COMPETITIVENESS STRATEGY
FOR THE SLOVAK REPUBLIC UNTIL 2010

National Lisbon Strategy

Ivan Mikloš
Deputy Prime Minister and Minister of Finance of the Slovak Republic
INTRODUCTION

SLOVAKIA must become, both at home and abroad, a synonym for a country with outstanding science and technology, where exceptionally educated and creative people produce high-quality innovative goods and services.

During the past fifteen years the Slovak economy has undergone profound changes, which have substantially transformed its character. The most important ones include the transformation from a centrally planned to a market economy, a full integration into the European Union (EU) and the implementation of deep structural reforms. Due to these changes, the Slovak economy now faces a new stage of its development with new opportunities and challenges. In order to promote further development of the economy, it is necessary to adapt government policy to this new situation on the basis of a clear and modern strategy. This document presents the economic strategy for Slovakia until 2010, which should form the basis of government policy in this period.

The primary objective of the strategy is clear: to attain the standard of living of the most prosperous EU countries as soon as possible. This goal can only be achieved through rapid and long-term economic growth. In a market economy, the state can support growth by creating conditions that enhance the competitiveness of the economy. This strategy may, therefore, be viewed as one of improving Slovakia’s competitiveness. The strategy requires, in the first place, the right vision of the direction of our country in an ever more integrated Europe and in a globalised world. This vision, which must not be built on outdated solutions, should form the basis of the main strategic priorities and the focus of the most important government policies.

The same strategic goal was adopted by heads of EU member states at the Lisbon Summit in 2000, namely to transform the EU, by 2010, into “the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion.” The so-called Lisbon Strategy was designed to achieve this goal. It is supposed to serve as the main guideline for economic policy of each EU member state, including Slovakia.

Most economic and political leaders in Europe now openly admit that the main Lisbon goal will not be achieved. There are two major reasons for this lack of success. First, the Lisbon strategy comprises too many objectives covering a wide range of fields; moreover, the goals are often contradictory. Not all of them are equally important to all 25 EU member states. Second, most EU governments lack the political will to implement the Lisbon Strategy, as it requires policies which are not always popular.

Nevertheless, the main goal of the Lisbon Strategy, i.e. the enhancement of economic competitiveness, is a correct one. The same can be said about the approach for achieving it. Put very simply, it comprises two types of activities: profound and systemic reforms (so-called structural reforms) and adequate development policies. Based on these conclusions a high-level expert working group lead by the former Dutch Prime Minister Wim Kok made a recommendation that each member state should adopt its own national Lisbon Strategy. Each strategy should focus only on those areas that are the most important for improving the competitiveness of the respective country. It is expected that every member state will be officially required shortly to prepare such a strategy.

The strategy of increasing the competitiveness of Slovakia presented in this document is based on the
overall Lisbon Strategy and at the same time it can be viewed as our national Lisbon Strategy. Based on the latest knowledge and experience from abroad we are convinced, that the long-term competitiveness of Slovakia can only be guaranteed by the implementation of the essential structural reforms creating conditions for the development of the so-called knowledge-based economy. Our strategy is therefore based on two main pillars:

- successful completion of structural reforms and maintaining their results
- systematic focus on the fulfilment of the development part of the Lisbon Strategy

Although the strategy is primarily economic in its nature, it will only be truly successful if it also contributes to the cultural development of Slovakia. In other words, Slovakia must not only become a knowledge-based economy, but also a knowledge-based society. Culture should be understood here in a broader sense, as an ethical and societal level of development of the nation. It is an important no economic factor which significantly influences the quality of life of the individual. It is not sufficient that all Slovak citizens should be IT literate, effectively using available information. Real development requires that citizens are able to think critically in their everyday lives, analysing events and communicating with one another. On the other hand, culture, understood in this sense, does have economic implications. As a set of informal rules of behaviour it is able to contribute significantly to the quality of the business environment. The material cultural heritage is an important source of economic development of the regions and the whole country.

Improving cultural awareness of the citizens is also the best means of fighting corruption. This fight must remain one of the main priorities of the government and the whole society. Many of the specific aims of this strategy, from the reform of the content of educational curriculum to the introduction of electronic public procurement, may significantly contribute to rapid reduction of corruption.

The strategy will only be successful if it gains broad public support, including that of the expert public. Thus, prior to official endorsement by the Slovak government, it was open for public discussion. This culminated in a national conference attended by the Prime Minister of the Slovak Republic, several government ministers, leaders of the parliamentary opposition, leading scientists and professors, managers of leading firms, representatives of trade unions and non-government organisations. All participants declared their support for the central vision and strategic direction defined in this document. The main conclusions of the public discussion were taken into account in preparing the final version of the document. Even after its endorsement, however, the government will have to ensure the highest possible level of involvement of the relevant parts of society in the implementation of the strategy, following the principles of partnership and cooperation.

