



EVALUATING SLOVAKIA'S COMPETITIVENESS IN THE EU

Ing. Tibor Lalinský, National Bank of Slovakia

At present a range of approaches are available to us in evaluating a country's competitiveness. In order to gain a comprehensive evaluation of a country's standing, it is necessary to use not only the classical indicators of price and cost competitiveness (wages, labour productivity, unit cost of labour, etc.), but it is also appropriate to identify and compare indicators characterising all decisive components of the internal environment of the country, as well as the degree of its international cooperation.

Evaluation methodology

The evaluation of Slovakia's overall standing (competitiveness) within the expanded EU (EU25) is based on 53 indicators. In selecting suitable indicators the World Competitiveness Yearbook – an annually updated analysis of competitiveness of the 49 economically most important countries – was used. The World Competitiveness Yearbook evaluates the competitiveness of countries on the basis of 314 indicators, of which 128 are numerical, 115 created additionally on the basis of research, and 71 represent supporting indicators not included into the overall evaluation.

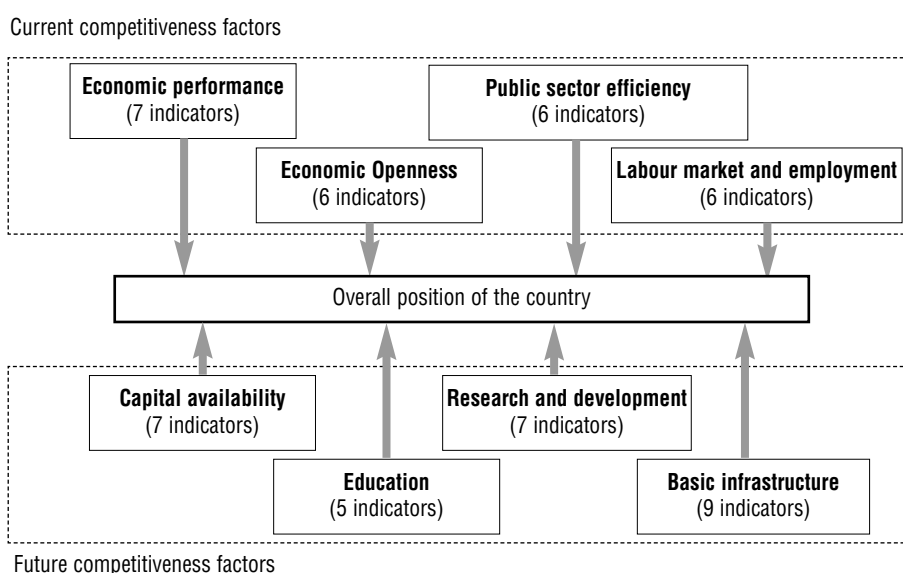
Attempting to minimise the influence of a subjective viewpoint, only objectively quantifiable indicators were chosen in order to identify suitable indicators (compared to the World Competitiveness Yearbook), and which are available for all EU25 countries¹ and are published by Eurostat or possibly another respected institution². On the basis of these criteria we identified more than 50 indicators.

The indicators are classified into eight basic fields which may be identified with the main competitiveness factors³. The first four factors include indicators desc-

ribing the current ranking of Slovakia within the EU25 and the other four fields deal with evaluating the degree to which the prerequisites for maintaining and improving the current competitiveness are fulfilled (Fig. 1).

Indicators characterising the current standing of the country deal with the economic performance, public sector efficiency, rate of economic openness and the level of the labour market. Indicators indicating the ability to sustain, or possibly improve the current standing in the future are included in the framework of the capital availability, research and development, education and basic infrastructure. The list of indicators used and their classification into individual fields is given in table 1.

Fig. 1: Diagram evaluating the SR's position in the EU25



¹ The World Competitiveness Yearbook does not evaluate competitiveness of all EU25 countries and uses other data sources.

² Indicators concerning the stock market come from the Federation of European Securities Exchanges.

³ The World Competitiveness Yearbook is founded on four main fields of competitiveness, namely economic performance, government efficiency, business efficiency and infrastructure. Each of these

fields is then divided into 5 smaller groups. Since the performance of the business sector contains mostly subjective indicators and the remaining objectively measurable indicators would insufficiently characterise the performance of the business sector as an independent factor of competitiveness, these indicators are classified into five further, at present very elevated competitiveness factors.

