EVALUATION OF THE SR ECONOMY'S REAL CONVERGENCE TO THE EU ECONOMY

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In connection with the recent presentation of the strategy for adopting the euro in the SR, discussions on nominal and real convergence have intensified. Nominal convergence includes fulfilment of the Maastricht criteria for joining the Eurozone, where this concerns five specific criteria (the criteria of fiscal deficit, government debt, long-term interest rate, inflation and the exchange rate). Real convergence, however is not an essential condition for entering the Eurozone, therefore the content of its evaluation is not unified.

Generally, real convergence of the SR to the EU may be understood as the approximation of the real parameters and conditions of the Slovak economy to those of the EU economy. We monitor performance, efficiency, competitiveness of the economy and its participants, as well as their relations with the EU and overall level of preparedness for functioning in the framework of the EU. At the macro-economic level we observe primarily differences in GDP per capita, in price levels, in labour productivity, as well as convergence in the field of foreign trade, or economic structure with regard to employment and the shares of individual sectors in GDP creation. Indicators concerning economic structure and the structure of foreign trade are, however, often monitored in the framework of an independent field, so-called structural convergence, which relies primarily on a knowledge of optimal currency area theory.

The traditional approach to the mutual relationship between nominal and real convergence is based on the assumption that higher real growth may be achieved only at the cost of higher inflation and fiscal deficit. Analysis of the development in various current EU countries prior to and following their accession to the EU, however confirms that this assumption is unfounded. Nominal convergence creates conditions for making successful headway in real convergence provided it is based on thoroughly prepared and realised reforms, taking place at an appropriate rate and under the assumption of mutual coordination of partial policies.

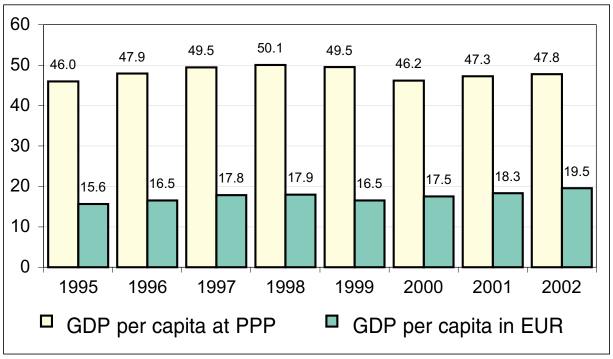
Development of the SR economy's real convergence to the EU economy

An evaluation of real convergence is based on an evaluation of the approximation of the SR economy's performance to the EU economy's performance. GDP per capita at purchasing power parity may be said to be the most significant indicator for evaluating real convergence. According to this indicator Slovakia currently achieves still less than 50% of EU performance.

Since this indicator is constructed for the needs of comparative analysis of the performance of economies at a given moment in time, for an analysis of an economy's performance over time it is more appropriate to use GDP per capita in EUR. Despite the fact that the development of GDP per capita at purchasing power parity has, with the exception of the years 1999 and 2000, tracked the development of GDP per capita in EUR, the second of the indicators indicates in a clearer

Graph 1 Development of GDP per capita in the SR

(EU = 100)



Source: Eurostat, NBS

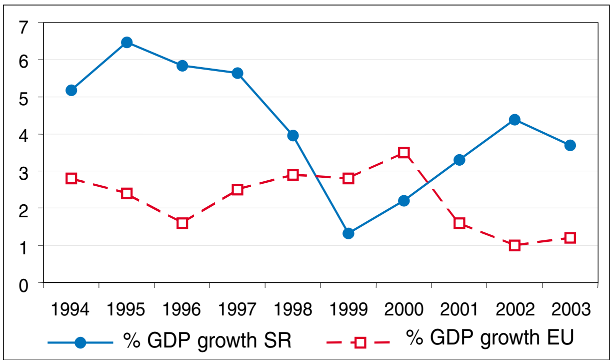
way the growth of the SR economy's performance compared to that of the EU. On the basis of GDP per capita expressed in EUR the SR economy's performance in comparison with the EU economy has over the past eight years grown by one quarter, even despite stagnation in the years 1999 and 2000, which was connected primarily with slow GDP growth in Slovakia.