Following the endorsement of the strategy by the Slovak government, action plans will be prepared for the timeframe up to the middle of 2006, that is up to the end of the current parliament. They will define the main tasks for the respective areas up to 2006, deadlines for their implementation, as well as persons and institutions responsible for their fulfilment. The creation of a broad social consensus on this strategy is important not least in order to ensure that it will be fully taken into account in the programme of the government that will be formed after the next general election.

A special role in the implementation of the strategy should be played by local and regional governments. Slovakia is a small economy, both in terms of its geographical size and in terms of its population. The fastest possible economic growth of the whole country must, therefore, be the main priority. The experience of other, comparable European economies shows that rapid growth may be temporarily accompanied, in
small countries like Slovakia, with rising differentials between the economic development of the region around the capital and the rest of the country. However, even in this case, the growth of living standards in the less developed regions tends to be much faster than is the case when the economic strategy is focused primarily on reducing such differentials. The activities of local and regional governments in implementing this strategy must, therefore, support economic growth of all regions of Slovakia, but not at the expense of rapid growth of the economy as a whole. It is, therefore, important that the resources obtained from the EU structural funds are invested with the explicit aim of increasing the competitiveness and growth of the entire Slovak economy.

As the strategy presented in this document is the basic overall strategy of economic development of the Slovak Republic until 2010, all other government initiatives and documents for this period have to be fully compatible with it and contribute to its implementation. This concerns especially the strategy for the use of European Union structural funds in the subsequent period (2007 - 2013). This strategy is the main point of departure for the National strategic reference framework, which must be designed so as to contribute to its fulfilment.

Effective fulfilment of this strategy will require adequate funds, including public financing. However, funding must not threaten the stability of public finances, or any of the fiscal objectives defined in Slovak Convergence Programme until 2010. This can be achieved in three ways. Firstly, by transferring public expenditure from those areas that do not correspond to the basic philosophy and the objectives presented in this strategy. Preparation of public administration budgets for this period will, therefore, have to involve sufficient increases in general government financing for the priority areas and at the same time expenditure cuts in other areas. Secondly, EU resources provide an enormous space for financing. These include the aforementioned resources from structural funds. Furthermore, there are also other EU expenditure programmes, aimed at improving competitiveness and innovation, which are only minimally used by Slovakia. It will, therefore, be necessary for the government to create adequate tools and institutions to allow their utilisation on a larger scale than has been the case so far. At the same time, when negotiating the future EU budget for the period 2007-2013, the government must ensure that Slovak institutions have guaranteed access to these funds in practice. Thirdly, even if these resources are efficiently used, a substantially greater extent of private sector involvement is crucial if the presented strategy is to receive sufficient funding.
I. COMPLETION OF STRUCTURAL REFORMS AND MAINTAINING THEIR RESULTS

Structural reforms form the basis of the Lisbon Strategy. Without them, the strategy at the level of the European Union is doomed to failure. Currently it is possible to state that in implementing structural reforms Slovakia is one of the most successful EU member countries. The prospects for a successful fulfilment of the other aims of the Lisbon Strategy in Slovakia over the next few years are, therefore, very good. The Slovak Government has made the reforms a priority, despite their unpopularity. Such an approach was ambitious and demanding, yet at the same time highly responsible. In contrast to most European countries we decided to settle the most pressing problems immediately, rather than leave their solution for the future. Thanks to this choice, we have almost completed this most difficult part of the Lisbon Strategy. The most significant implemented structural reforms include the tax reform, healthcare system reform, social system reform, labour market reform, pension reform and the general government (public finances) reform. For instance, the completion of the pension and healthcare reforms will, to a considerable extent, solve serious problems, which would face Slovakia in the future due to its ageing population. Only a few European economies have undergone such a complex set of reforms, which creates the basic prerequisites, in Slovakia, for a long-term and sustainable growth.

The economic success of Slovakia is influenced to a considerable degree by developments in the rest of the EU. This success would be threatened by negative developments in the economies of our European partners, including insufficient structural reforms. Slovakia must, therefore, decisively support all steps directed at improving the economic environment in the entire EU. It must, equally, take an active stance against processes which might threaten the competitiveness of the EU, including, for example, efforts to employ inadequate means of influencing the taxation and social policies of individual member states.

The progress achieved in the structural reforms is a key advantage thanks to which the living standards of Slovak citizens may start growing rapidly and in a sustainable manner. A necessary precondition for that to happen in reality is the full completion of the reforms. Slovakia must not stop or turn away from the path which it has almost completed. On the contrary, it is necessary to focus on completion and particularly quality implementation of adopted reforms so that they can bring about the expected positive results. Some of the reforms may be improved, for example by removing defects which may materialise only during their implementation in practice. Nevertheless, even with such practical amendments it will be absolutely necessary to observe several basic principles and rules necessary for fast and sustainable growth of prosperity in Slovakia. These principles and rules constitute the following frameworks for state policies in all areas of priority importance, in which the government has already carried out systemic reforms.