**Table 1: List of indicators used**

<p>Economic performance and growth GDP growth (2003) GDP growth per capita (2003) GDP growth per capita in PPP (2003) GDP growth per capita in EUR (2003) Labour productivity growth (2003) Private sector investment (2002) HICP inflation (2003)</p> <p>Public sector efficiency Public budget deficit (2003) Public debt (2003) Debt servicing costs (2002) Decline in state budget expenditure (2003) Growth in state budget incomes (2003) Exchange rate stability (2003)</p> <p>Rate of economic openness PB current account deficit (2003) Share of product exports in GDP (2003) Change in product exports (2003) Share of foreign trade in GDP (2003) Terms of trade (2003) Foreign direct investment inflow (2001)</p> <p>Labour market and employment Rate of employment (2002) Change in number of the employed (2003) Rate of unemployment (2003) Change in unit labour costs (2002) Level of nominal wages (2003) Number of hours worked (2002)</p>	<p>Capital availability Real short-term interest rate (2002) Nominal long-term interest rate (2002) Balance-sheet value of banks (2001) Market capitalisation of domestic stock market (2003) Number of domestic enterprises quoted (2003) Value of traded stocks (2003) Stock price index (2003)</p> <p>Education system and level of education Public expenditure on education (2001) Share of university graduates in inhabitants (2001) Share of graduates from natural and technical sciences (2001) Share of inhabitants with secondary-school education (2003) Pupil-teacher ratio (2001)</p> <p>Science-technological base and high-tech Public expenditure on research and development (2001) Share of graduates from scientific-technical studies (2001) Number of high-tech patents (2001) Expenditure on IT (2003) Employment in services demanding education (2002) Mobile telephone users (2002) Internet users (2002)</p> <p>Basic infrastructure and health Cost of telephone calls (2002) Energy demands of the economy (2001) Share of renewable energy (2001) Net population migration (2002) Average life expectancy (2002) Number of doctors per capita (2001) Income inequality among inhabitants (2001) Density of road network (2000) Density of railway network (2000)</p>
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The evaluation is based on the latest available data for individual indicators, the brackets indicate the specific period for each indicator.

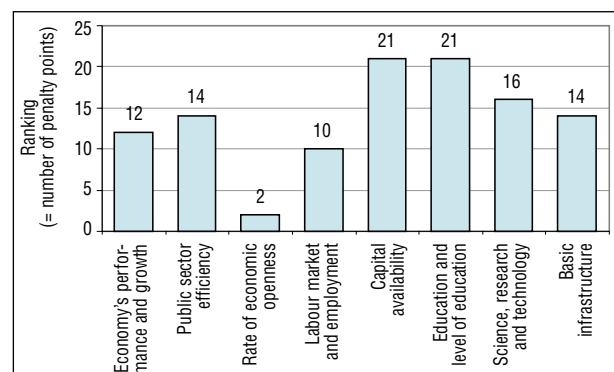
The evaluation relies on determining the position of individual countries for each of the 53 indicators. On the basis of matching specific indicators to individual fields, the position in the framework of each factor (field), or possibly within a group of factors (the group determining the current standing or the group determining the future standing), will be determined. The overall position of the country is given by a simple average of the positions for all factors.

Evaluation results

On the basis of comparing the 53 indicators, charts for each indicator and for all 25 countries of the expanded EU were created. Through gradually aggregating the "penalties" corresponding to the position (1st place = 1 point) we gained in the first stage a picture of the country's standing in each of the 8 factors. Slovakia's position in the individual factors of current and future competitiveness is shown in figure 2.

Slovakia achieved the best position in its economic openness. In the EU25 Slovakia ranks 2nd, preceded by Estonia. A decisive role in this case is played in particular by the significant growth in exports, but also the share of total foreign trade in GDP in 2003.

Thanks to low labour costs and growth in the number of employments, Slovakia achieved a relatively good standing also in the field of the labour market

Fig. 2: Slovakia's position in individual factors



and employment (10th place), and this despite its high rate (the second highest after Poland) of unemployment.

We can also consider current competitiveness as good, thanks to economic performance and growth (12th place). The GDP growth and the rate of private investment are among the highest in the EU25. The public administration reform – a sharp year-on-year decline in public expenditure – led to Slovakia approaching the first half of countries also in the field of public administration efficiency.

