

**BANKA
SLOVENIJE**



VLADA REPUBLIKE SLOVENIJE

PROGRAMME FOR ERM II ENTRY AND ADOPTION OF THE EURO

**JOINT PROGRAMME
OF THE SLOVENIAN GOVERNMENT
AND
THE BANK OF SLOVENIA**

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SUMMARY

The Bank of Slovenia and the Slovenian Government are in favour of joining ERM2 by the end of 2004 and of putting in place the conditions that will enable participation in ERM2 for the shortest possible time. Thus both the Bank and the Government support adoption of the euro at the earliest opportunity and judge that it will be possible at the beginning of 2007.

Before Slovenia can join ERM2 it will need to achieve a sustained nominal convergence, which will require continuation of coordinated policy-making by the Bank of Slovenia and the Government. Sustained nominal convergence during the period of participation in ERM2 will enable the Maastricht criteria to be met. As far as the assessment of whether Slovenia fulfils the criteria is concerned, the key period, given entry into the exchange rate mechanism by the end of 2004, will be the second half of 2005 and the first half of 2006.

In view of the restrictions that will apply when Slovenia joins the EU, with exchange rate policy becoming a matter of common interest of the member states, the Bank of Slovenia will no longer be able to conduct a fully independent monetary policy. The Bank's monetary policy will continue to be oriented towards bringing down inflation. The Bank of Slovenia will take account of the need for nominal convergence and the macroeconomic basis for achieving it in determining movements in nominal interest rates and the exchange rate. Therefore the planned entry to ERM2 by the end of 2004 presumes that, given nominal convergence of interest rates, it will then be possible to stabilise the tolar exchange rate.

The Government will gradually reduce the structural deficit in the public finances and reduce the cost pressures from administered prices and increases in taxation. Along with its policy on administered prices, the Government will also prevent the effects of tax and administrative measures being transmitted to free prices. The Slovenian Government will work together with independent regulators to try to ensure that their decisions take account of the inflation targets set out in the programme for adoption of the euro. Through its representatives in the management bodies of certain companies the Government will seek to increase the internal efficiency of these companies with a view to reducing the pressure on prices. Directly and indirectly administered prices must not be allowed to rise faster than the maximum inflation rate enabling entry to ERM2 and adoption of the euro. With this policy and also, in the short run, by controlling prices which are formed monopolistically or administratively insofar as the law allows, the Slovenian Government will contribute to fulfilment of the inflation criterion. Through active implementation of structural reforms it will also help, in the long run, to bring about competition in sectors that are still insufficiently competitive.

The Government will seek to abolish indexation of wages in the public sector and will modify the mechanisms for valorisation of transfers so as to ensure public finance sustainability and to maintain the real level of those transfers ensuring a minimum standard of living. Restrictive planning of public spending will limit the growth of non-investment public expenditure.

The successful realisation of the goals outlined above will require:

- the adoption of a joint Action Plan for Negotiations on ERM2 Entry by the end of 2004;
- coordinated implementation of the Government's fiscal and other policies and the monetary policy of the Bank of Slovenia;
- coordinated management of the proceeds from the sale of capital investments to nonresidents;
- the Bank of Slovenia and the Government informing each other about all movements and developments which could have an impact on the effective implementation of the joint programme for adoption of the euro;
- the Bank of Slovenia and the Government jointly seeking opportunities to deal with the effects of the tolar and foreign currency liquidity made available through Bank of Slovenia instruments for public debt management without increasing the level or costs of the public debt.

The Government and the Bank of Slovenia are expecting the social partners to cooperate in the process of further deindexation. And given the anticipated reduction in inflation to a level within the Maastricht framework this should not present a major problem.

I. SLOVENIA'S READINESS FOR THE ENTRY INTO THE ECONOMIC AND MONETARY UNION¹

A. INTRODUCTION

The decision in favour of Slovenia joining the EU was accompanied by a decision that it should also adopt the euro. Slovenia, like the other countries joining the EU, has no opt-out. That is, there is no possibility of Slovenia entering the EU without also adopting the euro.

Is Slovenia ready to adopt the euro, or when will Slovenia be ready to adopt the euro and when is it reasonable for it to enter ERM2? Slovenia's ability to operate effectively in the euro area rests on the following:

- the fact that the Slovenian economy is strong and robust enough to cope with changes in its environment, and does not require special treatment by the ECB;
- the fact that the probability of an asymmetric shock (a shock specific to Slovenia) is low – as the structure of the Slovenian economy is sufficiently similar to that of the European economy;
- the fact that Slovenia is adequately able to absorb any asymmetric shock that should nevertheless arise is sufficient although there are some rigidities in the labour market, and because Slovenia maintains macroeconomic balances. Fiscal policy is balanced enough and capable of responding to asymmetric shocks. However there is a need to further modify the mechanisms for determination of wages in public sector in the way it will be tied to real economic developments and mechanisms for valorisation of transfers. At the same time there is need for restrictive planning and control of non-investment public spending, although major steps to abolish indexation have already been made.
- the fact that the transition of the Slovenian economy to a modern market economy is in sufficient degree complete. The process of catch-up with the most advanced EU states, however, will be of long duration and low intensity, with the result that there will be no major impact on the achievement of price stability in Slovenia and the euro area;
- the fact that economic policy-makers are sufficiently experienced and competent to assume a portion of the responsibility for managing the euro as the common currency;

¹ The data in this chapter is based on EUROSTAT data available by June 2003, which included the last available for 2001. All the data in the text as well as in figures and tables are related to 2001, if not otherwise stated.

- the fact that Slovenia will soon also satisfy the formal conditions – the Maastricht criteria, which serve as a formal substitute for economic reasoning with regard to Slovenia's readiness to adopt the European single currency;
- and lastly, the fact that Slovenia's participation in EMU will not constrain the ECB in its conduct of an effective common monetary policy, and not merely because of the small size of the Slovenian economy in relation to the euro area.

The purpose of this chapter, then, is to demonstrate that Slovenia is ready for entry into common currency area.

In the first section we present economic arguments for why Slovenia is ready to adopt the euro, based on the theory of optimum currency areas.

In the second section we show that the process of long-term adjustment will not create an obstacle to price stability. The main emphasis is on the finding that adjustment effects, such as the Balassa-Samuelson effect, do not have a significant impact on inflation and the implementation of the Maastricht criteria. The associated inflationary effects will most probably last another two or three decades but will be moderate and within a range that permits the economy and common monetary policy to function normally.

In the third section we show that fulfilment of the EMU entry criteria will not pose a problem. We set out the various aspects of nominal and real convergence. We must distinguish between nominal and real convergence criteria, which constitute formal and "informal" requirements. The criteria serve as a summary of substantive arguments regarding of the readiness of Slovenia and other countries to adopt the euro as the common currency.

B. EMU IS AN OPTIMUM CURRENCY FOR SLOVENIA

When should Slovenia give up its own currency, the tolar, and join the Economic and Monetary Union (EMU), adopting the euro as its own currency? There are multiple reasons to join the common currency area, which can be categorised into three kinds:

- political,
- microeconomic,
- and macroeconomic.

The arguments that are most relevant to the assessment of Slovenia's readiness for entry into EMU are mainly macroeconomic.

Political reasons concern issues regarding the change of monetary system and encroachment on national sovereignty. The concept of national sovereignty is broad and generally exceeds the scope of economic analysis. With Slovenia's entry into the European Union and the strong public support for adoption of the euro, the political reasons for adopting the euro are satisfied.

Microeconomic reasons for joining the common currency area are based on the notion that the one-off costs of transition to the common currency are outweighed by the benefits created by its use. The most important savings include those due to reduced transactions costs, reduced information costs and lower prices caused by increased transparency.

Macroeconomic reasons have to do mainly with the issue of the efficiency of macroeconomic policy. Does it make macroeconomic sense for Slovenia to adopt the euro? This question can be answered with reference to the theory of optimum currency areas.

An optimum currency area is based on criteria that should ensure the efficient functioning of economic policy despite the relinquishing of monetary policy independence. Importantly:

- Slovenia's entry into EMU will not make the latter more heterogeneous as the two economies are sufficiently similar with regard to their level of development and structure;
- the probability of asymmetric shocks, to which a single monetary policy cannot respond, is low;
- Slovenia is adequately capable of absorbing by itself any asymmetric or other shocks that may arise.

It can be demonstrated that the costs of the loss of monetary policy as a stabilising factor upon entry into the common currency will not be large in Slovenia's case. Most indicators suggest that Slovenia already forms part of an optimum currency area with EMU. Compared with the countries that joined EMU most recently, Slovenia is a small economy with a comparable level of development. Moreover, Slovenia is a considerably more open economy, which is heavily involved in trade with the EU. In addition, the probability of its being subjected to asymmetric shocks vis-à-vis the EMU members is not large. Its ability to absorb such shocks by itself is moreover adequate, because the economy is robust, the macroeconomic situation well balanced and fiscal policy capable of responding to shocks.

1. Slovenia's small size facilitates integration

Because of its small size, there is little risk of Slovenia jeopardising the efficiency of the common monetary policy operated by the ECB. Slovenia's economy is tiny in relation to the other countries, representing only between 0.3% (at constant prices) and 0.4% (in PPS) of total EMU GDP.

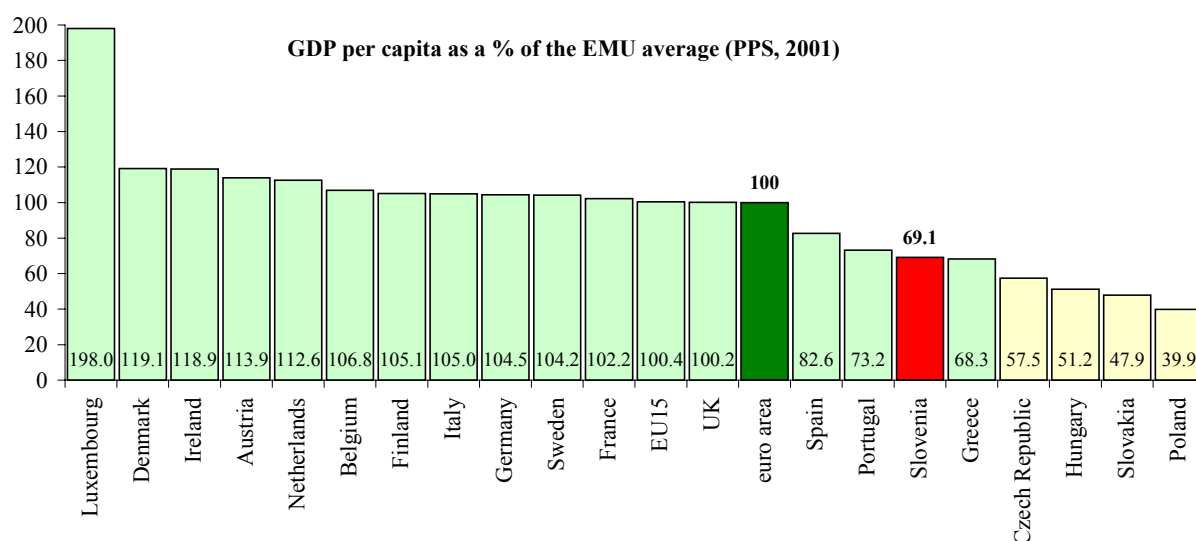
As a rule, joining a common currency area is more beneficial for smaller countries because monetary policy is generally more effective in larger currency areas while the credibility of large central banks also tends to be greater. In this respect, Slovenia would certainly benefit from joining the common currency area.

2. Purchasing power indicates a comparable level of development

In respect of its level of economic development as measured in terms of purchasing power, Slovenia is fit for adoption of the euro. In terms of development Slovenia already surpasses some of the less developed countries within EMU, and lies towards the middle of the distribution if treated as a region.

The fact that Slovenia's level of income per capita is comparable with that of EMU countries ensures that the homogeneity of EMU will not be materially changed by Slovenia's entry and therefore that the common monetary policy operated by the ECB will be no less effective. A comparable level of income or economic development, measured in terms of purchasing power, also serves as an "informal" criterion for measuring real convergence.

Figure: Comparison of levels of development as measured by GDP per capita in relation to the EMU average.



Source: Eurostat

Slovenia is very similar to the less developed members of EMU in terms of its level of development. Gross domestic product per capita (expressed in purchasing power standards (PPS)) was just under 70% of the EMU average in 2001, implying a very similar level of development to Greece (68.3%) and Portugal (73.2%). Greece and Portugal were behind Slovenia's current level of development at the time of their entry into EMU. Moreover, it should be born in mind that all of the least developed EU member states received substantial financial aid from various development funds in the past, amounting to around 4% of GDP.

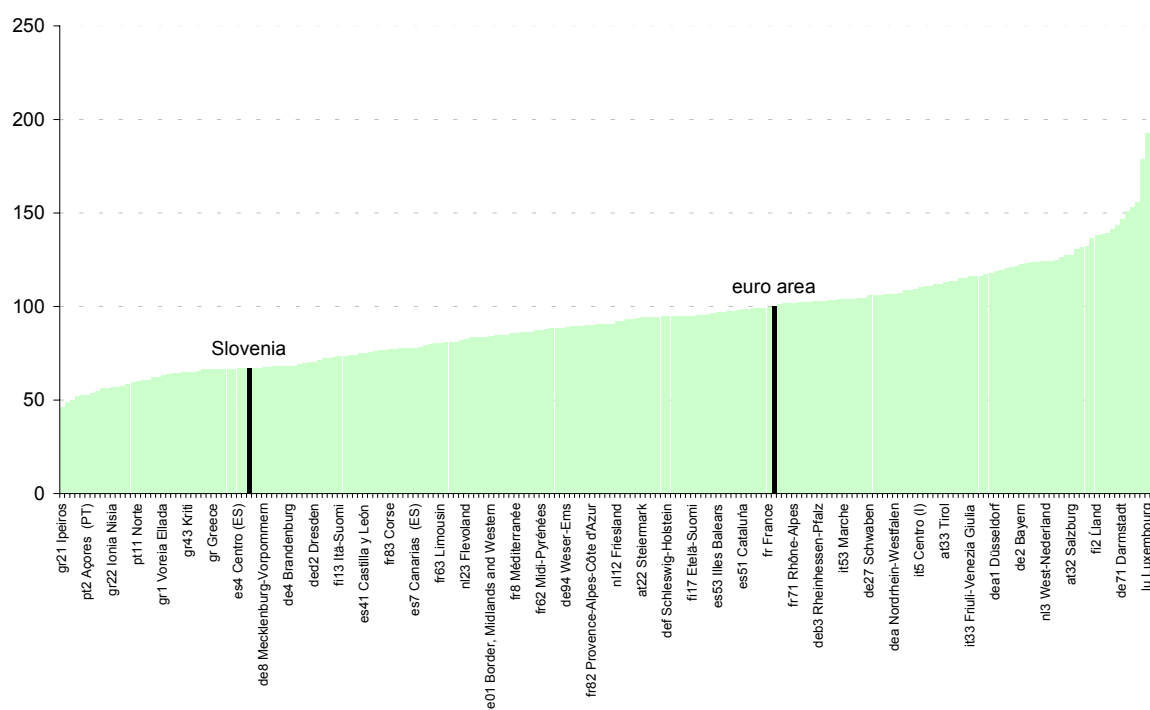
Table: Level of development of particular countries in relation to the EU average at entry into ERM and EMU

	At entry into ERM	At entry into EMU
Greece	Level of development 66.8% of EU average in 1998	Level of development 68.3% of EMU average in 2001
Portugal	Level of development 64.7% of EU average in 1992	Level of development 71.5% of EMU average in 1999
Slovenia	Level of development 69.1% of EMU average in 2001	

Source Eurostat

Treated as a region, Slovenia lies towards the middle of the distribution of EMU regions in terms of level of development. In 2001 it lay in the second decile of EMU regions. A comparison of levels of development across regions within EMU shows that there is considerable heterogeneity in the distribution. The majority of regions – around two thirds – are below the average. This is a further reason to believe that Slovenia's entry into EMU will not make the latter materially more heterogeneous than at present.

Figure: GDP per capita as a % of EMU average (by EU region)



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Source: Eurostat

Differences in the level of development are decreasing due to the rapid rate of catch-up with the EU and EMU average. Given the average rate of economic growth achieved in the last five years and the level of development in 2001 (in terms of GDP expressed in purchasing power), it would take Slovenia 22 years to reach the EMU average, or four years to reach 75% of the EMU average. This is less than it would take Greece and Portugal to reach the EMU average GDP per capita and somewhat more than Spain, which would take 15 years. These figures are based on assumed annual growth rates that are in line with medium-term forecasts. These predict that growth will continue to be higher in the EU accession countries than in the EMU member states in future years. The level of investment is an important factor in this faster growth, although the efficiency of this investment is crucial. A comparison of the level of investment in Slovenia and within EMU indicates that the assumption of faster future growth is plausible.

3. Low probability of asymmetric shocks

The probability of asymmetric shocks, i.e. shocks specific to Slovenia, is one of the key issues in establishing Slovenia's fitness to join the euro area. Shocks affecting different economies in similar ways are said to be symmetric, whereas those that have differing effects or affect only one country are asymmetric. The effects of symmetric shocks can be eliminated by means of a common economic policy, whereas asymmetric shocks present a problem for a common currency area, as there exists no scope for local or regional monetary policy measures, while fiscal policy may not be a suitable instrument for such action.

The probability of an asymmetric shock in Slovenia vis-à-vis EMU is relatively small because:

- there is a high degree of heterogeneity in Slovenia's economic structure;
- the structure of the Slovenian economy is similar to that of the countries within EMU;
- Slovenia is heavily involved in trade with the countries of the euro area;
- the business cycles are synchronised;
- the process of transition and structural reform is approaching completion.

Authors who have analysed the correlation of shocks in Slovenia and EMU have also reached such conclusions. A comparison of supply and demand shocks² shows that demand shocks in Slovenia are related to shocks within the EMU average to a similar extent as demand shocks in Greece or Spain. Supply-side shocks, on the other hand, are on the whole negatively correlated between Slovenia and EMU. One explanation for the negative correlation of supply-side shocks is the adjustment of the output composition during transition. This explanation is supported by the fact that supply-side shocks in Slovenia are otherwise positively related to supply-side shocks in most other accession countries. Similar findings emerge from analyses by the IMF³ and Deutsche Bank⁴, in which demand shocks in Slovenia are strongly correlated with shocks in Germany and France respectively, while supply-side shocks are negatively correlated. The same findings hold between euro area countries in the case of Ireland and Italy. The response to shocks is rather similar in Slovenia and the smaller EU countries, as shown by an analysis of response functions. All of these analyses also show that the relationship between shocks and between the responses to them in transition economies is increasing, or in other words they are becoming more synchronised. This implies that the (a)symmetry of shocks is changing with time, while their direction and the response to them are becoming more uniform in the common currency area as a result of increased integration.

² Korhonen and Fidrmuc (2001)

³ Frenkel and Nickel (2002)

a) Strong heterogeneity of economic structure

The wide diversity of products destined for international trade means that the economy is less exposed to shocks affecting particular sectors (e.g. a drop in demand for products of a specific sector), as most of the economy is unaffected by any such shock. Countries with a more diverse economic composition or composition of external trade are therefore less likely to require monetary policy and the exchange rate as instruments for adjusting to shocks. Such countries are thus better suited to participation in a common currency area.

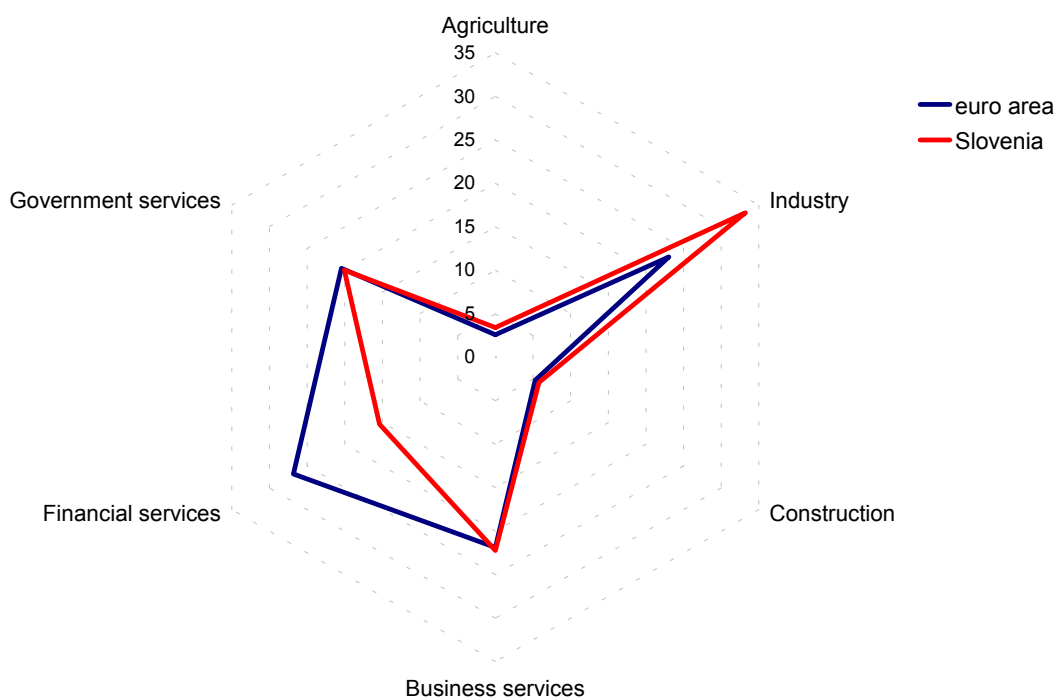
b) Similar economic structure in Slovenia and EMU countries

The composition of the Slovenian economy is very similar to the average economic composition of the EU. A similar economic structure ensures greater symmetry of shocks affecting member countries. A symmetric response to shocks is important from the point of view of the economic policy response, since a common currency area operates a single monetary and exchange rate policy. A comparison of the composition of value added in Slovenia and the EMU shows that the two economies are similar and that the least similar sectors are the financial sector and industry. The financial sector contributes around 10 percentage points more to value added within EMU than in Slovenia. However, the economic structure of the two economies is converging because of the already increased volume of trade accompanying the process of Slovenia's accession to the EU and because of the close relationship of the business cycles. Industrial activities decreased by nine percentage points as a proportion of total value added in Slovenia between 1992 and 2001, while the financial sector grew by three percentage points.

A comparison of the composition of manufacturing output also shows a close similarity between Slovenia and EMU. The only significant differences occur within the production of coke, refined petroleum products and nuclear fuel, which represents a larger proportion (by 6.6 percentage points) of total production within EMU owing mainly to a smaller share (by 4.2 percentage points) of textiles production in the EU relative to Slovenia. It is possible and indeed likely that the composition of the economy will change further, and hence that its exposure to asymmetric shocks will increase or decrease, once Slovenia enters the common currency area and participates in the integrated economic system, as a result of specialisation within it. Linkage with the common currency area will intensify intra-industry links, which will mean most countries being involved in trade with a larger number of sectors.

⁴ DB Research Notes (1999)

Figure: Comparison of GDP composition by activity



Source: Eurostat

c) Synchronisation of business cycles

A synchronised timing and direction of business cycles is a major factor in the conduct of a common monetary policy by the ECB, as well as in the smooth maintenance of price stability and lasting development in Slovenia following entry into EMU. It is important for the conduct of a common monetary policy that the monetary policy stance should be as similar as possible across the different regions and states of the euro area. This helps the central bank to ascertain the monetary policy stance and make necessary changes in monetary policy.

Differing business cycles increase the need for specific economic policies designed to facilitate responses to shocks. A close synchronisation of the business cycle thus contributes towards the fulfilment of the criteria for membership of the common currency area. The business cycle in Slovenia can be shown to be closely related to business cycles within EMU.

One of the criteria for deciding whether two countries form an optimum currency area is whether movements in aggregate activity are aligned. From the point of view of the synchronisation of the

business cycle with EU countries, Slovenia fulfils the conditions for membership of EMU⁵. The business cycle is becoming further synchronised with time, as is indicated by the increasing integration of Slovenian firms in trade with the countries of the euro area⁶.

d) Involvement of Slovenia in trade with EMU countries

Economic openness, and especially a large volume and similar composition of trade with countries forming a common currency area, are important factors in the benefit to an economy of joining an integrated economic system of this kind.

Slovenia, in which external trade in goods and services is equal to around 120% of GDP, is a considerably more open economy than the EMU average. It has a similar level of openness to the Netherlands but a considerably lower level than some of the smaller EMU countries (Luxembourg, Ireland and Belgium), where the ratio is above 160%. The volume of trade and with it the openness of the Slovenian economy can be expected to increase following entry into EMU. This trend has been evident in most EMU countries in the last ten years. The countries that have lagged furthest behind or stood still in terms of increasing economic openness have been Greece and Portugal.

Trade with the euro area accounts for about 60% of Slovenia's external trade, and trade with the EU for as much as 65%. This demonstrates that Slovenia is heavily involved in trade with the euro area, since it trades a large proportion of GDP with EMU countries. Only a few smaller countries, mainly geographical neighbours of EU member states, conduct a larger proportion of their external trade with the EU.

