



# ANALYSIS OF CONVERGENCE OF THE SLOVAK ECONOMY TO THE EUROPEAN UNION

Ing. Zora Komínková, CSc., Ing. Tibor Lalinský, Mgr. Martin Šuster, PhD.  
Institute for Monetary and Financial Studies of the National Bank of Slovakia

## Introduction

In this study we assess the current state of convergence of the Slovak economy and its functioning in the EU and identify the main aspects and actions that will be crucial to fulfilling the criteria for Slovakia's entry to the euro area. We will at the same time compare the current state and outlook for the convergence process in Slovakia within the V4 countries.

Nominal and real convergence are mutually conditional upon one another and bilaterally stimulate one another. A stable macroeconomic environment as defined by the Maastricht criteria of nominal convergence acts as a stimulating factor for business. Faster growth in productivity and economic efficiency simultaneously create better conditions for applying stabilisation policies, mainly for reducing the deficit and reducing inflation. Real convergence thus supports the process of nominal convergence and its sustainability over the long term.

Slovakia has progressed in nominal convergence. On the basis of the current projection for nominal convergence indicators Slovakia will fulfil all Maastricht criteria in 2007. In accordance with the Specification of the Strategy for Adopting the Euro it will be possible to introduce the euro in Slovakia on 1 January 2009.

Nominal convergence has been supported by progress in real convergence. Slovakia has recorded fast economic growth based on labour productivity growth. Thanks also to foreign direct investment (FDI) the economy maintains a high degree of openness. The start of production in new foreign plants should ensure the continuation of fast economic growth in the coming years. A tight spot for real convergence remains the labour market and unemployment.

Institutional and structural convergence are helping to create a good business and institutional environment, thereby contributing to accelerating the process of real convergence and subsequently also nominal convergence. A major challenge for the future is for Slovakia to fulfil the aims of the Lisbon Strategy.

So far the Maastricht criteria have not been fulfilled by any of the V4 countries. Given the different dates for the V4 countries' expected entry into the euro area, it is not presently possible to objectively compare the outlook for fulfilment of the convergence criteria in all

these countries. Slovakia plans to be the first to introduce the euro. Slovak prospects of fulfilling the aims in the Convergence Programme Update appear to be the most realistic from among the V4 countries.

From the aspect of the sustainable fulfilment of the nominal stability criteria it is necessary to pay regard to several important aspects. First, simply fulfilling the nominal criteria at the assessment date does not guarantee stability in the macroeconomic environment following entry. Second, progress in real convergence before entry improves the conditions for fulfilling the nominal criteria. Third, the degree of real convergence achieved upon entering the euro area will have an influence on maintaining nominal stability after entry.

## 1. Nominal convergence

### 1.1. Current state in Maastricht criteria fulfilment

At present Slovakia fulfils only the criterion concerning the level of long-term interest rate.

Despite the fact that public sector debt in 2004 was lower than the reference value, Slovakia does not fulfil the fiscal criterion, because the public finance deficit was 0.3% of GDP above the level set by the Maastricht criterion.

Inflation over the past months has fallen significantly, Slovakia however does not yet meet either the criterion of price stability. The 12-month average for inflation in 2005 was still almost two times higher than the reference value. The year-on-year inflation measured by HICP as at June 2005 however was only 2.5% and in the near future the 12-month average will also fall significantly.

The long term interest rate criterion is the only criterion Slovakia presently fulfils. In the past months we have

Table 1 Maastricht Criteria fulfilment

Criterion		Current value (June 2005)	Reference value	State of fulfilment (June 2005)
Fiscal criterion	public deficit	3.3% GDP <sup>1)</sup>	3% GDP	No
	public debt	43.6% GDP <sup>1)</sup>	60% GDP	
Inflation rate (HICP) <sup>2)</sup>		4.5%	2.3%	No
Long-term interest rate		4.3%	5.9%	Yes
Nominal exchange rate		Outside ERM II (+10.1% / -1.4%) <sup>3)</sup>	Participation in ERM II +15% / -15%	Not evaluated

Source: SR Ministry of Finance, NBS, Eurostat, own calculations.

1) 2004.

2) 12-month average.

3) Simulated fluctuation band against average for July 2003.



seen a fall in the reference value as well as in the average long-term interest rate in Slovakia, where the average long-term interest rate in Slovakia has fallen faster than the reference value. Development in Slovakia is connected with the increased credibility of its economic policy, a decline in inflationary expectations, as well as with a reduction in the risk premium.

Slovakia does not currently fulfil the basic systemic conditions for assessing exchange rate stability (participation in ERM II and a set central parity). We can therefore assess exchange rate stability only indicatively, on the base of its deviations from a simulated mean value. In accordance with the convention adopted in ECB convergence reports we will assess the stability of the exchange rate relative to the average for the first month of the monitored two-year period, i.e. relative to the average for July 2003. The nominal SKK/EUR exchange rate over the monitored two-year period gradually appreciated, moving in a range from -1.4% (depreciation) to +10.1% (appreciation) against the average for July 2003, i.e. within the standard fluctuation band  $\pm 15\%$ .