However, in ensuring preconditions for future competitiveness Slovakia has achieved much worse results than in factors within current competitiveness. It is close to the EU25 average (14th place) only in basic infrastructure (covering also the quality of life), and this primarily thanks to the lowest income inequality and density of the railway network.

In the field of science, research and modern technology implementation it ranked 16th place among the EU25 countries. Over the recent year expenditures on science and research have been declining and the rate of modern technology use has been even slighter.

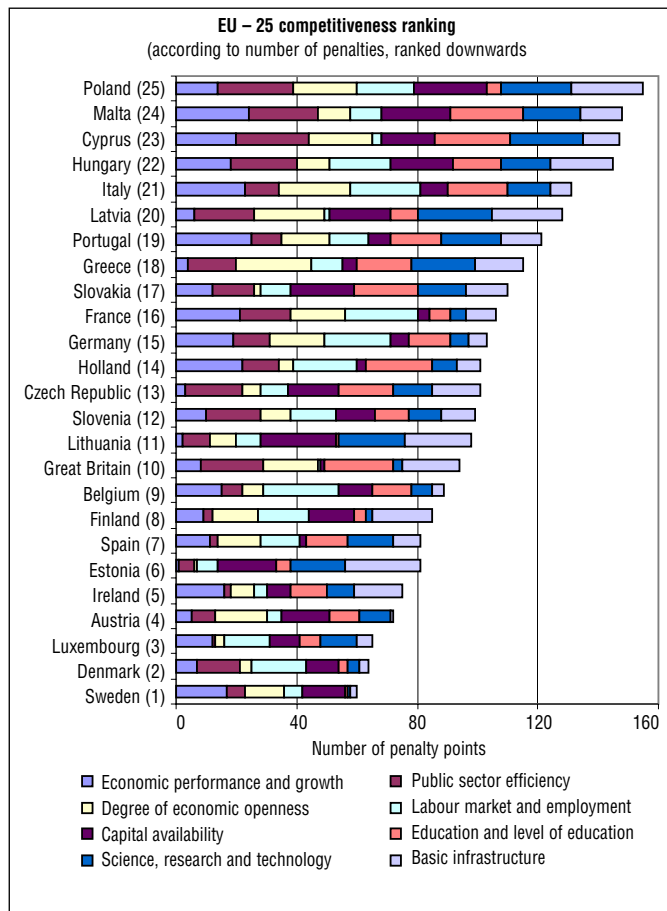
Slovakia has persistent low capital availability. Besides an underdeveloped securities market, high interest rates still constitute another disadvantage.

Most problematic appears to be the field of education. The share of expenditure on education, expressed as a percentage of GDP, represents the second lowest value among all 25 countries and the pupil-teacher ratio is the third worst.

After aggregating results for all eight fields we obtain the overall position corresponding to the standing of individual countries within the EU25. As can be seen from figure 3, showing besides the overall positioning of the countries also the shares of individual fields in each country's overall standing, Slovakia currently ranks at 17th place, achieving a better position than some countries of EU15⁴.

As has already been said, the current relatively favourable position of Slovakia is given primarily by the results in the field of economic growth and foreign trade. For sustaining this position, in particular however for sustaining the fast pace of growth in the future, it is essential to orient the economy in a more focused manner on ensuring permanently sustainable

Fig. 3: Aggregate standing of countries in the EU25



growth and future competitiveness through education reform, continuing in changes in the approach to capital, but also through being aware of the importance of research, development and modern technology for fulfilling the prerequisites of long-term growth. The importance of future competitiveness factors increases mainly in connection with the expected gradual decline in advantages connected with low labour costs and with the need for a progressive focus on production having a higher share of sophisticated work.

In general a positive relationship may be observed between the structural reforms and the growth in the Slovak competitiveness. Restructuring the banking sector, and in particular the reform in public finance have created the preconditions for fast economic growth and have been reflected in Slovakia's growing competitiveness.⁵

⁴ The standing of Cyprus and Malta must be viewed as indicative only, since several data have been supplemented from previous years and in certain cases were not available at all.

⁵ The unavailability of consistent data for a longer time period for all EU25 countries does not allow us to obtain a precise picture on the development Slovakia's competitiveness over time. An approximate evaluation based on the data of 40 indicators (of the original 53 indicators) confirms that Slovakia's competitiveness has been increasing. Over the past 5 years (compared to 1998) Slovakia has progressed from the 20th place to the 17th place within the EU25.