At present there is talk of a need to re-evaluate the methodology used to calculate GDP in the Czech Republic. In connection with the possible subsequent harmonisation with the methodology used in the EU a correction of about 5 to 8% in the level of GDP is expected, where this correction concerns mainly the counting of revenues from the rental of houses and apartments and a re-evaluation of the pricing of roads and motorways. The methodology for calculating GDP in the Czech Republic, however is not identical with the methodology used in the Slovak Republic, therefore it is not yet known whether a harmonisation of the Slovak methodology for calculating GDP with EU methodology will lead to such a correction in the level of GDP as is the case in the Czech Republic. In the case that the harmonisation of the Slovak methodology leads to a correction of GDP in such an extent as is predicted in the Czech Republic, the performance of the Slovak economy measured by GDP per capita at purchasing power parity would marginally exceed half the EU economy's performance.

An approximation of the performance of the two economies may take place in two ways, either through a different rate of growth in these economies' productions, or by changes in the real exchange value. An approximation of the SR economy's performance to the EU economy's performance was at the beginning happening by means of faster GDP growth in the SR than in the EU and in the recent period also primarily through an appreciation in the real exchange rate.

From a comparison of real GDP growth in Slovakia and the EU we can see that GDP growth in the SR exceeded GDP growth in the EU mainly in the first years, which suggests that convergence occurred in this period prevailingly by means of faster growth in production in the SR than in the EU. The effect of the growth in GDP on the approximation of the Slovak economy to the EU economy has again been growing in recent years. In 2002 real GDP growth in Slovakia exceeded real GDP growth in the EU by more than three percentage points. On the basis of the forecast higher GDP growth in the SR than in the EU it may be expected that the Slovak economy's performance will come more significantly closer to that of the EU economy's by means of faster GDP growth also in coming years.

Graph 2 GDP growth rates in the SR and EU

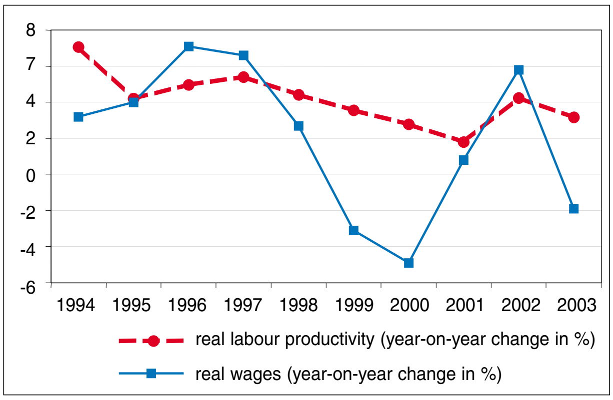


Source: NBS, Eurostat

In connection to GDP growth it is necessary to realise that it is essential that this growth is founded on productivity growth while keeping a control on cost factors. We can see from Graph no. 3 that the growth of labour costs exceeded labour productivity growth in 1996, 1997 and 2002 mainly thanks to a low rate of inflation. On average in the period monitored (1994 to 2002) the annual rate of growth of real labour productivity reached 4% and the annual rate of growth in real wages reached 2%, which corresponds sufficiently well to the condition of long-term faster growth of productivity of the production factor than growth of production factor costs.

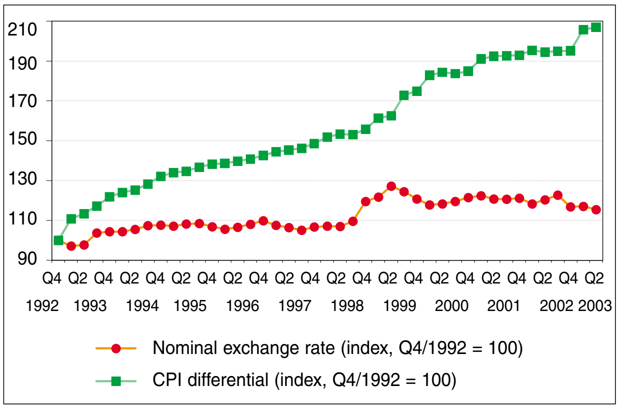
An approximation of the performance of the SR economy to that of the EU has been occurring also by way of an alignment of the price levels. Even despite the fact that the nominal exchange rate of the SKK/EUR over the past 10 years has depreciated by almost 20%, the faster growing inflation differential has led to a significant appreciation in the real exchange rate and thus to a relatively significant alignment of the price levels

