CONVERGENCE AND REGIONAL COHESION IN SLOVAKIA

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Slovakia's entry into the euro area is approaching. Since meeting the Maastricht criteria is its essential precondition, the importance of evaluating developments in both nominal and real convergence is growing. The Research Department of the NBS is continuing in a series of regular analyses of convergence, and this year it has produced a study which evaluates the progress of the Slovak economy's convergence towards the EU economy.[1] The study also includes an evaluation of regional cohesion in Slovakia. This article presents the main parts of the study.[2]

Slovakia has recorded significant progress in nominal convergence. In 2005, the fiscal criterion was met for the first time, the Slovak koruna entered ERM II and inflation fell. According to the current outlook that assumes a responsible policy and absence of adverse shocks, Slovakia should be ready to meet all the criteria in 2007 and to introduce the euro on the planned date of 1 January 2009.

Nominal convergence is taking place with substantial support from real convergence. In 2005, Slovakia experienced record economic growth. However, with exports rising sharply due to extensive investments and with a widening deficit on the balance of income, the external imbalance increased. The roll-out of production planned at new foreign factories should lead to a gradual decrease in the external imbalance and a further acceleration of economic growth in Slovakia over coming years. Although the increase in unit labour costs has been slowing down and unemployment has been falling, the labour market and unemployment remain a bottleneck of real convergence.

Real convergence is not happening equally in all regions of Slovakia. The uneven distribution of foreign investment inflow from region to region is apparent in the increasing regional disparities in labour productivity, employment and consequently alsooverall performance. The regional differences in Slovakia are already among the highest compared to other EU countries.

1. Nominal convergence

1.1 Current state of fulfilment of the Maastricht criteria

In comparison with a year ago, Slovakia has made a significant progress in nominal convergence. At present, it fulfils the long-term interest rate criterion and the fiscal criterion. By joining ERM II, it has begun to meet an essential condition for the evaluation of exchange rate stability.

Table 1 Fulfilment of the Maastricht criteria

Criterion		Current value (June 2006)	Reference value	State of fulfilment
Fiscal criterion	government deficit	2.9 % GDP[1)]	3 % GDP	YES
	government debt	34.5 % GDP[1)]	60 % GDP	
Inflation rate (HICP)		3.7 %	2.8 %	NO
Long-term interest rate		3.8 %	5.9 %	YES
Nominal exchange rate		Participation in ERM II since 28. 11. 2005[2)]	Two years' participation in ERM II without severe tensions	Not assessed

Source: Slovak Ministry of Finance, NBS, Eurostat, own calculations.
[1)] For 2005.
[2)] In a simulated fluctuation band against the average for July 2004, the koruna's exchange rate fluctuated in the range -6.76% (an appreciating direction) to +0.68% (depreciating).

In 2005, Slovakia met the fiscal criterion for the first time, when the general government deficit[3] fell slightly below 3% of GDP.[4] Moreover, the volume of public debt declined year-on-year and is, over the long-term, lower than the reference value.

Although inflation decreased substantially in 2005, Slovakia does not yet meet the criterion of price stability. The average twelve-month rate of inflation in June 2006 was higher than the reference value. Rising inflation in other months (mainly owing to increases in fuel prices, as well as in foodstuffs and certain services) saw Slovakia move further away from the reference value of the inflation criterion.

The long-term interest rate criterion is the second criterion that Slovakia currently meets. Both the reference

[1] Analysis of the convergence of the Slovak economy. NBS Research Department, July 2006, http:/www.nbs.sk/PUBLIK/06_KOL4.PDF.
[2] Our aim in this study is not to compare convergence in Slovakia with that in the other V4 countries and Slovenia, nor to deal with the situation in structural and institutional reforms, and the evaluation of nominal and real convergence is abridged from the full version.
[3] The deficit has up to now been reported exclusive of the effects of pension reform, in accordance with the transition period stipulated by Eurostat.
[4] According to revised GDP data, the general government deficit was also below 3% in 2004.

value and the average long-term interest rate in Slovakia continued a downward trend last year, with the average long-term interest rate falling more sharply than the reference value. The development in Slovakia has been related to a credible economic policy, the lowering of inflation expectations and a decrease in the risk premium. Since the beginning of 2006, the average interest rate has again been rising amid growing inflation expectations.