4. Ability to absorb shocks independently

A country's ability to absorb shocks without assistance is an important indicator of its readiness to join the common currency area. If asymmetric shocks, however unlikely, nevertheless occur, their adverse effects can be prevented or eliminated by economic policy through the use of other than monetary or exchange rate policy measures. Since there is no such possibility in a common currency area, an economy must contain alternative channels for adjustment to shocks. The alternative to monetary and exchange rate policy measures most often identified in the theory of optimum currency areas is

⁵ See Žumer (2001), Korhonen (2001) or Boone & Maurell (1998, 1999)

⁶ The opening-up of the markets of the former Yugoslavia and the increased importance of trade with those countries is a factor reducing the degree of synchronisation of economic cycles with EMU.

mobility of factors of production, and to a large extent also the appropriate use of economic policy, such as fiscal and income policy.

The maintenance of the main macroeconomic balances in Slovenia allows economic policy greater flexibility in responding to asymmetric shocks. Economic policy can respond to shocks affecting the economy with countercyclical, and in the event of negative shocks therefore expansionary, measures. Such measures can assist in eliminating the effects of asymmetric shocks, but at least in the short term usually create new macroeconomic imbalances or exacerbate existing ones. If initially, prior to the asymmetric shock, the economy is out of balance (there is a large balance of payments deficit or a large budget deficit), then it is possible for the scope for economic policy measures to be constrained by the persistence of these deficits, or in other words by a failure to meet the Maastricht criteria in the case of participation in ERM2 and by a breach of the Stability and Growth Pact in the case of inclusion in EMU. In this case, economic policy cannot intervene to eliminate the disruption caused by the asymmetric shock in the way and to the extent that would have been possible had the macroeconomy been in balance when the shock occurred. Slovenia's economic policy has always been based on maintaining macroeconomic balances. Existing macroeconomic balances ensure that the government and the central bank will be able to absorb shocks.

The remaining elements of wage and social transfer indexation are an important factor reducing fiscal policy flexibility and hence Slovenia's ability to absorb shocks by itself. Wage flexibility is important for the ability of costs to respond to a change in economic conditions, and depends on the power of trade unions and the prevalence of indexation. Wages and social transfers represent an important portion of public finance expenditures and are determined in accordance with the agreement between Government and employees and in accordance with legislation. In the case of full-fledged indexation the fiscal policy flexibility is restricted to a great extent. Higher flexibility has already been reached by the latest agreement, which partially ties wages in the public sector to EU inflation, and by a change of a mechanism of transfer valorisation, which will be tied to expected inflation. This mechanism also assumes the possibility of a downward wage adjustment if inflation is lower than expected. However there is a need to further modify the mechanisms for determination of wages in public sector in the way it will be tied to real economic developments and mechanisms for valorisation of transfers. At the same time there is need for restrictive planning and control of non-investment public spending, although major steps to abolish indexation have already been made.

Trade union power in the private sector as well restricts downward wage flexibility in Slovenia, as base wages have been partly or wholly aligned with recorded price growth for several years under an agreement between the social partners. Such linkage of wages to price growth heavily restricts the adjustment of the economy, especially in conditions when, because of recessionary pressures, additional savings or cost reductions are necessary, including reductions in wage bills. At times of

slowing economic growth, wage growth therefore does not reflect the correct direction of downward adjustment to the desired or necessary extent. Wage indexation also represents a channel through which one-off relative price changes, which should in normal circumstances have only a short-term effect, can transform into more permanent cost-based inflation pressures.

Restricted labour mobility importantly reduces country's own ability of shock absorption. In traditional optimum currency area theory, labour mobility is an instrument of adjustment to asymmetric shocks in the absence of monetary policy. Labour market mobility can be measured using the results of surveys in the area of labour market regulation and educational participation, carried out by the Institute for International Management Development (IMD) as part of its analysis of competitiveness. These indicators show that the organisation and by extension the mobility of the labour market in Slovenia is most similar to Portugal, Greece and Italy⁷. Slovenia is behind other countries mainly in the area of the institutional organisation of the labour market, whereas it is fully comparable in the area of educational participation. An IMF analysis⁸ comparing labour mobility in the accession countries and EU also shows that after an initial period of high rigidity in the countries in transition, labour market flexibility has fully attained the level of the EU since their emergence from the transition crisis and their introduction of liberal reforms.

Optimum currency area theory emphasises the importance of production factors, labour and capital, which ensures the ability of economy to adjust to longer lasting changes in its environment. Capital market mobility has been ensured through the adoption of European legislation, which assumes full capital mobility within a common market. Labour mobility can be considered from the perspective of wage flexibility and employment flexibility. Because of linguistic and cultural differences and differences in the level of social security, wage flexibility is considerably the more important of the two for labour mobility among countries making up a common currency area. Wage flexibility is difficult to determine because of the non-comparability of wage or labour cost data. Remaining elements of wage indexation importantly reduce wage flexibility and at the same time they reduce the ability of Slovenia to absorb any asymmetric shocks. Structural changes in the labour market in Slovenia as a result of the transition present an additional problem. The importance of labour mobility for the effective functioning of the currency area is greater, the greater the risk of asymmetric shocks. This risk is relatively small in Slovenia because of its similarity to EMU in economic composition, already discussed. This composition, as has been shown, is diverse, while the business cycle in Slovenia is closely related to those within EMU. Besides, Slovenia's economic policy has always been based on maintaining macroeconomic balances, which ensure that the government and the central

⁷ World Competitiveness Yearbook 2002

⁸ IMF (2000)

bank will be able to absorb shocks. Although some rigidities in the labour market still exist, the **flexibility of economic policies as well as the flexibility of labour and capital markets ensure Slovenia enough flexibility to take part in EMU.**

C. THE PROCESS OF CATCH-UP WITH THE MOST DEVELOPED COUNTRIES WITHIN EMU IS NOT AN OBSTACLE TO PRICE STABILITY

Slovenia continues to lag behind EMU in terms of both output per capita and the level of consumer prices. The process of catch-up with the most developed countries of the euro area will therefore continue into the future. The catch-up process is most noticeable in the areas of productivity and price equalisation. In the long term we must assume that the euro will be adopted as a common currency, or a stable nominal exchange rate with the euro introduced, which implies that inflation in Slovenia will be higher than the economies with which it is catching up.

For how long inflation in Slovenia will exceed that in the euro area depends on the time and intensity necessary for the Slovenian economy to catch up with the most developed EMU countries. Adjustment of the price level, and consequently higher inflation, is closely linked to the catch-up process (often called real convergence). We consider real convergence to mean a long-term process of catch-up with the productivity achieved by the most developed economies of EMU. On current trends of more rapid productivity growth, the Slovenian economy could attain the level of the leading EMU economies in the space of 20 to 30 years, and reach their current level in just over 10 years. The average rate of additional price growth (real appreciation) can be expected to be between one and one-and-a-half percentage points per annum during the catch-up period. This implies that the current process of real convergence does not jeopardise the achievement of price stability under condition that the Government implies adequate policy of structural reforms and restricts non-justified price pressures.

Although the current catch-up process does not jeopardise the achievement of price stability, convergence at a significantly more intense pace could hinder the fulfilment of the Maastricht inflation criterion. If the catch-up were significantly faster than at present, with economic growth exceeding the EMU average by more than five percentage points, the equilibrium rate of real appreciation might increase to three percentage points. An acceleration of convergence could even require a slight nominal appreciation during the ERM2 period in order to meet the Maastricht inflation criterion. In view of the lengthy duration of the catch-up process, this cannot be an argument for delaying entry into ERM2.

In order to explain the difference in the level of prices between different countries it is necessary to distinguish between the two sectors of the economy, tradable and non-tradable. Real appreciation is

the result of the adjustment of relative prices between the tradable and non-tradable sectors, known as the Balassa-Samuelson effect. Because productivity growth in the non-tradable sector lags behind productivity growth in the tradable sector, producers in the non-tradable sector must raise relative prices in order to pay the same wage rate as in the tradable sector. The adjustment of internal relative prices between the two sectors is made possible by a low elasticity of substitution between the two types of products with respect to a change in relative prices. Internal relative prices are higher, the larger the productivity differential between the two sectors. Prices in the tradable sector are related to foreign prices via the exchange rate, while prices in the non-tradable sector are constrained only by the level of internal relative prices. The general price level therefore differs between countries with differing relative productivity between the two sectors. The change in the level of relative prices between two countries, or real appreciation, is therefore a consequence of the speed and intensity of catch-up with the productivity of the more developed countries.

The catch-up process for Slovenia will be complete once productivity in the two sectors of the economy, tradable and non-tradable, is equal to that in the most developed countries. At that point the price level will also be equalised and real appreciation will cease, as internal relative prices between countries will also be equalised.

On current trends the catch-up process will last around two decades⁹. If we measure the catch-up process in terms of comparative GDP per capita, Slovenia is at a level around 75% of the EU average. The price level is between 65% and 70% of the price level in those countries. If current long-term trends in economic growth continue, with the Slovenian economy growing by 4-4.5% per annum in real terms and those of the developed European countries by 1.5-2%, the catch-up process will last around 25 more years. Meanwhile Slovenia will attain the current level of development of the EU countries in just over 10 years.

Equilibrium real appreciation in Slovenia, arising from the Balassa-Samuelson effect and accompanying the catch-up process, has been moderate. However, equilibrium real appreciation can change very rapidly in response to the speed and intensity of catch-up. It also depends on which sector, tradable or non-tradable, has faster productivity growth. To judge by the first simulations to have been carried out, it seems most likely that convergence will be achieved sooner in the tradable sector than in the non-tradable sector¹⁰. Until convergence in the tradable sector is complete, which may take 20 years or so, average real appreciation of between one and 1.5 percentage points per

⁹ See Kozamernik 2003.

¹⁰ The simulations are based on a two-sector model of long-term growth developed by the Analysis and Research Department of the Bank of Slovenia. Detailed results will be presented at a later stage.

annum can be expected to continue. These forecasts are in line with other analyses¹¹ that have estimated the Balassa-Samuelson effect for the recent past. Because we predict that productivity in the tradable sector will grow at the same rate as in the other developed countries after convergence, catch-up thereafter will only affect productivity in the non-tradable sector. Because of catch-up, the latter will grow faster than in the more developed countries and, given similar tradable sector productivity growth as elsewhere, will give rise to real depreciation in the final phase of convergence. In the common currency area this would imply lower inflation than in the other countries. Estimates indicate that this effect is relatively negligible, amounting to only one or two-tenths of a point of annual inflation¹². The catch-up process described also implies a somewhat higher level of prices in Slovenia than in the more developed countries during the final phase, with the disparity being eliminated by real depreciation. This overshooting of prices is based on the premise that the tradable sector converges faster than the non-tradable sector. The extent of overshooting is forecast to be small, probably less than 5%.

Slovenia would have difficulties in achieving the Maastricht criterion for low inflation in the event of rapid economic growth based on rapid productivity growth in the tradable sector and an unproductive non-tradable sector. Faster productivity growth in the tradable sector would significantly shorten the time until catch-up (real convergence), but would also be reflected in greater real appreciation. In the extreme event that productivity growth in the tradable sector was so high that the economy grew at 8% per annum in real terms, Slovenia would catch up with the developed countries in a mere 10 years or so. A further consequence of such rapid growth in the tradable sector, however, would be a faster adjustment of prices, or nominal appreciation. The estimated Balassa-Samuelson effect in this case could be in the order of three percentage points a year, or more than twice as much as in the most likely catch-up scenario. Assuming adoption of the euro, equilibrium inflation in this case could be around 5%¹³. Inflation of this magnitude is a normal catch-up phenomenon and does not give rise to adverse price instability, but is too high with respect to the Maastricht criteria that have to be satisfied within ERM2. Compliance with the Maastricht low inflation criterion is obligatory only during participation in ERM2, but not after entry into the euro area.

The process of catch-up with the most developed EU countries does not jeopardise price stability. At the current rate of catch-up, it will take the Slovenian economy another two to three decades to attain

¹¹ See Jazbec (2001) and Žumer (2001).

¹² The reason for this is the relatively minor difference in productivity in the non-tradable sector. This also means lower long-term productivity growth and a lower difference in productivity growth between countries in the non-tradable sector than in the tradable sector.

the level of the most developed countries. In this case the convergence process would be accompanied by equilibrium real appreciation of around 1-1.5 percentage points per annum. The catch-up process is an equilibrium process and the real appreciation caused by it does not jeopardise the competitiveness of the Slovenian economy. Following adoption of the euro as the common currency, or stabilisation of the exchange rate, real appreciation would be expressed purely as higher inflation. However, price stability would not be placed in jeopardy and inflation would remain moderate and within the Maastricht limit.

The only case in which Slovenia could have difficulties in achieving the Maastricht criterion for low inflation is rapid economic growth based purely on rapid productivity growth in the tradable sector compared with the non-tradable sector. In this exceptional and unlikely event equilibrium inflation could run at around 5%.

Thus, the catch-up process, or real convergence, cannot serve as an argument for delaying Slovenia's entry into EMU and ERM2. The catch-up process is very likely to run for another two decades at least. Because it is an equilibrium process, the real appreciation it causes is unrelated to the competitiveness of the economy. In view of the lengthy duration and weak inflationary impact of this catch-up process, it does not make sense to delay entry into ERM2.

¹³ The rate of growth implied here appears at first extreme, but the case of Ireland has shown that such high growth is not implausible. We do not consider here what might prompt such high growth, although it would probably be related to entry into EMU.

D. THE CRITERIA FOR THE EMU ENTRY ARE EXPECTED TO BE MET SOON

This section presents in detail the various aspects of nominal and real convergence. We must distinguish between nominal and real convergence criteria, which constitute formal and “informal” requirements. These criteria, both formal and informal, serve as a substitute for substantive arguments in assessing countries’ readiness to adopt the euro as the common currency.

The nominal convergence criteria, also known as the Maastricht criteria, are focused on nominal requirements relating to inflation, interest rates and fiscal policy. Fulfilment of these criteria is intended to facilitate the implementation of a single monetary policy for the entire EMU area and prevent excessive use of fiscal policy as an instrument within the common economic and monetary zone.

Real convergence is not cited as a criterion for entry into monetary union in any ECB or European Commission document. Nor are these criteria quantified in the way that those for nominal convergence criteria are (the Maastricht Treaty indirectly mentions a need for economic and social cohesion, which is intended to eliminate disparities between countries and regions). Nevertheless, a requirement to fulfil real convergence criteria can be inferred from the statements of senior ECB officials¹⁴. Moreover, the requirement for real convergence is divided into income and structural convergence. Income convergence relates to the level of GDP per capita, while structural convergence encompasses reform of the institutional framework within which the economy operates.

The fulfilment of nominal and real criteria is closely interrelated. Structural reforms, which are part of real convergence, remove obstacles on the supply side of the economy, improving the conditions for economic growth and generally promoting an environment of low inflation and interest rates. In addition, nominal convergence, by curbing inflation expectations and ensuring a more stable macroeconomic environment, positively influences the decisions of economic agents and thereby supports real convergence in the long term. In addition to fulfilling these criteria as a condition of entry into EMU, it is important to do so in a sustainable and robust way.

Below we present first the nominal convergence criteria and the current status of Slovenia regarding their fulfilment, followed by aspects of real convergence.

¹⁴ E.g. Padoa-Schioppa (2002)

1. Maastricht (nominal) convergence criteria

The nominal convergence criteria are divided into four components that are defined in detail in the Maastricht Treaty:

- low inflation, not exceeding by more than 1.5 percentage points average inflation in the three EU member states with the lowest rate of price growth,
- a government deficit not exceeding 3% of GDP,
- government debt not exceeding 60% of GDP,
- a low long-term interest rate, not exceeding by more than 2 percentage points the average long-term interest rate of the three countries with the lowest rate of price growth.

In addition, a stable exchange rate, assessed over two years of participation in ERM2, is also required for the adoption of the euro.

MAASTRICHT CRITERIA	Inflation (%) last 12 mths (1)	L-t int. rate (%) last 12 mths (1)	Deficit (% of GDP) 2002	Debt (% of GDP) 2002
Belgium	1.4	4.23	0.1	105.8
Denmark	2.3	4.37	2.1	45.5
Germany	1.0	4.11	-3.5	60.8
Greece	3.6	4.33	-1.2	104.7
Spain	3.4	4.18	0.1	53.8
France	2.1	4.17	-3.1	59.0
Ireland	4.3	4.20	-0.2	32.4
Italy	2.9	4.31	-2.3	106.7
Luxembourg	2.7	3.51	2.5	5.7
Netherlands	2.7	4.16	-1.6	52.4
Austria	1.4	4.20	-0.2	67.3
Portugal	3.6	4.24	-2.7	58.1
Finland	1.5	4.20	4.2	42.7
Sweden	2.2	4.67	1.3	52.7
United Kingdom	1.4	4.46	-1.5	38.5
euro area 12	2.1	4.20	-2.2	69.0
Convergence criterion	2.8	6.18	-3.0	60.0
Czech Republic	-0.2	(3) 4.50	-3.9	27.1
Hungary	4.5	(3) 6.99	-9.2	56.3
Poland	0.6	(3) 6.47	-4.1	41.8
Slovenia	6.2	(2) 5.75	-2.6	28.3

Notes:

(1) Last 12 months refers to the average up to and including September 2003 (Netherlands and Greece up to August 2003).

(2) Government bond RS54 (issued October 2003).

Coupon rate used rather than yield to maturity, as required by the Maastricht criterion.

(3) Yield to maturity on 10-year government bonds as at 23 October 2003 (not a 12-month average).

Sources: Statistical Office of the Republic of Slovenia, MF, EUROSTAT, Pre-Accession Economic Programme, central banks.

a.) Inflation

Slovenia does not yet meet the Maastricht criterion for low inflation. While low inflation is relatively simple to bring about in a short-term and transitory way, durable low inflation is considerably harder to achieve. We expect the effects of eliminating the disparity in the price level between Slovenia and EMU to be evident for several more years in the form of moderately higher

inflation in Slovenia. This is mainly due to the so-called Balassa-Samuelson effect, arising from a difference in productivity between the tradable and non-tradable sectors.

The ECB has warned¹⁵ that it will not make any exception in the admission process for new members if candidate countries' inflation exceeds the level set in the Maastricht Treaty, as the latter already allows for higher inflation in the candidate countries due to faster economic and productivity growth.

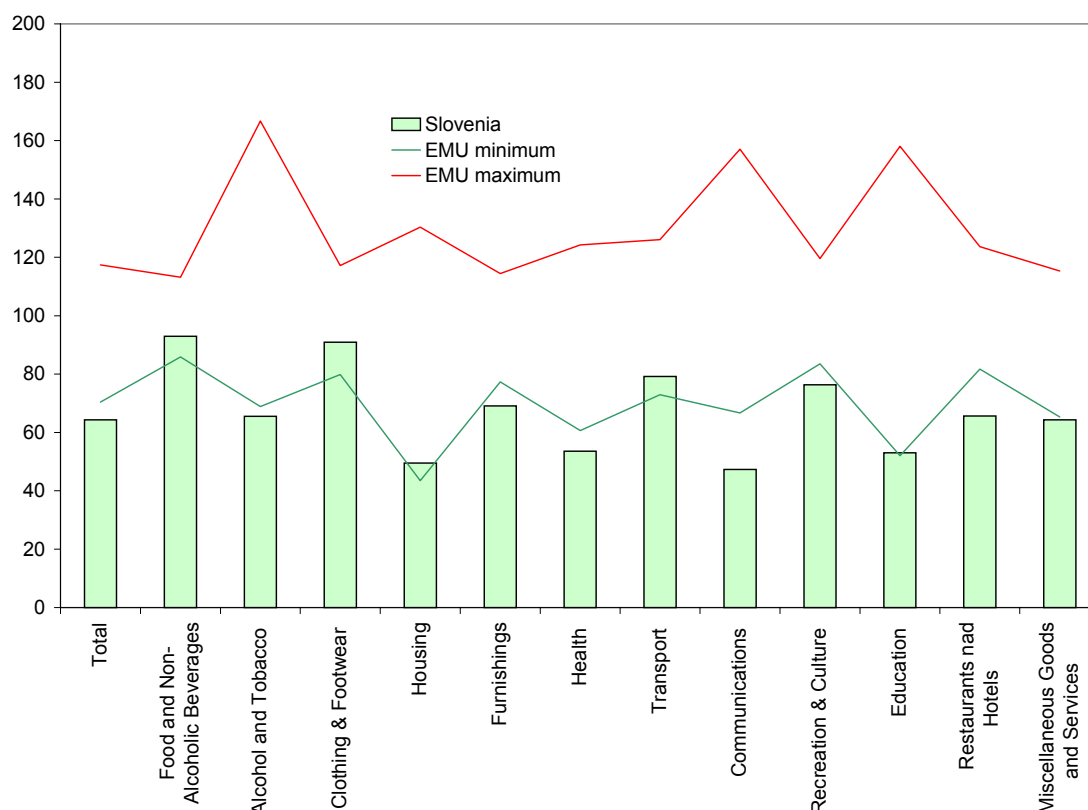
In making its decisions the ECB will not take account of higher inflation in Slovenia or in any other member state. The costs of higher inflation will have to be born by the economy, primarily its tradable part, particularly as the contribution of Slovenian inflation to overall euro area inflation is negligible. The weight on Slovenia in the index of consumer prices (forecast to be around 0.3%), and hence its contribution to overall EMU inflation, is negligible because of Slovenia's small fraction of total EMU GDP and population. If we assume that the difference in inflation between Slovenia and the euro area due to the Balassa-Samuelson effect would be 1.5 percentage points, a 0.3% weight would raise overall EMU inflation by 0.004 percentage points.

Conversions of the price level may be a source of inflationary pressure for a relatively long period to come. Because of the low price level, which is mainly the effect of a lagging-behind of prices in the non-tradable sector, price growth can be expected to remain higher in Slovenia than in the EMU countries in coming years. Assuming that price growth in Slovenia exceeds average price growth within EMU by 1.5% points per year, it would take Slovenia 13 years to attain the average price level of the euro area and around 32 years to catch up with average prices in the EU.

The price level in Slovenia is lower than the average in the EU and EMU. Analysis of price levels shows that the overall price level in Slovenia is around 63% of that in the EU and around 66% of that in the euro area, and therefore lags behind the price level in the EU by 37% and behind the price level in the euro area by 34%. Differences in the price level also exist among countries that are already EU members. The price level in Sweden is 27% higher than the EU average, while the price levels in Portugal and Greece are lower than the EMU average by 24% and 15% respectively.

¹⁵ ECB (2002)

Figure: Comparison of price levels in individual categories of goods and services



Source: Eurostat

The price level primarily lags behind in the non-tradable sector, while prices in the tradable sector are comparable with those in the EU and the euro area. A comparison of the level of prices of particular categories of goods and services shows that goods prices in Slovenia are very similar to average goods prices within EMU (food and non-alcoholic beverages are only 7% behind), while the disparity in prices of services is considerably larger (the prices of education and healthcare services are little more than half the average level within EMU). Differences in the structure of relative prices in Slovenia – disparities between the prices of particular groups of goods and services and the average price level – are therefore also larger than on average within EMU, although they are comparable with those in countries with a similar price level, such as Portugal and Greece¹⁶. This implies faster future price growth in services, or the non-tradable part of the economy, as the economy undergoes real convergence towards the average for the common currency area¹⁷. Since prices in the tradable part of the economy, which are already almost up to the EMU level, will grow at similar rates to those in the

¹⁶ Čihak and Holub (2001)

¹⁷ See chapter "The process of catch-up with the most developed countries within EMU is not an obstacle to price stability".

EMU once Slovenia is inside the common economic area, overall price growth in Slovenia will be faster than the EMU average because of the faster growth of prices in the non-tradable sector. A positive relationship of this kind between the level of prices and the level of GDP, or between price growth and GDP growth, is already observed in EMU member states.

It is to be expected that **increased market integration, improved price transparency and real convergence will continue to reduce disparities in price levels.** Moreover, it is not necessarily the case that the general price level will converge towards the lowest prices. It could be instead that prices in economies with a low price level adjust upwards, depending on product attributes¹⁸. If major differences in inflation rates were to arise despite increased market integration and real convergence, this could cause disproportionate changes in competitiveness and imbalances in individual countries. In this case structural policy measures, which are the responsibility of the individual member states of the common currency area¹⁹, would be necessary in order to eliminate price disparities.

b) Interest rates

The Maastricht criteria specify a permitted deviation of the long-term interest rate from the average for the three countries with the lowest inflation rates. The level of interest rates reflects both investors' confidence in financial instruments and their inflation expectations. Choosing a reference interest rate for government bonds in a country with a relatively illiquid market for government securities is difficult, because interest rates do not necessarily reflect the true level of confidence or the true expectations of investors, due to the relatively small volumes of primary issues and the consequently low market capitalisation. According to the criteria decided at the beginning of 2003, Slovenia fulfils the Maastricht interest rate criterion for tolar-denominated bonds with a fixed interest rate. The criteria for determining the relevant interest rate, and with it the government bond to be used for the time being in establishing whether the interest rate criterion is satisfied, were determined earlier this year.

c) Fiscal criteria

The scope for using national fiscal policy measures to limit or eliminate the effects of asymmetric shocks is restricted within EMU by fiscal criteria relating to the size of the budget deficit and government debt and by the need to comply with the Stability and Growth Pact. Although the public financial position in Slovenia meets the Maastricht criteria, the budget deficit calculated according to

¹⁸ European Commission (1998)

¹⁹ ECB (1999)

ESA95 methodology has been very close to the 3% limit in recent years. According to official projections for the next few years the budget deficit will shrink and balance will be achieved in the medium term. Government revenues and expenditures are both below the EMU average and are at an appropriate level if compared with EU member states at a similar level of development.