Graph 3 Rates of growth of real productivity and wages in the SR



Source: NBS

Graph 4 Development of the nominal exchange rate and relative CPI

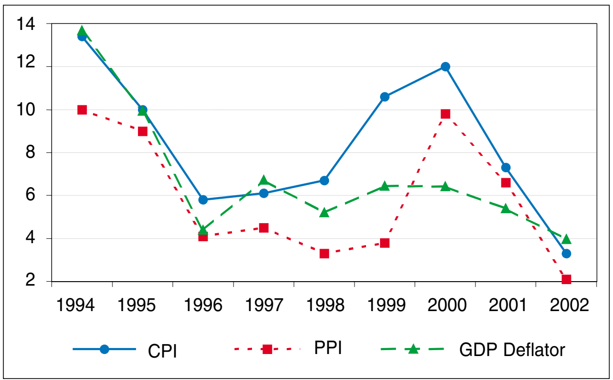


Source: NBS, own calculation

[1] SKK/ECU until 1999

The development of individual components of inflation in Slovakia has from the long-term aspect had a very similar course (Graph no. 5), even if in the case of a GDP deflator there have in recent years been recorded less significant fluctuations in their development than in the case of consumer prices and industrial producer prices. The growth of consumer prices influenced by adjustments to regulated prices exceeded from the long-term aspect the growth in industrial producer prices in the years 1996 to 2000, where in 1999 the growth in consumer prices reached almost triple the growth in industrial producer prices. In 2002 a record low growth in prices in all sectors was recorded. The rate of inflation, measured by the growth in consumer prices, fell largely as a consequence of the decline in food prices and lower year-on-year rate of growth in market service prices.

Graph 5 Inflation development in the SR

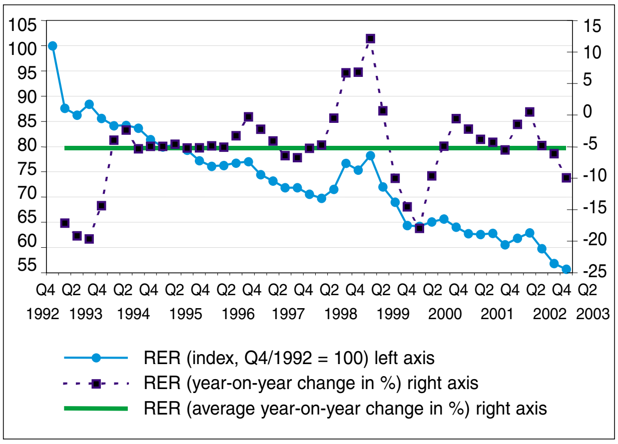


Source: NBS

Despite the growth in inflation, as well as the partial growth in the inflation differential, there occurred in 1998 and 1999 a depreciation in the real exchange rate caused by depreciation in the nominal exchange rate ensuing from the change of exchange rate regime. In consequence of changes to regulated prices at the start of 2003, recorded inflation for the first half of the year was 8.4 per cent, which in the case of the concurrent decline in inflation in the EU has led to a deepening of the inflation differential and to a repeated marked appreciation of the real exchange rate (Graphs no. 6 and 7).

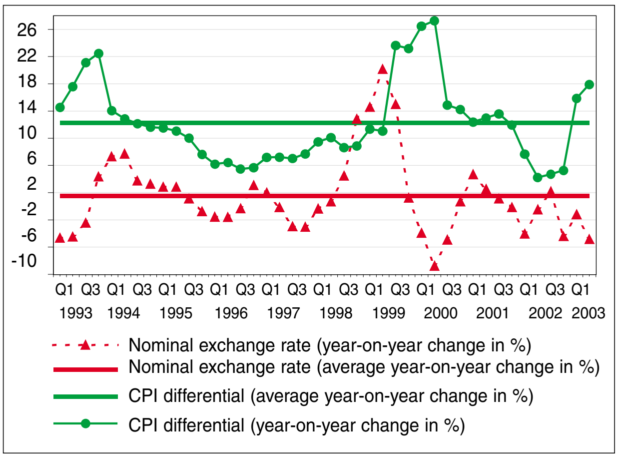
Even if an appreciation in the real exchange rate occurred recently largely due to a growth in the inflation differential, a certain role was played also by the appreciation in the nominal exchange rate. In connection with the forecast increase in the inflow of foreign direct investment and the growth in the volume of foreign trade connected with this, it may be expected that appreciatory pressures on the nominal exchange rate leading to an alignment of the SR and EU price levels will persist also in the future.