At the same time, it will be necessary to share the positive experiences from structural reforms in Slovakia at the level of the EU as well. The Slovak Government should actively encourage policies which will lead to the effective realisation of structural reforms in other EU states. This way it will be possible to achieve a synergic effect and improve the competitiveness of the EU as a whole. This applies even to such sensitive areas, from the perspective of many member states, as agriculture.

**Macroeconomic and fiscal area**

Responsible macroeconomic and fiscal policies are the foundation for economic and social development. All the key parameters and principles of these policies by 2010 were specified clearly and in detail in the *Convergence Programme of the Slovak Republic by 2010*, approved by the Government of the Slovak Republic and subsequently by the European Council. Thus, Slovakia is bound by a strong domestic and
international obligation to conduct only such policies that are in compliance with that strategic document. The most important goals and principles in the macroeconomic and fiscal area are as follows:

- to improve the functioning of the market economy and to minimise market interventions

The free market is the best means of ensuring economic growth and welfare. The state will interfere with the free market only in the areas where the market fails and where public services could be provided more effectively or fairly by the government.

- to reduce the public finance deficit

The public finance deficit creates a debt that will have to be repaid, with interest, by future generations. The government must, therefore, achieve an approximately balanced budget, meaning that budget deficit or surplus should not exceed 1% of GDP. This will guarantee sustainability in public finances.

- to refrain from increasing the level of redistribution in the economy

Maintaining public redistribution of economic resources at a relatively low rate is one of the basic prerequisites for fast economic growth. As a result, public expenditures - along with public revenues received from taxes and contributions - should not be increased. Instead, the government should, by means of responsible policies aimed at systematic removal of wasteful activities, open up more room for their further reduction.

- to maintain transparent and neutral tax policy

The simple and transparent tax system is one of the main competitive advantages of the Slovak Republic. Tax incentives are a generally inefficient and easily misused instrument which tends to result in wastage of public resources, without the accomplishment of the desired objectives. Hence the government will not pursue any public objectives using tax incentives, but only by means of targeted public expenditures.

**Social area**

The Slovak Government fully subscribes to traditional European values, such as individual responsibility, equal opportunities, the role of the family and the community in caring for those in need, and the social responsibility for fighting poverty. In the social sphere the government will, therefore, continue to follow policies which are consistent with these European values, and which will contribute to their successful fulfilment. The maintenance of social stability must be a priority but good social policy should minimise the negative impact on Slovakia's further economic development. For these reasons the following principles and objectives should be observed.

- to emphasise the co-responsibility of the individual and his family for his or her situation

Primary responsibility for establishing sufficient social and economic background for himself and his family must be borne by the individual. The role of society is to create the prerequisites, including equal opportunities, to enable the individual to succeed in this effort. Public support to individuals and families should be balanced in different phases of life.
- to avoid social policies that create disincentives for individual activity and creativity

In every situation possible, social policy must motivate the individuals to improve their social and economic situation and that of their families. It must neither indirectly punish those who are doing so, nor lead others towards being dependent on social benefits.

- to reduce absolute poverty

Government policy should focus on reducing the number of people whose income is insufficient to provide for their basic living needs and those of their families. It should provide instruments that will make it easier for people to escape severe social difficulties.

- to maintain an effective social net

The best way to improve its efficacy is to continue the decentralisation process which will allow the local and regional governments to develop, with the help of appropriate tools set at the national level, their own, suitable solutions. Among other things, it is necessary to change the housing policy so as to allow the municipalities and citizens to secure homes even for the poorest groups and to prevent homelessness, as one of the most socially harmful phenomena.

- to maintain a flexible labour market

A flexible labour market is one of the foundations for the creation of new employment opportunities. Such policies enable citizens to obtain stable employment, lowering the burden on the social security system, creating opportunities for personal fulfilment and a healthy environment for family life, as well as reducing the incidence of social-pathological phenomena.

**Health care and pension insurance**

Good policy in health care and the pension system is crucial for ensuring adequate quality of life for individuals of all ages. The Slovak Republic, like other EU countries, will continue to face low birth rates and growing average life expectancy of its citizens in the coming years. Without fundamental systemic changes, these demographic developments would significantly increase the burden of financing health care and the pension system. This would threaten their effective functioning. Current reforms in both areas are ensuring that in the future, the citizens of Slovakia will continue to have access to high quality medical care and a just pension system, which will reflect their efforts during their economically active lives. The new pension system will also motivate people to remain longer in the labour market, in accordance with the aims of the Lisbon Strategy. Any changes made in these two areas in the future must not jeopardise the achieved result. On the contrary, maintaining the sustainability of public finances will require further changes in the first pillar of the pension system, in particular an increase in the retirement age. Any changes in the health care and pension systems must follow two basic principles:

- to maintain a balanced system reflecting both the principle of social solidarity and the principle of individual merit

Every citizen must be entitled to minimum health care and old-age social security provision, regardless of
his or her financial contribution to these systems during working life. However, the individual's actual contributions must be adequately reflected in the overall package of services and pension benefits to which the individual is entitled.

