Ljubljana.

Bole V. and Mramor D. (2006): »Soft Landing« in the ERM2: Lessons from Slovenia, in Prasnikar J. (edit.): Competitiveness, Social Responsibility and Economic Growth, Nova Science Publishers, Ljubljana.

European Central Bank (2006): Convergence Report May 2006, Frankfurt.

European Commission (2006a): 2006 Convergence Report on Slovenia:Technical Annex, Brussels.

European Commission (2006b): Adjustment Dynamics in the Euro Area: Experiences and Challenges, The European Economy Review 2006, Brussels.

European Commission (2008): EMU@10: Successes and Challenges after 10 Years of Economic and Monetary Union, Brussels.

Lavrac V. (2008a): Euro Adoption in Slovenia and Other New EU Member States, Institute for economic research, Ljubljana.

Lavrac V. (2008b): Globalna financna kriza in clanstvo v EU, konferenca Globalna financna kriza in svetovno gospodarstvo, 12. december 2008, Ekonomska fakulteta Univerze v Ljubljani in Zveza ekonomistov Slovenije, Ljubljana.

Urad RS za makroekonomske analize in razvoj (2007): Ucinek prevzema evra na inflacijo v Sloveniji, Ljubljana.

Appendix: Economic Convergence in Slovenia before the Euro Adoption

Yearly data, 1999-2007	1999	2000	2001	2002	2003	2004	2005	2006	2007
HICP (EU harmonized inflation index)	6,1	8,9	8,6	7,5	5,7	3,7	2,5	2,5	3,8
Budget deficit/surplus - % of GDP (general government budget balance)	-0,6	-1,2	-1,3	-2,8	-1,3	-1,3	-1,0	-0,8	0,3
General government gross debt, % of GDP	22,2	22,9	24,8	25,6	24,5	24,7	24,3	23,7	21,5
Long-term interest rates (10-year government bonds) – end of year	-	-	-	-	6,4	4,7	3,8	3,9	4,5
Exchange rate - % change against the Euro	-4,6	-5,6	-5,6	-4,0	-3,2	-2,2	-0,3	0,0	0,0
Price level compared to the EU average (Eurostat)	74,1	72,8	73,9	74,4	76,2	75,5	76,0	76,8	77,8
GDP per capita at PPS as % of EU average (Eurostat)	80,6	79,8	79,7	82,3	83,4	86,4	87,4	87,6	89,2
GDP growth	5,4	4,4	2,8	4,0	2,8	4,3	4,3	5,9	6,8
Employment rate (15-64)	62,2	62,8	63,8	63,4	62,6	65,3	66,0	66,6	67,8
Export growth	-0,3	18,2	9,0	5,9	2,9	13,3	12,6	16,4	15,8
Current account - % of GDP	-4,0	-3,2	0,2	1,1	-0,8	-2,7	-1,7	-2,5	-4,2
FDI - % of GDP	0,6	0,8	2,0	7,4	1,1	2,5	1,6	1,7	3,0
FDI from EU countries - % of FDI	-	-	87,1	81,7	70,1	73,9	75,6	77,8	83,2
Gros external debt (private + public) - % of GDP	47,7	51,4	50,3	49,8	52,7	56,7	71,4	77,6	100,8
Net external debt (private + public) - % of GDP	1,9	4,3	-6,9	-11,0	-6,8	-3,3	3,2	10,9	18,0
Trade with EU countries, % of total (exports)	66,1	63,9	62,2	59,3	67,0	66,0	67,9	70,2	70,6
Trade with EU countries, % of total (imports)	68,9	67,8	67,6	68,0	75,6	79,5	80,9	81,2	78,9
Bank credit growth (% change)	19,2	16,9	17,6	14,3	13,9	19,7	20,8	21,4	25,2
M1 (% change)	17,9	9,3	29,0	6,4	11,3	10,5	22,8	9,0	4,0
M3 (% change)	10,2	17,2	29,4	10,6	6,5	7,6	-12,0	8,1	-7,7
Interbank interest rates, monthly averages for the correrspondin g year	8,6	10,9	10,9	8,7	6,9	4,7	4,0	3,6	4,3
Share of deposits and credits denominated in Euro	-	-	-	-	-	-	-	-	-
EU banks ownership of local banks, % of total assets	-	-	-	34,7	36,0	36,2	38,7	40,1	41,6
Stock market index - % change	5,9	0,1	19,0	55,2	17,7	24,7	-5,6	37,9	78,1

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7. Bojan Radej. **THE FOUR CAPITAL MODEL, MATRIX AND ACCOUNTS.** IER, Ljubljana, 2007. 25 p.