With the entry of the Slovak koruna into ERM II on 28 November 2005, Slovakia met the basic systemic conditions for evaluating exchange rate stability. The central parity was fixed at 38.4550 EUR/SKK. In the days that followed entry into ERM II, the nominal exchange rate strengthened by approximately 1.5%, to around 37.8 EUR/SKK, and it remained above the central parity until the end of 2005. The strengthening has slowed down in 2006, while the currency's highest value to date came on 3 March, at 36.948 EUR/SKK. The markets reacted negatively to the political aftermath of the parliamentary elections and the uncertain direction of economic policy, with the koruna weakening sharply and even slipping below the central parity.

Since the koruna has not been a member of ERM II for long enough, the exchange rate's stability over the longer term may be assessed only indicatively, on the basis of its fluctuation from a simulated central value. In accordance with the convention adopted in the ECB's convergence reports, we assess the exchange rate stability in relation to the average for the first month of the two-year period under review, in other words, in relation to the average for July 2004. Over the past two years, the ten-day moving average in comparison with the average for July 2004 fluctuated in a band ranging from -0.68% (depreciating) to +6.76% (appreciating), therefore safely within the standard fluctuation band of ±15%. This development may be assessed as stable, without severe tensions, and without significant deviation from the central parity.

Table 2 Outlook for Maastricht criteria fulfilment

Criterion		2006	2007	2008
Fiscal criterion (% GDP)	**General government** deficit including effcts pension reform	4.0	3.0	2.5
	Government debt	35.5	34.7	33.9
		will be fulfilled		
Inflation rate (HICP, %, according to P3Q-2006)		4.4	2.9	2.0
		will be fulfilled		
Long-term interest rate (%)		4.1	4.5	–
		will be fulfilled		
Nominal exchange rate		Participation in ERM II since 28. 11. 2005		
		will be fulfilled		

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

1.2 Outlook for Maastricht criteria fulfilment

In order to meet the condition for introducing the euro in 2009, it will be necessary to maintain the favourable development of public finances and to achieve in 2007 a general government deficit of not more than 3% of GDP[5] Inflation measured by the harmonized index of consumer prices (HICP) should decrease comfortably below the expected reference value. According to official documents published by the Slovak Ministry of Finance[6] and the National Bank of Slovakia, the country should be in a position to fulfil these criteria in 2007.

The general government deficit including the effects of pension reform is growing in 2006, but it is expected to narrow gradually in coming years.[7] The plan to reduce the general government deficit below 3% of GDP has been repeatedly endorsed by the new Slovak government. The ratio of government debt to GDP has long been lower than the reference value and will decline further over the next years. Slovakia is therefore expected to meet the public finance criterion in 2007.

According to the current medium-term forecast of the NBS[8] and the reference value estimate, the average rate of inflation will rise in 2006 and the inflation criterion will not be fulfilled. The average rate of year-on-year inflation measured by the HICP should stand at 4.4% for 2006. The price stability criterion should be fulfilled in 2007, with year-on-year average inflation expected to decrease to 2.9%, below the estimated reference value of around 3.1%.[9] Whether the inflation criterion is fulfilled will depend on the development of several risks described in the forecast.

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[5] Under the Stability and Growth Pact, the deficit may exceed the 3% limit in certain circumstances. For Slovakia, the most important of these is the possibility to take into consideration the costs of pension reform (See box in the article by Komínková, Z., Lalinský, T. and Šuster, M. – "Analysis of Convergence of the Slovak Economy to the European Union" – Biatec, September 2005).

[6] Documents entitled "Convergence Programme for the Slovak Republic – covering the period 2005-2010", published by the Ministry of Finance of the Slovak Republic in November 2005, and "Proposed Bases for the General Government Budget for the years 2007 to 2009", published by the MF SR in March 2006.

[7] In our assessment of the Maastricht criteria fulfilment, we focus mainly on the feasibility of meeting the fiscal criterion in 2007, when the general government deficit will have to be reported with the effects of pension reform included. In assessing fulfilment of the fiscal criterion, we therefore take as a basis the general government deficit including the effects of pension reform. The pension reform will increase the deficit by 1.3% of GDP in 2006 and 2007, and by 1.4% of GDP in 2008.

[8] Medium-term forecast (P3Q-2006), NBS, July 2006.

[9] The value of the inflation criterion as calculated on the basis of the European Commission's point estimates for inflation in EU countries in 2007. According to several expert estimates, the value of the inflation criterion in 2007 could be lower.

The prediction of the expected return to neutral interest rates in EU Member States (including Slovakia) is gradually being fulfilled. This development is also creating the conditions for raising the long-term interest rate. Based on current estimates for the future development, Slovakia will in 2007 and 2008 continue to fulfil the long-term interest rate criterion with ease.