- to refrain from measures jeopardising the long-term sustainability of the health care and pension systems

Any modifications and changes in these systems must consider long-term economic and demographic capacity of the Slovak economy. Under no circumstances may they put at risk the ability to sufficiently finance high-quality health care and pension system in the medium and long-term.
II. PRIORITY DEVELOPMENT AREAS

The realised structural reforms create the necessary prerequisites for the achievement of rapid growth of employment and labour productivity and hence also wages and living standards. However, these are only solid foundations on which further development needs to take place. Thanks to these reforms, Slovakia has already become one of the most attractive places for investment in the European Union. Excellent conditions for efficient production are currently Slovakia's main source of competitive advantage. However, Slovakia will only be able to capitalize on this advantage for a limited period. Among other things this is because the gradual catching up with the most developed European countries will tend to reduce this advantage. Within the horizon of ten years or so, many investors focused exclusively on cheap large-scale production with a low value added will probably begin to move further east.

If we want living standards in Slovakia to continue to grow, we must anticipate this problem and begin to deal with it. As mentioned above, long-term competitiveness of Slovakia can only be guaranteed by creating favourable conditions for the development of the so-called knowledge economy. In other words, our economic growth must be based on the ability of Slovak workers to continually absorb new information, producing know-how and using it in practice. Therefore, in the timeframe up to 2010, it is necessary to focus on those areas that will support the growth of the creative potential of the Slovak economy. Slovakia must become, at home and abroad, a synonym for a country with exceptionally educated and creative people, blossoming science and technology, producing innovative products and services of the highest quality.

The development part of our strategy must, therefore, essentially focus on four areas which we consider to be the most important in this respect:

- information society
- science, R&D and innovations
- business environment
- education and employment

For each area, the government must formulate a clear vision of the final status we want to achieve; one that will also have the support of the majority of experts and the general public. At the same time it must define the basic goals that correspond to such vision. Then it must have a clear idea of the main policies and steps by which these goals can be achieved. It is also necessary that the goals and policies in individual areas are mutually consistent and well coordinated. In the following part of the strategy we present, for each of the four areas, the three components just mentioned, i.e. the vision, principal objectives, and the main policies for their fulfilment. Many of the objectives and policies may be included in more than one of the four areas. For example, ensuring computer literacy among teachers belongs to the area of information society and at the same time to the area of education and employment. However, in the interest of clarity and in order to avoid repetition, we have tried to include them in one area only.

Although the aim of this strategy is to create conditions for rapid long-term economic growth, this must not lead to policies causing excessive damage to the environment. The protection of the environment and rapid economic growth are not necessarily, and should not be, mutually incompatible objectives. In fact, with correctly set public policies, these objectives can complement each other. The government should actively support activities and policies which lead to eco-friendly innovations, the introduction of environmental technologies, and the reduction of energy usage. As an example one could point to the support for the so-
called "green public procurement." Thus, in forming the policies of individual sectors, it is necessary to adhere systematically to two main principles, both of which have been fully taken into account in preparing the development part of this strategy:

- **to fully include costs to the environment in the prices of goods and services (i.e. internalising the environmental externalities)**

The production of certain goods and services has an impact on the environment which must be borne by the whole society. In such cases the market usually fails because the producer does not fully bear the environmental costs and therefore does not incorporate them into the product prices. It is the state's duty to remedy such market distortions, which unduly benefit certain products to the detriment of society as a whole.

- **to refrain from deforming the market by improper subsidy policies**

Where the market is deformed by unsystematic elements, such as an unsuitable subsidy policy, the prices of products and services are eventually deformed and environmental technologies and services become less competitive.

**INFORMATION SOCIETY**

The introduction of information technologies into society is one of the best means of transforming Slovakia into a dynamic, knowledge-based economy. Within the next few years, it is therefore necessary to ensure that most citizens are IT literate, have access to the Internet and are able to enjoy the benefits of the information society. This should result in an increase in the overall level of education, productivity and employment; greater social inclusion of disadvantaged groups of citizens; improvement in the quality of services; faster growth of innovations and more effective use of public funds. The main priorities in the development of an information society in Slovakia are as follows:

- information literacy
- effective e-government and modern on-line public services
- wide access to the internet

Insufficient development in the building of an information society in Slovakia thus far is largely attributable to the absence of “centralised command” in this area. That is why it will be necessary to significantly strengthen institutional capacity in this area: in the short-run by increasing the competencies of the representative of the Government of the Slovak Republic for the introduction of information technologies, and in the medium-run, for example, by transforming the Ministry of Transport, Post and Telecommunications, shifting emphasis on the introduction of information technologies.