## 1.2. Outlook for Maastricht criteria fulfilment

In the interest of fulfilling the conditions for introducing the euro in 2009 it will be necessary to continue in consolidating public finances and to achieve at latest in 2007 a public finance deficit not exceeding 3% of GDP. Inflation measured by HICP is expected to fall below the expected reference value of approx 2.4% with a significant margin<sup>1</sup>. Based on official materials from the Ministry of Finance<sup>2</sup> and the NBS, Slovakia will be able to fulfil these criteria.

Table 2. Outlook for Maastricht criteria fulfilment

Criterion		2005	2006	2007	2008
Fiscal criterion	public deficit inclusive pension reform effect	3.8% GDP	4.2% GDP	3.0% GDP	2.7% GDP
	public deficit exclusive pension reform effect	3.4% GDP	2.9% GDP	1.6% GDP	1.3% GDP
	debt	36.7% GDP	38.4% GDP	37.8% GDP	37.5% GDP
				will fulfil	
Inflation rate (HICP)		2.4%	1.9%	1.8%	1.8%
				will fulfil	
Long-term interest rate		5.4%	5.5%	5.7%	–
				will fulfil	

Source: SR Ministry of Finance, NBS, own calculations.

<sup>1</sup> Estimate of the reference value on the basis of our own calculations.

<sup>2</sup> Convergence Programme Update for Slovakia for 2004 until 2010 of the SR Ministry of Finance, November 2004 and the Draft General Government Budget for 2006 to 2008 of the SR Ministry of Finance, July 2005.

<sup>3</sup> Until completing the initial phase of pension reform it is not possible to reliably determine the costs connected with reform. In accordance with the Eurostat decision allowing, until March 2007,

### Reform of the Stability and Growth Pact

In March 2005 the Council of the EU adopted a decision on the need to change the Stability and Growth Pact. In the near future changes are expected to Council Regulations Nos. 1466/97, 1467/97 and 3605/93, which govern the Pact. The changes in assessing the public finance deficit will concern mainly the assessment of the euro area countries' fiscal situation (and the assessment of stability programmes, as well as convergence programmes).

The Maastricht Treaty remains unchanged, the fiscal criterion for the public deficit remains 3% of GDP. The deficit includes all public finance expenditures, no items may be automatically excluded.

The agreed changes to the Stability and Growth Pact will allow an excess over the 3% deficit ceiling under certain conditions without the need to apply the excessive deficit procedure. Pension reform costs may be taken into account as follows:

- the net costs of reform shall be taken into account over the first five years from introducing a compulsory capitalisation pillar (in the case that the member state has already made this reform, the cost are taken into account over the five years after 2004),
- costs are taken into account in a regressive manner, in the subsequent years 100%, 80%, 60%, 40% and 20% of the net costs of reforms for the public pillar may be deducted.

In the Slovak case 100% of the effect of the pension reform in 2005 may be deducted (i.e. 0.4% of GDP), 80% in 2006 (1% of GDP), 60% in 2007 (0.8% of GDP), 40% in 2008 (0.6% of GDP) and 20% in 2009 (0.3% GDP).

According to the starting points for preparing the budgets for 2006 to 2008, the public finance deficit (including the impact of pension reform) in 2006 will grow, though in later years it will progressively decline. At the same time the ratio of public debt to GDP will also fall. Slovakia will meet the public finance criterion in 2007<sup>3</sup>.

In the Monetary Programme until 2008 the NBS has set a target of meeting the inflation criterion by 2007. According to the NBS current medium-term projection<sup>4</sup> and estimate of the reference value, the inflation criterion should be met in 2006. In 2005 year-on-year inflation measured by HICP should fall to 2.4% and in 2006 fall further to 1.9%. Decisive factors for the development of inflation will be: low imported inflation, a slowdown in the growth of energy prices and increasing competition in

the public finance deficit to be reported exclusive of the impact of pension reform, the SR Ministry of Finance decided (until completing the initial phase, i.e. to June 2006) to report the public finance deficit exclusive of the pension reform effect. In our assessment Maastricht criteria fulfilment we focus primarily on whether fulfilment of the fiscal criteria in 2007 is realistic, when it will no longer be possible to apply this procedure. Therefore, in assessing the fiscal criterion fulfilment, we use the deficit inclusive of the pension reform impact.

<sup>4</sup> Medium-Term Forecast (MTF-2005Q3), NBS, July 2005.



the retail sector. On the basis of our calculations the reference value for 2007, which will be decisive for assessing the fulfilment of the inflation criterion, will be approximately 2.4%. The probability that the reference value will be lower than 1.8% (current inflation estimate for Slovakia) is negligible – less than 0.3%<sup>5</sup>.

Currently, ECB rates are at their historically lowest levels. In the future a gradual return to neutral interest rates in EU member states (including Slovakia) may be expected. This development will create conditions for growth in the long-term interest rate. Concurrently however a decline is expected in the interest-rate differential between the interest rate in Slovakia and the reference value. Based on current estimates of future development, Slovakia will fulfil the long-term interest rate criterion with a wide margin also in subsequent years.

In recent years the strengthening of the nominal SKK/EUR exchange rate has been accelerating, where this has been caused mainly by improving economic development. Based on the relatively stable development of the nominal exchange rate to date, as well as in connection with the expected positive macroeconomic development it may be expected that subsequent years will not see any transgression outside the  $\pm 15\%$  fluctuation band.