The stock of outstanding government debt is equal to around 30% of GDP, well below the Maastricht limit of 60%. In view of the projected reduction of the budget deficit and the anticipated progress towards balanced government finances, this public finance indicator can be expected to show only a mild deterioration.

d) Timescale for meeting the Maastricht criteria

Table of anticipated fulfilment of the Maastricht criteria:

	2003	2004	2005	2006	2007
Inflation			✓	✓	✓
Interest rate	✓	✓	✓	✓	✓
Government deficit	✓	✓	✓	✓	✓
Government debt	✓	✓	✓	✓	✓
Exchange rate stability		✓	✓	✓	✓

2. Real convergence is adequate

Although it is not a formal criterion for adoption of the euro and is often referred to as an informal requirement, Slovenia already satisfies real convergence. No mention is made of real convergence as criterion for entry into monetary union in any ECB or European Commission document. Nor are these criteria quantified in the way that those for nominal convergence are. The Maastricht Treaty indirectly mentions a need for economic and social cohesion, which is intended to eliminate disparities between countries and regions, but criteria for real convergence are not specifically laid down.

Moreover, the requirement for real convergence is divided into income and structural convergence. Income convergence relates mainly to the level of GDP per capita and prices, while structural convergence encompasses reform of the institutional framework within which the economy operates. Real income convergence and structural convergence are closely related. Structural convergence and

institutional reform can be viewed as a basis for a more favourable business environment and a more efficient allocation of financial resources in future, while real income convergence is usually measured using GDP per capita, which is an indicator of the level of development of the country. Real income convergence has already been discussed in detail as one of the criteria for an optimum currency area.

In considering structural convergence we encounter a measurement problem, as it is not directly quantifiable. We can only use the results of surveys such as the one carried out by the World Bank (2001) on the quality of governance, which includes indicators of government accountability, the level of development of the legal system, public administrative efficiency and the quality of the judicial system. The results of the survey show Slovenia to be somewhat behind the EU average on most indicators, but comparable with Italy, Portugal and Greece, and in some respects even France and Belgium.

E. SLOVENIA IS READY FOR AN EARLY ADOPTION OF THE EURO

Slovenia forms an optimum currency area with EMU. This means that Slovenia's entry into EMU will not constrain the ECB in its conduct of an effective common monetary policy not merely because of the small size of the Slovenian economy in relation to the euro area. The Slovenian economy is strong and robust enough to cope with the changes in the environment, and does not need special treatment by the ECB.

The probability of asymmetric shocks (shocks specific to Slovenia) is low – since the structure of the Slovenian economy is sufficiently similar to the structure of the European economy. Slovenia is adequately able to absorb any asymmetric shock that should nevertheless arise. Slovenia maintains macroeconomic balances and its labour and capital markets are sufficiently flexible although there are still some rigidities in the labour market. Fiscal policy is also balanced and capable of response. In order to further increase the ability of economy to respond to asymmetric shocks, there is a need to further modify the mechanisms for determination of wages in public sector in the way it will be tied to real economic developments and mechanisms for valorisation of transfers. At the same time there is need for restrictive planning and control of non-investment public spending, although major steps to abolish indexation have already been made.

Another important fact is that the catch-up process in Slovenia is in sufficient measure complete and the remaining effects of catch-up will not have a serious negative impact on the achievement of price stability either in Slovenia or in the euro area. In view of the lengthy duration of the catch-up process, its low intensity and its weak inflationary impact, it does not make sense to delay entry into ERM2 and hence the adoption of the euro.

Finally, we expect Slovenia shortly to satisfy the formal requirements – the Maastricht criteria, which serve as a formal substitute for economic reasoning regarding a country's readiness to adopt the European single currency. Slovenia will meet these criteria during its participation in ERM2, when their fulfilment will be examined.

Slovenia can thus get ready to adopt the euro in the following two years. Before Slovenia will adopt the euro as common currency it needs to take part in ERM2 by a minimum of two years. In the next chapter economic policies required to successfully co-operate within ERM2.

II. RISKS ASSOCIATED WITH ERM2 AND ADOPTION OF THE EURO AND THEIR MANAGEMENT

Five Maastricht criteria need to be met for adoption of the euro. Only one of the criteria – the inflation measure – is Slovenia still some distance from meeting. Most of the other accession countries are in the reverse position – they meet the inflation criterion but are a long way from fulfilling the other criteria reflecting budgetary and balance of payments stability. The existence and sustainability of macroeconomic equilibria is an advantage for Slovenia in terms of adoption of the euro, the route to which leads via the European exchange rate mechanism. But as far as maintaining this position is concerned it is important to recognise that on entry to the EU the circumstances for conducting policies, which create equilibrium will change. This is why EMU entry has to be accelerated.

Monetary policy independence will be lost in defining the monetary policy stance. The ability to use exchange rate policy to close the uncovered interest parity will diminish as soon as Slovenia joins the EU because at that point the provision of the Europe Treaty stipulating that the exchange rate is a matter of common interest for the member state concerned and the other members of the EU begins to apply. Thus in the event of shocks the Bank of Slovenia will be unable to react using interest rates differing significantly from ECB rates. Otherwise, in conditions of free flow of capital, the Bank of Slovenia independently setting interest rates would only exacerbate the shocks instead of easing them.

Coordinated action by the Government and the Bank of Slovenia will enable appropriate responses to be taken in the event of shocks so as to even out their impact. After Slovenia joins the EU it will be fiscal policy that carries the biggest burden. Therefore the Government envisages a gradual reduction in the structural deficit in the public finances. But other economic policies, in the short run, do not provide the flexibility offered by monetary policy in terms of the way they act and their effect. Hence the period in which Government policies operate in a monetary environment that will be under the decisive influence of the ECB, although while Slovenia still retains its own currency, has to be reduced to the minimum duration required under EMU rules. A delay in carrying out the structural reforms could extend the time Slovenia remains within ERM2 beyond the minimum period required, which would jeopardise inclusion in EMU and cause a loss of competitiveness, commercial losses and high unemployment in the tradable sector. This would lead to a rise in structural budget expenditures to deal with the resulting social consequences and ultimately to instability in the financial sector as a whole. Delaying the adoption of the euro (and in this context early entry into ERM2 and fulfilment of the Maastricht criteria) only increases the likelihood of such scenarios.

The programme for entry to ERM2 comprises a range of measures enabling a reduction in inflation to the level required by the Maastricht criteria in 2005 and stabilisation of the tolar exchange rate with no deterioration in other macroeconomic results. Given the understandable uncertainty, this process is subject to certain risks during the preparations for ERM2 and participation within the mechanism. The Slovenian Government and the Bank of Slovenia consider these risks to be manageable, but of course they need to be recognised in time and responded to with suitable measures.

In terms of their effects on the macroeconomic variables we can divide the risks into two groups:

(a) *exchange rate risks* are those that can cause excessive fluctuation in the exchange rate exceeding the limits of ERM2. For this to happen would mean a serious loss of credibility and would extend the time spent within ERM2, and could eventually lead to pressure for a change in the central parity. The principal exchange rate risks are:

- ***increased speculative inflows of capital*** motivated by uncovered interest parity. The danger of speculative inflows can increase in the event of inappropriate economic policies leading to speculation of a change in the exchange rate or the central parity. Hence consistent implementation of the policies set out in this programme also provides the best protection against such risks.
- ***increased inflows of capital from the sale of assets*** which the Bank of Slovenia is unable to sterilise sufficiently could cause an appreciation of the domestic currency and increased liquidity within the banking system as a result of the increased supply of foreign exchange. To a large extent this risk is managed by virtue of the Government and the Bank of Slovenia coordinating the pace at which state-owned assets are sold off and thus the rate at which payments are received.
- ***increased liquidity*** as a result of the structure of the Bank of Slovenia's monetary policy instruments being brought into line with ECB rules. The volume of tolar- and foreign currency-denominated central bank bills will have to be reduced irrespective of when Slovenia enters ERM2, but even this risk can be managed without increasing the size or costs of the public debt if a suitable agreement is reached between the Bank of Slovenia and the treasury.

(b) *macroeconomic risks* are those that can cause an increase in the macroeconomic imbalances (increased inflation, increased budget deficit or an increased balance of payments deficit). This could cause a delay in adoption of the euro either directly (non-fulfilment of the Maastricht criteria within the reference period) or indirectly by increasing exchange rate fluctuation. Maintaining the macroeconomic equilibrium will depend increasingly less on monetary policy, thus the capacity for fiscal policy to respond and flexibility in the labour market must be expanded. The principal macroeconomic risks are:

- ***an inflationary increase in domestic consumption***, which could occur with a fall in real interest rates at a time when nominal interest rates are coming into line with European rates while inflation remains above the European average. Low interest rates can cause increased borrowing for consumption purposes and hence an increase in aggregate demand, which can lead to higher inflation, an increased appreciation of the tolar in real terms and a deepening of the balance of payments deficit. But there are a number of reasons why an increase in consumption would not have an immediate inflationary effect: (i) even in the event of a short period of negative central bank real interest rates it would be unrealistic to expect the commercial banks not to charge their customers at least minimally positive real lending rates; (ii) part of the increase in the volume of lending will be channelled towards financing of real investments by the private sector or profitable financial investments; (iii) part of the increased demand will be satisfied by purchases abroad or by purchases of domestic goods and services for which there exists effective market competition which will prevent prices from rising; (iv) increased demand will stimulate not just a rise in prices but also an increase in supply, especially because capacities are currently under-exploited as a result of weak economic growth; increased demand will therefore raise not just the aggregate price level but also real economic growth; (v) the expected slow growth in wages and other incomes and the still uncertain conditions in the labour market; (vi) a large engagement of households current and future funds in the national housing scheme. We believe that the Bank of Slovenia's interest rates can be adjusted in such a way as to maintain positive real interest rates given coordinated action on the part of the other policies with which inflation is kept within the Maastricht criteria. If nevertheless we see increased consumption with significant inflationary effects then fiscal and incomes policy will need to respond with greater restrictiveness.
- ***upward pressure on the prices of nontradable goods and services***, which could come about as a result of the still unbalanced structure of domestic relative prices, the slower productivity growth in the nontradable part of the economy or an increase in taxation. The economically substantiated faster increase in prices in the nontradable part of the economy is described by the Balassa-Samuelson effect, which we estimate at 1 – 1.5 percentage points. Assuming that the growth trend for free prices will be towards alignment with EU inflation, this level of increase in nontradable prices will not jeopardise achievement of the Maastricht criteria. Excessive one-off pressures for adjustments to particular prices will need to be prevented, which the Government can achieve through: (i) restricting the growth of regulated prices to no more than the inflation target, forcing providers to operate more efficiently; (ii) efforts to ensure that independent regulators also take account of macroeconomic restrictions when setting the prices for which they are responsible; (iii) restricting public sector wage growth; (iv) gradual introduction of competition in infrastructure and the nontradable sectors; (v) gradual structural adjustment of tax burdens where justified by

policy objectives, such as environmental protection or reducing the levels of energy-use in the economy; in general this will be after the adoption of the euro.

- ***an upturn in the economy***, which could put pressure on inflation through increased demand and through faster growth in the prices of foreign manufacturers. This risk is probably less important because an upturn in the economy would also stimulate a rise in production as well as prices, and furthermore a simultaneous recovery in the European economy, if it had an inflationary effect, would also mean an adjustment in the reference values for achieving the inflation target.
- ***an increase in the budget deficit***, which could come about if there is a fall in budget revenues at the same time as a rapid reduction in inflation. However, reduced inflation would also lower certain important public expenditures because both public sector wage rises and the majority of social transfers are linked to expected inflation. Although a slight increase in the budget deficit would not have an inflationary effect nor jeopardise fulfilment of the Maastricht criteria, it would significantly reduce the flexibility in the public finances and hence the possibility for fiscal policy action in the event of changes in macroeconomic conditions. Therefore the Government will adopt measures that will bring anticipated budget expenditures into line with expectations of a faster reduction in inflation.
- ***external oil shocks*** which the Slovenian Government would be unable to control using the excise duty mechanism. It is estimated that this risk is low but if such shocks were to occur the Government would have to prioritise the inflation target.

Appropriate management of these risks using the economic policies for which the Bank of Slovenia and the Slovenian Government are responsible will also ensure maintenance of the macroeconomic equilibria and continuation of the process of real convergence. And in connection with the achieving of macroeconomic equilibria, restrictive incomes policy and price policy measures and industrial policy measures will also prevent significant imbalances in the labour market when Slovenia joins ERM2.

We should also mention the institutional risks concerning interpretation of the Maastricht criteria. Until now the measurement has been calculated using the inflation level in the three countries with the lowest inflation in the whole of the EU, but inflation in some of the new members is already significantly below the average of the countries in EMU. A more sensible approach would be to use inflation in the eurozone because joining ERM2 is about preparing for adoption of the euro and because very low inflation in a particular country may be an indication of macroeconomic imbalances (for example, a recession). A suitable adjustment of the rules would facilitate fulfilment of the criteria but it is unlikely to happen. Therefore this programme is drawn up on the assumption that the current criteria will remain in force.

The Bank of Slovenia and the Slovenian Government have adopted the goal of lowering inflation to a level which will mean compliance with the Maastricht criterion in the period necessary for adoption of the euro at the start of 2007. This means that year-on-year inflation must fall to 2.9% by the middle of 2005. This plan presupposes entry to ERM2 by the end of 2004. But before this a nominal convergence of interest rates must be achieved to enable exchange rate stabilisation before the central parity is determined. At the same time, by the first half of 2005 a low inflation policy will need to be applied to the structural adjustment of relative prices and to decisions concerning tax and administrative effects on prices. Inflation rates from mid-2005 to mid-2006 must on average be within the Maastricht price stability criterion (currently 2.8%) as fulfilment of the criterion is calculated on the basis of a 12-month average of year-on-year inflation rates.

Before it can adopt the euro Slovenia must meet the Maastricht criteria, hence the importance of the procedure for assessing their fulfilment. Under the regular procedure the European Commission would make its assessment of Slovenia's readiness to adopt the euro and its conformity with the Maastricht criteria in January or February 2006, or following an extraordinary procedure at Slovenia's request in the autumn of 2006. In the first case the period for assessing fulfilment of the Maastricht criteria would run from September 2004 to August 2005, and in the second case from June 2005 to May 2006. The second option is more suitable as fulfilment of the Maastricht criteria will be possible from mid-2005 onwards.

Basic elements for calculating the Maastricht price stability criterion

The Maastricht price stability criterion: inflation must not exceed by more than 1.5 percentage points the rate of inflation in the three EU countries with the lowest inflation.

- Price stability is calculated using the 12-month average of the annual rates of the harmonised consumer price index.
- The assessment of fulfilment of the criterion is made by the European Commission and the ECB, and is adopted by the European Council at the level of heads of state and government. Prior to this the European Council receives the opinions of ECOFIN and the European Parliament.
- The Maastricht inflation criterion is currently 2.8% (August 2003)

III. POLICY MIX IN ERM2

A. MONETARY POLICY UNTIL SLOVENIA JOINS ERM2 AND IN TIME OF ERM2

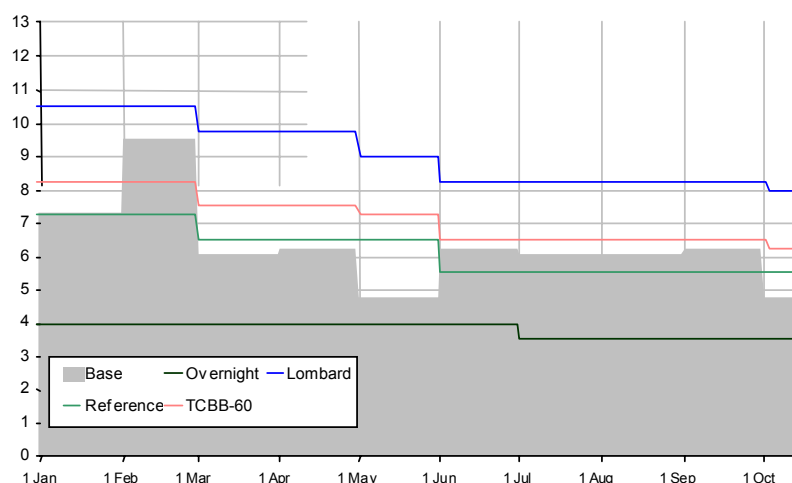
1. Monetary policy until Slovenia joins ERM2

Bank of Slovenia monetary policy will continue to be oriented towards bringing down inflation.

The Bank of Slovenia will take account of the need for nominal convergence and macroeconomic factors underlining it in simultaneously determining movements in nominal interest rates and the exchange rate. Decisions on interest rates and euro exchange rate growth are largely influenced by the fact that in the period until ERM2 entry we are not anticipating significant supply-side or demand-side inflationary pressures or an excessive growth in bank loans.

Interest rate policy until ERM2 entry will be oriented towards a gradual reduction of nominal interest rates. The rate of reduction of domestic nominal interest rates is limited by the still relatively high domestic rate of inflation. Even a reduction in nominal interest rates can lead to increased credit activity. But if this also means a large drop in real interest rates then the increase in bank lending will be even greater, which would increase a current account deficit. Therefore an achievement and maintenance of Maastricht inflation criteria as soon as possible after entering ERM2 is of even greater importance.

Figure: Bank of Slovenia interest rates



Source: Bank of Slovenia

Exchange rate policy will seek to secure an appropriate closing of the interest parity along with the gradual reduction in nominal interest rates. An appropriate differential between interest rates in Slovenia and in the eurozone equalises the conditions for borrowing at home and abroad and allows domestic lending rates to be brought into line with lending conditions abroad. This policy is oriented towards maintaining a stable long-term external equilibrium without increasing the inflation risk over the long run. On the investments side the adjusting of uncovered interest parity helps to equalise expected rates of return on investments in financial instruments of equivalent value (financial assets or securities) in tolar and euros or other foreign currencies. Thus it works to restrain the motives triggering inflows of speculative capital, which in the short term could destabilise the financial market and consequently the stability of prices.

The gradual convergence of nominal interest rates will narrow the gap between interest rates at home and abroad to the extent that stabilisation of the exchange rate will be possible on entry to ERM2. With approximately equal levels of nominal interest rates monetary policy will be oriented towards maintaining interest parities within bands that do not give rise to speculative movements in short-term capital and consequently do not cause large fluctuations in the exchange rate. Bank of Slovenia will try to maintain a positive level of real interest rates within the Maastricht inflation criteria.

Table: Application of the principle of uncovered interest parity in 2002 and 2003

m onth	Change				Level			
	TCBB 60 day	sw ap rate	signalled ER dynam ic	ECB refinanc. rate	TCBB 60 day	sw ap rate	signalled ER dynam ic	ECB refinanc. rate
Application of principle of uncovered interest parity in 2002								
January					7.5	5.0	4.0	3.25
January	0.25	0	0	0	7.75	5.0	4.0	3.25
March	0.25	0	0	0	8.0	5.0	4.0	3.25
April	0.25	-0.25	-0.25	0	8.25	4.75	3.75	3.25
May	0.5	0	0	0	8.75	4.75	3.75	3.25
December	-0.5	-0.25	-0.25	-0.5	8.25	4.5	3.5	2.75
Application of principle of uncovered interest parity in 2003								
March	-0.75	-0.5	-0.5	-0.25	7.5	4.0	3.0	2.50
May	-0.25	0	0	0	7.25	4.0	3.0	2.50
June	-0.75	-0.5	-0.2	-0.5	6.5	3.5	2.8	2.0
October	-0.25	0	0	0	6.25	3.5	2.8	2.0

Source: Bank of Slovenia

2. Monetary policy during participation in ERM2

In ERM2 monetary policy will be most influenced by elements that will be relatively independent of Bank of Slovenia decisions. Three elements in particular should be mentioned:

- interest rates in the eurozone, which are set on the basis of ECB monetary policy;
- the risk premium, which results from the perception of country risk and currency risk by foreign investors and foreign creditors;
- inflationary pressures.

The biggest impact of these elements will be on the monetary policy instruments, i.e. the exchange rate and interest rates.

When Slovenia is participating in ERM2 the rate of convergence of nominal interest rates will depend on how quickly the risk premium falls and on ECB interest rate policy.

- As far as ECB interest rate policy is concerned we can assume two things: that nominal interest rates on average will remain unchanged and that as economic growth in the EU picks up the ECB will gradually raise nominal interest rates.
- We can assume that the rate of reduction of the risk premium will vary. Those countries that have adopted the euro have achieved a considerable reduction in their risk premium; in fact it has been reduced almost to zero. We can assume therefore that the risk premium will fall, and we estimate that a faster reduction is more probable given that the risk premium fell rapidly even at the time of the referendum on joining the EU.

There is a very strong likelihood that real interest rates will be low, or at times very low.

In view of the fact that after the tolar enters ERM2 the Bank of Slovenia will have to consistently ensure coverage of differences between interest rates in Slovenia and in the eurozone and ensure a stable exchange rate with the euro, it will not always have the means to achieve the desired level of real interest rates and hence to achieve the desired level of monetary policy restrictiveness necessary to control inflationary pressures. This is particularly important in the case where low real interest rates lead to increased demand for bank loans and to excessive final consumption. Government support for Bank of Slovenia action to restrict final consumption will therefore become even more important.

While the tolar is in ERM2 the exchange rate will be exposed to the effects of the market, particularly the effects of free flow of capital. And while the conditions for a sustained external equilibrium are

maintained the exchange rate can also be influenced by one-off movements of capital originating from the privatisation of state assets. It will not be possible to maintain exchange rate stability in the face of such movements without the cooperation of the Slovenian Government.

The redemption of tolar and foreign currency liquidity from Bank of Slovenia instruments can also affect exchange rate stability. Thus the Bank of Slovenia and the Government need to work together to find ways in which management of the public debt can prevent such effects without increasing the size of the debt.

Only joint and coordinated action on the part of the Government and the Bank of Slovenia will ensure fulfilment of the exchange rate stability criterion during the ERM2 period.

B. FISCAL POLICY IN ERM2

A prerequisite for Slovenia to adopt the euro and join EMU in 2007 is for it to comply with the Maastricht criteria during the period when the tolar is in ERM2 in 2005-2006. This section provides an overview of the projections concerning fulfilment of the Maastricht criteria.

1. Fiscal criteria

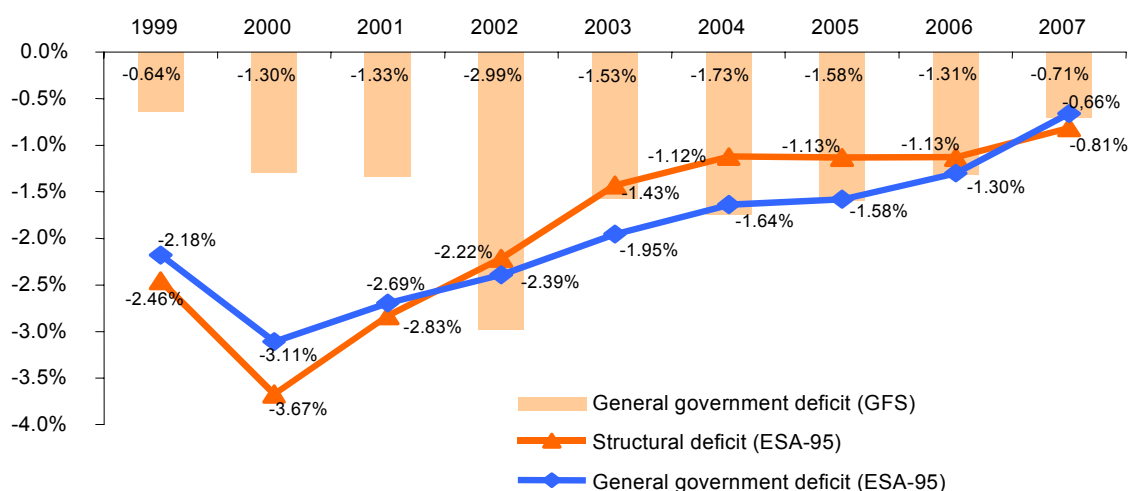
a) Budget deficit

Slovenia will continue to meet the condition stipulating that the budget deficit must not exceed 3% of GDP. According to the *Budget Memorandum for 2004-2005* and the *PEP 2003*, Slovenia's budget deficit expressed as a percentage of GDP (using ESA 95 methodology) will fall from 1.64% in 2004 to 1.58% in 2005, 1.30% in 2006 and 0.66% in 2007. The originally planned faster reduction in the deficit has been put back to 2007 owing to the economic downturn and additional membership obligations connected with international integration (*PEP 2003* and *Budget Memorandum for 2004-2005*). The speed of reduction in the deficit cannot be divorced from the situation in the international economic cycle.