**Information literacy**

Employment in a knowledge economy requires information literacy. As a priority, it is necessary to ensure such literacy in all age and social groups of society. The traditional school must be transformed into a modern school as soon as possible. This involves a change of both the content and form of education with regard to IT. An effective means of introducing information technologies into society is to introduce them
into education, in particular the regional school system and universities, as well as into the system of life-
long learning. Information and communication technologies must become a tool used by students and their
teachers on everyday basis. It is necessary:

- to ensure IT literacy among teachers at all school levels as well as among employees in public
  administration.
- to approximate the European standard in equipping schools with information and communication
  technologies (ICT)
- to support the increase in computer literacy and life-long learning of citizens in the field of ICT, also
  in cooperation with the private sector
- to improve general awareness of the benefits of an information society and IT literacy with focus on
  specific groups (e-inclusion).

Effective e-government and modern on-line public services

Alongside the private sector, the state also plays a key role in offering a range of electronic services which
serve as important catalysts in the process of introducing information technologies. The state must remove
barriers to the development of electronic services provided by private companies. At the same time, it must
introduce a wide range of modern and effectively provided public electronic services, as well as secure their
security and credibility. This will require the consolidation of the use of information technologies in the public
sector, the interconnection of information systems and a change in organisation processes. The primary
objective in this area is a more effective provision of various services for citizens and the private sector, so
that they can devote more time to productive activities. It is necessary:

- to interconnect the basic information systems of public administration in an effective, reliable and
  secure way, defining the standards for the exchange of data between different public administration
  bodies
- to gradually make the services accessible at a central public portal for citizens and especially for
  firms (see also the section on Business Environment)
- to improve the functioning of all public registers and databases by switching to on-line services (see
  also the section on Business Environment)
- to make the process of introducing information technology into the public sector more effective, to
  introduce coherence and monitor project results, and to consider the possibilities of joint public
  procurement, on the basis of an audit of the expenditure on information and communication
  technologies and public administration services
- to introduce secure electronic identification cards, which are necessary for transactions within an e-
government

Wide access to the internet

A high-quality and affordable information and communication infrastructure is the fundamental pre-requisite
for the creation of an information society. Broad-band internet access, with emphasis on modern
technologies, should be made available to every citizen, ideally at home but also in public places. According
to several studies and surveys, the price of a computer as well as the prices of the connection itself are the
main barriers that prevent people from connecting to the internet. It is, therefore, necessary to take
appropriate legislative and regulatory measures in order to promote a more competitive environment, which
will lead to lower prices and boost investment in the telecommunications sector. It is necessary:

- to continue the liberalisation of the telecommunications market, especially by improving the regulation process in this market
- to promote access to broadband internet and its wider use in the underdeveloped regions, with effective utilisation of the infrastructure whose majority owner is the state
- to promote the development of public places providing Internet access
- to make all school multimedia classrooms open to the public
- to promote schemes, based on partnership with the private sector, aiming to provide computers with broadband internet access for the wider public

**SCIENCE, R&D, AND INNOVATIONS**

Innovation policy effectively combining promotion of science, research and innovations, must become one of the principal long-term priorities of the Slovak Government. Public policy should ensure long-term development of quality scientific potential. Slovakia needs a wide base of scientists able to carry out high quality scientific research at the highest level. It is essential that the scientists and their activities are interconnected with the business sector in order to transform the scientific knowledge into material outputs in the economy in the form of innovations. Public support for basic science and research should be clearly distinguished from the support for applied research, development and innovations, since these have a different economic character. The principal objectives in this area are as follows:

- Raising and supporting highly qualified scientists
- Research of international quality, adequately interconnected with the business sector
- Effective public support of business activities in the areas of R&D and innovations

**Raising and supporting highly qualified scientists**

The main objective is to motivate gifted people towards the career of a professional scientist by creating good opportunities for quality scientific work and securing their adequate professional and financial valuation. Appropriate financial support for leading Slovak scientists and research institutions is the key precondition for this objective to be achieved. The financing system should be designed in such a way that enables a growth of funds for quality scientists and institutions and, at the same time, forces inefficient institutions to close down. This can be achieved by placing greater emphasis on financing based on a principle of competition - it is not institutions themselves that should be financed, but high-quality research projects chosen on competitive basis, while observing strict scientific standards. In order to achieve these objectives it is necessary:

- to improve the mutual connections between scientific research and university education, particularly by implementing the institute of the research university that should form, in partnership with other research institutes, the basis for the scientific research in the Slovak Republic
- to remove institutional obstacles that prevent leading scientists from career advancement in domestic research and academic institutions
- to divide the public financing of science into financing for institutions and financing based on the principle of competition; only research universities and SAV (Slovak Academy of Sciences) should be entitled to claim the financing for institutions; this should only enable the institutions to survive so
that they are motivated to maintain adequate quality of research that would enable them to obtain additional funds based on the principle of competition

- to increase the public financial supports (including scholarships) for PhD students and introduce financial support for PhD graduates
- to create instruments of financing aimed at improving the international mobility of Slovak scientists and mobility of scientists between academic and business sectors

Research of international quality, adequately interconnected with the business sector

Publicly funded domestic research must meet current European and world standards in terms of its quality and objectives. Basic research should reflect current scientific developments in the world. Applied research and development should react to the most important economic challenges and contribute to economic growth. This is why the academic and business sectors should be actively interconnected within the area of applied research and development. Slovakia, being a small country, is not able to support world class research in all areas of science. It will be necessary, on the basis of broad expert discussion, to choose a small number of priority areas in which the state will create appropriate conditions to achieve such quality of research. The choice must be based on the objective possibilities of Slovak science and research and on the ability of the areas to contribute to a long-term development of international competitiveness of the Slovak economy. To that end it is necessary:

- to implement efficient cooperation and shared responsibility of Ministry of Education and Ministry of Economy, and perhaps other relevant ministries, for the development of public instruments and institutions supporting applied research and development
- to introduce mechanisms of an independent quality assessment of projects and an obligation to publish the results of all publicly funded research projects
- to establish instruments for special public support for those scientific teams and institutions that are successfully cooperating and obtaining funds from the private sector and from abroad
- to provide for extra funding for research in 2 to 3 priority areas and in the network of the so-called "centres of excellence"
- to remove institutional obstacles which reduce the mobility of quality scientists between the academic and business sectors
- to create instruments to help obtain funding for projects from international research and development programmes, community schemes and EU initiatives in research and development

Effective public support of business activities in the areas of R&D and innovations

Establishing new, innovative companies and activities aimed at development and innovation within existing companies significantly contribute to economic growth. Since a successful establishment of an innovative firm carries considerable risk, the market often fails and the private sector finances less such firms than would be economically optimal. Moreover, the innovative activities themselves are usually very risky and costly which means firms undertake a suboptimal amount of such activities. That is why the state should create an environment and apply instruments that will support the establishment and successful operation of new firms and motive the existing ones to intensify their development and innovative activities. To meet these goals in Slovakia it is necessary:

- to motivate increased private sector financing of research, development and innovations, mainly by introducing an effective public co-financing of such activities
• to unify and improve the existing public instruments supporting new and innovative firms, particularly small or medium sized ones
• to create a significant public instrument which will improve access to venture capital for innovative firms in the early stages of their operation
• to include the classes aimed at basic business knowledge and skills into the standard educational structure of technical universities
• to improve educational activities on the possibilities of venture capital for businesspeople and potential businesspeople (see also the section on Education and Employment)

BUSINESS ENVIRONMENT

A sound business environment which motivates people to be entrepreneurial is one of the key instruments of the government in providing for the long-term competitiveness of the economy. The business environment must enable effective competition among businesses and enterprises, which are the basic motor of the economy. Public institutions must serve to strengthen and simplify this competition, rather than making the entrepreneurial activities more difficult.

The central and regional government will, therefore, strive to create, throughout Slovakia, a business environment which will promote new investment, productivity growth, innovations and the creation of new jobs. As to the instruments affecting public finances, the government will prefer reducing the tax burden for all enterprises. Individual support to firms by means of subsidy will only be provided in exceptional and clearly justified cases and according to clearly stated and known rules. The main priorities with respect to the business environment are the following:

• High degree of enforcement of laws and contracts
• Public institutions as a partner and not as a burden
• Effective access to capital market for all firms
• High-quality physical infrastructure and services in network industries

High degree of enforcement of laws, regulations and contracts

Enforcement of contracts is currently the key obstacle to the smooth functioning of the business sector in Slovakia. The government must therefore create conditions for a fast and just resolution of disputes, which will ensure enforcement of contracts and protection of ownership rights. Law enforceability must be speeded up not only in the stage up to the issuing of an effective judicial decision, but also in subsequent stages, i.e. up to a successful execution of the decision. To achieve this it is necessary:

• to reduce room for corruption in the judiciary
• to improve management in the judiciary, particularly with respect to human resources and financing
• to improve conditions for out-of-court dispute resolution
• to introduce effective mechanisms for the recovery of claims and reinforcement of active creditors’ rights
• to introduce a regulatory impact assessment system which will evaluate every legislative bill at the national and EU level, especially with respect to its impact on the business environment
Public institutions as a partner and not as a burden