### 1.3. Risks in the sustainability of fulfilment

Risks in the field of fulfilling the fiscal criterion are linked primarily to the results of the ongoing structural reforms. With regard to the reforms made, expected revenues to the public sector budget need not necessarily be fulfilled, or the estimated long-term benefits of the ongoing reforms need not fulfil. A drop out in revenues in connection with the second pension pillar is a further uncertainty. A potentially lower than expected growth in economic performance, or possibly also an increase in co-financing of projects realised from EU funds may also have a negative impact on meeting the fiscal criteria<sup>6</sup>. An utmost risk would be a change in the major fiscal policy goals after elections in 2006.

The risk of higher inflation is connected primarily with the development of wages. In a situation of an insufficiently flexible labour market it will be important to ensure that wage growth develops in line with the growth in labour productivity. An important determinant of a future inflation will be the success of the strategy of sustainable fiscal consolidation and continuation in restructuring the economy. In some regards FDI, too, may be considered as a potential source of risk. Exhaustion of the labour supply in some specific segments of the labour market could increase wage requirements and be mani-

festated in increased inflation. In the public sector a negative role may be played by the influence of the approaching parliamentary elections in 2006. Possible inappropriate growth in wages together with increase in general government consumption may thus be negatively manifested not only in the real, but also in the nominal convergence. The process of catching up to more developed countries will also have an influence on the level of inflation. In 2006 to 2008 the contribution of the Balassa-Samuelson effect on overall inflation will be approximately two percentage points annually. A risk to fulfilling the price stability criterion is also the possible persistence of the present high oil prices or their further growth over the medium-term<sup>7</sup>. Other potential risks are fast credit growth, a sudden weakening of the exchange rate or a fail in maintenance of disinflationary expectations. A specific risk to fulfilling the inflation criterion lies in the uncertainty regarding the level of the reference value, which reflects the development in the three countries with the best inflation performance.

The long-term interest rate is to a large degree influenced by development in the fiscal field and the inflation differential. Under the condition of fulfilling the fiscal and inflation targets, the fulfilment of the long-term interest rate criterion is not endangered.

Despite the falling interest-rate differential between Slovakia and the EU, the nominal exchange rate in subsequent years will probably continue to be exposed to pressures connected with the movement of short-term capital and portfolio investments. A correct setting of the central parity will be important for development over the medium term.

## 2. Real convergence

### 2.1. Current state of real convergence

Slovak economic growth in 2004 exceeded original expectations, the real GDP growth reached 5.5%. In contrast to 2003 the growth was stimulated not only by foreign demand, but primarily by domestic consumption and investment. However, the performance of the Slovak economy measured by GDP per capita at purchasing power parity (PPP) is at present only 52%<sup>8</sup> of the average EU output.

The high rate of inflation and strengthening of the koruna also brought the price level in Slovakia closer to that in the EU. In 2004 the price level in Slovakia, according to our estimates, stood at approximately 54.2% of the average EU price level.

In 2004 growth in the export of goods and services

<sup>5</sup> The probability that the reference value will be lower than 2% (which is the NBS inflation target ceiling for 2007) is also very low – only 4%.

<sup>6</sup> Draft General Government Budget for 2006 to 2008 of the SR Ministry of Finance, July 2005.

<sup>7</sup> Higher oil prices have a greater influence on inflation in the SR, where the economy has a substantially higher energy intensity than the EU average. In Slovakia, the production of a GDP unit has a 4.5-time higher energy consumption than the EU average.

<sup>8</sup> Eurostat estimate for 2004. According to the authors' estimate the share of GDP per capita in the SR to that in the EU was 53.9%.



Table 3 Real convergence indicators (2004)

Performance and price level		Openness of the economy		Labour market and employment	
Ratio of GDP in SR to EU (at PPP)	52.0% <sup>1)</sup>	Exports	76.8% HDP	Employment rate	56.8%
Real GDP growth in SR	5.5%	Imports	79.5% HDP	Unemployment rate (survey)	18.1%
Real GDP growth in EU	2.4%	Current account	-3.5% HDP	Labour productivity growth (ESA 95)	5.8%
Ratio of price level in SR to EU	54.2% <sup>2)</sup>	FDI inflow	2.0% HDP	Unit labour cost growth (ESA 95)	4.7%

Source: SR Ministry of Finance, NBS, own calculations.

<sup>1)</sup> Eurostat estimate. According to the authors' estimate, the ratio of GDP per capita in the SR to EU was 53.9%.

<sup>2)</sup> Authors' estimate on the basis of inflation and exchange rate development.

(primarily in the automobile industry) slowed significantly against previous years and at the same time growth in imports accelerated due to increasing household consumption and growth in investments. This resulted in a worsening in the balance of payments. The current account deficit rose to 3.5% of GDP.

With regard to the fact that imports and exports grew at a rate similar to that of nominal GDP, the openness of the economy remains high. The share of foreign trade (the sum of exports and imports) in 2004 represented 156.3% of GDP.

Besides the growing number of new foreign direct investments recorded, the actual inflow in 2004 was lower than in previous years. The conditions for an inflow of foreign investment improved thanks to structural reforms and labour market indicators continue to be advantageous. Alongside a low price level Slovakia is maintaining also a relatively low level of wages.