According to the *PEP 2003* Slovenia will retain a very good position compared to the other EU accession countries as far as its budget deficit as a percentage of GDP in the period 2004-2006 is concerned. Slovenia also has a historically very low deficit in comparison with the other accession countries as well as some of the current EU member states. Large deficits as a rule are connected with high borrowing requirements, which can invite speculative inflows or a strengthening of the nonresident accounts of domestic debt creditors, which creates pressure on the exchange rate and

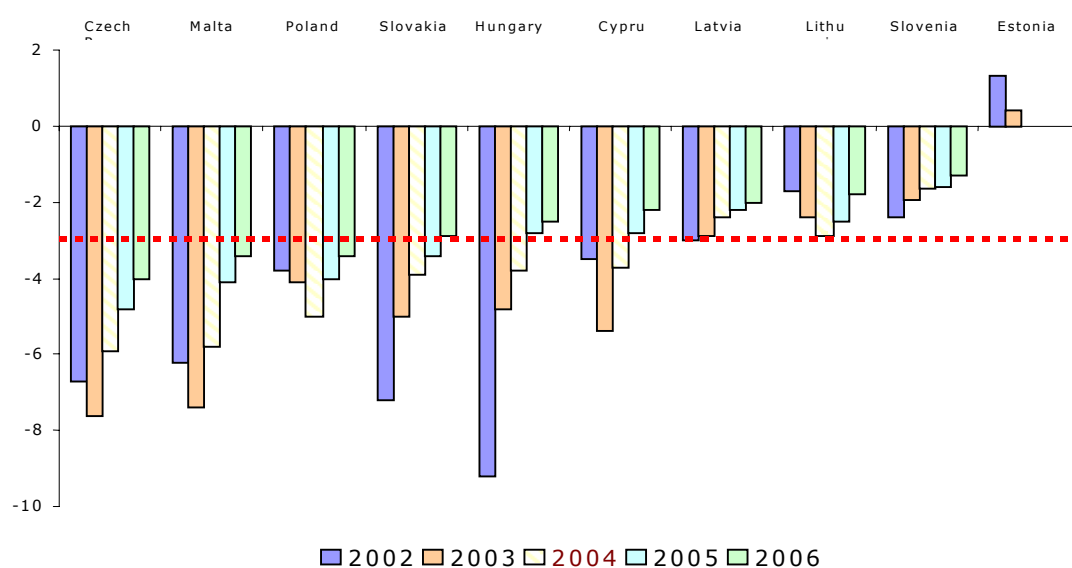
macroeconomic vulnerability. The scenario of a small deficit envisaged for the period of participation in ERM2 thus has the goal not only of meeting the Maastricht criterion relating to the deficit but also of ensuring macroeconomic stability and preventing the potential for speculative attacks on the domestic currency. In this way fiscal policy will support the Bank of Slovenia's efforts in conducting its existing exchange rate policy.

Figure: General government deficit according to national methodology and overall and structural general government deficit according to ESA-95 methodology (as % of GDP)



Source: Ministry of Finance

Figure: General government deficit as a percentage of GDP (PEP 2003)



Source: Ministry of Finance

As stated earlier, the Government is not only envisaging a small general government deficit in the period 2004-2005 but is also planning a further reduction in the size of the structural deficit to a level below 1% in 2007. The Government's medium-term fiscal policy goal, as set out in the *PEP 2002* and *PEP 2003*, is to achieve a balanced budget with zero structural deficit. A similar policy on the structural deficit is planned for the eurozone in the *Stability and Growth Pact*.

Short-term fiscal pressures connected with international integration processes mean that the reduction in the deficit will be slower than in the period 2000-2003. Nevertheless, the estimated structural deficit in the public finances for the period 2004-2007 is in line with the requirement for the budget deficit not to exceed the prescribed level of 3% as it takes account of the sensitivity of the deficit to fluctuations in the economic cycle. The implementation of this policy will enable fiscal policy to be more responsive to needs arising out of the position in the economic cycle. For this purpose the importance of, and opportunity to apply, the fiscal stabiliser would need to be increased. In this regard the policy of restructuring budget revenues and expenditures, as set out in the *Budget Memorandum for 2003-2004*, will play an important role.

Fiscal policy will also help to accelerate the process of real convergence. The budgets for 2004 and 2005 envisage measures aimed at improving the flexibility and structure of budget expenditures intended for development priorities. On the revenues side the Government plans to reduce the tax burden on labour and increase tax incentives in the area of research and development, which should improve the competitiveness and development potential of the economy.

The Government will gradually reduce the structural deficit in the public finances and limit the cost pressures arising from administered prices and tax increases. Along with its policy on administered prices, the Government will also act on prices that are under its indirect influence (prices controlled by state agencies, prices in public companies which are majority-owned by the state, the effects of tax and administrative measures being passed on to free prices). Directly and indirectly administered prices must not be allowed to rise faster than the maximum inflation rate enabling entry to ERM2 and adoption of the euro. In order to restrict indirect effects on prices the Government will conduct a coordinated policy on excise duties and tariffs. With this policy and also, in the short run, by controlling prices which are formed monopolistically or administratively insofar as the law allows, the Government will contribute to fulfilment of the inflation criterion. Through active implementation of structural reforms it will also help, in the long run, to bring about competition in sectors that are still insufficiently competitive.

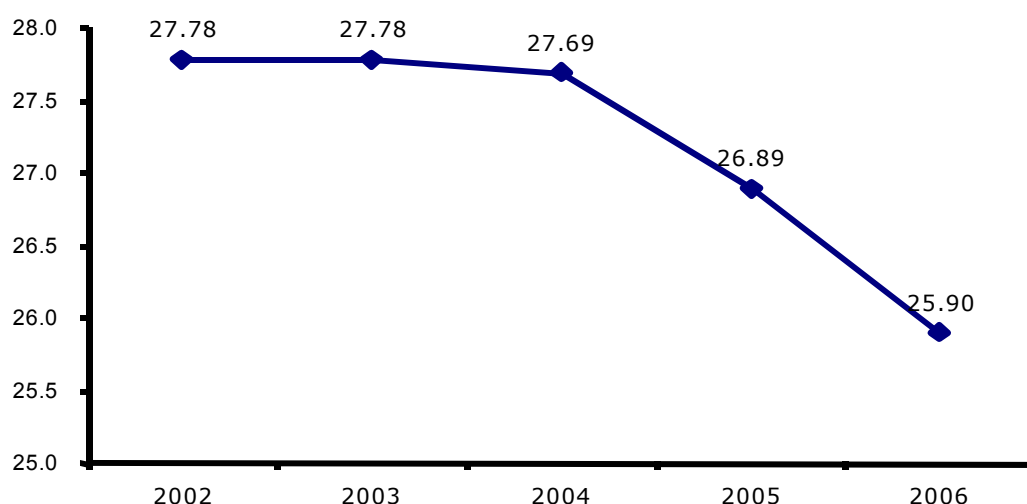
Government will endeavour to further modify the mechanisms for determination of wages in public sector and modify mechanisms for valorisation of transfers in a way to ensure public finance sustainability while preserving a real level of transfers ensuring a minimum standard of living. At the

same time restrictive planning and control of public spending will limit the growth of non-investment public expenditure. The Government will actively apply the solutions, which it envisaged in the Budget Implementation Act for 2004.

b. General government debt

At the end of 2002 the general government debt stood at 27.8% of GDP, which is well below the Maastricht criteria reference figure of 60% of GDP. Given the low level of budget deficit expected in the next few years the ratio of debt to GDP will continue to decline. The central government debt, which makes up the majority of general government debt, is projected to fall to 25.9% of GDP by 2006 (*PEP 2003*).

Figure: General government debt (2002) and central government debt (2003-2006) as a percentage of GDP (*PEP 2003*)



Source: Ministry of Finance

Slovenia has a smaller general government debt than the current and future EU member states. The relative size of the debt is important as far as assessing the sustainability of the public finances is concerned. Nevertheless, even when the debt is small compared to GDP it can still be a source of macroeconomic vulnerability if it is primarily short-term or if debt repayments are not appropriately spread out. However, the maturity of repayments on Slovenia's public debt is suitably balanced and the repayments are spread out over time. Moreover, the bulk of Slovenia's external debt is in euros and payments on the principal will mostly not fall due until after Slovenia has adopted the euro. Therefore this type of currency risk associated with the external government debt (which will certainly persist until then) will be reduced, particularly given that repayment of the interest and the principal on

that part of the external government debt denominated in US dollars is mostly hedged with appropriate derivative financial instruments. In general, the existing currency risks will be reduced after Slovenia has joined the European Union. Fulfilment of the inflation and exchange rate criteria will have the positive effect of reducing significant autonomous growth in the government debt because of differences in inflation and exchange rates.

The Slovenian Government will work together with the Bank of Slovenia in managing the proceeds from the sale of the state's capital investments to nonresidents and they will jointly seek opportunities to deal with the effects of the tolar and foreign currency liquidity made available through Bank of Slovenia instruments for public debt management without increasing the size of the public debt.

c. Interest rates on government securities

The Ministry of Finance regularly issues 10-year and 15-year euro-denominated bonds and 3-year and 5-year tolar-denominated nominal bonds on the domestic market. The ministry recently issued a first 10-year tolar-denominated nominal bond. The issuing of this bond was a logical continuation of the process of building up the yield curve on government debt instruments. The new 10-year bond should become the reference bond for measuring fulfilment of the Maastricht criterion relating to long-term interest rates. The coupon interest rate at issue was within the limits set by the Maastricht criteria. With the continuing reduction in inflation and the gradual elimination of the differences in the risk premium for the tolar and the euro mean, it is realistic to expect the yield on the 10-year tolar-denominated nominal bond to remain within the prescribed limits.

In general, most of the EU accession countries have yield curves that are more or less inverse, reflecting expectations of a reduction in inflation. The shape of the yield curve will normalise when the accession countries achieve a long-term sustained inflation rate in line with the positive productivity differential vis-à-vis the EU. Nevertheless, while in ERM2 the yield curve will still be slightly inverse, reflecting the anti-inflationary stance of the monetary authorities.

C. LABOUR MARKET FLEXIBILITY

Along with fiscal policy, labour market flexibility also has a key role among the mechanisms for ensuring stable economic conditions and cushioning potential shocks within ERM2. Within this framework incomes policy in particular also makes an important contribution to fulfilment of the Maastricht criteria. Its principal tasks are to:

- ensure sufficient flexibility in the labour market in the event of asymmetric shocks;
- prevent cost pressures which affect prices and weaken both competitiveness and the public finance position;
- limit excessive demand-side pressures on the market for goods and services.

Deindexation of wages represents an important step towards increasing flexibility in the labour market and in public spending and achieving a sustained reduction in inflation. The social agreement concluded in July 2003 enables greater flexibility as it lays down a new method of adjusting wages from 2004 onwards which will introduce a partial deindexation and is based on three equal elements (domestic inflation, inflation in selected member states and growth of the euro exchange rate). The public sector wage agreement concluded this year takes account of these elements and will ease the wage pressure on public expenditure. Implementation of an agreement among the social partners over the method of indexation of basic wages in the private sector would supplement the Government's efforts to maintain the competitiveness of the Slovenian economy because of the impact of labour costs, in which wages make up the most important share, on employers' expenses. The wage policy agreement for the private sector in the coming period should also contain guidelines for further negotiations at lower levels, i.e. branch and company collective agreements, concerning the incentive elements of wages policy and performance-based rewards, as well as guidelines concerning employees working on individual employment contracts.

Gradual deindexation of wages over the long run reduces inflationary pressures and also has an important demonstration effect and helps to reduce inflationary expectations. Because exposure to competition means that the private sector has to adapt to cyclical conditions, or asymmetric shocks, in the area of labour costs too, it is primarily in public sector wages that the Government must try to increase flexibility. In the nontradable sector (the whole of the public sector and part of the private sector) there is a lower level of competition and productivity and so additional costs – including labour costs, which represent a large share of total costs – can be transmitted more easily and more fully to its prices.

Along with a gradual deindexation of wages and partly also of social transfers, a major role in making the labour market more responsive to asymmetric shocks will need to be played by the institutional arrangements in the market, which, in line with appropriate tax legislation, will have to ensure greater employment flexibility. Inflexibility in the labour market can be an important obstacle preventing the economy from responding flexibly to a downturn in economic conditions and also to positive economic opportunities. The new labour legislation has already increased labour market flexibility²⁰. Further adjustments will need to focus on increasing employee mobility and strengthening non-standard forms of employment.

Less rigidity in the method of wage-setting, increased flexibility in public sector human resource management, and employment policy measures aimed at reducing structural unemployment and increasing the employability of certain jobless groups will also help to increase flexibility in the labour market. The measures envisaged comprise: additional employment incentives through subsidies (payment of part of the wages of the long-term unemployed receiving social security benefits when they take up employment for an indefinite period); measures to promote employment of unemployed people over the age of 55 (the employer's social security contributions are waived for one year when they employ a registered unemployed person over the age of 55 for at least two years); measures to tackle the problem of unemployed people with university education (an employer who employs for an indefinite period an unemployed person with university education does not have to pay the payroll tax for that person for a period of two years; and in the case of a young person with university education the employer is also entitled to a rebate of the contributions paid).

²⁰ The recent adoption of Employment Relationship Act has moved Slovenia on the scale of employment protection legislation from 26 to 16 place, thus placing it in front of some Euro area countries. See World Bank (2002): Michelle Ribaud, Carlos-Silva Jauiregui, Carolina Sanchez-Paramo: Does Eurosclerosis Matter? Social Protection Discussion Paper Series No. 0202.

IV. CENTRAL PARITY AND THE EXCHANGE RATE FLUCTUATION MARGIN

Entry to ERM2 and adoption of the euro need to be viewed from two aspects. The first concerns the formal framework for participation in ERM2, the procedure for joining and leaving the mechanism, and the method of assessing achievement of the Maastricht criteria. The second aspect concerns certain practical experiences of countries that joined ERM2 and adopted the euro after it was introduced in 1999 because it was only subsequently that they met all the required criteria. The aim of this section is to set out the important concepts, the key legal bases and the various possible scenarios which these legal bases make possible, and, within this framework, also the practical experience of Greece, which was the last country to adopt the euro.

The determination of the central parity at entry, the fluctuation band and the exit exchange rate on adoption of the euro are matters for negotiation. These negotiations proceed according to a strict formal procedure, which includes the issue of informing the public about the results of the negotiations. Until the negotiations are concluded the public may not have access to any information which could in any way indicate the content of decisions that are the subject of negotiations.

1. Key concept in setting central parity

ERM2 is not an exchange rate regime but an exchange rate mechanism that provides a framework within which the exchange rate regime operates. This mechanism includes the currencies of the EU member states which have not yet adopted the euro as the single currency and intend to do so in the near future. Participation in ERM2 is compulsory and is treated as the Maastricht criterion for exchange rate stability. The key concepts related to ERM2 are:

- the central parity rate
- the equilibrium exchange rate
- the market exchange rate at entry
- the fixed exchange rate vis-à-vis the euro
- the fluctuation margin.

The central parity rate in the ERM2 system is a predetermined reference value for the exchange rate of the domestic currency vis-à-vis the euro. The agreement on the central parity rate is multilateral and is adopted by a candidate country for entry to ERM2 in agreement with the ECB, the national banks of the Eurosystem and ECOFIN.

As a rule the level of the central parity rate should not diverge significantly from the equilibrium exchange rate. This is because the equilibrium exchange rate permits the achievement of internal and external equilibrium, which is a prerequisite for long-term stability. The European Central Bank has not yet issued an official opinion regarding the method of setting the central parity rate in the countries that will be entering ERM2.

The equilibrium exchange rate can also change over time, depending primarily on long-term factors such as productivity and structural reforms. The central parity rate for individual member states at the time of entry and during their membership of ERM2 will not necessarily be equal to the equilibrium exchange rate that ensures internal and external equilibrium because of the ongoing process of nominal and real convergence.

The exchange rate at entry, i.e. the market exchange rate prevailing at the time of entry to ERM2, can diverge from the central parity rate for two reasons:

- the market exchange rate at entry to ERM2 does not reflect the equilibrium exchange rate
- the market exchange rate reflects the equilibrium exchange rate but the central parity rate is set in such a way as to incorporate expected changes in the equilibrium exchange rate reflecting anticipated structural and other changes. In other words, the central parity rate will reflect the equilibrium exchange rate at the end of the period of participation in ERM2.

The ERM2 mechanism incorporates two kinds of flexibility:

- In the case of temporary pressures on the exchange rate, these are absorbed by fluctuations within a relatively broad exchange rate fluctuation margin and by automatic and quantitatively unlimited exchange rate interventions by the ECB at the margin.
- In the case of constant and unsustainable pressures on the exchange rate, ERM2 permits changes in the central parity rate. ERM2 is based on the principle that the exchange rate should be as freely determined by the market as possible. The frequency and intensity of exchange rate interventions is an indicator of the sustainability of ERM2 given an unchanged central parity.

The central parity rate can thus be changed during the period of participation in ERM2, although the change is treated differently depending on its direction.

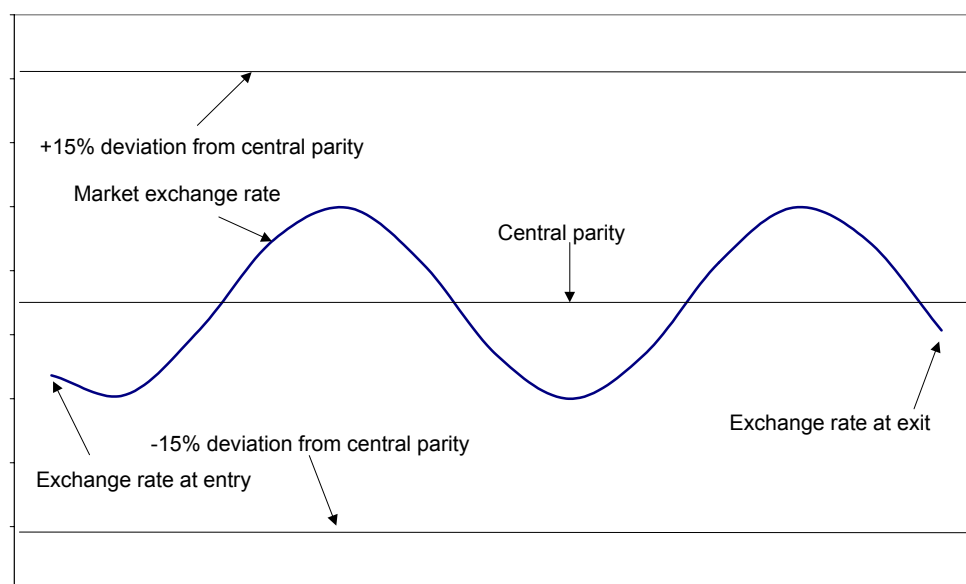
- Revaluation of the central parity rate has no impact on the fulfilment of the Maastricht criteria.
- Devaluation (a reduction in the value of the central parity rate of the currency of a member state) is treated as a failure to fulfil the Maastricht criterion for exchange rate stability within ERM2 in the prescribed timeframe of at least two years. The period of participation in ERM2 is therefore automatically extended and the adoption of the euro as the country's own currency automatically deferred for at least two more years.

The unequal treatment of revaluation and devaluation of the central parity rate is based on the notion that countries have an incentive to create a competitive advantage vis-à-vis the other countries participating in the euro area and ERM2 through devaluation of the central parity rate.

The fixed exchange rate vis-à-vis the euro at which the currency of a member state is tied to the euro is determined at entry to ERM2 and may be changed through revaluation or devaluation while in ERM2.²¹ Conversion rate of the currency towards euro at entry to EMU may differ from the central parity valid until then. Participation in ERM2 is therefore also an opportunity to seek an appropriate level of the exchange rate²², although the setting of the fixed exchange rate vis-à-vis the euro will be subject to special negotiations. Nevertheless there is a strong likelihood that the fixed exchange rate vis-à-vis the euro will be identical or very close to the central parity rate in effect at the time of the transition from ERM2 to EMU.

The fluctuation margin within which the market exchange rate can vary is set within $\pm 15\%$ of the chosen central parity rate. The ERM2 member states may also unilaterally (or bilaterally by agreement with the ECB or the central bank of any other member state) specify a narrower band of exchange rate movements than $\pm 15\%$. The fluctuation margin is primarily important for intervention in support of the currency of the member state.

Figure: Graphical depiction of some concepts relating to the operation of ERM2



²¹ ECB 2002b: p. 6

Since ERM2 is not an exchange rate regime but merely an exchange rate mechanism that provides a framework within which the exchange rate regime operates, the path and trend of movements in the market exchange rate of the ERM2 member currency will depend on the chosen exchange rate regime and the level of the exchange rate at entry relative to the central parity rate. The $\pm 15\%$ band for deviation from central parity provides a relatively high degree of flexibility in the determination of the market exchange rate as well as broad scope for the choice of exchange rate regime. In the assessment of ECOFIN²³, the following exchange rate regimes are unsuitable for participation in ERM2 and are ruled out in advance:

- a free floating exchange rate,
- a managed floating exchange rate without a central parity rate,
- a crawling peg exchange rate,
- pegging of the domestic currency to any currency other than the euro.

²² ECB: 2002a: p. 5

²³ “*Report by the (ECOFIN) Council to the European Council in Nice on the Exchange Rate aspects of Enlargement*”

12. The new Member States will be expected to enter ERM II, established by the European Council Resolution of 16 June 1997. The key features of the ERM II are that it has stable but adjustable central rates to the euro for the participating currency with fluctuation margins of $\pm 15\%$ around the central rate and that it uses a common procedure for the main decisions relating to the conditions of participation of a country in the mechanism. A new Member State may join ERM II, upon request, any time after accession, subject to agreement on the central parity and fluctuation margin in accordance with the common procedure referred to above. Most accession countries have stated their intention to join the mechanism as soon as possible after entry to the EU.

13. The multilateral nature of the above-mentioned common procedure implies that, ultimately, final decisions related to a request for participation can only be taken on a case-by-case basis at the time of entry in the mechanism. At the same time, the ERM II is flexible enough to accommodate the features of a number of existing exchange rate strategies. The only clear incompatibilities with the ERM II that can be identified already at this stage are the cases of free floating (or managed floats without a mutually agreed central rate), crawling pegs, and pegs against anchors other than the euro.

Box: The Maastricht criteria and their official interpretation

ARTICLE 121(1) OF THE TREATY

1. The Commission and the EMI shall report to the Council on the progress made in the fulfilment by the Member States of their obligations regarding the achievement of economic and monetary union. These reports shall include an examination of the compatibility between each Member State's national legislation, including the statutes of its national central bank, and Articles 108 and 109 of this Treaty and the Statute of the ESCB. The reports shall also examine the achievement of a high degree of sustainable convergence by reference to the fulfilment by each Member State of the following criteria:

- the achievement of a high degree of price stability; this will be apparent from a rate of inflation which is close to that of, at most, the three best performing Member States in terms of price stability;
- the sustainability of the government financial position; this will be apparent from having achieved a government budgetary position without a deficit that is excessive as determined in accordance with Article 104(6);
- the observance of the normal fluctuation margins provided for by the exchange rate mechanism of the European Monetary System, for at least two years, without devaluing against the currency of any other Member State;
- the durability of convergence achieved by the Member State and of its participation in the exchange rate mechanism of the European Monetary System being reflected in the long term interest rate levels.

The four criteria mentioned in this paragraph and the relevant periods over which they are to be respected are developed further in a Protocol annexed to this Treaty. The reports of the Commission and the EMI shall also take account of the development of the ECU, the results of the integration of markets, the situation and development of the balances of payments on current account and an examination of the development of unit labour costs and other price indices.

PROTOCOL (NO 21) ON THE CONVERGENCE CRITERIA REFERRED TO IN ARTICLE 121 OF THE TREATY ESTABLISHING THE EUROPEAN COMMUNITY

THE HIGH CONTRACTING PARTIES,

DESIRING to lay down the details of the convergence criteria which shall guide the Community in taking decisions on the passage to the third stage of economic and monetary union, referred to in Article 121(1) of this Treaty.

HAVE AGREED upon the following provisions, which shall be annexed to the Treaty establishing the European Community.

Article 1

The criterion on price stability referred to in the first indent of Article 121(1) of this Treaty shall mean that a Member State has a price performance that is sustainable and an average rate of inflation, observed over a period of one year before the examination, that does not exceed by more than 1½ percentage points that of, at most, the three best performing Member States in terms of price stability. Inflation shall be measured by means of the consumer price index on a comparable basis, taking into account differences in national definitions.

Article 2

The criterion on the government budgetary position referred to in the second indent of Article 121(1) of this Treaty shall mean that at the time of the examination the Member State is not the subject of a Council decision under Article 104(6) of this Treaty that an excessive deficit exists.

Article 3

The criterion on participation in the exchange-rate mechanism of the European Monetary System referred to in the third indent of Article 121(1) of this Treaty shall mean that a Member State has respected the normal fluctuation margins provided for by the exchange-rate mechanism of the European Monetary System without severe tensions for at least the last two years before the examination. In particular, the Member State shall not have devalued its currency's bilateral central rate against any other Member State's currency on its own initiative for the same period.