Since the nominal exchange rate has up to now been relatively stable, and macroeconomic expectations continue to be positive, it is likely that Slovakia will not exceed the fluctuation band of ±15% while operating within ERM II, and that the exchange rate stability criterion will be fulfilled.

1.3 Fulfilment sustainability risks

The key to fulfilling the forecast for public finances is to maintain the government policy of fiscal consolidation. This should be facilitated by stable economic growth based on growth in potential output, total productivity and competitiveness.[10] The loss of income in relation to the second pension pillar is a cause of uncertainty, since the general government deficit in 2007 will have to include the effects of pension reform and still be under 3% of GDP. Fulfilment of the fiscal criteria could also be adversely affected by higher than expected growth in the co-financing of projects implemented with EU funds,[11] especially if the high utilization of funds in 2007 is added to the carrying-over of a part of the funds from 2006. What is clear from the Proposed Bases for the General Government Budget for the years 2007 to 2009 is that, in order to mitigate the risk to the fulfilment of the fiscal criteria, it will be necessary to reduce the overall and structural deficit at least at the pace which Slovakia undertook to meet in the convergence programme. Any higher than predicted income or lower than predicted interest costs should be used to hasten the reduction of the general government deficit.

On the expenditure side, it is also important to ensure strict adherence to fiscal discipline. If the fiscal criteria are to be fulfilled, then these principles will have to be taken on board by the new Slovak government. The government may adjust the structure of expenditure and income, but, when pushing through its policy, it should respect the budgetary restrictions on the overall general government deficit.

As regards fulfilment of the inflation criterion, the negative risk is increasing and a combination of several policies will be needed to bring about fulfilment. According to current estimates, it will be possible to meet these criteria in 2007 at the earliest. The risks to the inflation prediction for Slovakia lie mostly in higher prices of oil and other raw materials, which could be reflected in higher prices of fuel and energy and possibly in higher than predicted regulated prices.[12] Faster wage growth exceeding the increase in labour productivity also remains a possibility, which could support cost inflation. Other inflation risks include foodstuff prices and secondary effects that higher inflation in 2006 could have on the prices of services and on inflation expectations in 2007. There is also a risk of imported inflation developing differently owing to producer-price increases abroad. From 2006 to 2008, the impact of the Balassa-Samuelson effect on rising inflation should continue to be reckoned with.[13]

A specific risk to the fulfilment of the inflation criterion arises from uncertainty over the level of the reference value, which reflects developments in the three countries that have the best results for inflation. European institutions and mainly the European Commission are at present taking a very rigorous stance that does not admit a softer assessment of convergence. In fact, it seems that the Commission may come to require not simply an inflation figure below the reference value, but also sustainable fulfilment of the inflation criterion in the future, notwithstanding that the assessment of sustainability is not unambiguous. On the other hand, our prediction of the reference value is based on the European Commission's spring forecast, which unlike the NBS's medium-term forecast from July 2006 (P3Q-2006), does not include some of the latest and rather negative reports about inflation development. Risks to the reference value of the inflation criterion are therefore centred more on an increase in the reference value, which could make it easier for Slovakia to fulfil the inflation criterion.

Meeting the fiscal and inflation targets is essential to fulfilment of the long-term interest rate criterion. The long-term interest rate criterion will not be at risk, contingent on continuing fiscal consolidation and disinflation.

The next years will also see the nominal exchange rate affected by the inflow of foreign investments, and both portfolio and short-term capital. The exchange rate should follow a strengthening course mainly under the effect of fast productivity growth as well as positive expectations related to euro area entry.

Exchange rate development is at risk if these expectations are not met, which may result from, for example, a fundamental change in economic policy. In July 2006, merely the fear of such a change was enough to cause rapid weakening of the koruna. By making interventions, the NBS has so far prevented the koruna from deprecia-

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[10] "Bases for the General Government Budget for the years 2007 to 2009", published by the MF SR in March 2006.

[11] The forecasted development of public finances assumes that spending on the co-financing of projects will not increase substantially until 2008, since 2007 will be the first year of the new budgetary period.

[12] Medium-term forecast (P3Q-2006), NBS, July 2006.

[13] Benčík et al. (2005): An estimation of the Balassa-Samuelson effect in the Slovak economy.

ting by more than 1% above the central parity. But if such a development had persisted for more than just a few days or weeks, the European Commission or ECB may have classified it as a severe tension in the exchange rate, in other words, non-fulfilment of one of the conditions of the exchange rate stability criterion. Another risk is instability in the global or regional foreign exchange market, which could affect the value of the koruna against euro.