In 2004 growth in unit labour costs increased on a year-on-year basis; the nominal compensation per employee grew by 10.8% and real labour productivity by 5.8%. An important fact is nonetheless that real wage growth did not move ahead of real labour productivity growth. The level of labour productivity in Slovakia in 2004 increased to 61.4% of the labour productivity in the EU.

The level of registered unemployment fell to 14.3%, the rate of unemployment calculated on the basis of labour force surveys conversely grew slightly to 18.1%. The structural component of unemployment is high; long-term unemployment forms more than half of total unemployment. The rate of employment in 2004 fell slightly (by 0.2%) under the influence of the ongoing changes in the labour market to 56.8%.

## 2.2. The state in structural and institutional reforms

Slovakia has been successful in implementing several important structural reforms. First and foremost this concerns the reform of public finances, changes in the tax system, and reform of the pension system, changes in social policy and the labour market, in the regional school system and in health care.

Several legal regulations were adopted recently, whereby the SR was reacting to the need to transpose and

implement European directives and regulations into the Slovak legal framework. Adopted laws include those governing supranational legal forms of business entities, the act on bankruptcy and restructuring, etc.

Other legal regulations have been amended, for example the amendment to the civil code, which introduces a two-year warranty period and governs new types of consumer contracts. In the field of services a National Strategy for Broadband Access was adopted, along with a Postal Policy to 2008. Legal regulation of the capital market and financial services have also undergone extensive changes.

The situation in the banking sector is stabilised, profitability has improved, competition in the market for banking products has risen and prudent banking indicators have developed favourably. The capital market continues to suffer with insufficient liquidity. The most dynamically developing segment of the financial market is collective investment.

The business sector, similarly as the whole micro-sector is increasing in terms of efficiency and strengthening in its economic stability. This has been the trend now for several years. The share of profitable businesses is progressively growing and the share of loss-making businesses is falling. The influence of loss-making businesses on inter-corporate financial flows is also declining, whereby the risk of possible financial disruptions is reduced. Capital adequacy is growing, financial dependency including credit is falling, the turnover period for business assets is decreasing and value added is growing. Profitability parameters as expressed by the profitability of business assets and proper capital are gradually approaching the level of the business sector in the EU. The results is a level of sustainable growth enabling higher business sector efficiency to be achieved in the future.

The business environment has improved. The new labour code has increased labour market flexibility. The administrative burden in starting up business has been reduced. The property registration has also undergone significant changes. The successful advancement of Slovakia in the field of improving the business environment has also been the subject of a study by the World Bank "Doing Business in 2005", marking out Slovakia as the "top reformer".

Based on the Cardiff Report<sup>9</sup>, which assesses reforms in the product and services market, it will be necessary

<sup>9</sup> Progress Report on Reforms on Product and Capital Markets (Cardiff Report), SR Ministry of Finance, October 2004.





### Fulfilling the Lisbon Strategy goals

In 2000 at the summit in Lisbon the heads of EU member states set out the strategic goal of making the EU by 2010 the most competitive and dynamic knowledge economy in the world, capable of sustainable economic growth, with more and better jobs and greater social cohesion. It was with a view to achieving this goal that they adopted the Lisbon Strategy, which is to be the main guide to each member state's economic policy, including that of Slovakia. The Lisbon Agenda set a number of specific targets and reference indicators.

Many of the targets represent a great challenge not only for Slovakia, but also other EU member states. For the SR it will be problematic to fulfil primarily the targets in the field of science and research, employment and education. One of the main goals in the field of science and research is to increase total expenditure on research by 2010 to 3% of GDP, while in Slovakia these expenditures are now only 0.59% of GDP and by 2010 they are expected to grow to 1.8% of GDP. It is also unrealistic for the SR to fulfil several targets in the field of employment. The Lisbon Strategy, for example, calls for achieving 70% employment rate by 2010. The employment rate in Slovakia in 2004 was 56.8% and, on the basis of our estimates it will grow by 2010 only to 57.2%. Despite the shift in the retirement age, it is also unrealistic for the SR in the short term to raise the employment rate of older workers to 50%.

In March 2004 the SR government approved the document "Position of the SR towards the Lisbon Process", which represents the first analytical assessment of the implementation of the Lisbon Strategy in Slovakia. This document contains also measures which should lead to an acceleration in the fulfilment of the main Lisbon Strategy objectives in the SR. Subsequently a coordination mechanism was proposed for ensuring the mutual accordance of the Lisbon Agenda and the convergence process in the SR. At the same time a Competitiveness Strategy for Slovakia to 2010 was formulated (the Lisbon Strategy for Slovakia), which was later detailed into action plans.

The Competitiveness Strategy for Slovakia to 2010 is based on two pillars. The first is the successful completion of structural reforms and the maintenance of their results. The second pillar is the systematic focusing on fulfilling the developmental part of the Lisbon Strategy, the aim of which is to build long-term competitiveness through creating the conditions for developing a knowledge economy. Key fields are an information society; science, research and innovation; the business environment; education and employment. For each of these fields a vision has been set, along with basic targets and main policies. For all four key fields action plans have been drawn up, containing specific tasks, deadlines for their implementation, as well as the institutions responsible for fulfilling them.