Article 4

The criterion on the convergence of interest rates referred to in the fourth indent of Article 121(1) of this Treaty shall mean that, observed over a period of one year before the examination, a Member State has had an average nominal long-term interest rate that does not exceed by more than 2 percentage points that of, at most, the three best performing Member States in terms of price stability. Interest rates shall be measured on the basis of long-term government bonds or comparable securities, taking into account differences in national definitions.

Article 5

The statistical data to be used for the application of this Protocol shall be provided by the Commission.

Article 6

The Council shall, acting unanimously on a proposal from the Commission and after consulting the European Parliament, the EMI or the ECB as the case may be, and the Committee referred to in Article 114, adopt appropriate provisions to lay down the details of the convergence criteria referred to in Article 121 of this Treaty, which shall then replace this Protocol.

2. Scenarios for the path of the exchange rate during participation in ERM2

The following sections give an overview of some possible scenarios for Slovenia's entry and participation in the ERM2 mechanism. The aim is to set out the strengths and weaknesses of the various scenarios and their implications for action by the Bank of Slovenia. The scenarios differ in terms of three main elements:

1. The ratio of the exchange rate at entry to ERM2 to the central parity. The exchange rate at entry to ERM2 can diverge from the central parity rate, but by no more than 15%, which is the maximum permitted exchange rate fluctuation margin. A divergence between the central parity rate and the exchange rate at entry can be explained by anticipated changes in the equilibrium exchange rate. The case where the exchange rate at entry is lower than the central parity can be justified as a margin of safety within an asymmetric system of adjustment of the central parity and wide confidence intervals in estimating the equilibrium exchange rate, and where errors in the direction of overvaluation of the domestic currency are more costly than errors in the other direction.
2. The path of the exchange rate during participation in ERM2. Two aspects of the path of the exchange rate are especially important: the monotonicity and smoothness of exchange rate movements.
 - Monotonicity of exchange rate movements. Will the market exchange rate converge monotonically with the central parity rate throughout the run-up to entry to ERM2 and throughout participation in ERM2? A break in the trend and with it a transition from a trend nominal depreciation to a trend nominal appreciation would indicate:
 - either that the tolar was undervalued relative to the euro,
 - or that an inappropriate central parity had been negotiated.
 - Smoothness of exchange rate movements. Will the exchange rate converge smoothly with the central parity or will a major one-off jump in the exchange rate occur, most probably at entry to ERM2 or on publication of the central parity rate? As a rule smoothness of change has been one of the Bank of Slovenia's desiderata for monetary policy, although in certain cases it makes sense for the change in the exchange rate to be discrete, especially in the case of a

compulsory nominal appreciation of the exchange rate if the central parity is set below the exchange rate at entry.

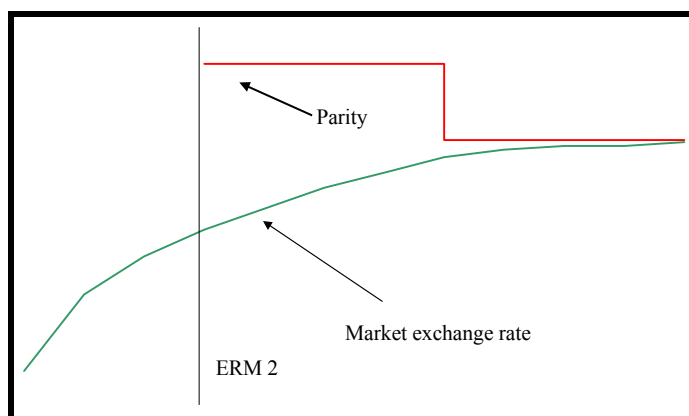
3. Alteration of the central parity rate. The third important element is alteration of the central parity rate during participation in ERM2. We distinguish the possibilities of no alteration, devaluation and revaluation of the central parity. Devaluation of the central parity is a special case which entails an extension of the period of participation in ERM2 by two years. A central bank whose goal is the shortest possible participation in ERM2 is thus biased towards no alteration or revaluation of the central parity.

There are a large number of scenarios corresponding to the possible combinations, most of which are not reasonable. Below we set out the four most probable. Action by the Bank of Slovenia, the choice of exchange rate regime and the establishment of appropriate policy instruments depend on the scenario chosen.

a) Repeat of the Greek case

The main features of this scenario are:

- Central parity rate significantly above the exchange rate at entry
- Monotonic and smooth path of the exchange rate
- Possibility of a subsequent revaluation of the central parity rate



Monetary policy has greater flexibility and “convergence play” is less intense. A central parity rate significantly above the exchange rate at entry in combination with the possibility of a subsequent revaluation of the central parity rate reduces the risks for the central bank by allowing monetary policy a greater degree of flexibility, and provides a margin of safety in the event of an unforeseen extension of participation in ERM2.

Because of the greater degree of freedom of monetary policy in the area of exchange rate depreciation, the premium for exchange rate risk is larger and the need for closure of interest rate parity smaller due to the reduced intensity of capital inflows arising from “convergence play”.

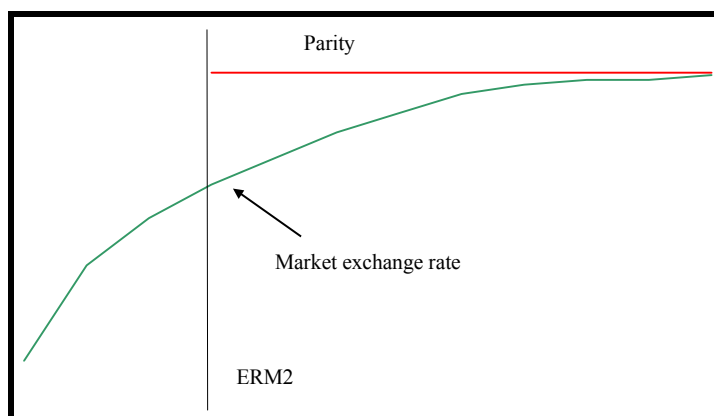
The main weakness of this scenario is the failure to make use of inflation expectations. Entry to ERM2 may generate positive inflation expectations, especially if it coincides with a change of exchange rate regime and a stable (fixed) exchange rate. This scenario underestimates the role of inflation expectations and may even generate inflation expectations and inflationary pressures due to the significant divergence of the market exchange rate at entry from the central parity rate.

A second weakness of this scenario is incompatibility with the new EU requirements and the reinterpretation of ERM2. If exchange rate stability within $\pm 2.25\%$ of the central parity rate is to be taken as the criterion for adoption of the euro, this scenario makes no sense. On the other hand this means that new members will not be treated equally, as this scenario represents the Greek case, envisaging a wide fluctuation margin.

b) Greek case with reduced flexibility

The main features of this scenario are:

- Central parity somewhat above the exchange rate at entry
- Monotonic and smooth path of the exchange rate
- No possibility of subsequent revaluation of the central parity rate envisaged in advance



This scenario resembles the preceding one:

- it permits further closure of interest rate parity by means of the exchange rate, although to a lesser extent
- interest rates can be somewhat higher than those of the ECB
- monetary policy can remain unchanged
- there is a smaller probability of adverse inflation expectations

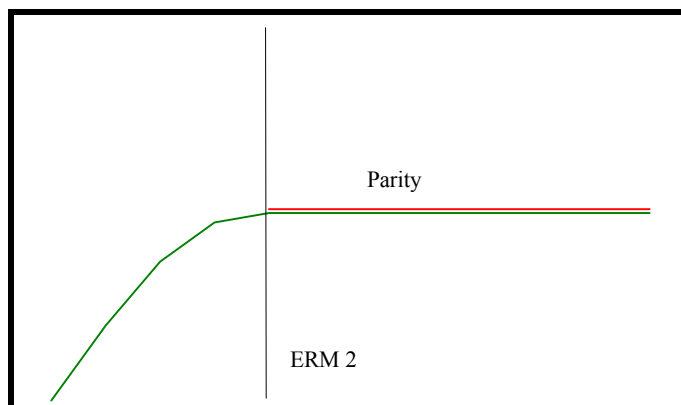
The main difference lies in the reduced flexibility of monetary policy, since in this case the central bank relinquishes the possibility of fully exploiting the difference between the exchange rate at entry and the central parity for depreciation of the tolar, which may be important in the event of:

- an unforeseen extension of the ERM2 period
- increased capital inflows due to currency attacks.

c) Central parity equal to the exchange rate at the time of entry

The main features of this scenario are:

- central parity is equal to the exchange rate at entry
- monotonic and smooth path of the exchange rate
- no alteration of central parity
- exchange rate regime close to fixed



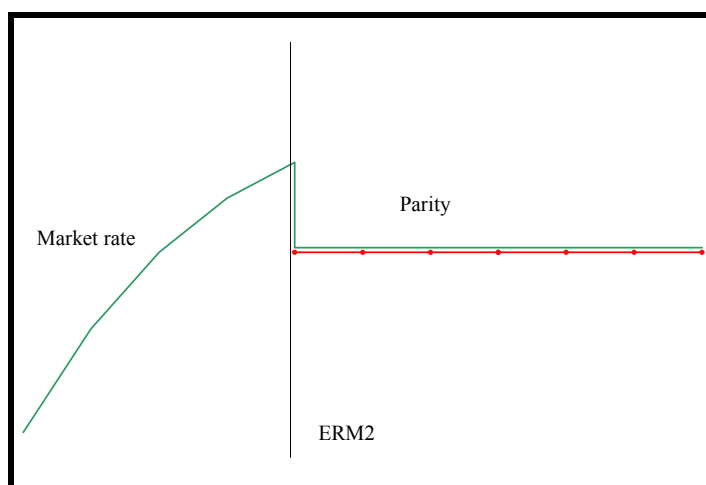
The exchange rate becomes an unambiguous inflationary anchor, since a fixed exchange rate regime is most likely to be used in this scenario. Monetary policy loses further room for manoeuvre since in this case the Bank of Slovenia would have to cut interest rates significantly, to the level of those of the ECB.

In this case there is an increased need for the role of managing demand and inflationary pressure to be transferred more intensively to other areas of economic policy. Lower interest rates and the restricted flexibility of monetary policy require an increased level of coordination of economic policy-making, as the central bank in this case can no longer curb final consumption and demand-side inflationary pressure.

d) Appreciated central parity

The main features of this scenario are:

- central parity is lower than the exchange rate at entry (the market exchange rate is undervalued)
- non-monotonic and non-smooth path of the exchange rate
- no alteration of central parity
- exchange rate regime close to fixed



A steady, linked adjustment of the exchange rate is not possible over the longer term for maintaining an appropriate differential between interest rates at home and in the eurozone. As far as the central bank is concerned it makes sense to raise the exchange rate once to a rate at which it is overvalued. After that, as in case c), the exchange rate becomes an inflation anchor. In this case too the exchange rate regime is actually and/or formally a fixed rate regime.

Monetary policy loses some of its room for manoeuvre because in this case too interest rates would have to be lowered substantially to the level of ECB interest rates.

In this case it is even more important that other economic policies take over the role of restricting final consumption because household purchasing power increases and the costs of borrowing in foreign currencies fall as a result of the appreciation of the domestic currency. Lower interest rates and restricted monetary policy flexibility necessitate an increased level of coordination in economic policies because in this case the central bank will no longer be able to restrict final consumption and the emergence of demand-side inflationary pressures.

V. ACTION PLAN FOR NEGOTIATIONS ON ERM2 ENTRY

1. Fulfilment of the convergence criteria

In order to join EMU Slovenia must meet the convergence criteria. The technical procedures as far as assessing fulfilment of the convergence criteria is concerned must be precisely determined and monitored.

European legislation envisages two types of examination of the convergence reports:

a) The regular examination takes place within two months of submission of the convergence programme. The ECB and the European Commission compile an assessment of the programme for the European Council, which deliberates fulfilment of the criteria for adoption of the euro. In view of the fact that the established procedures envisage the submission of the convergence programme between October and December, the European Council assesses these programmes in January and February of the following year. The decision on fulfilment of the convergence criteria and on abolition of a country's derogation status is taken by the European Council at the level of heads of state and government after it has received the opinions of ECOFIN and the European Parliament. Therefore the regular examination of the convergence report for Slovenia would be in January or February 2006 dealing with the report submitted between October and December 2005. The reference period for fulfilment of the convergence criteria would thus be from September 2004 to August 2005.

b) Examination at the request of a member state: If Slovenia joins ERM2 by the end of 2004 and wishes to remain in the mechanism for no more than two years, in other words to adopt the euro at the start of 2007, the convergence report will have to be examined by autumn 2006 at the latest. In order for the convergence report to be examined in accordance with the envisaged procedure the deadline for its submission is the end of June 2006. The reference period for fulfilment of the convergence criteria would thus be from June 2005 to May 2006. So far extraordinary convergence reports have been examined in May (May 1998 for the original eleven countries and May 2000 for Greece).

This means that after the regular convergence programme is submitted between October and December 2005 an updated programme will need to be prepared in spring 2006 for submission in June 2006, which will be drawn up for the assessment of Slovenia's fulfilment of the convergence criteria.

Convergence criteria and envisaged reference periods:

- The criterion of participation in ERM2 means that the member state has remained within the permitted band envisaged in the exchange rate mechanism without serious pressures being caused

for at least two years prior to the assessment. In particular, the member state must not have devalued the central parity to the euro during this period at its own initiative. The two-year period would therefore cover 2005 and 2006. But if the convergence report were examined in the second half of 2006 Slovenia would not yet have been in ERM2 for two years. However, when its convergence report was deliberated in May 2000 Greece had not been in ERM2 for at least two years, having joined the mechanism in January 1999.

- The inflation criterion: The rate of inflation must not exceed by more than 1.5 percentage points the average rate of inflation in the three EU countries with the lowest inflation in the 12-month period prior to the assessment of the convergence report. Inflation is measured using the consumer price index allowing for changes in national definitions. In the case of Greece, whose report was deliberated in May 2000, the reference period taken into account was from April 1999 to March 2000, while for the original eleven countries (report deliberated May 1998) the reference period was from February 1997 to January 1998.
- The interest rate criterion: Long-term interest rates must not exceed by more than 2 percentage points the average of the interest rates in the three EU member states with the lowest rate of inflation in the 12-month period prior to the assessment of the convergence report. For the original eleven countries and subsequently for Greece the reference period was the same as for the inflation convergence criterion.
- The public debt criterion: The public debt must not exceed 60% of GDP, except in the case where a satisfactory pace of debt reduction towards the reference value is being achieved.
- The budget deficit criterion: The budget deficit must not exceed 3% of GDP. At the time of the assessment the country must not be in the excessive deficit procedure. A member state is in the excessive deficit procedure from the moment when the European Council, upon a recommendation from the European Commission and taking account of any comments from the member state itself, decides that an excessive deficit exists.

2. Action Plan for Negotiations on ERM2 Entry

In line with the policy of joining ERM2 by the end of 2004 the Slovenian Government and the Bank of Slovenia will complete all the technical preparations for entry to ERM2 by the time Slovenia joins the European Union. At that time they will take specific decisions in connection with the formal procedure for joining ERM2.

Action Plan for Negotiations on ERM2 Entry

Date of completion of activity	Activity	Description	Responsible body
2 October 2003	Confirmation of ERM2 entry strategy	Substantive definitions (central parity, fluctuation band, intervention, monetary instruments)	Governing Board of the Bank of Slovenia
31 October 2003	Harmonisation of views with the Government	Deliberation of the positions of the Government and the Bank of Slovenia on the substantive definitions and on the specific entry date	ERM2 coordinating body
20 November 2003	Confirmation of the desired date of entry and the substantive definitions	Deliberation by the Governing Board of the Bank of Slovenia and the Government	Government, Governing Board of the Bank of Slovenia
31 December 2003	Presentation of Slovenia's views	Presentation of entry strategy to members of Eurosystem, the ECB and the Commission	Ministry of Finance, Bank of Slovenia
1 January – 31 March 2004	Positions of members of Eurosystem, the ECB and the Commission	Obtaining the position of members of Eurosystem, the ECB and the Commission on the substantive views of Slovenia and the desired date of entry to ERM2	Ministry of Finance, Bank of Slovenia
15 April 2004	Assessment of positions of members of Eurosystem, the ECB and the Commission	Assessment of positions of members of Eurosystem and any supplementation of Slovenia's views	ERM2 coordinating body
30 April 2004	Unified position	Confirmation of unified position on the substance and date of entry to ERM2	Governing Board of the Bank of Slovenia, Government
30 April 2004	ECB intervention system	Technical preparation for intervention system within ERM2	Bank of Slovenia

May 2004	Inclusion in ECB intervention system	Signing of agreement on intervention with the ECB	Bank of Slovenia
?	Application for exchange rate procedure	Confirmation of harmonised text of application for exchange rate procedure	Governing Board of the Bank of Slovenia, Government
?	Negotiations as part of the exchange rate procedure	Negotiations on central parity and fluctuation band with members of Eurosystem, the ECB and the Commission	EFC, ECOFIN
By end 2004	Date of entry to ERM2	Inclusion in ERM2 in line with decisions taken in exchange rate procedure	Bank of Slovenia

VI. APPENDIXES

1. Preparations for joining the TARGET

	<i>Start of the activity</i>	<i>End of the activity</i>	<i>Activity</i>	<i>Activity description</i>	<i>Responsible department</i>	<i>Co-operating entities</i>	
	1.8.2003	27.2.2004	Analysis of possibilities for joining the TARGET and preparation of proposal for the Governing Board of the BoS	<p>Analysis of different options for joining the TARGET that are viable for implementation until 1st January 2007.</p> <p><u>Options:</u></p> <ul style="list-style-type: none"> - joining the TARGET with an own RTGS platform – OP1; - joining the TARGET via another central bank, already participating in TARGET – OP2. 	PS	PS, CBO, RAC, ECB, Bundesbank, Banca d' Italia	
		27.2.2004	Decision on the option for joining the TARGET	The Governing Board of the BoS will decide on the option for joining the TARGET on the basis of proposal prepared by the PS.	Governing Board of the BoS		

Joining the TARGET with own RTGS platform – OPI; time for implementation: 24 months

OPI	1.1.2005	31.12.2006*	Joining the TARGET with an own platform	Joining the TARGET with an own platform requires establishing the parallel system for executing euro payments via TARGET, setting up the Interlinking component and opening of inter-NCB and banks' TARGET accounts, setting up the business and operational procedures in line with TARGET Manual, setting up the disaster recovery centre and business continuity/contingency plans, risk analysis, obligatory testing with participants, the ECB and all NCBs, adoption of the legal basis (agreements with all NCBs and the ECB), setting up procedures for reporting according to the ECB rules.	PS		
	1.1.2005	1.1.2006	Purchase and implementation of the secondary RTGS system with the Interlinking component	Purchase of software (CAS and Interlinking) and hardware (including the hardware for the disaster recovery centre), installation and testing.	PS	PS, IT, supplier, banks	
	1.3.2006	1.9.2006	Bookkeeping – opening of banks and inter-NCB TARGET accounts	Opening of accounts of the Slovenian banks and savings banks and the inter-NCB accounts in the books of the BoS, implementation of the bookkeeping procedures in line with the ECB methodology.	PS	RAC, banks, ECB, NCBs	

* The deadline for joining the TARGET is 1st January 2007

1.1.2005	30.10.2006	Business/operational procedures - setting up of the business/operational rules and procedures in line with the TARGET Manual	Setting up of the complete internal business and operational rules and procedures in line with the TARGET Manual.	PS	RAC, CBO, BP, banks	
1.5.2005	30.9.2006	Disaster recovery centre – setting up the disaster recovery centre and business continuity/contingency plans, risk analysis	Adoption of the ECB's rules and procedures for business continuity and contingency plans for TARGET, setting up the disaster recovery centre and before joining the TARGET the complete risk and security analysis of the system with the view to the ECB's rules.	PS	IT, PO, UH, BP, OGP, RAC, banks	
1.3.2006	30.10.2006	Obligatory testing with banks, the ECB and all NCBs	The ECB prescribes rules, procedures and schedule for testing between the TARGET participants; testing covers three phases: testing of the own platform, testing with the banks and savings banks in Slovenia and testing with the NCBs and the ECB as TARGET participants.	PS	IT, BP, OGP, RAC, CBO, banks, ECB, NCBs	
1.1.2006	1.7.2006	Legal basis – adoption of the relevant legal basis	Adoption of the legal basis that is in force for the TARGET, including signing the agreements with all NCBs that participate in TARGET and the ECB.	PO	PS, ECB, NCBs	
1.1.2006	31.12.2006	Reporting - setting up procedures for reporting according to the ECB rules	With joining the TARGET the BoS will have to report statistics to the ECB according to the ECB's rules. In this regard the technical support and internal rules and procedures will be established.	PS	IT, RAC, ECB	
1.7.2006	30.11.2006	Collateralized intra-day liquidity in EUR	Signing the agreement with an Eurosystem NCB or commercial bank enabling the liquidity provision in euro for the Slovenian banks and implementation of internal rules and procedures regarding the collateralized intra-day credit provision.	PS	CBO, RAC, Eurosystem NCB or commercial bank	

Joining the TARGET via another NBC – OP2; time for implementation: 12 months

OP2	1.1.2006	31.12.2006**	Joining the TARGET via another central bank participating in TARGET	<p>Two NCBs are offering this service with multiple options for joining the system, but only those options will be considered, that allow normal execution of monetary policy, monitoring of banks' liquidity and settlement of the securities settlement system. Furthermore the option also has to provide for smooth transition to TARGET2.</p> <p>A more detailed list of activities for this option (OP2) is not yet known, because it has only been considered since September 2003, but according to the estimate of one of the central banks offering this service, the process for joining the system is expected to last between 8 and 10 months.</p>	PS		
	1.1.2006	1.7.2006	Bookkeeping – opening of banks and NCBs TARGET accounts	Opening of accounts of the Slovenian banks and savings banks and the inter-NCB accounts in the books of the BoS, establishment of the bookkeeping and reconciliation procedures in line with the ECB methodology.	PS	RAC, banks, ECB, NCBs	
	1.1.2006	30.11.2006	Business/operational procedures - setting up of the business/operational rules and procedures	Setting up of the complete business and operational rules and procedures for the internal procedures and for the procedures between the service providing NCB and the BoS.	PS	RAC, CBO, BP, IT, banks	

** Joining the TARGET under this option can be realized even some months before the deadline (according to the decision of the Governing Board of the BoS)

1.3.2006	31.12.2006	Business continuity and contingency arrangements - risk analysis and setting up of the business continuity/contingency plans	Disaster recovery centre and business continuity and contingency plans will be covered by the NCB providing the service while the BoS will have to prepare business continuity and contingency plans for its SWIFT connection; before joining the TARGET also the risk analysis has to be carried out as well as the compliance with the ECB rules and procedures regarding security has to be checked.	PS	IT, PO, UH, BP, OGP, RAC, banks	
1.7.2006	30.11.2006	Obligatory testing with banks, the ECB and the service providing NCB	In co-operation with the service providing NCB a testing scenario will have to be laid down; testing covers two phases: testing with the banks and savings banks in Slovenia and testing with the service providing NCB.	PS	IT, BP, OGP, RAC, CBO, banks, ECB, the service providing NCB	
1.1.2006	31.10.2006	Legal basis – adoption of the relevant legal basis	Signing the agreements with the service providing NCB, the ECB and possibly with all NCBs participating in TARGET.	PO	PS, RAC	
1.1.2006	30.10.2006	Reporting - setting up procedures for reporting according to the ECB rules	With joining the TARGET the BoS will have to report statistics to the ECB according to the ECB's rules. In this regard internal rules and procedures will be established and tested in co-operation with the service providing NCB.	PS	IT, RAC, ECB, the service providing NCB	
1.7.2006	30.11.2006	Collateralized intra-day liquidity in EUR	Signing the agreement with an Eurosystem NCB or commercial bank enabling the liquidity provision in euro for the Slovenian banks and implementation of internal rules and procedures regarding the collateralized intra-day credit provision.	PS	CBO, Eurosystem NCB or commercial bank	

2. Preparing the euro cash changeover

Start of activity	End of activity	Activity	Description	Dependent activity	Holder	Participants
01.06.2006	01.03.2007 (Eurosystem)	Information campaign	Range of activities, measures and procedures in connection with informing the general and professional public about the introduction of the euro. Link to other ECB projects:: CO 14 (co-ordination of information campaigns aimed at the professional public), CO 16 (co-ordination of information campaigns aimed at the general public), BN (euro cash project)	Co-ordination of information campaigns aimed at the general public in connection to the euro (project BD-1.1), production of the advertising material, organisation of the Bank of Slovenia web site, media promotion, a variety of lectures, participation in other campaigns.	BS	Management, BD, O&P, Gov, MoF, MoI, BAS, CCIS, CCS in co-operation with the ECB
03.01.2006	30.11.2006	Introduction of the euro cash – general legal acts	General legal acts , which will replace the Monetary Unit of the Republic of Slovenia Act and the Use of the Monetary Unit of the Republic of Slovenia Act and other legal acts relating to cash operations (in total 42 acts): 16 acts related to euro banknotes, 9 acts related to euro coins, 8 acts related to protection of euro cash, 9 acts related to the logistics of the euro cash changeover	Up-to-date monitoring and updating of the acts, according to the adopted acts of the competent authorities - ECB, EU and authorities in Slovenia.	BD	BD, PO, GovCBS, GovRS in co-operation with ECB, EC - EFC: Euro Coins Subcommittee, MoF and MoI