Public administration at the EU and national level, as well as at the level of higher-tier territorial units, cities and municipalities has to increase the effectiveness of its functioning, particularly with respect to entrepreneurs. It is necessary to further simplify market entry, operation in the market, as well as exist from the market. The objective is the minimisation of the regulatory and financial burden, which needlessly consumes human and financial resources of entrepreneurs. This requires the following measures:

- to increase the quality of public administration using a combination of offering competitive salaries to state employees, investing in their human capital, and further streamlining of the administration
- to reduce the tax burden for businesses; this can be achieved by reducing general and payroll taxes paid by businesses and also by changing the overall structure of this tax burden.
- to carry out a thorough procedural audit with the objective of simplifying the relationship between the public administration authorities and firms, especially with respect to environmental protection, construction permits and information duties
- to provide for a fully electronic exchange of information on firms between public institutions; no information on a firm which has already been provided to a public institution should be requested directly from that firm by another public institution - the two institutions should exchange information electronically and automatically
- to simplify the requirements of public institutions towards firms upon market entry, particularly by managing the whole process by information technology and potentially by introducing the so-called one-stop shops (with respect to the future businessperson, focusing the whole registration procedure in one location)
- to enhance the transparency and effectiveness of public procurement by means of gradual transition to a fully electronic system

Effective access to capital market for all companies

A significant improvement in the access of small and medium sized enterprises to capital market and to non-bank financial resources more generally is an essential pre-requisite for long-term development of the economy and enterprise. Government policy must therefore create favourable conditions for the development of venture capital and of access of Slovak firms to the stock market. The effective access to the stock market is much more important than the location of such a market. With regards to the small size of the Slovak economy and its high level of integration in the single European market, there is no point in focusing on the development of a national stock market, which would be located at the domestic stock exchange. Instead, it is necessary to integrate the Slovak stock market into the European stock market and particularly to create a regional Central European stock market. In order to achieve this objective it is necessary:

- to promote the formation of an integrated Central European stock market by changing the institutional organisation and ownership of CDCP, a.s. and BCPB, a.s.; international integration and the establishment of a powerful regional stock exchange should take priority, as is the case, for example, in the North European countries, namely through a merger or close interconnection of the main regional stock exchanges (especially Bratislava, Prague, Budapest, Warsaw, Vienna, and perhaps Ljubljana).
- to lift legislative and institutional barriers in the domestic stock market.
- to lift barriers to cross-border clearing and settlement and the reduction of costs of these operations
- to create an integrated regulatory framework for the financial market
- to promote the development of sources of long-term capital by eliminating legislative barriers, especially in relation to resources from banks, insurance companies, collective investment funds and pension funds
- measures aimed at stimulating venture investment are described in the section on science, R&D, and innovation

**A high-quality physical infrastructure and services in network industries**

The central and local government will take measures to promote the development of physical infrastructure and network industries (electricity, gas, telecommunications, transport, water management, postal services and heating) with the aim of ensuring that consumers receive high-quality products and services at low prices. This can be best achieved by strengthening competition in the network industries, building further connections with EU member countries, and by genuine opening of Slovak markets, so as to give all domestic consumers, including households, the possibility of selecting their supplier. It is necessary:

- to rapidly modernise and develop high-quality transport and environmental infrastructure throughout the country, among other means by enhancing the participation of private sector financial resources
- to promptly lift the remaining legislative barriers preventing new producers from entering the Slovak market
- to gradually reduce regulation in those sectors of network industries where a sufficient level of genuine competition has been achieved
- to increase the professionalism of independent regulators in network industries and public control over them
- to complete the privatization of all enterprises within the network industries
- to adjust the energy prices to fully reflect the actual economic and environmental costs of their production; this will primarily require increasing the effectiveness of state aid to renewable and non-renewable resources

**EDUCATION AND EMPLOYMENT**

Securing a high employment rate and the preconditions for high labour productivity is the best guarantee, in the long term, of a high standard of living for the entire population of Slovakia. Public policy in the area of human resources must create, for all citizens, opportunities and abilities to study, absorb new information and smoothly change from one employment to another. It is especially important to use education policy as a tool for fighting intergenerational reproduction of poverty. Each child must have the opportunity to obtain good quality education that corresponds to his or her potential. Following are the main priorities in the area of human resources:

- Modern educational policy
- Achieving a high employment rate
- Coping with aging population
Modern educational policy

The key to securing long term competitiveness of Slovakia in the area of human resources is the completion of the reform of primary and secondary education with emphasis on the reform of the content of education. Education must provide all students with general skills and must primarily reflect current and expected needs of the labour market. The reform must provide the student with a high level of freedom to choose a school, and the school with the possibility to select the form and content of education. This must be connected to a universal and complex system of measuring the quality of teaching and institutions. It will require the following steps:

- to realise a transformation of the content and process of the traditional school into that of a modern school, away from emphasis on memorising information and towards developing the ability to obtain, evaluate and use it
- to strengthen and improve education in the area of foreign languages, information technology and basic business knowledge and skills in secondary schools
- to enhance the quality of teachers, particularly by making the profession more attractive for high-quality teachers and by improving the conditions for their training and continuous development of their skills
- to gradually increase the average length of education leading to a graduation exam as the standard point of completion of education for most students
- to consolidate, professionalise and broaden the tools for the development of talented children and youth in the form of primary arts schools, sports schools, competitions or correspondence seminars
- to support programmes for the integration of children from marginalised groups into the standard school environment; emphasis should be further laid on financial support for accessibility of education to children from poor families through scholarships and similar tools.

At university level, enlargement of capacities and significant increase of quality is required. The key to reaching this goal is a flexible system, in which universities react mainly to the requirements of the labour market and to those of young people, but also to the demand for life-long learning. The ones with the highest quality should become centres of research and development on an internationally comparable level. The tools for reaching these objectives are as follows:

- to improve access to education by increasing available funds; this can be achieved through a combination of students’ financial participation in covering their tuition fees, guaranteed loans and social scholarships
- to improve the quality of teaching, particularly by making the profession more attractive for quality teachers and by improving the conditions for their professional growth, especially with regards to opportunities for scientific research
- to stimulate the differentiation of universities and their activities through increasing the level of competition as well as using direct grants
- to support the acquisition of general skills by university students (e.g. communication, analytical, teamwork skills) as well as deepening the practical skills gained in previous education (languages, IT literacy, business)
- to support the mobility of students and teachers which must become an automatic part of education
- steps in the area of research and development are specified in the section on science, R&D, and innovations.
The majority of the population of working age will need, at some point in their life, a further dose of knowledge and skills. For this reason it is necessary to create an accessible, modular and market-based system of lifelong education. The most important role of the state is:

- to support the creation and use of standards in key areas (e.g. a driving licence for IT or foreign languages)
- to eliminate barriers that prevent providers from entering various segments of the education system
- to create a functional model of financing further education through a combination of public finance with the resources of the employer and the employee
- to strengthen ‘second chance’ educational programmes for people with low education; these programmes must be built on the link between centrally supported partnerships and activities of the local governments
- to support the principle of learning regions, where regional networks of various institutions provide individually tailored advisory services and lifelong education

**Achieving a high employment rate**

The achievement of a high employment rate is conditional on the successful fulfilment of the strategy as a whole; however, it is important to specify several key steps that can specifically influence employment. The following are some of the most important priorities:

- to reduce payroll tax especially for low income earners; since Slovakia already has the lowest tax and payroll tax rates in the EU, we need to consider shifting the tax burden between individual items in the whole tax-payroll tax system
- to increase flexibility of the employment relationship and simplify the regulatory and administrative burden involved in hiring employees and in the participation of individuals in the formal economy
- to concentrate non-standard tools on severely underdeveloped regions
- to change the concept of housing policy towards its understanding as a tool for geographic mobility, where the state and municipalities should primarily create the conditions for private investment into home construction

**Coping with aging population**

The Lisbon Strategy must cope with challenges such as reduced birth rate, aging of the population and migration pressures. Although in recent years, Slovakia has formulated concrete strategies in many areas, we still need to prepare a long-term population policy which would address the issues of birth rate and immigration. The most important priorities in this respect include the following:

- to provide efficient support for harmonising family and working life of parents with infants; during the time when one of the parents can not work for objective reasons, the parents must have the highest support of the society and access to child-care services
- to ensure that housing is accessible to young families in areas of economic growth
- to continue with the reform of social insurance, particularly in further deepening the motivation to work longer and with consideration to the physical and psychological condition of the individual
AUTHORS

Main author

Martin Bruncko, Ministry of Finance of the Slovak Republic

Authors

Miroslav Beblavý, Ministry of Labour, Social Affairs and Family of the Slovak Republic
Irma Chmelová, Stockholm School of Economics
Vladimír Tvaroška, Ministry of Finance of the Slovak Republic

Other Co-Authors

Beáta Brestenská, Deputy of the National Council of the Slovak Republic
Vladimir Dvoráček, Ministry of Finance of the Slovak Republic
Peter Mederly, Ministry of Education of the Slovak Republic
Ludovít Odor, Ministry of Finance of the Slovak Republic
Ondrej Studenec, Ministry of Finance of the Slovak Republic

The authors would like to thank those colleagues who helped them and who provided information or suggestions for this strategy.