**Table 4 Outlook for performance, price level and openness of the economy in the SR**

	2005	2006	2007	2008
Ratio of GDP per capita in SR to EU (at PPP)	53.6% <sup>1)</sup>	55.2% <sup>1)</sup>	57.5% <sup>2)</sup>	58.7% <sup>2)</sup>
Ratio of price level in SR to EU	56.7% <sup>3)</sup>	57.9% <sup>3)</sup>	59.4% <sup>3)</sup>	61.1% <sup>3)</sup>
Share of exports and imports in GDP	156.1%	155.6%	158.7%	159.8%

Source: Eurostat, NBS, own calculations.

<sup>1)</sup> Eurostat estimate

<sup>2)</sup> Authors' estimate on the basis of the estimated real GDP growth in the SR and EU.

<sup>3)</sup> Authors' estimate.

**Table 5 outlook for real economy indicators**

	2005	2006	2007	2008
GDP (real growth)	5.1%	5.5%	6.7%	4.8%
Final household consumption (real growth)	5.7%	5.0%	5.0%	4.8%
Final general government consumption (real growth)	2.9%	3.2%	2.4%	2.0%
Gross fixed capital formation (real growth)	8.1%	8.6%	5.5%	4.5%
Export of goods and services (real growth)	5.5%	9.4%	15.2%	8.2%
Import of goods and services (real growth)	6.3%	7.9%	10.6%	7.9%
Current account balance (share in GDP)	-6.5%	-6.0%	-3.0%	-2.6%
Employment (survey, growth)	1.7%	0.8%	0.8%	0.7%
Average monthly wage (real growth)	6.1%	4.5%	3.7%	3.5%
Labour productivity (real growth)	3.2%	4.7%	5.7%	4.1%

Source: NBS.

to make further changes in three fields, namely the knowledge economy, the business environment and human resources.

As part of improving the business environment it is necessary to continue along the path of liberalisation and efficient regulation of utilities, to continue removing administrative and regulatory burdens, as well as impro-

ving the enforceability of law. At the same time it is important to support enterprising, mainly the further facilitation of market entry to small businesses and self employment.

Achieving significant progress in the transition to a knowledge economy probably represents the most difficult challenge. This field is closely connected with the future of the country's technological level and is conditional upon reforms in higher education, science and research.

The importance of solving the problems of lagging behind in issues concerning the knowledge economy and human resources is accentuated also by the fact that these issues have become key points in the Lisbon Strategy for Slovakia.

### 2.3. Outlook for real convergence

Along with nominal convergence there may also be expected in the coming years an acceleration in real convergence based on a growth in the competitiveness and performance of the Slovak economy.

According to the authors' estimates GDP per capita in Slovakia relative to the EU (at PPP) will by 2008 grow to reach 58.7% and the share of price levels in Slovakia and the EU will increase to

61.1%. In 2007 and 2008 nominal growth in exports and imports exceeding nominal GDP growth is expected, which will lead to a further growth in the openness of the Slovak economy.

On the basis of current predictions<sup>10</sup> Slovakia will con-

<sup>10</sup> Medium-Term Forecast (MTF-2005Q3), NBS, July 2005.



tinue to maintain over the coming years fast growth in its economy's potential and also production itself. Under the influence of the expected increased inflow of FDI a substantial acceleration in the growth of gross investment may be expected, which will be manifested in a transitional worsening in the trade balance in 2005 and 2006. In later years (2007 and 2008) with regard to the planned gradual start-up of export production capacities may be expected, which will be reflected in a renewed reduction in the trade deficit.

Besides the balance of payments the positive effect of FDI will be manifested also in other areas of the real economy, which will favourably support real convergence. We assume primarily a continuation of the relatively high rate of real labour productivity growth with a partial acceleration in the growth of employment. Growing employment should in future years gradually result in a reduction in the number of unemployed persons.

Despite the increased year-on-year real wage growth in 2005, the medium-term projection still reckons on a stabilisation of real wage growth and subsequently also final household consumption in 2006 to 2008. Based on the Convergence Programme Update for the years 2004 to 2010, general government consumption should also in the future remain the slowest growing component of GDP.

Growth in compensations per employee should also gradually slow, which will be manifested in a slowdown in the growth of unit labour costs.

#### 2.4. Tight spots in real convergence

With regard to the expected acceleration of convergence in output and the price level and Slovakia's growing trade interconnection with the EU, the most critical area of real convergence may be deemed the labour market and employment. Most of the changes in the labour market have been of a structural nature, therefore its adaptation is very slow, moreover it reacts only with a substantial time delay. The employment rate gap between the SR and the EU should gradually close, its complete closure, however, cannot be expected within the next 10 years. The forecast year-on-year growth in employment at an average of 15,000 persons annually should mean a growth in the employment rate<sup>11</sup> of approximately 0.2 percentage points per year.