2. Real convergence

2.1 Current state of real convergence

Economic growth in Slovakia exceeded original expectations again in 2005: real GDP growth in the fourth quarter reported a record 7.4% and average real GDP growth for the year came in at 6.1%. The strong growth was largely caused by a sharp increase in investments and domestic consumption. Slovakia's economic productivity in terms of GDP per capita at purchasing power parity (PPP) increased to 55.3%[14] of the average productivity in the EU.

Because of the persisting interest rate differential and strengthening of the koruna, the price level in Slovakia drew closer to that in the EU. According to our estimates, the Slovak price level increased in 2005 to 57.8% of the EU average price level.

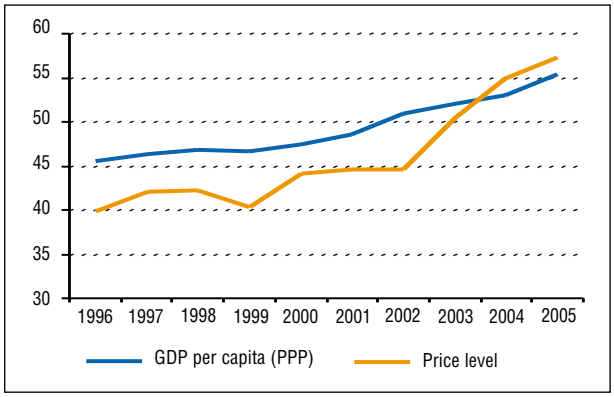
The growth in exports of goods and services increased in comparison with the previous year, but with imports growing even faster (in connection with extensive investments in the automotive sector), the trade deficit increased to 5.2% of GDP. With a substantial rise in the balance of income deficit, as a result of dividend payments to foreign shareholders of Slovak enterprises, the deficit on the balance of payments current account came to 8.6% of GDP.

The openness of the economy increased as growth in imports and exports outstripped growth in nominal GDP. Relative to GDP, foreign trade (the sum of imports and exports) reached almost 160% in 2005.

Unit labour costs[15] increased at a slower pace in 2005, with the nominal compensation per employee rising by 8.2% and real labour productivity by 4.6%. The decline in inflation caused an acceleration of real wage growth, and rising employment slowed down real labour productivity growth. Real wage growth overtook real productivity growth. Labour productivity in Slovakia in 2005 represented 62.3% of EU labour productivity.

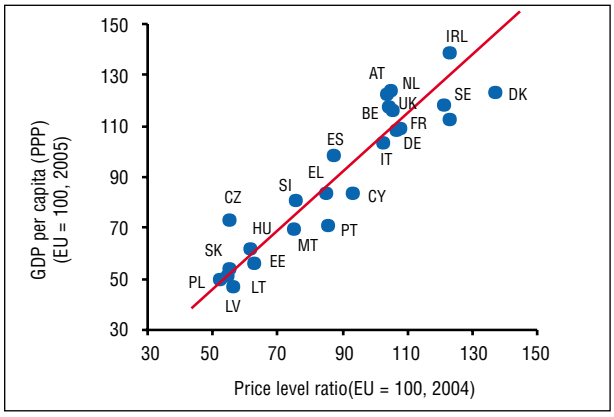
The unemployment rate came down significantly in 2005. The average rate of registered unemployment fell from 14.3% to 11.6%, and the unemployment rate according to a sample survey of the workforce declined from 18.1% to 16.2%. The structural component of unemployment remained high. Since the number of long-term unemployed did not decrease, long-term unemployment as a share of total unemployment rose. The increasing number of employed people was reflected in the employment rate, which rose to 57.7%.

Chart 1 Real convergence in Slovakia (EU average = 100)



Source: Eurostat, own calculations

Chart 2 Ratio of price level to productivity in EU countries



Source: Eurostat

2.2 Outlook for real convergence

The rapid real convergence with advanced economies will continue in coming years, based on the increa-

Table 3 Current indicators of real convergence and the economic situation (2005)

Real convergence indicators		Openness of the economy		Labour market and employment	
GDP in Slovakia relative to that in the EU (PPP)	55.3 %[1)]	Exports	77.0 % HDP	Employment rate	57.7 %
Price level in Slovakia relative to that in the EU	57.8 %[2)]	Import	81.5 % HDP	Unemployment rate (survey)	16.2 %
Real GDP growth in Slovakia	6.1 %	Current account (BOP)	-8.6 % HDP	Labour productivity growth (ESA 95)	4.6 %
		FDI inflow	4.1 % HDP	Unit labour cost growth (ESA 95)	4.7 %

Source: Statistical Office of the SR, Eurostat and own calculations.
1) Eurostat estimate.
2) Own estimate based on inflation and exchange rate developments.