Graph 6 Development of real exchange rate in CPI



Source: NBS, own calculation

Graph 7 Development of inflation differential CPI and CPI-EU15 and of changes in the nominal exchange rate



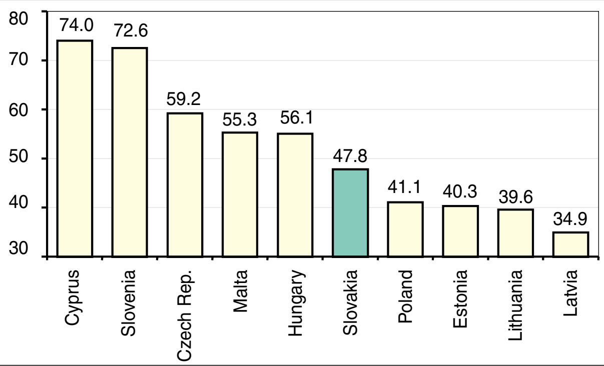
Source: NBS, own calculation

Real convergence of the SR in comparison with other candidate countries

On the basis of GDP per capita at purchasing power parity Slovakia in comparison with other candidate countries achieves average success in real convergence. The most successful countries – Cyprus and Slovenia – achieve more than 70% of the performance of the EU economy. Lower real convergence was recorded up to 2002 in Poland and the Baltic States (Graph no. 8).

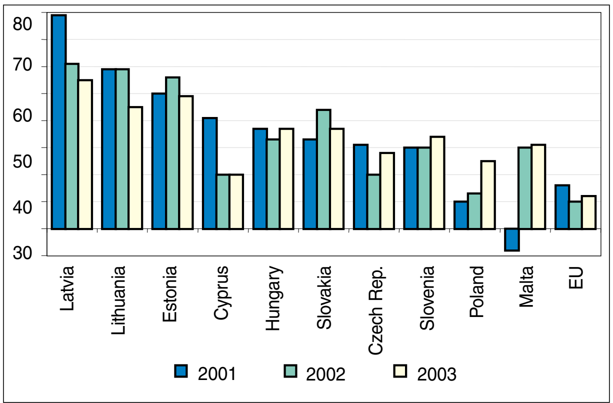
The fast rate of economic growth, assisting the approximation of the individual economies' performances to the EU economy has in the past two years been achieved not only in Slovakia but also in the other candidate countries (Graph no. 9). Apart from Poland and Malta, the rate of GDP growth in the last two years has significantly exceeded the rate of GDP growth in the EU, and thus in the majority of candidate countries a process of economic "catching up" with the EU has been underway. Slovakia through its rate of GDP growth ranks

Graph 8 Ratio of GDP/person in candidate countries in 2002 (PPP, EU=100)



Source: Eurostat

Graph 9 Development of the rate of growth in candidate countries and the EU (in % p.a.)



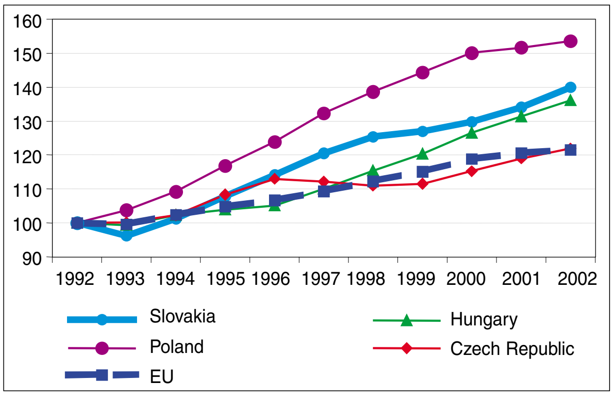
Source: Eurostat

among the most dynamic economies, where estimates for 2003 rank Slovakia in fourth place from among all candidate countries, a faster rate of growth is expected only in the Baltic states.