In the development of unemployment we can identify several risk factors which may hinder the expected reduction of unemployment. Due to the shift in the retirement age the supply of workforce will be expanded and

Table 6 Current state in Maastricht criteria fulfilment in the V4 countries (Jun 2005)

Criterion		Slovakia	Czech Republic	Poland	Hungary
Fiscal criterion <sup>1)</sup>	Public deficit	3.3% GDP	3% GDP	4.8% GDP	4.5% GDP
	Public debt	43.6% GDP	37.4% GDP	43.6% GDP	57.6% GDP
		does not fulfil	fulfils	does not fulfil	does not fulfil
Inflation rate		4.5%	2.1%	3.8%	5.0%
		does not fulfil	fulfils	does not fulfil	does not fulfil
Long-term interest rate		4.3%	4.2%	6.2%	7.5%
		fulfils	fulfils	does not fulfil	does not fulfil
Nominal exchange rate		outside ERM II	outside ERM II	outside ERM II	outside ERM II
		Not evaluated	Not evaluated	Not evaluated	Not evaluated

Source: Eurostat.

<sup>1)</sup> 2004.

thus weaken the influence of the growth in employment on the decline in the unemployment rate. Furthermore there is a risk of redundancies in non-restructured domestic businesses which through lagging behind in labour productivity and in the conditions of an appreciating exchange rate lose competitiveness. Competitive businesses in this regard and with a view to maintaining their favourable position in labour productivity may not necessarily in the medium term be willing to employ the growing supply of labour on the market.

As regards the trade balance it is necessary to reckon with the risk of a growth in raw material prices (oil especially) and, on the exports side, with a risk of a delayed start-up of production in the new FDI projects.

The mutual interconnection of nominal and real convergence is demonstrated also by the fact that a too fast decline in the nominal exchange rate could have the consequence of a slowdown in real convergence. Faster-than-expected appreciation of the exchange rate could cause, alongside with disinflationary pressures and a decline in interest rates, a growth in consumption and imports, and a weakening of domestic competitiveness. Subsequently the trade deficit would deepen, GDP growth and real personal incomes slow and pressure on unemployment would increase.

In education the problem most manifest is an insufficient link between courses and labour market needs, insufficient legislative provision for lifelong learning, as well as low expenditure, including private, on university financing.

At present Slovakia is also characterised by an insufficient technical infrastructure and under-financed science and research. Annual expenditures in science and technology is the lowest among the EU countries. Slovakia also occupies the last place in the EU country ranking in the information society. In both cases it is necessary to ensure as soon as possible that any growth in investment in these fields is connected with a growth in their productivity. This concerns primarily science and research, which so far has not undergone any transformation.

<sup>11</sup> Employment rate = employment / labour force.



Table 7 Updated Convergence Programmes for the V4 countries

	Country	2004 <sup>1)</sup>	2005	2006	2007
<b>Real GDP (change in %)</b>	Czech Republic	4.0	3.6	3.7	3.8
	Hungary	4.0	4.0	4.2	4.3
	Poland	5.3	5.0	4.8	5.6
	Slovakia	5.5	4.5	5.1	5.4
<b>Inflation HICP (%)</b>	Czech Republic	2.6	3.2	2.6	2.2
	Hungary	6.8	4.5	4.0	3.5
	Poland	3.6	3.0	2.7	2.5
	Slovakia	7.4	3.3	2.8	2.5
<b>Public finance deficit (% of GDP)</b>	Czech Republic	-3.0	-4.7	-3.8	-3.3
	Hungary <sup>2)</sup>	-4.5	-3.8	-3.1	-2.4
	Poland <sup>3)</sup>	-4.8	-3.9	-3.2	-2.2
	Slovakia <sup>4), 5)</sup>	-3.3	-3.8	-3.9	-3.0
<b>Gross government debt (% of GDP)</b>	Czech Republic	37.4	38.3	39.2	40.0
	Hungary	57.6	55.3	53.0	50.6
	Poland	43.6	47.6	48.0	47.3
	Slovakia <sup>5)</sup>	43.6	44.2	45.3	45.5
<b>Planned euro area entry</b>					
Czech Republic: 2010					
Hungary: 2010					
Poland: not stated					
Slovakia: 2009					
<b>Monetary policy</b>					
Czech Republic: inflation targeting, fixed target of 3% $\pm$ 1% from 2006; free floating exchange rate regime.					
Hungary: inflation targeting in combination with exchange rate fluctuation band $\pm$ 15% around a central parity.					
Poland: inflation targeting, free floating exchange rate regime.					
Slovakia: inflation targeting in ERM II conditions and a managed floating exchange rate regime.					

<sup>1)</sup> Actual results.

<sup>2)</sup> Public finances do not include the revenue loss in consequence of introducing the second pension pillar, which reduces the size of annual deficits by 0.8 - 1.0% of GDP.

<sup>3)</sup> Public finances do not include the revenue loss in consequence of introducing the second pension pillar, which reduces the size of annual deficits by 1.5% of GDP.

<sup>4)</sup> With taking into account the revenue-reducing, or deficit-increasing effect of introducing the pension pillar from 2005, estimated at 0.4% of GDP in 2005, 1.0% of GDP in 2006 and 1.1% of GDP in 2007.

<sup>5)</sup> Data taken from the CPU for November 2004 do not take into account the current impact of the pension reform and the decline in the gross public debt following a transfer of reserves intended for pension reform from the NBS into the State Treasury.