Fig. 4: A simple SWOT analysis of Slovakia

Strengths	Position in EU25	Weaknesses	Position in EU25
Investície súkromného sektora	1	GDP per capita in PPP	21
Private sector investments	5	HICP inflation	25
Share of foreign trade in GDP	3	Public budget deficit (Debt servicing cost)	21 (21)
Level of nominal wages	3	Mobile telephone users	22
Employment in education demanding services	5	Energy demand of economy	23
Opportunities		Threats	
Position in EU25		Position in EU25	
GDP growth (Growth in exports)	5 (1)	Market capitalisation of domestic stock market	25
Decline in state budget expenditure	1	Rate of unemployment	24
Change in the number of the employed	3	Public expenditure on education	24
Stock price index	3	Public expenditure on research and development	21
Income inequality in population	1	Net migration of inhabitants	21

SWOT analysis

On the basis of the results from the analysis of Slovakia's standing within the EU25 it is possible to identify fields (corresponding to specific indicators) that require improvement, as well as indicators that form the basis for our competitiveness and that need to be sustained.

Of the set of 53 indicators used, 20 may be selected which testify decisively to Slovakia's current position and its stability. These indicators are classified into a simple SWOT table (fig.4), containing strengths, weaknesses, opportunities and threats.

Slovakia ranks at the first place among all 25 countries in its share of private investment in GDP, which indicates a possibility to sustain high growth in the economy. An important strength is also the country's degree of openness, measured by the share of foreign trade in GDP, which creates a precondition for the exchange of experience and inflow of modern technology. The important factor of a high rate of international cooperation, as well the increased inflow of direct foreign investment over recent years has been the level of labour costs, but at the same time also the good level of education of the workforce.⁶ A finding that could be said to be very positive is that Slovakia achieves one of the best results in employment in services demanding education. It is desirable to sustain this strength also in the future.

Slovakia's weakness is its low economic level of inhabitants, GDP per capita in PPP (purchasing power parity) being ranked among those lowest in the EU25. Negative consequences can be also seen from a high rate of inflation, high public finance deficit, as well as debt servicing cost. Other serious shortco-

mings are the persistently high energy demands of the economy, as well as the low availability of modern technology for inhabitants (and subsequently also its use).

Opportunities may be sought in the current high rate of economic growth (GDP) and at the same time export. Evidence for the correct direction of the reforms started is also the fact that in 2003 the SR achieved the highest percentage decline in state budget expenditure of all 25 countries. A result of the reforms has also been a significant growth in the number of employed. The relative ease of pushing through the reforms, the low degree of resistance expressed and strikes called may be partially explained by the persistent lowest income inequality among the population within the EU25. The growth in the share price index may also be considered an opportunity, which may increase the appeal of investing in shares, making the securities market more efficient and in this way improve capital availability.

In the framework of threats it is essential to mention the low level of expenditure on education and research and development, the importance of which will grow alongside the decline in advantages resulting from low labour costs. Another problem is represented by the persistently high rate of unemployment. The importance of solving these issues has been growing also in connection with the need to become involved in fulfilling the Lisbon Strategy objective, which is to create from the European Union the most competitive and growing knowledge-based economy in the world, able to ensure sustainable economic growth with multiple and better job opportunities and social cohesion. The low market capitalisation of the domestic stock market and the negative net migration of inhabitants also represent certain threats.

⁶ Strength in the field of low labour costs is not sustainable from the long-term aspect, therefore it would be necessary to replace it in the future by the strength from the field of labour productivity.



Overall evaluation of the SR's competitiveness

Slovakia's competitiveness within the EU 25 is currently better than that of certain original EU countries, as well as that of most of the newly-acceded member states of the EU. In connection with the reforms underway Slovakia's competitiveness continues to grow compared to other EU countries.

The current standing of the Slovakia's competitiveness is given mainly by its economic openness, which relates to the level of labour cost, but at the same time also the good level of education of its workforce. A weakness of Slovakia is the low economic level of

its inhabitants. In connection with the planned fulfilment of the Maastricht criteria it may be expected that weaknesses of Slovakia's competitiveness will gradually be removed, such as the currently high rate of inflation, high public finance deficit, as well as debt servicing costs. Opportunities for the future growth of competitiveness may be sought in the high rate of economic growth attained.

An important precondition for further growth in Slovakia's competitiveness is continuation in pro-reform measures, the completion of reforms commenced and the creation of conditions for the development of education, science and research.