[14] Eurostat estimate for 2005.
[15] Unit labour costs according to the ESA 95 methodology.

Table 4 Outlook for the performance, price level and openness of the Slovak economy

	2006	2007	2008
GDP per capita (PPP) in Slovakia relative to that in the EU	57.5 %[1)]	59.8 %[1)]	61.7 %[2)]
Price level in Slovakia relative to that in the EU	60.3 %[3)]	61.8 %[3)]	63.3 %[3)]
Exports and imports relative to GDP	163.8 %	164.57 %	164.4 %

Source: Eurostat, NBS, own calculations.
1) Eurostat estimate.
2) Authors' estimate based on estimated real GDP growth in Slovakia and the EU.
3) Authors' estimate based on inflation and exchange rate developments.

Table 5 Outlook for real economy indicators

	2006	2007	2008
GDP (real growth)	6,7 %	7.1 %	5.7 %
Household final consumption (real growth)	6.0 %	6.0 %	5.2 %
General government final consumption (real growth)	3.9 %	2.4 %	2.0 %
Gross fixed capital formation (real growth)	11.9 %	5.9 %	8.0 %
Export of goods and services (real growth)	12.9 %	14.8 %	10.2 %
Import of goods and services (real growth)	11.1 %	11.9 %	10.4 %
Current account of the BOP (relative to GDP)	-7.0 %	-4.3 %	-4.1 %
Employment (survey, growth)	2.9 %	1.8 %	1.4 %
Average monthly wage (real growth)	3.2 %	4.1 %	4.0 %
Labour productivity (real growth)	4.3 %	5.4 %	4.7 %

Source: NBS.

sing competitiveness and productivity of the Slovak economy.

According to our estimates, the ratio of GDP per capita (PPP) between Slovakia and the EU will increase up to 2008, to 61.7%, and the ratio of the price level between Slovakia and the EU will rise to 63.3%. Given the launch of new production in the automotive industry, there should be nominal growth in exports and imports – even substantially exceeding nominal GDP growth – which will lead to greater openness of the Slovak economy.

Based on current forecasts,[16] the economy's potential will grow more quickly in coming years, as will the potential of actual output. The trade deficit will again be high in 2006, but the next years will see it decline as a consequence of improved export performance. The formation of gross fixed capital will continue to be a significant factor in GDP growth.

Given the expected strong economic growth and slight rise in employment, dynamic real growth in labour productivity can continue to be expected. As profits rise, growth in real wages will probably not slow down significantly. The increase in real labour productivity will, however, probably be sharper than that in real wages, and therefore undesirable demand pressures are unlikely to emerge.

[16] Medium-term forecast (P3Q-2006), NBS, July 2006.

With faster economic growth, there will probably be a moderate increase in the real growth of household consumer spending and general government expenditure. General government consumption is expected to remain in future as the slowest-increasing component of GDP.

The sharp growth in labour productivity and the more modest rise in compensation per employee should be reflected in a slowdown of growth in unit labour costs.

2.3 Tight spots in real convergence

Despite the faster growth in employment (higher than originally expected), the labour market and employment sector may still be considered as the most critical area of real convergence. The gap between the employment rates in Slovakia and the EU is narrowing very slowly. Although the unemployment rate is declining, the number of long-term unemployed remains unchanged. The effect of raising the retirement age will expand the labour supply and therefore weaken the effect of employment growth on the decline of the unemployment rate.

From the preliminary assessment of the fulfilment of the National Programme of Reforms, it is clear that the continuing challenges in the employment field are to elaborate a long-term population policy, remove administrative impediments to employment, increase labour mobility, and improve the position of disadvantaged employment applicants in the labour market.

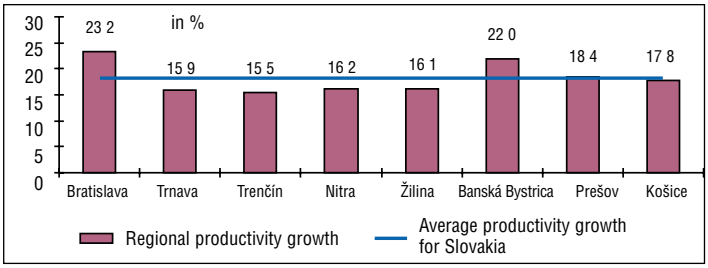
Higher global prices for energy raw materials could lead to a widening of the trade deficit and an increase in production costs, which in turn may adversely affect economic growth. On the export side, the risk from delayed production roll-out within direct foreign investments should be reckoned on, as should the weaker growth in the economies of significant trading partners.