From an analysis of the cumulative GDP growth of the V4 countries over the past 10 years (Graph 10) we can see that, besides the Czech Republic, all countries have recorded a significantly higher rate of economic growth than have EU countries. In Slovakia over the past 10 years GDP growth 20 per cent higher than that in the EU has been achieved, which represents on average 2% yearly. In the case of maintaining this trend into the future and under the assumption of an appreciation of the real equilibrium exchange rate of 1 – 2% annually it may be expected that Slovakia will achieve 75% of the EU economy performance average in 10 to 15 years' time.

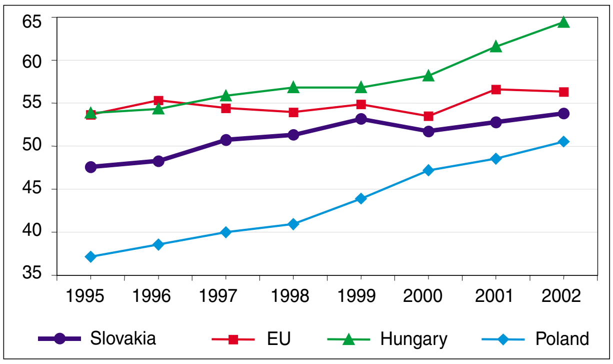
GDP growth was in the majority of cases underpinned by labour productivity growth. The development of the relative level of labour productivity vis-à-vis the EU indicates that candidate countries are gradually approaching the EU countries. The most significant progress in the growth of the relative level of productivity has been achieved in Hungary and Poland. Labour productivity in Slovakia over the past seven years has approached labour productivity in the EU by more than seven per cent (Graph 11).

Graph 10 Development of the GDP level in Central European candidate countries (1992 = 100)



Source: NBS, Eurostat

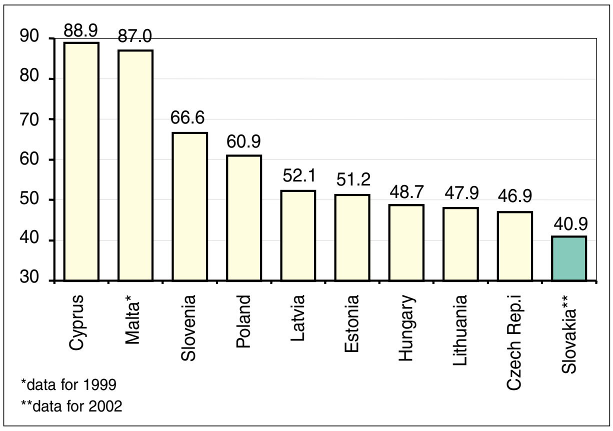
Graph 11 Level of labour productivity (PPP, EU = 100)



Source: Eurostat

Despite the increasing inflation differential between the SR and the EU and thus a gradual approximation of price levels, Slovakia still achieves the lowest price level in comparison with other candidate countries. One of the reasons is backwardness in price deregulation in previous years (Graph no. 12).

Graph 12 Price levels in candidate countries in 2001 (PPP, EU = 100)



Source: Eurostat

Expected development of real convergence in the future

In connection with the planned reforms, which will create the essential conditions for forming a stable economic environment, attractive for foreign capital, it is realistic that Slovakia's competitiveness will increase and thereby also the preconditions for maintaining the present high rate of economic growth in the future. Due to the expected growth in prices, ensuing from amendments to regulated prices, there will in the coming two years occur an approximation of Slovakia's price level to the EU price level largely due to the inflation differential. In the interest of fulfilling the nominal inflation criteria for accession to the eurozone the inflation differential in the coming period (after 2005) will be gradually reduced. Growth in foreign trade and foreign direct investment will create pressures for the domestic currency to appreciate and real convergence will therefore occur mainly through appreciation of the nominal exchange rate, but also by means of a growth differential between the SR and EU. Following the SR's entry into the ERM II exchange rate mechanism, however, the influence of the inflation differential will again strengthen because a more significant appreciation of the nominal exchange rate will no longer be possible.