Despite significant progress in the support of the business environment there are, too, possibilities for further improvement. Among other things, it would be appropriate to increase the share of investment via venture capital and support private investment in research.

### 3. Comparison of the current state and outlook for the convergence process in the V4 countries

#### 3.1. Current state in Maastricht criteria fulfilment

At present none of the V4 countries fulfils all Maastricht criteria. So far only the Czech Republic has fulfilled the fiscal criterion, reducing its public sector deficit in

2004 to 3% of GDP (from 11.7% of GDP in 2003). Hungary and Slovakia have reduced their ratios of public sector deficit to GDP on a year-on-year basis, while in Poland this ratio has increased.

The second part of the fiscal criterion, the level of public debt, was met in 2004 by all four countries. Hungary presently has a public debt of close to 60% of GDP. Other V4 countries have stabilised their levels of public debt below 45% of GDP.

In June 2005 the Czech Republic succeeded in fulfilling also the inflation criterion, when its 12-month average inflation rate was 2.1% (i.e. 0.2% lower than the reference value). Falling inflation has meant also a decline in the 12-month average for Slovakia and Hungary. The 12-month inflation average in Poland has recently temporarily risen.

Slovakia and the Czech Republic also meet the long-term interest-rate criterion. Interest rates in both countries in June 2005 were significantly below the reference value (5.9%). Conversely, in Hungary and Poland the long-term interest rate is still above the reference value.

Similarly as Slovakia, the other V4 countries have not yet entered ERM II (nor set a central parity), therefore meaning that they do not meet the main condition for assessing exchange rate stability.

#### 3.2. Medium-term outlook for fiscal consolidation in the Convergence Programme Updates

A comparison of the basic expectations in the Convergence Programme Updates (hereinafter "CPU") of the V4 countries from November/December 2004 provides an outline of the intended dynamics of fiscal consolidation. In assessing it, it is necessary to take into consideration the planned date of the individual countries entry into the euro area and the manner of taking account of the effects of pension reform on public finances (see Table 7)<sup>12</sup>.

In the Czech Republic the public finance deficit is expected to be reduced below 3% of GDP only in 2008. With regard to the cautious scenario given for economic growth, containing the potential for higher revenues and lower expenditures, the fulfilment of fiscal targets is realistic. The feasibility of meeting these targets is supported also by the forecast faster GDP growth than was predicted in the CPU<sup>13</sup>. A risk may be the non-enforcement of legislation on the intended introduction of expenditure ceilings for 2006 – 2007, in connection with parliamentary elections in June 2006. An outline of fiscal consolidation in the Czech Republic indicates that the probable date of the country's entry into the euro area, according to

<sup>12</sup> Hungary and Poland applied the Eurostat decision of 23 September, 2004 on the possible exclusion of pension funds in the sphere of public finances in the period until fiscal notification in 2007, enabling them to report, until March 2007, the public finance deficit exclusive of the pension reform effect.

<sup>13</sup> According to EC forecast of April 2005 GDP growth in the Czech Republic should be 4.0% in 2005 and 4.2% in 2006.



unclear official line of “around 2009 – 2010”, appears to be 2010. As yet the Czech Republic has not undertaken fundamental reforms of the pension and healthcare system and neither does the CPU foresee systemic reforms in these fields. A precondition for achieving the fiscal target for 2008 is in this regard merely to maintain the status quo. A risk of the long-term (un)sustainability of public finances – with regard to the highly adverse demographic development in the Czech Republic – thus does not disappear, the problem is merely shifted into a period following euro area entry.

In Hungary fiscal consolidation is planned so that the public finance deficit (without including the pension funds) reaches 2.8% of GDP in 2008. Restoring market confidence in Hungarian strategy for adopting the euro in 2010 is seen as a key factor. The main signal should be adherence to the targets set for 2005-2006, which the government has supported by creating a package of “emergency” reserves in the amount of 0.5% of GDP (increased at the start of 2005 to 0.8% of GDP), which should not in any case be used. In the case of Hungary, fulfilling the targets set in the CPU is closely conditional upon the forecast rate of GDP growth. With regard to the worsened outlook for growth<sup>14</sup> this may therefore be further complicated.

The CPU for Poland reflects the measures of the Hausner plan from January 2004. This contains social expenditure savings (in the pension system for disabled persons and social security for farmers) and the revision/cancellation of the automatic indexation of social benefits. Were the whole plan to be implemented, the effect on the budget for the whole period is estimated at 4.7% of GDP. The risk of these savings targets being curtailed is however high (Parliament has not approved the pension reforms). This together with the worsened outlook for GDP growth<sup>15</sup> casts doubt upon Poland fulfilling its CPU. The fact that no intended date for the country's entry into the euro area has so far been officially specified may also act as hurdle for fiscal consolidation.

The prospects of Slovakia fulfilling its CPU are the most favourable from among the V4 countries, where its achievability is facilitated by an outlook of faster than expected GDP growth<sup>16</sup>. A potential risk of an unwanted increase in budgetary expenditure are the parliamentary elections in 2006.