If the exchange rate appreciation is faster than the expected balanced rise, the result could be growth in consumption and imports, and subsequently an increase in the trade deficit. Any imbalanced appreciation would be reflected in weakening of domestic competitiveness and a slowdown in economic growth, causing a slowdown in the growth of real household income and upward pressure on unemployment.

3. Regional cohesion in Slovakia

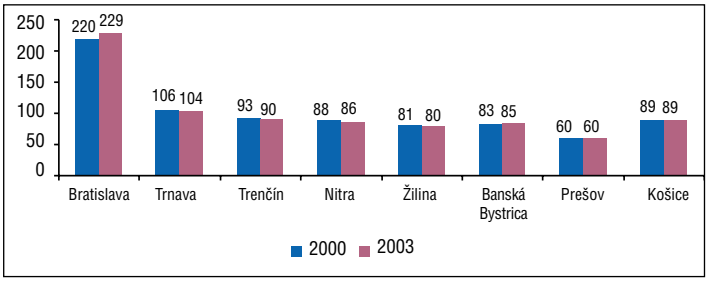
The fast economic growth and rising employment that are reported for Slovakia as a whole are not clear in all regions. The fastest-growing region over the long-term has been Bratislava, whose growth between 1996 and 2003 was on average 1.5 percentage points faster than

Chart 3 Change in GDP per capita (PPP) in the years 2000 to 2003



Source: Statistical Office of the SR, own calculations.

Graf 4 Pomer HDP na obyvateľa v PKS (SR=100)



Source: Statistical Office of the SR.

that of the slowest growing region, Trnava. Regions recorded a certain degree of economic convergence during this period, as growth slowed down in the fastest-growing regions and picked up in those regions that had started out as the slowest-growing.

All regions reported a significant increase in productivity between 2000 and 2003. The sharpest productivity rise during this period was in the richest region, Bratislava, while the third-highest increase was reported by the poorest region, Prešov.

Although economic growth in Bratislava region slowed in 2003 to the second-lowest rate among the eight regions, the gap between productivity[17] in the most developed and least developed regions, Bratislava and Prešov, widened in comparison with 2000. A key factor was population change, with Bratislava recording the biggest decline in population and Prešov the highest rise. The productivity of Prešov region in 2003 amounted to only 26.3% of that in Bratislava region.[18]

Over a long period (1996 to 2002), GDP growth in PPP terms in Bratislava and Prešov regions mirrored its figure for Slovakia, while the growth differential between these two regions steadily decreased. In 2003, GDP growth (PPP) in Prešov region was slightly higher than that in Bratislava region. If we assume that the trend in GDP growth (PPP) in these two regions was maintained in 2004 and 2005,[19] it may be expected that GDP growth (PPP) in Prešov region was only slightly higher than GDP growth (PPP) in Bratislava region.

Although the population of Bratislava region increased in 2004 and 2005 as a result of migration, it was considerably lower than the population growth in Prešov region.[20] After taking into account the growth differential between the populations of Prešov and Bratislava regions – considerably exceeding the differential in GDP growth (PPP) – it may be said that the regional differences in productivity probably increased even further in 2004 and 2005.

Most of Slovakia's value-added production (more than 25% of the total) is located in Bratislava region, while the lowest creation of value added is in Prešov region. The share of each region in the creation of value added has not changed significantly in recent years.

Under the influence of employment development, regional differences in labour productivity widened between 2000 and 2003. GDP per employee (PPP) in Prešov region fell from 39% to 37.2% of the level in Bratislava region. In the event that GDP growth (PPP) develops according to the previously mentioned assumption, and if we take into account employment growth – which was almost the same in these two regions, though slightly higher in Bratislava region – then it may be expected that the difference in labour productivity did not widen in 2004 and 2005.