1.4.2005 (start of the decision-making process)	15.12.2006	Production of the euro banknotes	Determining the quantity of the required banknotes, broken down by the denomination (the authorisation from the ECB), the tender for the selection of the paper supplier, the printer and other subcontractors for the production of banknotes, the production of the paper and the banknote elements, printing and the delivery of the banknotes to the BS.	Decision of the GovCBS on introduction of euro; authorisation of the ECB regarding the quantity and the denominational breakdown of the euro banknotes; international tendering.	BD	BD, A&R, LD, BSD, GovCBS in co-operation with the ECB, MoI
3.1.2005 (start of the decision-making process)	01.12.2006	Production of the euro coins	Determining the quantity of the required coins (approval of the ECB), tender for the selection of the design for the “national side” of the coins, of the mint and other subcontractors for production of coins; minting and delivery of coins to the Bank of Slovenia.	Decision of the GovCBS on introduction of euro; authorisation of the ECB regarding the quantity of the euro coins; international tendering. (investigate also the possibility for the procurement of excess stocks of euro coins in other EU Member States)	BD	BD, A&R, LD, BSD, GovCBS, GovRS in co-operation with the ECB, EC – EFC: Euro Coins Sub-committee, MoF, MoI
30.05.2003	30.04.2004	Setting-up of a national counterfeit centre for analysis of counterfeited euro banknotes – NCC	Signing of the Agreement on combating the threats arising from counterfeiting of the euro with the ECB (GovCBS) (30.10.2003), BD assures that organisational and technical conditions are suitable for the smooth operation of the NCC, submit the proposal to the GovRS for the establishment of the NAC and CNAC within the MoI (Forensic Lab and Research Centre), MoI assures that organisational and technical conditions for the smooth operation of the NAC and CNAC are suitable..	GovRS establishes NCC and CNAC v okviru MOI (Forensic centre), GovRS endorses the Parliament for the ratification of the Geneva convention.	BD	BD, LD, GovCBS, GovRS in co-operation with the ECB, EC – EFC: Euro Coins Sub-committee, MoF, MoI – General police directorate in Forensic Lab and Research

						Centre
15.05.2003	01.01.2007	Production of euro cash - links to other ECB projects	Links to other ECB projects: BN 1 (security standards for the production, storage and transport of euro cash), BN 4 (standards for issuing of banknotes), BN 6 (elaboration of logistics for the euro cash changeover, in connection with project L 1 – introduction of ESCB rules), BN 7 (cooperation in the area of prevention of euro counterfeiting, establishment of links between the NCC, NAC and CNAC – centres for analysing counterfeit euros), BN 9 (training of counterfeit experts and thereafter others involved in cash operations), BN 10 (expert support for the production of banknotes), BN 14 (expert support for the production of coins), BN 18 (research and development and practical harmonisation of the production of euro cash), BN 20 (co-operation in quality control concerning the printing and minting of euro cash).	Successful implementation of the projects under the preceding points.	BD	BD, LD, BSD, GovCBS, GovRS in co-operation with the ECB, EC – EFC: Euro Coins Sub-committee, MoF, MoI – General police directorate and the Forensic Lab and Research Centre

15.05.2003	15.12.2006	Introduction of the ESCB security standards for the production, storage and transport of the euro banknotes and the security elements	Complete ESCB information on security standards provided to the Bank of Slovenia's security expert (15.5.2003-31.12.2003); information on the ESCB security standards to the printer and other suppliers of security elements for the production of euro banknotes (03.01.2005-31.12.2005), co-ordination of conditions for the production of euro banknotes (the printer and the suppliers of other security elements) (03.01.2006-15.12.2006); on-site supervision of the working processes – security control carried out by the ECB in co-operation with the Bank of Slovenia (03.01.2006-15.12.2006).		BD	BD, BSD, GovCBS
27.11.2002	15.12.2006	Standards for issuing of euro banknotes	Information on standards for issuing of banknotes (27.11.2002-31.12.2005), acquisition of standards for sorting, service charges, debiting/crediting rules, rules on opening hours, packing standards (03.01.2006-15.12.2006).		BD	BD, GovCBS
01.10.2004	31.05.2005 (according to the plan of the ECB)	Adoption of the scenario for the euro cash changeover	Exchange of information on the euro cash changeover in 2002 (front/sub-frontloading and supply of euro cash to various target groups, converting ATMs and vending machines, withdrawal of tolar from the circulation) (01.10.2004-01.12.2004); Master plan for the cash changeover in Slovenia (03.01.2005-31.05.2005);	Successful implementation of the projects under the preceding points.	BD	BD, GovCBS, GovRS, ECB, ESCB

03.01.2003	30.04.2004 (EU)	Co-operation in the area of prevention of the euro counterfeiting,	The ECB informs the Bank of Slovenia about the obligations of the EU Member States (03.01.2003-28.02.2003); the Bank of Slovenia proposes the organisation, measures and procedures for setting up the national centre for analysis of euro banknote counterfeits - NCC (01.03.2003-31.10.2003); the ECB takes note of the setting up of the national centre for analysis of the counterfeited euro banknotes – NAC (03.11.2003-30.11.2003); the Bank of Slovenia proposes the organisation, measures and procedures for setting up the national centres for analysis of the counterfeited euro banknotes and coins (NAC and CNAC) (01.10.2003-31.10.2003); the Bank of Slovenia sends to the ECB and the EU Commission a list of the bodies in Slovenia responsible to prevent counterfeiting of banknotes and coins (03.11.2003-30.12.2003); publication of the list of in the Official Journal of the EU (03.01.2004-31.01.2004); three-month time limit for objections to the preliminary list (02.02.2004-30.04.2004).	Corresponding decisions of the GovCBS and the GovRS.	BD	BD, LD, GovCBS, MoI, GovRS
01.09.2003	01.03.2007	Training of the counterfeit experts and thereafter others involved in the cash operations	Identification of the requirements and establishing the training objectives (01.09.2003-31.10.2003); review of the computer software for the Counterfeit Monitoring System (CMS) (03.11.2003-31.12.2003); evaluation of the past experience in handling of the euro counterfeits (03.11.2003-31.12.2003); in-depth training of instructors on the euro counterfeits (employees of the NCC, NAC, CNAC) (03.01.2004-30.4.2004); training of cashiers-	Successful implementation of projects under the preceding points.	BD	BD, MoI, ECB, Europol, Interpol, commercial banks, BAS, CCIS, CCS

			instructors and employees of the MoI (03.05.2004-31.12.2004); training of cashiers and all other employees who handle with cash (03.01.2006-01.03.2007 (Eurosystem).			
01.09.2003	15.12.2006 (Eurosystem)	Expert support for the production of banknotes	Information on the technical standards for the quality control of euro banknotes and the notification system (01.09.2003-31.12.2004); temporary obligations of the Bank of Slovenia in the area of developing quality control system for the euro banknotes (03.01.2005-31.12.2005); confirmed obligations of the Bank of Slovenia in the area of developing quality control system for euro banknotes (03.01.2006-15.12.2006) (according to the plan of the ECB).	Joining the ERM II.	BD	BD, GovCBS, ECB, Pulp and paper institute, paper mill Radeče papir, Cetis
01.09.2003	01.12.2006 (Evrosystem)	Expert support for the production of coins	Information on the technical standards for the quality control of the euro coins and the notification system (01.09.2003-31.12.2004); temporary obligations of the Bank of Slovenia in the area of developing quality control system for euro coins (03.01.2005-31.12.2005); confirmed obligations of the Bank of Slovenia in the area of developing quality control system for euro coins (03.01.2006-01.12.2006).	Joining the ERM II.	BD	BD, GovCBS, GovRS, ECB, Institute of metals and technology

03.01.2005	15.12.2006 (Evrosystem)	Research and development and practical adjustments in the production of euro cash	Practical introduction of the methodology for the quality control and the notification system (03.01.2006-15.12.2006 (according to the plan of the ECB).	Joining the ERM II.	BD	ECB, BD, GovCBS
03.01.2006	15.12.2006 (according to the plan of the ECB)	Quality control and inspections of the printing and minting of euro	Inspections of the legal, organisational, technical conditions, which need to be fulfilled for producing the euro (printers of banknotes, suppliers of security elements, paper and other secure items needed for the production); carrying out inspections during printing and minting of the euro, inspections of transports, storage, security measures (adequate to the ECB security standards and good praxis in banking).	Successful implementation of the projects under the preceding points.	BD	ECB, EC, BD, GovCBS; GovRS, MoF, MoI – Forensic Lab and Research Centre), Pulp and paper institute, Insitute of metals and technology, paper mill Radeče papir, Cetis
01.01.2007 (Eurosystem)	28.02.2007	Withdrawal of tolar banknotes and coins from the circulation	BD co-ordinates the activities in co-operation with the cash depots and commercial banks (establishment of the cash changeover co-ordination committee), co-operation with the BAS, MoI (security, counterfeits), MoF – Office for money laundering prevention. Basic activities: pre-withdrawal of tolar banknotes and coins not being in active use (i. e. hoardings), withdrawal of the tolar banknotes from the commercial banks to the BS, logistics of the cash transports and storage in the BS premises,	Successful implementation of the projects under the preceding point and preparation of logistics for introduction of the euro cash (the security measures and procedures, preparation of the vaults and storage, organising of cash transport – distribution of euro and withdrawal of tolar) and preparation of logistics for	BD	Management, LD, BSD, BD, GovCBS, GovRS, BAS, MoI, MoF, cash depots, banking system (commercial, saving banks, exchange offices),

			corresponding organisation of the cash counter at the BS (01. 12. 2006)	destruction of tolar banknotes and coins.		CCIS (and larger retailers), CCS.
01.01.2007	09.01.2007	Putting the euro banknotes and coins into circulation	BD co-ordinates the activities in co-operation with the cash depots and commercial banks (establishment of the cash changeover co-ordination committee), co-operation with the BAS, MoI (security, counterfeits), MoF – euro coins). Basic activities: logistics of the transports and storage at the BS premises, frontloading to the cash depots, commercial banks, larger retailers and selling of starter kits to the general public.	Successful implementation of the projects under the preceding point.	BD	ECB, EC, BD, Management, GovCBS, GovRS, BAS, MoI, MoF, cash depots, banking system (commercial, saving banks, exchange offices), CCIS (and larger retailers), CCS.

03.03.2007	15.12.2007	Destruction of tolar banknotes	<p>Organisation of cash destruction at the BS: the quantities, preparation of the logistic and destruction plans, approval by the GovCBS, agreement with the paper mill (contract), agreement with the MoI (security measures) and the security company (contract on additional physical safeguarding and renting security equipment), nominating the members of the commission for the destruction, preparing the working equipment, organising the transport of banknotes to the destruction site (special security measures and procedures).</p> <p>Off-line destruction with acid: establishment of the security system and setting up of the security equipment on the site of destruction, transport of banknotes and commission to the site, preparing the banknotes for destruction (sample quantity checks), destruction and accompanying tasks (records, reports, management supervision, internal audit etc.)</p>	Successful implementation of projects under preceding point.	BD	GovCBS, BD, LD, BSD, IA, MoI, CIT company, security company, paper mill (domestic).
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03.05.2007	31.12.2007	Destruction (processing) of tolar coins	<p>Organisation of cash destruction at the BS: the quantities, preparation of the logistic and destruction plans, approval by the GovCBS, tendering for the selection of the company for processing (melting) the (contract), agreement with the MoI (security measures) and the security company (contract on additional physical safeguarding and renting security equipment), nominating the members of the commission for the destruction, preparing the working equipment, organising the transport of coins to the destruction site (special security measures and procedures).</p> <p>Off-line destruction with acid: establishment of the security system and setting up of the security equipment on the site of destruction, transport of coins and commission to the site, preparing the coins for destruction (sample quantity checks), destruction (melting or mechanical destruction) and accompanying tasks (records, reports, management supervision, internal audit etc.)</p>	Successful implementation of the projects under the preceding point.	BD	GovCBS, GovRS, BD, LD, BSD, IA, MoI, CIT company, company for processing of metal (domestic or foreign).
02.07.2006	15.12.2006 (Evrosystem)	Amending and supplementing the BS information system - inclusion into the CIS	Acquisition and adaptation of the computer hardware, software and communication equipment for supporting cash operations and producing statistics (SAP R/3 – module Materials Management and different financial modules)	Bringing all the projects into line with the ACC and IT	BD	ECB, GovCBS, BD, ACC, IT

03.01.2003	30.04.2004 (EU)	Amending and supplementing the BS information system - inclusion into the CMS	Acquisition and adaptation of the computer hardware, software and communication equipment for monitoring the euro counterfeits at the NCC, NAC and CNAC.	Bringing all the projects into line with the ECB, IT BS in MoI (Forensic Centre)	BD	ECB, GovCBS, BD, LD, IT, GovRS, MoI (Forensic Lab and Research Centre).
03.01.2006	15.12.2006 (Evrosystem)	Amending and supplementing the BS information system - other	Acquisition and adaptation of other computer hardware, software and communication equipment supporting cash transactions (RTGS: application DBS – supporting the operation of cash depots, PPBS – cash transaction for the governmental bodies etc.).	Bringing all the projects into line with the PS, ACC, BanD, CBO and IT	BD	GovCBS, BD, PS, ACC, CBO, BanD, IT
03.01.2003	30.04.2004 (EU), (CMS/EU), 01.12.2006 (CIS)	Amending and supplementing the BS information system – links with other ECB projects	IS 3 (ESCBnet computer application for communication within the ESCB system, in connection with projects IS 4 and IS 7), IS 4 – CMS (computer application for classification and monitoring of counterfeits, in connection with projects BN 7, BN 9, IS 3 and IS 7), IS 7 (maintenance of ESCBnet computer application, in connection with projects IS 3, IS 4 and IS 8), IS 8 – CIS (CIS computer application for monitoring cash circulation and cash-related activities, in connection with projects IS 3, IS 7 and IS 12), IS 12 (exchange of non-statistical data, in connection with projects IS 3, IS 7 and IS 8).	Bringing all the projects into line with the IT	BD	GovCBS, BD, IT

Legend:

BD – Banknote departement

O&P – Organisation and Personnel

MoF – Ministry of finance

BAS – Banking Association of Slovenia

MoI – Ministry of the Interior

LD – Legal departement

CCIS – Chamber of Commerce and Industry of Slovenia

CCS – Crafts Chamber of Slovenia

GovRS - Governemnt of the Republic of Slovenia

GovCBS – Governing Council of the Bank of Slovenia

A&R – Analysis and Research

BSD – Bulding Services Departement

BanD – Banking departement

CBO – Central banking operations

IA – Internal Audit

ACC – Accounting

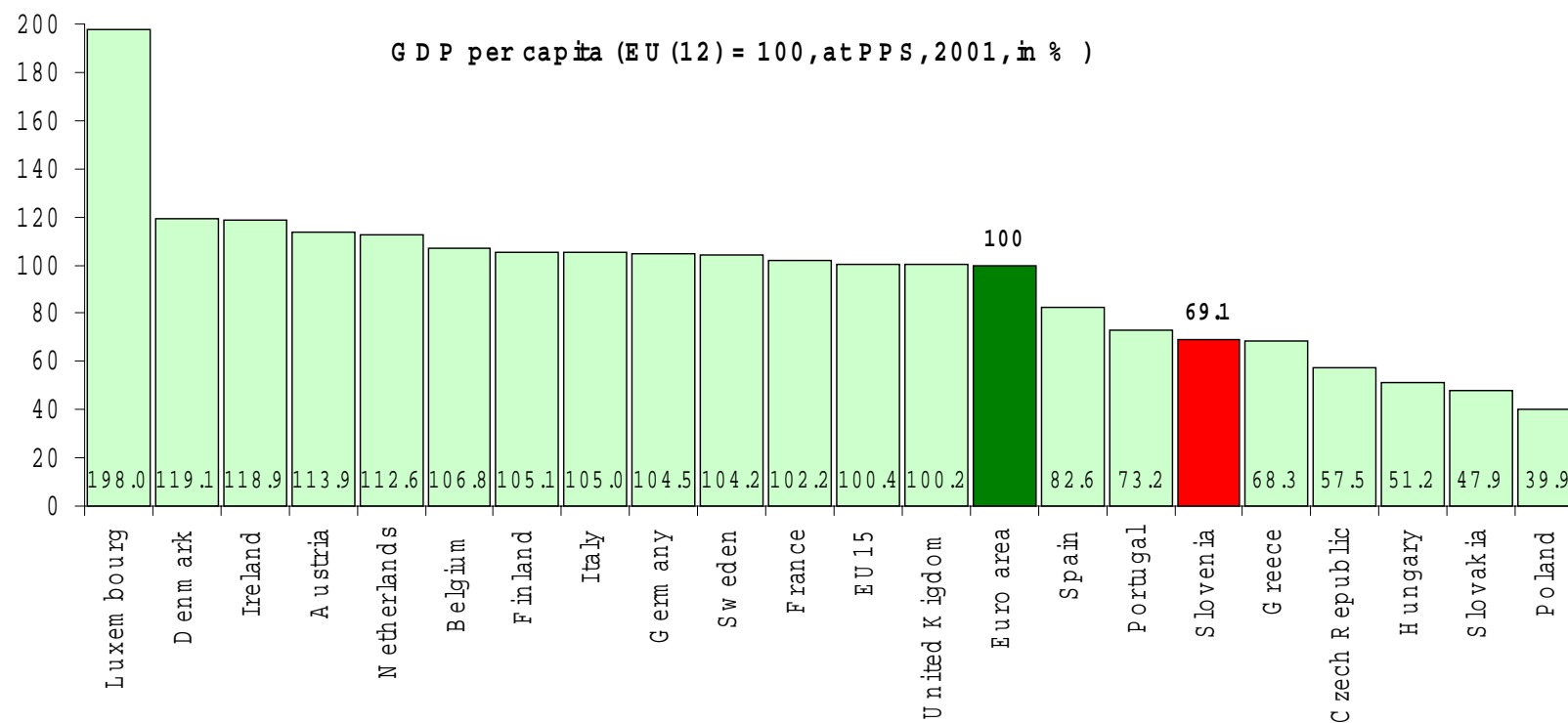
PS – Payment Systems

IT – Information Techna

Readiness for the EMU entry

GDP per capita

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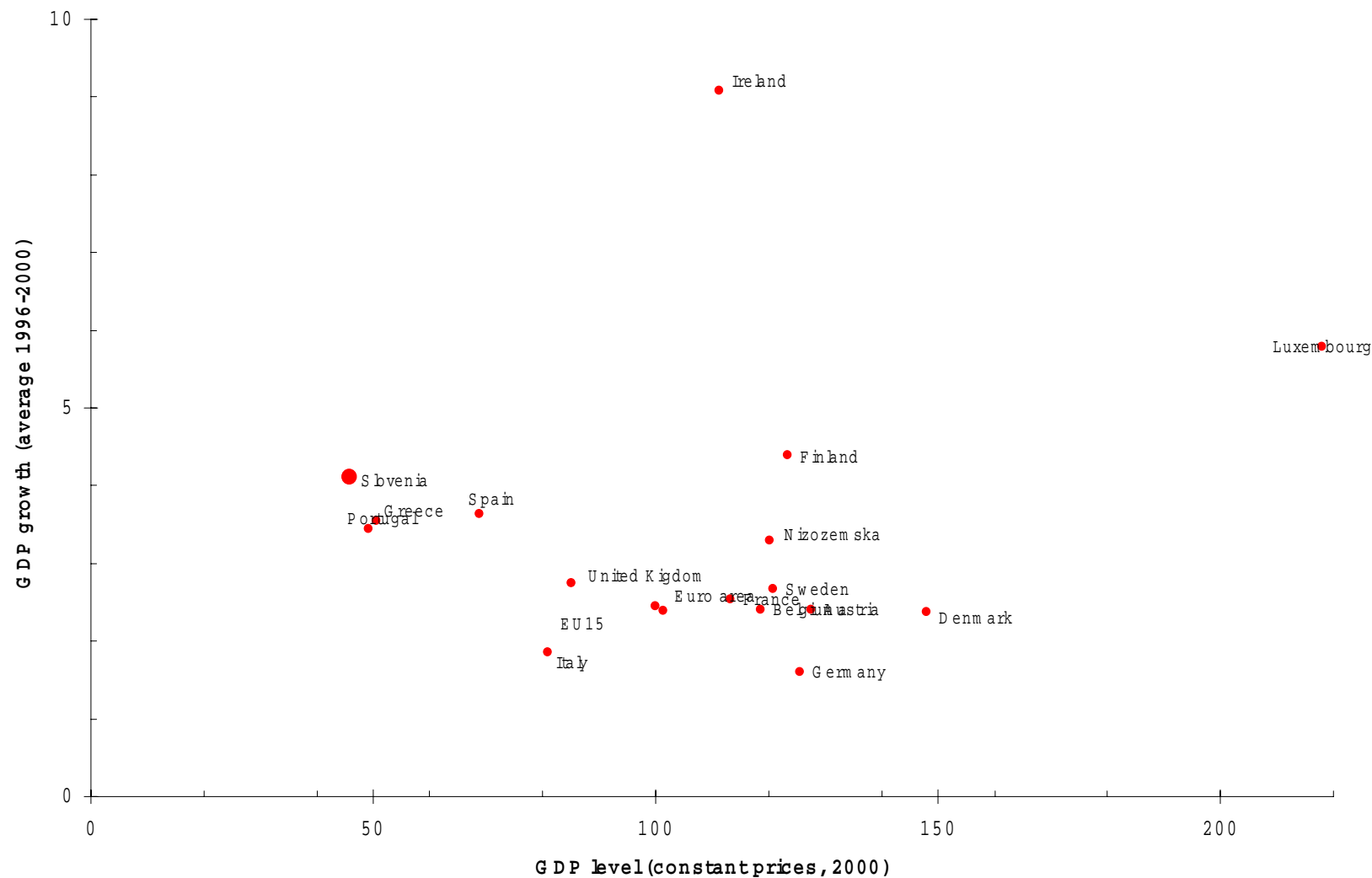


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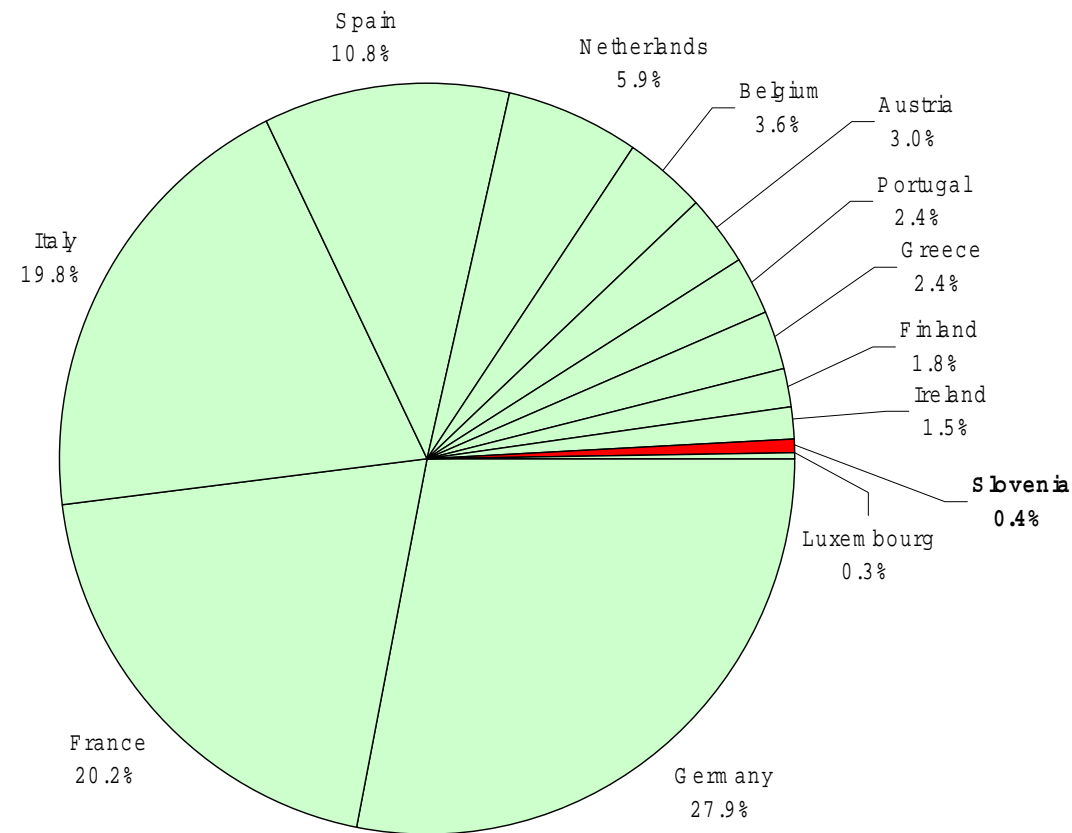
GDP level and growth (constant prices)