In contrast to the other countries the CPU horizon in Slovak case includes practically the whole period (except

**Table 8 Current state of real convergence indicators for the V4 countries (1995 – 2004, EU = 100)**

	GDP growth, % annual average	GDP at PPP		Price level		Labour productivity	
		1996	2004	1996	2003	1996	2004
	1996 – 2004 <sup>1)</sup>						
Czech Republic	2.1	71.4	71.3	43.3	55.2	59.6	63.6
Hungary	3.8	49.1	60.5	44.3	58.0	58.6	69.5
Poland	4.1	42.2	46.7	49.6	53.3	45.2	60.1
Slovakia	4.1	46.1	52.0	40.3	49.8	47.9	61.4

Source: Eurostat

<sup>1)</sup> Average annual rate of GDP growth for the 12 euro area countries in the same period was 2.1%.

for several months of 2008) relevant for assessing the fulfilment of the nominal convergence criteria for euro area entry on 1 January 2009. The European Commission in assessing the CPU of Slovakia therefore has paid specific attention also to the forecast disinflation and emphasised that a key factor in reducing inflation to the programmed value in 2007 is a thorough elimination of secondary effects of the high inflation of 2004.

Given the differing planned, or expected, dates of the individual V4 countries' entry into the euro area (Slovakia 2009, Hungary 2010, Czech Republic and Poland roughly 2010) it is not possible on the basis of the compared CPU to directly identify the possibility of fulfilling all the convergence criteria in the periods relevant for assessing preparedness for entry.

We have identified the probability of the (non)fulfilment of the inflation criterion on the basis of an estimate of the reference value before the planned entry into the euro area. In the Czech Republic in 2008 fulfilment of the inflation criterion should be relatively safely secured. For Hungary in 2008 the probability of the reference value being exceeded is high; besides a very tight programme for fulfilling the fiscal criteria for entering the euro area in 2010, there is the possibility of neither the inflation criterion being fulfilled. In Poland the probability of the reference value being exceeded in 2008 is also relatively high, where the fulfilment, or otherwise, of the inflation criterion may be influenced by the exchange rate development, or slower than expected GDP growth. As regards the estimate of the Convergence Programme Update<sup>17</sup> for Slovakia the probability of the reference value being exceeded in 2007 is significant, adherence to the NBS inflation target for 2007 below 2% should however almost completely eliminate this possibility.

### 3.3. Convergence outlook for the V4 countries

The rate of real convergence is not a set requirement for euro area entry itself. After entering the euro area however it will be an important determinant for sustainable (macroeconomically stable, non-inflationary) economic growth.

<sup>14</sup> According to EC forecast of April 2005 GDP growth in Hungary should be 3.9% in 2005 and 3.8% in 2006.

<sup>15</sup> According to EC forecast of April 2005 GDP growth in Poland should be 4.4% in 2005 and 4.5% in 2006.

<sup>16</sup> According to EC forecast of April 2005 GDP growth in Slovakia should be 4.9% in 2005 and 5.2% in 2006

<sup>17</sup> The CPU does not take into account possible reaction of monetary policy to the development of inflation.





The course of GDP growth to date and the current level of real convergence provide information as to the possibilities, requirements and risks to macroeconomic stability and the continuation of the convergence process after entering the euro area, i.e. after adopting the single monetary policy of the ECB, or respectively after the loss of a national monetary and exchange rate policy. In estimating the starting position on the basis of current indicators it is necessary to take into consideration also the expected date of entry into the euro area.

Based on the CPUs for the V4 countries, the euro should be introduced first in Slovakia. In comparison with the other V4 countries this shortens the time horizon for the possible employment of a complete mix of domestic economic policies. The low value of real convergence indicators (GDP at purchasing power parity and a comparable price level) indicate that Slovakia has high potential for the convergence process. In consequence of the shorter time horizon for catching up prior to entry Slovak real convergence indicators upon entry will probably be lower than in the case of the other three countries, which will enter the euro area later.

The longer and more stable inflow of FDI into the Czech Republic and Hungary has been reflected in their presently higher labour productivity than in Slovakia. On the other hand, the labour productivity growth over the past decade in Slovakia has been very good. The high volumes of FDI flowing into the country are creating the basis for a continuation of this trend also in the near future. For accelerating GDP convergence it would nevertheless be desirable, alongside with maintaining favourable development in labour productivity, to increase also the contribution of employment growth. The potential of unused labour force in Slovakia is seemingly high, given its high rate of unemployment. This unemployment however has specific structural characteristics that may over the longer term complicate any increase in the employment rate even in the case of a growth in job opportunities.

In Slovakia GDP convergence will continue to be very closely conditional upon labour productivity growth. This fact has significant consequences for catching up in terms of prices and for macro-economic stability following the euro area entry. In approaching the average standard of living in the EU there will simultaneously be

an approximation of the price level in the SR to that in the EU.

For eliminating risks resulting from the relatively low level of the Slovak economy's real convergence following entry to the euro area there must come support in the form of a fully consolidated fiscal sector whose functioning will not generate additional inflationary pressures in the economy and which, besides this, will create sufficient room for applying fiscal policy in line with the needs of the economic cycle. The course to date of fiscal consolidation in the SR may be considered sufficiently credible for guaranteeing also the credibility of fulfilling the CPU targets, not only from the aspect of a point-based fulfilment of fiscal criteria for meeting the date of planned entry to the euro area, but also for creating operative room for fiscal policy after entry.

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