Economic growth has created scope for growth in employment and the average wage. Employee numbers in Košice and Banská Bystrica regions, as well as in

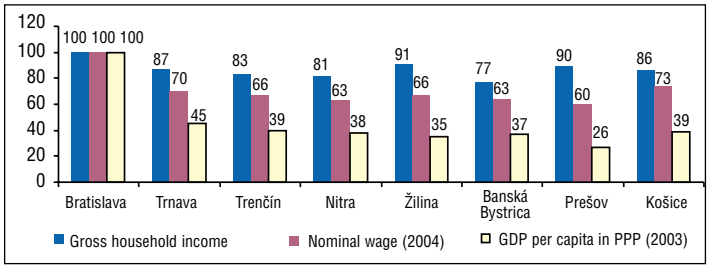
Table 6 Employment rate and unemployment rate

	Employment rate (15 – 64, in %)		Unemployment rate (in %)	
	2001	2005	2001	2005
Bratislava region	70.6	69.2	8.3	5.2
Trnava region	59.2	64.1	18.0	10.4
Trenčín region	59.6	62.6	13.4	8.1
Nitra region	52.2	55.8	23.1	17.8
Žilina region	56.0	57.2	18.9	15.2
Banská Bystrica region	54.2	52.7	22.4	23.8
Prešov region	52.6	53.4	22.7	21.5
Košice region	50.7	49.0	24.8	24.7
Slovakia – total	56.8	57.7	19.2	16.2

Source: Statistical Office of the SR, own calculations.

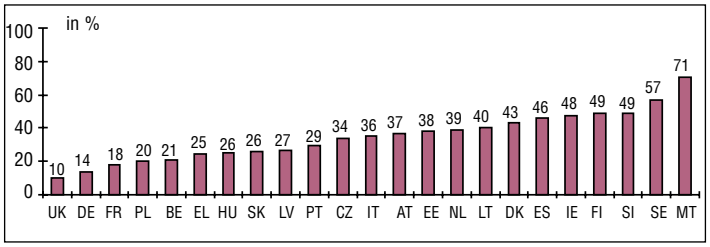
[17] Measured by GDP per capita (PPP).
[18] Regional data on GDP are available only after final revision, and therefore the latest figures are for 2003.
[19] The trend seen so far could be disrupted by a substantial inflow of FDI into these regions, which has not as yet happened. By contrast, for example, Trnava region has seen a sharp increase in growth, and the divergence of its growth from the average for Slovakia is connected with the inflow of FDI.
[20] Bratislava region is recording the highest natural decline of any region, and its population is increasing entirely due to migration. In Prešov, the population is growing as the result of the highest natural increase of any region.

Chart 5 Regional differences in productivity, wages and total household income (BA = 100)



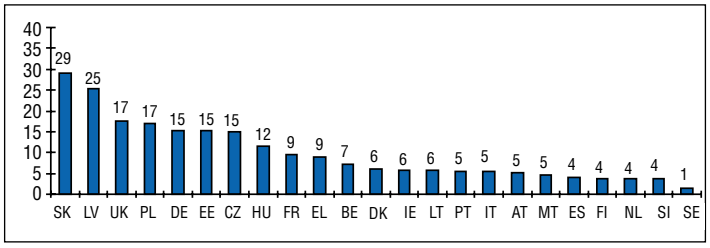
Source: Statistical Office of the SR.

Chart 6 Regional differences in productivity in EU countries – simple ratio (2002)



Source: Statistical Office of the SR.
Note: The ratio is between the regions with the lowest and highest GDP per capita in PPP, based on data for the regional level NUTS 3. At the NUTS 3 level, Cyprus and Luxembourg consist of only one region, so it is therefore not possible to compare internal differences in these countries.

Chart 7 Regional differences in productivity in EU countries – variance coefficient (2002)



Source: Eurostat.
Note: At the NUTS 3 level, Cyprus and Luxembourg consist of only one region, so it is therefore not possible to compare internal differences in these countries.

Bratislava region, have in recent years increased more slowly than the populations. The highest growth in the number of employees between 2001 and 2005 was recorded in Trnava region, which also achieved the highest employment rate growth. Bratislava region comes closest to meeting the Lisbon Strategy objective of a 70% employment rate, with a rate of 69.2% in 2005. Regional differences in employment have increased over the past five years. In 2001, the employment rate in Bratislava region was 19.8% higher than that in Košice region, while the difference in 2005 represented 20.3%.

The best paid employees are in Bratislava region, where the average monthly wage is one-third higher than the average for the whole of Slovakia. Regional differences in the average wage have risen steadily over recent years. The average wage in Prešov region in 2000 represented 61.1% of the average nominal wage in Bratislava region, falling to 60.3% in 2003 and down to 56.8% in 2005.

Given the large degree of income redistribution, regional differences in the population's living standards are substantially lower than those in output. Regional differences in total household income are significantly lower than regional differences in wages.

With regional differences in labour productivity exceeding regional differences in wages, there will continue to be upward pressure on nominal wages in the more productive regions that have low unemployment. The risk will be that wage growth outstrips growth in real labour productivity in these regions, which could be reflected in higher overall inflation in Slovakia.