BANKA SLOVENIJE



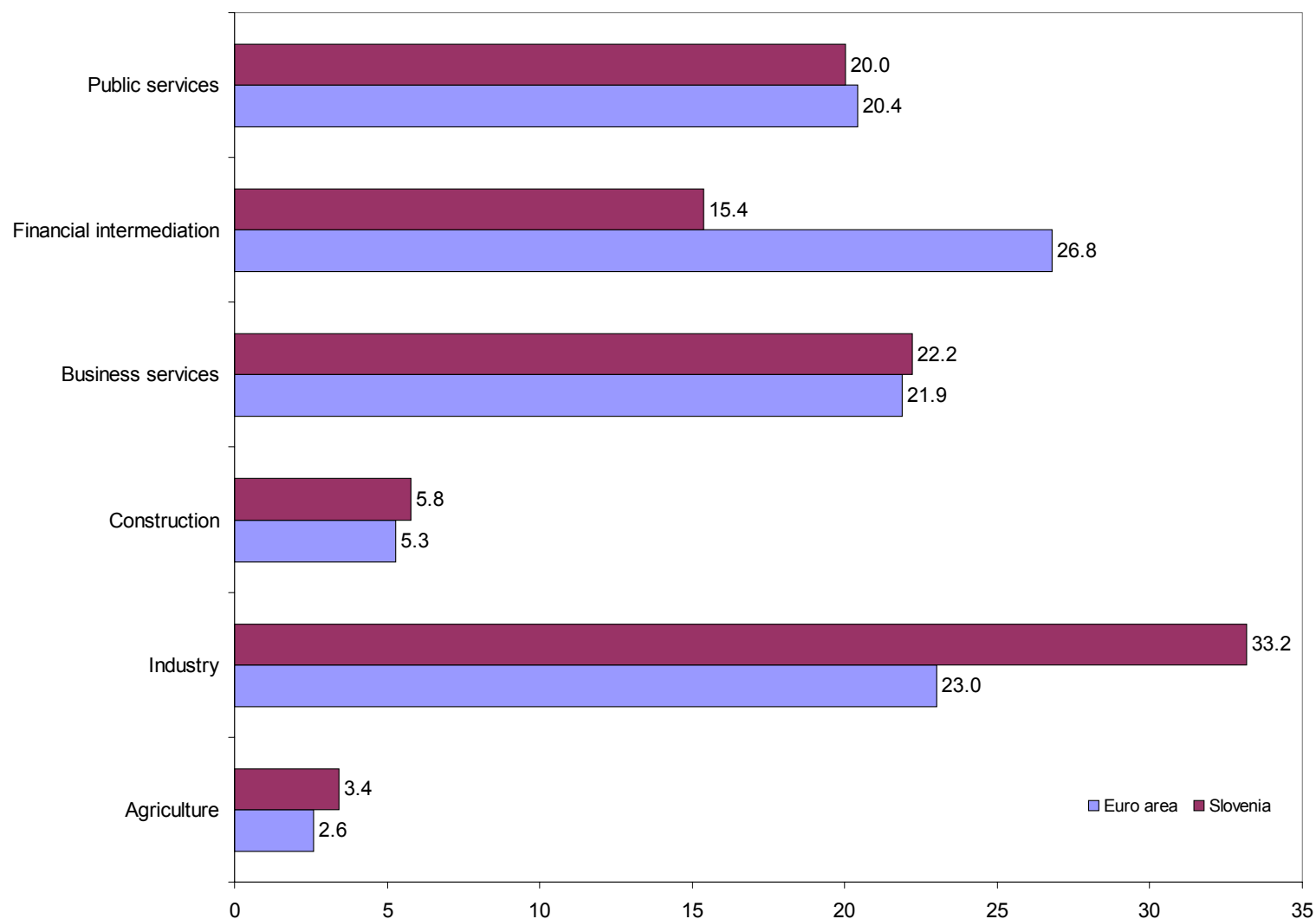
Shares in Euro area GDP by countries

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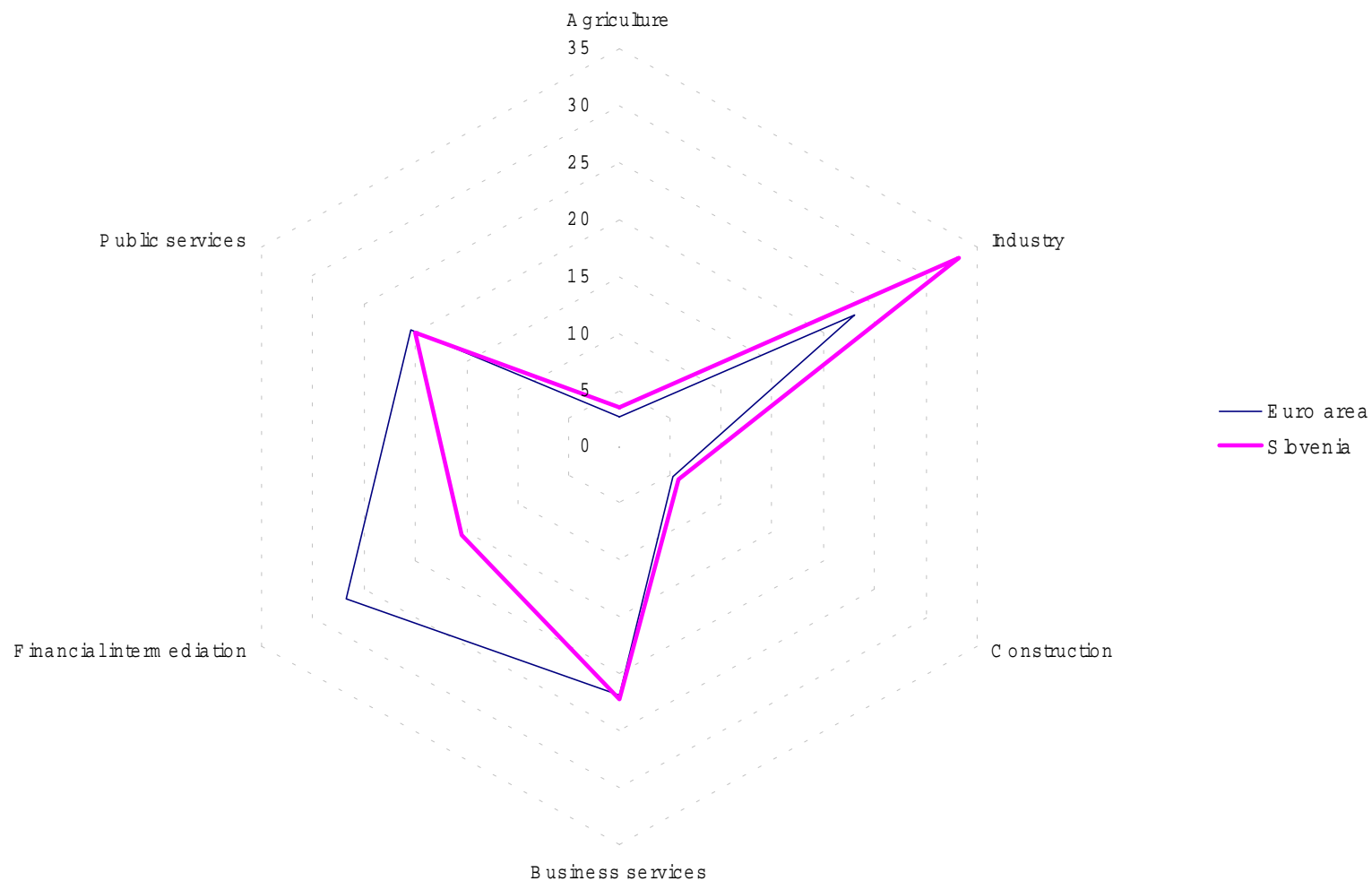
Value added by activities (2001)

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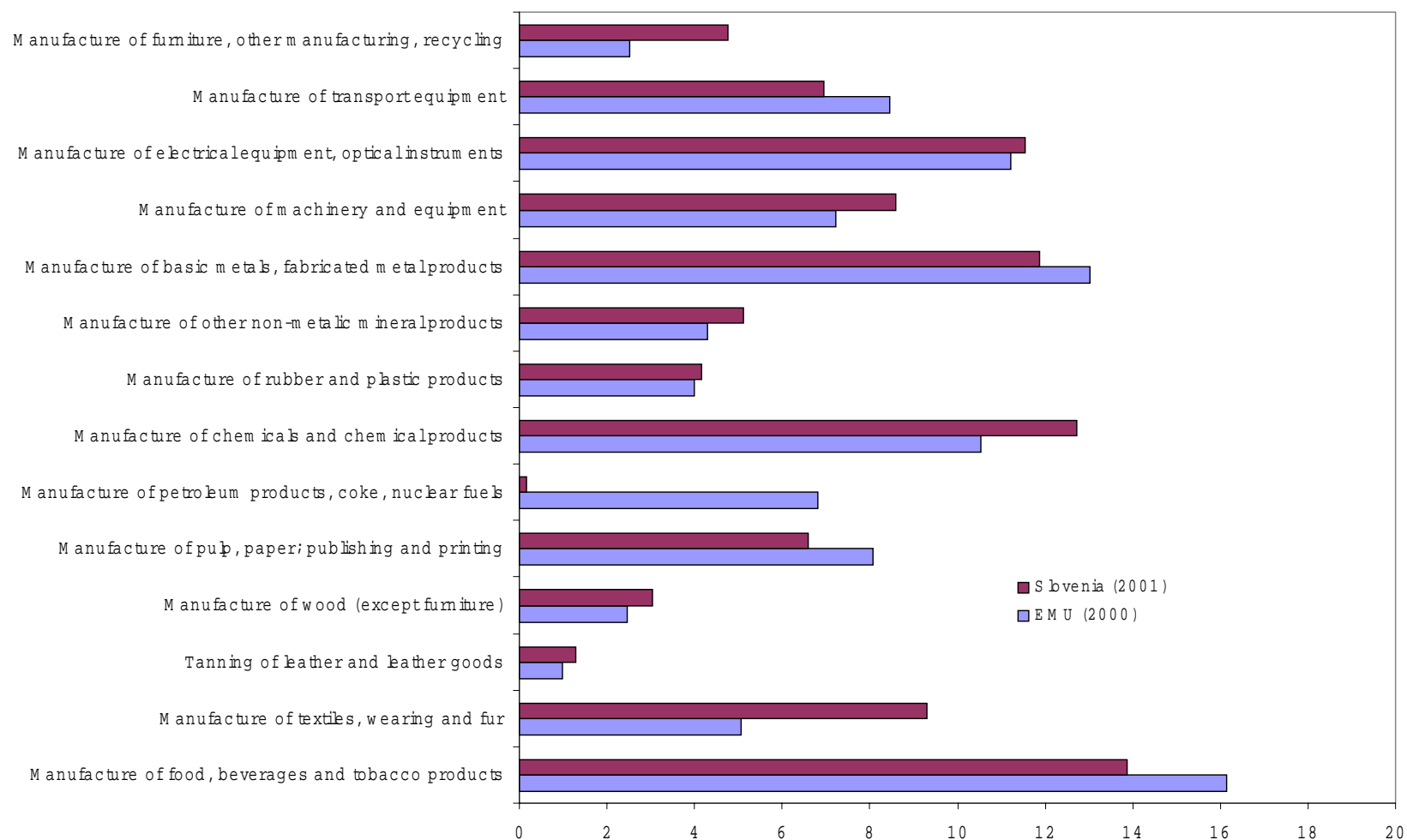
Value added by activities (% of total value; 2001)

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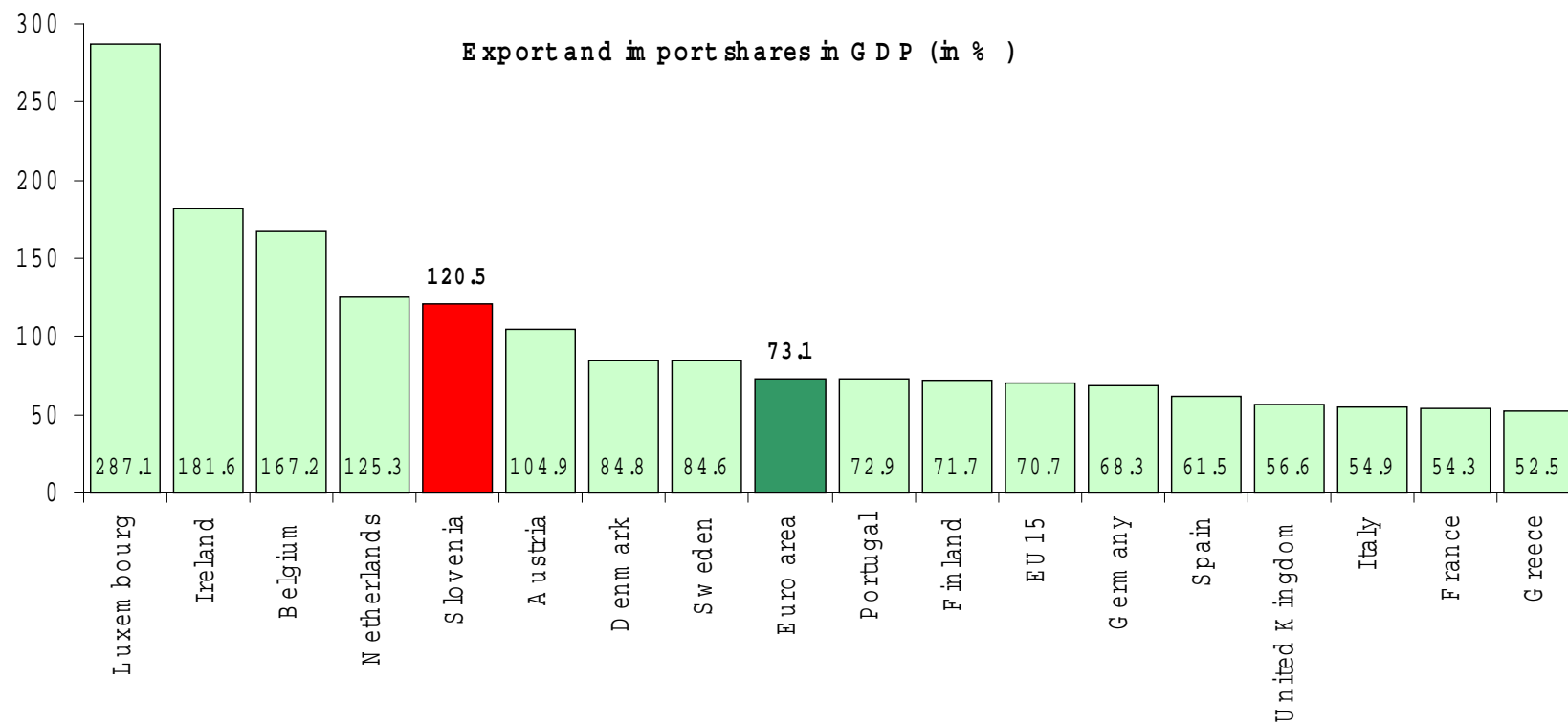
Structure of manufacturing

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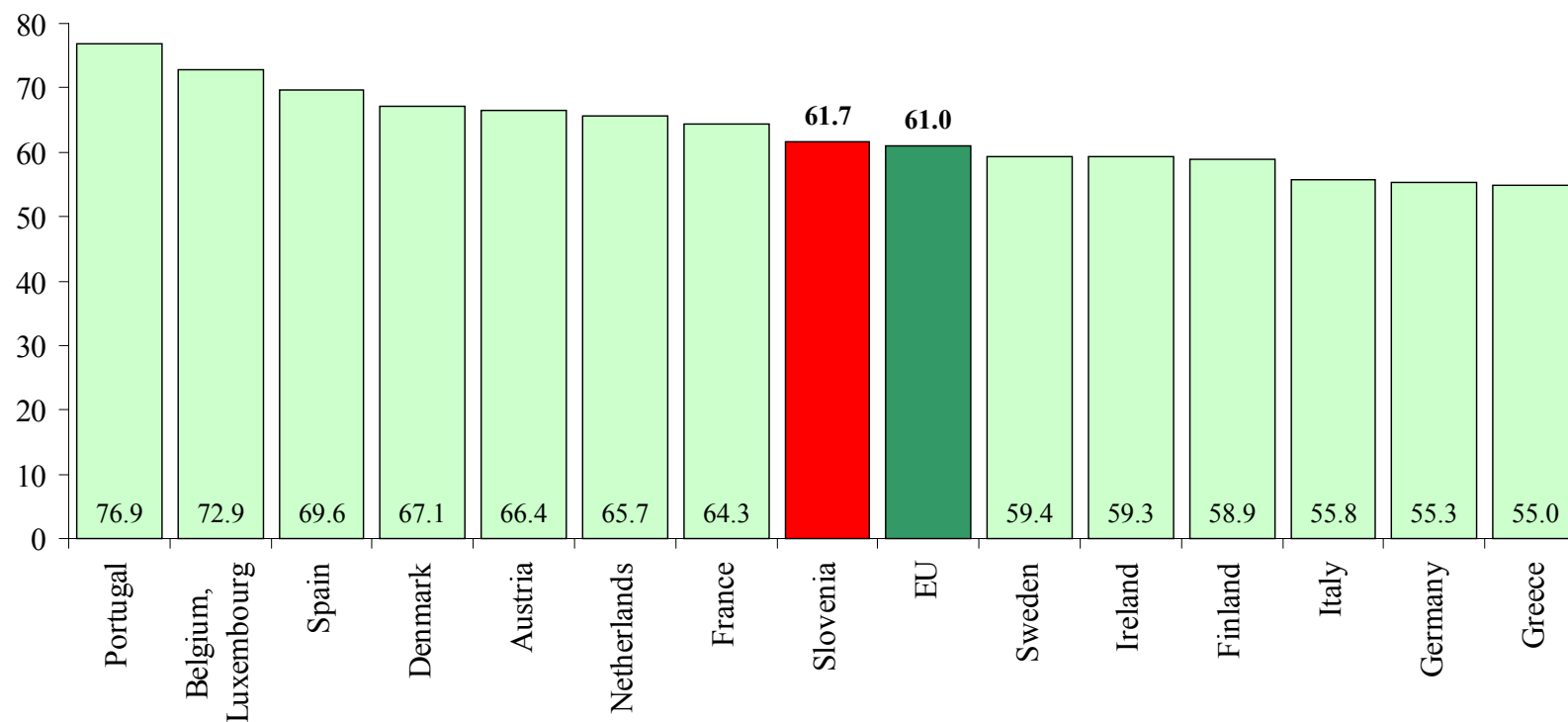
Openness (export and import in % GDP)

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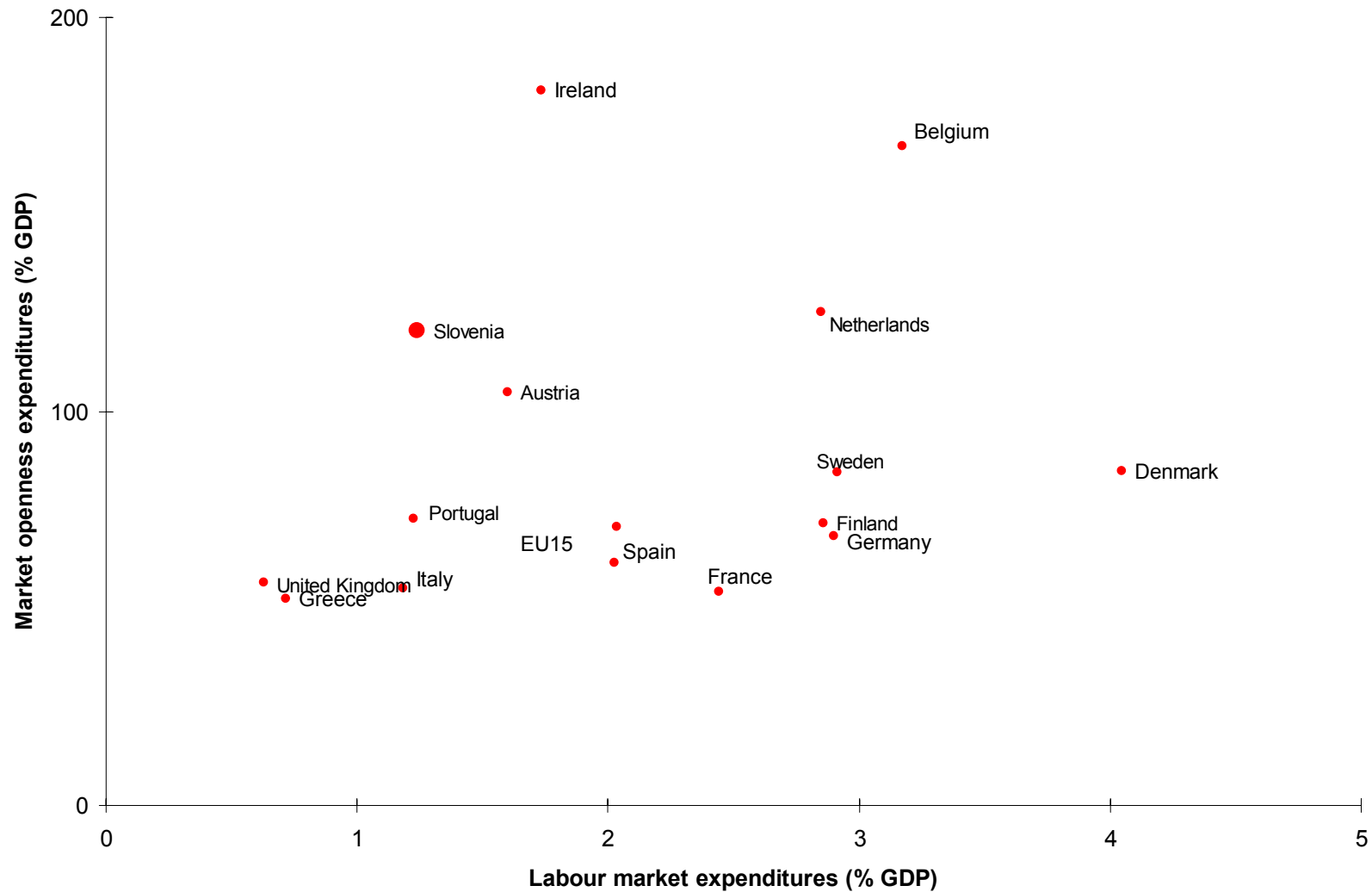
Foreign trade with EU (in % of export and import, 2001)

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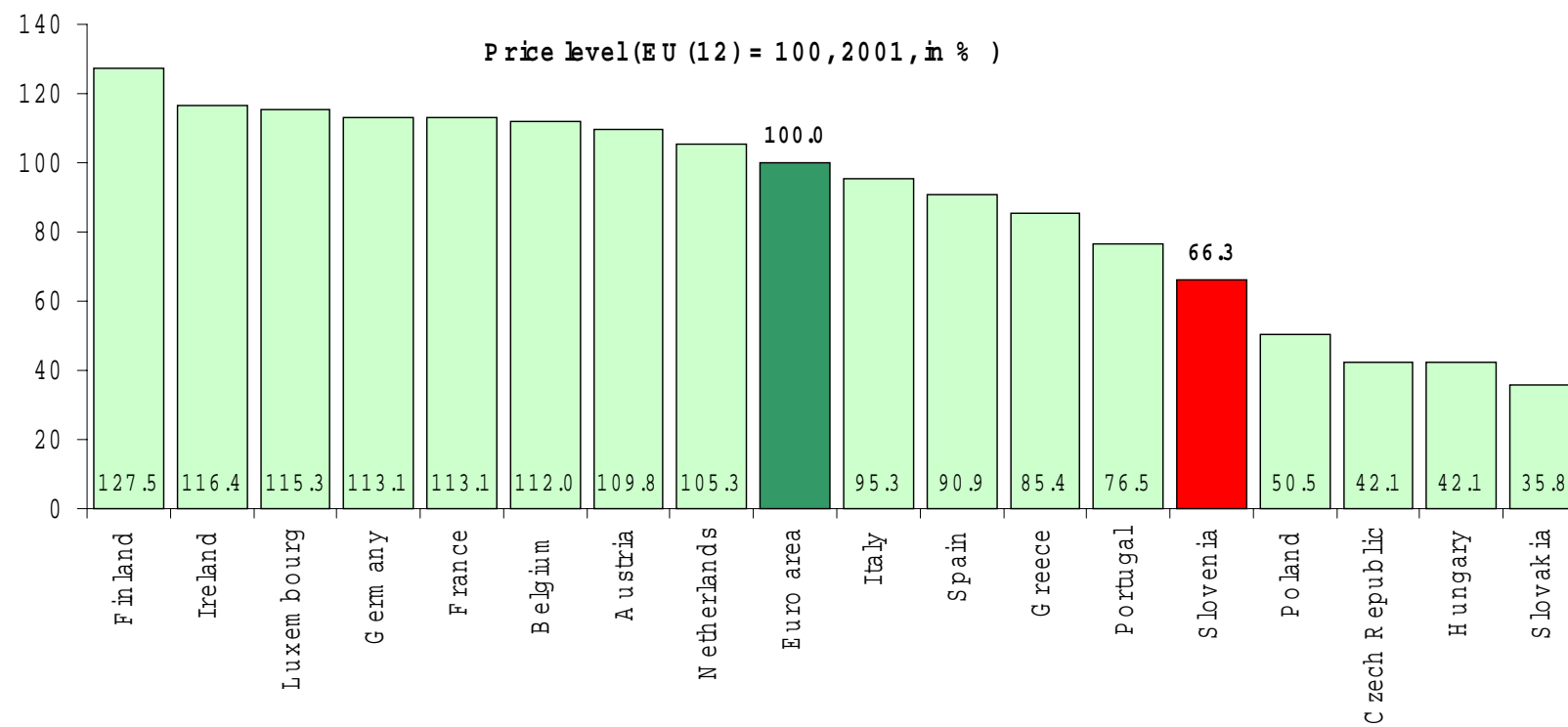
Government expenditure on labour market and market openness (2001)

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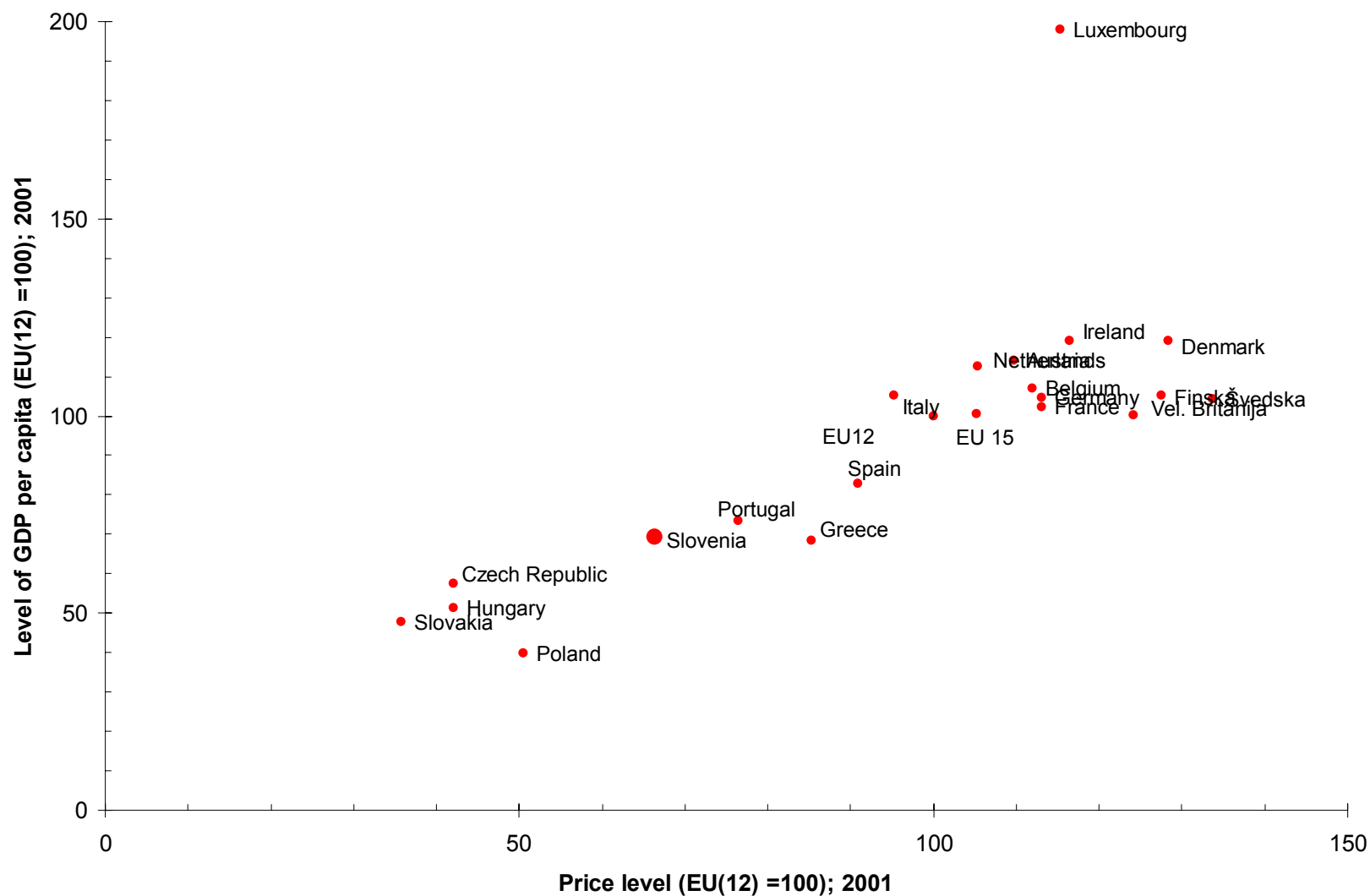
Price level

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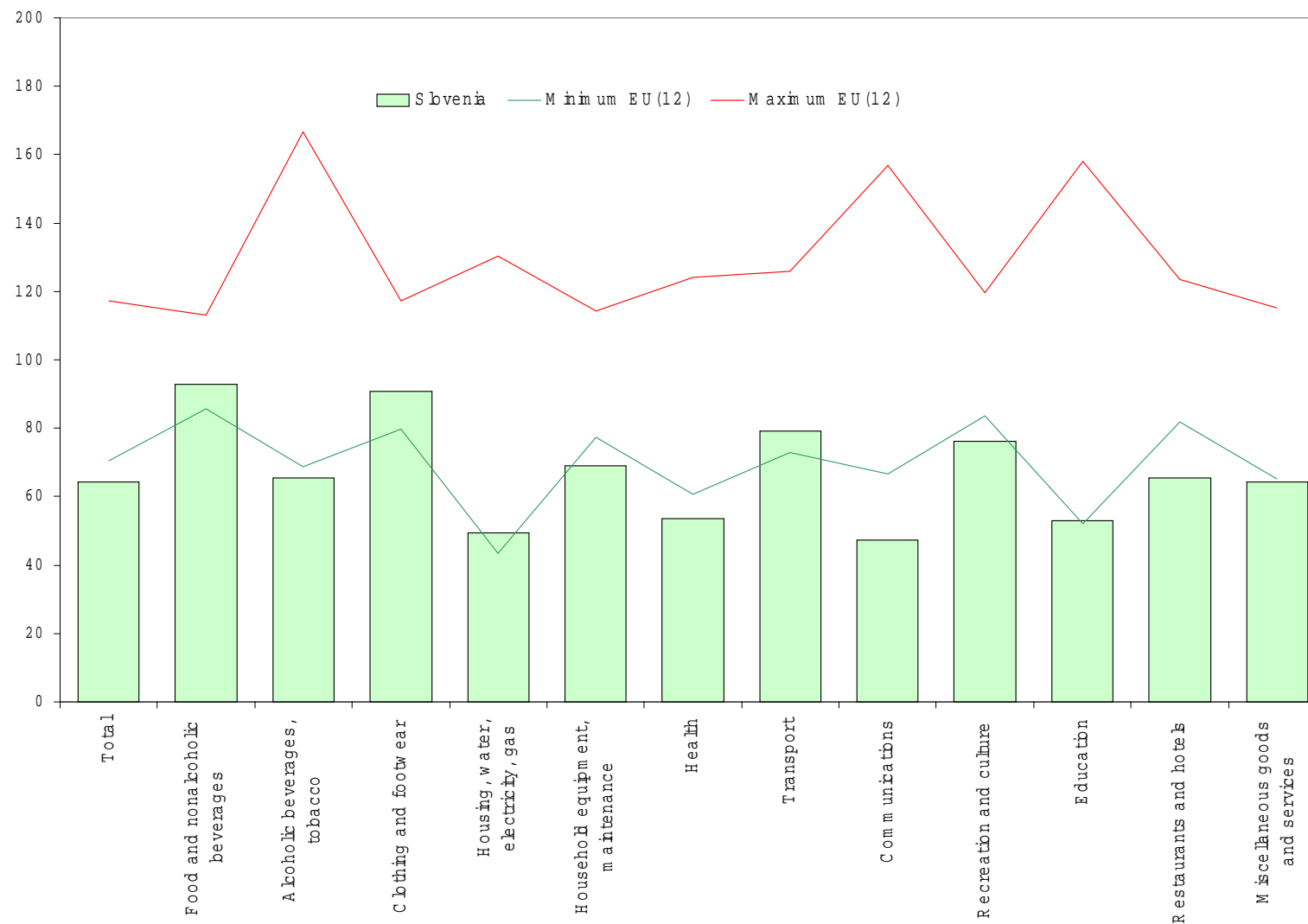
GDP level (PPS) and price level (2001)

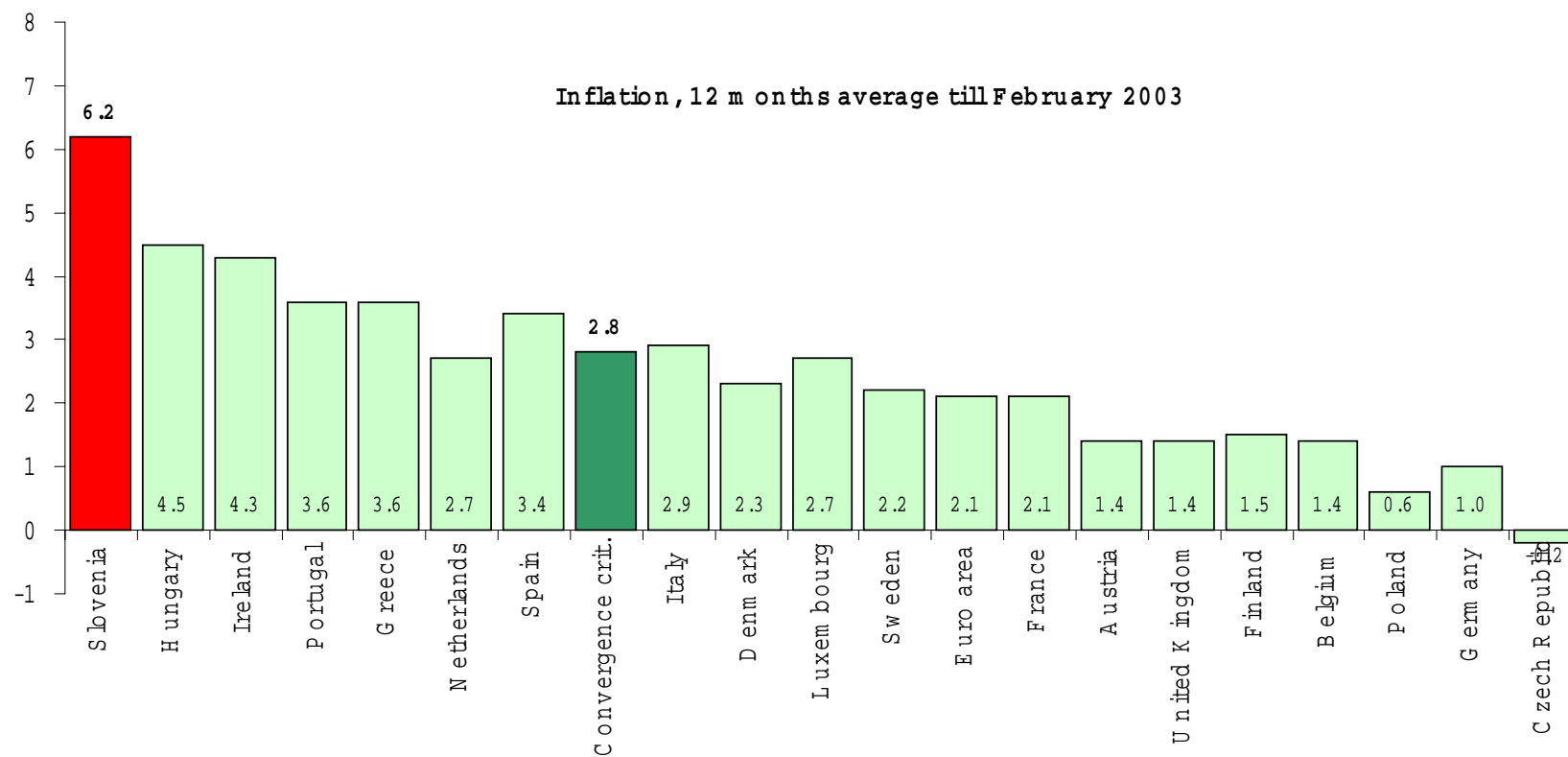
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Price level by groups in Slovenia and EU(12) in 2001 (EU(12) = 100)

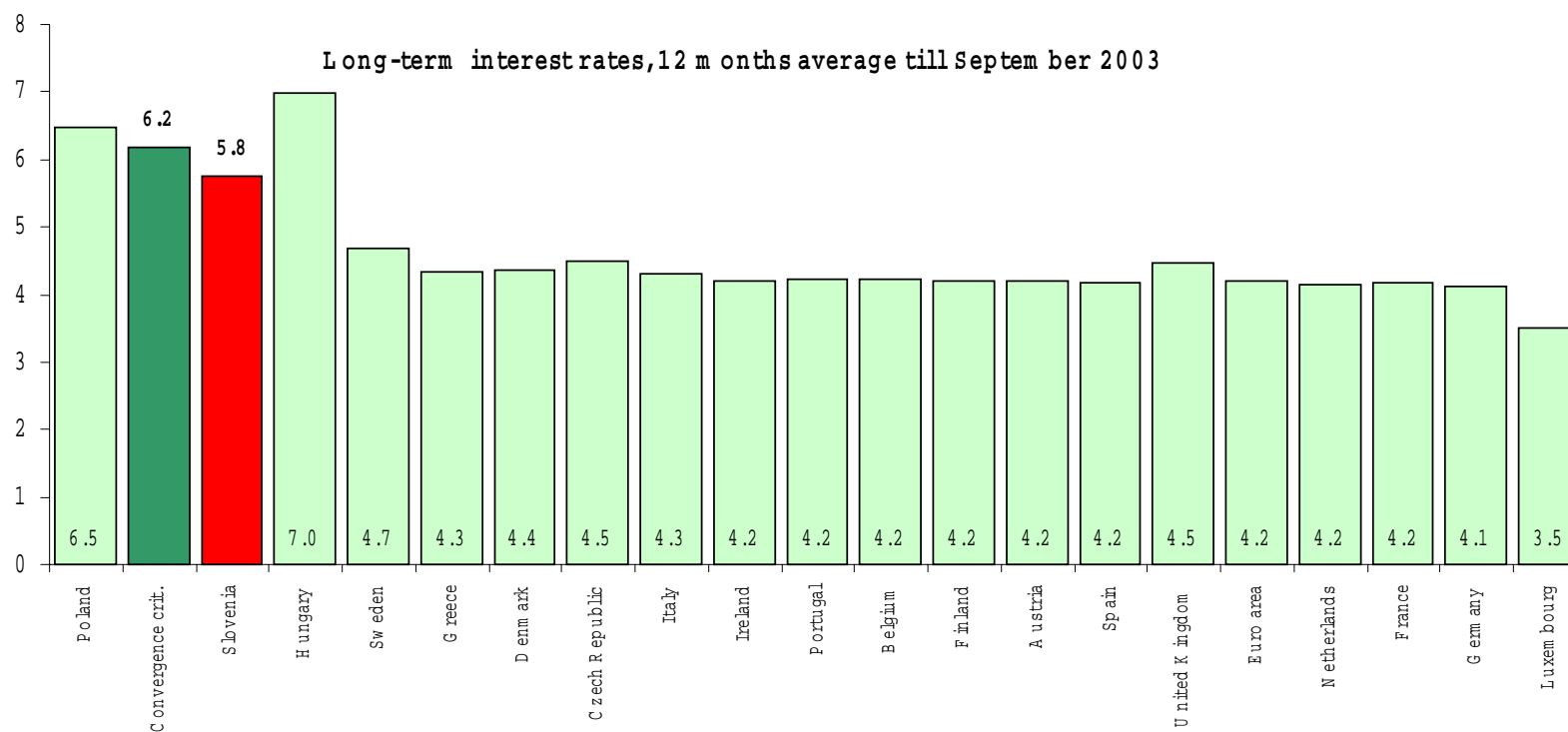
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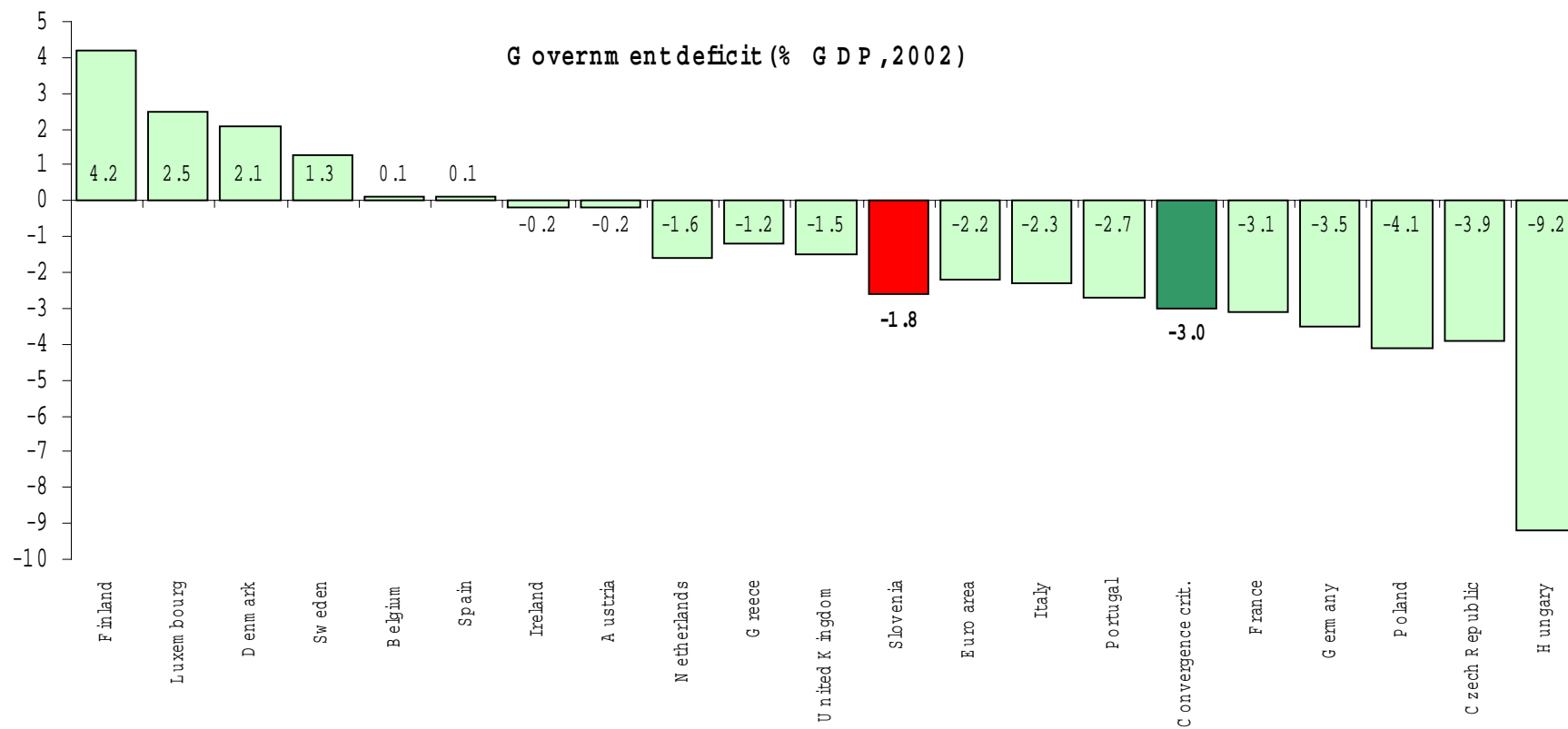
Long-term interest rates

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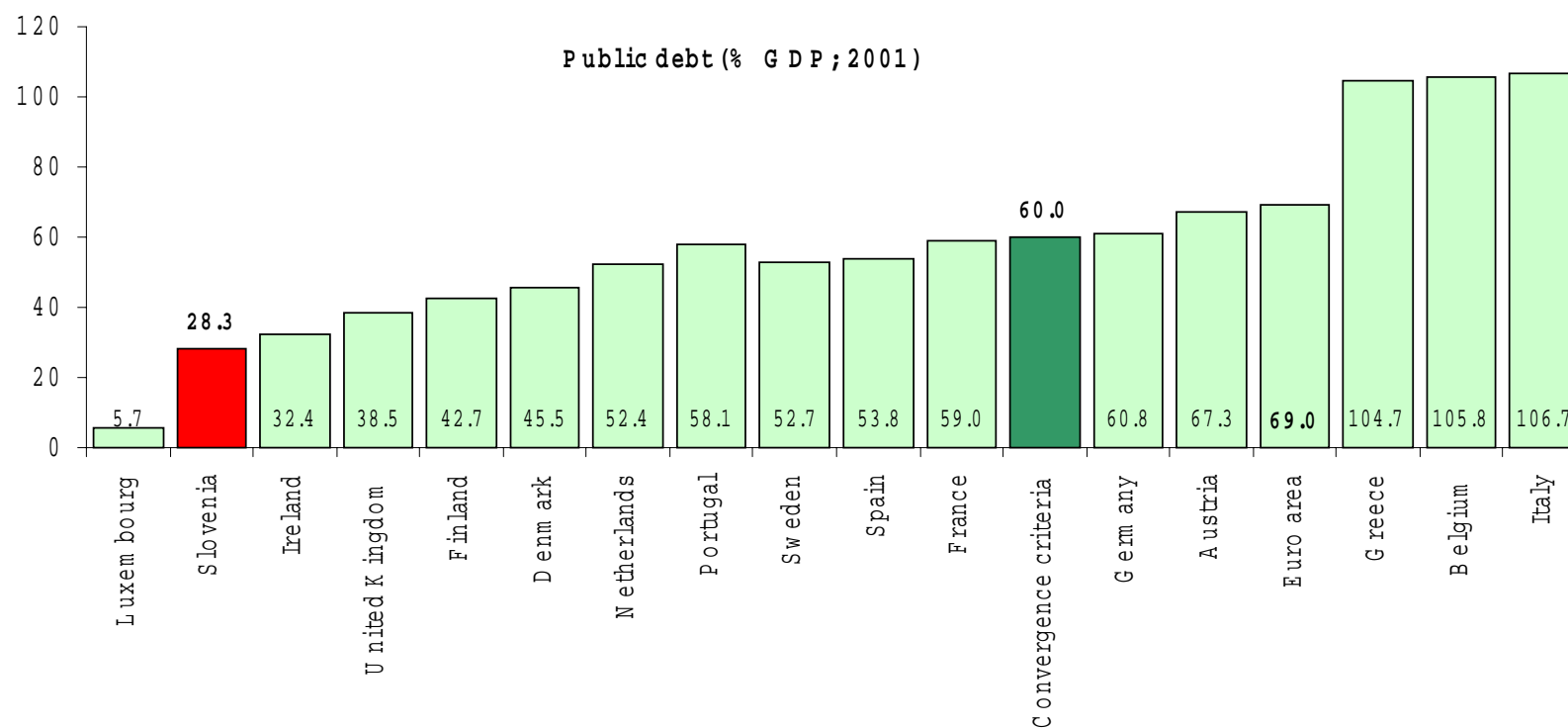
Government deficit

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Public debt (% GDP; ESA95)

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Maastricht convergence criteria

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MAASTRICHT CRITERIA	Inflation (%) last 12 mths (1)	L-t int. rate (%) last 12 mths (1)	Deficit (% of GDP) 2002	Debt (% of GDP) 2002
Belgium	1.4	4.23	0,1	105,8
Denmark	2.3	4.37	2,1	45,5
Germany	1.0	4.11	-3,5	60,8
Greece	3.6	4.33	-1,2	104,7
Spain	3.4	4.18	0,1	53,8
France	2.1	4.17	-3,1	59,0
Ireland	4.3	4.20	-0,2	32,4
Italy	2.9	4.31	-2,3	106,7
Luxembourg	2.7	3.51	2,5	5,7
Netherlands	2.7	4.16	-1,6	52,4
Austria	1.4	4.20	-0,2	67,3
Portugal	3.6	4.24	-2,7	58,1
Finland	1.5	4.20	4,2	42,7
Sweden	2.2	4.67	1,3	52,7
United Kingdom	1.4	4.46	-1,5	38,5
euro area 12	2.1	4.20	-2,2	69,0
Convergence criterion	2.8	6.18	-3.0	60.0
Czech Republic	-0.2	(3) 4,50	-3,9	27,1
Hungary	4.5	(3) 6,99	-9,2	56,3
Poland	0.6	(3) 6,47	-4,1	41,8
Slovenia	6.2	(2) 5,75	-2,6	28,3

Notes:

(1) Last 12 months refers to the average up to and including September 2003 (Netherlands and Greece up to August 2003).

(2) Government bond RS54 (issued October 2003).

Coupon rate used rather than yield to maturity, as required by the Maastricht criterion.

(3) Yield to maturity on 10-year government bonds as at 23 October 2003 (not a 12-month average).

Sources: Statistical Office of the Republic of Slovenia, MF, EUROSTAT, Pre-Accession Economic Programme, central banks.