The substantial gap in economic performance between the region which includes the capital city area and the other regions is hardly exceptional given the benefits of a concentration of financial centres, a qualified workforce, agglomeration effects and other effects. The regional differences in productivity in Slovakia[21] are already among the highest of the small EU countries and are approaching the regional differences typical of the large EU countries.

The results are significantly unfavourable if the degree of regional differences is calculated with a variance coefficient that takes into account the division of productivity among all the country's regions. In 2002, the variance coefficient for Slovakia was the highest for any EU country.

Although the variance coefficient for Slovakia fell slightly in 2003, the estimated development for 2004 and 2005 leads us to assume that the current regional imbalance is at least equal to the level in 2002.

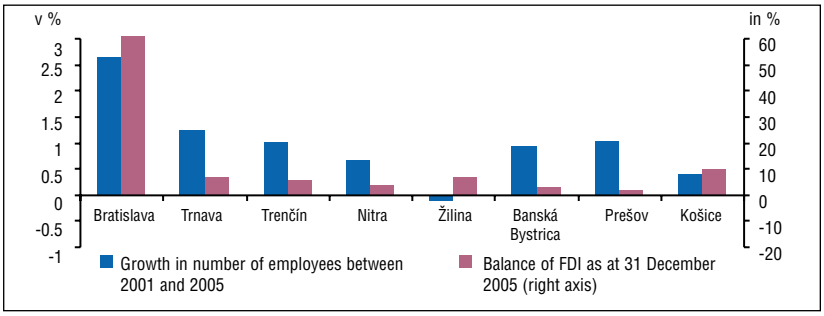
3.1 Regional cohesion – factors and outlook

The most important factor behind the current regional differences is the unequal distribution of foreign direct investment. The regions with the highest FDI inflow are the regions with the highest growth in number of employees.

The inflow of foreign direct investment in 2005 indicates a trend of FDI moving outside Bratislava region, although significant FDI growth has only been recorded in Žilina, Trenčín and Trnava regions. Eastern Slovakia continues to lag behind in terms of FDI inflow. Another factor that will

[21] Measured as a ratio between the productivity of the region with the lowest GDP per capita (PPP) and the region with the highest GDP per capita (PPP).

Chart 8 Balance of FDI and average growth in employee numbers



Source: Slovak Statistical Office.

affect how regions develop is the fact that Bratislava region is beginning to attract interest as a location for FDI in research and services, while FDI in other regions is predominantly focused on low value-added production.

The current course of FDI is also an indicator of regional differences in a majority of aspects of economic and social life. Regional differences in Slovakia may also be found in infrastructure, human resources and education, as well as in informatization, the knowledge economy, and innovations.[22]

Although regional access to higher education has improved, qualitative differences in education and the educational structure of the population persist. In terms of the share of the population with university education, the differences between Bratislava region and the other regions are substantial. In the regions, this share represents around 40% of the share in Bratislava region. Slovakia has a relatively good road network density, though some regions continue to lack high class roads (motorways and dual carriageways). Recent years have seen decreasing investment in civic facilities. There also remain qualitative and quantitative differences in the standard of accommodation, which adversely affects labour mobility and therefore slows down the decline in unemployment in certain regions. The share of households with computers and internet access also varies markedly between regions. Research and development capacity is predominantly concentrated in Bratislava region, while in the southern and eastern regions there is hardly any research and development activity.

The utilization of EU funds is expected to cause a significant shift in regard to regional disparities. Under Structural Funds and the Cohesion Fund, Slovakia will have more than EUR 10 billion at its disposal between 2007 and 2013. Owing to its strong economic performance, Bratislava region will only be able to draw a small part of these funds. Regional disparities may also be mitigated to a certain extent by the approved rules on the provision of individual state aid to investors.

Given the changing character of the economy and the faster growth in services, Bratislava region is unlikely to lose its position, and with more dynamic headway in the knowledge economy, its lead could increase still further. As for the other regions of Slovakia, their economic performance may be expected to balance out to a certain extent.

In comparison with other EU countries, Slovakia has wider than average regional differences and they are not at present being narrowed. The rational division and effective use of EU funds could help mitigate these differences. Bratislava region will remain the most developed region, given the capital city's concentration of financial institutions and qualified workforce. It is important, however, to ensure the growth of each region and to make adequate use of their potential. This is also confirmed by the comparison of regional division in productivity and household income, which indicates a substantial degree of redistribution of household income.

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