

BACK TO THE TOP

**The International Competitiveness Strategy for the Czech
Republic
2012 - 2020**

Table of Contents

Introduction	4
1 Institutions	10
1.A A Brief Description of the Present Situation and its Problems	10
1.B Objectives of the Pillar	10
1.C International Comparison	11
1.D Key Initiatives	11
2 Infrastructure.....	14
2.A Objectives of the Pillar	14
2.B International Comparison	15
2.C Key Initiatives in the Sphere of Infrastructure	16
3 Macroeconomic Stability	18
3.A Objectives of the Pillar	18
3.B International Comparison	19
3.C Key Initiatives	19
4 Healthcare.....	20
4.A Objectives of the Pillar	21
4.B International Comparison	21
4.C Key Initiatives	22
5 Education.....	26
5.A Objectives of the Pillar	26
5.B International Comparison	27
5.C Key Initiatives	28
6 The Labour Market.....	30
6.A Objectives of the Pillar	31
6.B International Comparison	31

6.C	Key Initiatives	32
7	Financial Markets	34
7.A	International Comparison	35
7.B	Government Policy Objectives in the Financial Markets Sphere.....	35
7.C	Key Initiatives	35
8	Goods and Services Market Efficiency and Improving the Characteristics of Business...	37
8.A	Objectives of the Pillar	38
8.B	International Comparison	39
8.C	Key Initiatives	39
9	Innovation.....	42
9.A	Objectives of the Pillar	42
9.B	International Comparison	43
9.C	Key Initiatives	44
10	Basis for the Pro-export Strategy	48
10.A	Objectives of the Project.....	48
10.B	International Comparison	49
10.C	Fundamental Basis	50
11	Cohesion Policy	52
11.A	Focus of Cohesion Policy in the Czech Republic.....	53
11.B	International Comparison	54
11.C	Challenges of Cohesion Policy.....	54
	Conclusion: Preparing the Czech Republic for the Future	57

Introduction

VISION: A HIGH AND SUSTAINABLE STANDARD OF LIVING FOR CZECH CITIZENS BASED ON SOLID FOUNDATIONS OF COMPETITIVENESS

The Ministry of Industry and Trade submits the International Competitiveness Strategy for the Czech Republic with aim to secure its future in a globalised world. The Strategy includes more than forty key measures and several hundred sub-measures that should create friendly conditions for creative business, innovation, and growth.

The OECD definition was used in the drafting of the Strategy, according to which competitiveness is defined as the ability to produce goods and services that withstand the test of international competition and are able to sustain or increase real GDP. The competitiveness potential of entities operating in the Czech Republic is not determined merely by their subjective properties. Such potential is fundamentally shaped both by conditions that they cannot influence (natural, geographic, conditions having to do with functioning abroad, competing entities, the global economy, and the financial cycle), as well as conditions that can be influenced by the actions of national governments and public administration (which may also influence the conditions of the EU internal market). International Competitiveness Strategy is concerned with these conditions.

At this point, we should also consider what would happen if the Czech Republic did not systematically build its competitiveness. In terms of institutions, a potential risk would be the deepening of adverse phenomena in the public sector – in particular, corruption and declining productivity. That would reflect in a gradual burgeoning of red-tape and in a general worsening of the quality of public services, and also in them becoming more expensive. The burden of such adverse developments in the public sector would also be borne by the private sector, especially businesses.

In terms of infrastructure, a passive approach would result in the gradual dissolution of the competitive advantage that the Czech Republic enjoys due to its favourable geographic position in the centre of Europe. If Czech infrastructure networks are not successfully connected to Europe, trade and investments will avoid our country. Insufficient infrastructure would, in a passive scenario, result in deeper regional disparities.

In terms of innovation and education, it could be expected that if reforms are not made then the role of Czech companies would be increasingly reduced to that of subcontractors, without contact with end markets and innovation. In combination with a declining standard of training and education, this situation would, in the long-term, have a devastating effect on the growth and sustainable development of the Czech economy and on the competitiveness of the Czech labour force in international competition. The stated scenario and an effort to avert it were therefore major motivating elements in the drafting of this Strategy, which directly ties into the Competitiveness Strategy Framework of the Economic Council of the Government, from March

2011, and the Analysis of the Competitiveness of the Czech Republic prepared by the Ministry of Industry and Trade in January 2011.¹ The Strategy is also consistent with the European strategy Europe 2020, the National Programme of Reform of the Czech Republic 2011, and other government policy documents. According to the National Programme of Reform, the International Competitiveness Strategy is an important cross-sectional document for the foundations of an economic policy and it also elaborates in greater detail the measures contained therein.

In 2005, the Government adopted the very first longer-term "Strategy for the Economic Growth of the Czech Republic for 2005-2013", which directed the Czech Republic towards being the "knowledge technology centre of Europe, with an increasing standard of living and high employment". The objective of the strategy was to "bring the Czech Republic significantly closer to the economic level of the economically developed EU countries, while respecting the principles of sustainable development". Measured by the GDP per capita indicator, it quantified this goal such that "the country can reach the EU average by 2013".²

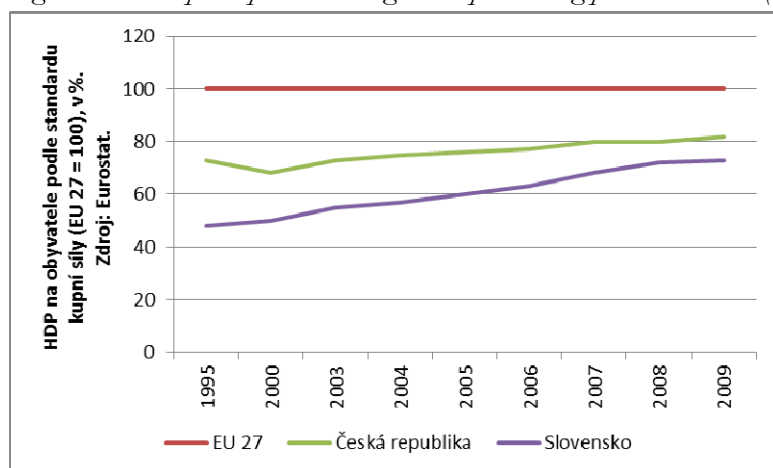
However well this government document was drawn up in the Czech context (even from today's point of view, it identified a number of serious problems, especially on the public administration level), it did not successfully generate the will and willingness to address those problems. As shown by

Figure 1, the rate of convergence (in GDP per capita in PPP) has slowed down in recent good and bad years, in spite of the country becoming excessively indebted. In the future, the only "consolation" will be the worsening of the situation in countries of the southern wing of the Eurozone and of Eastern Europe.

¹ For the NERV report, see http://www.vlada.cz/assets/ppov/ekonomicka-rada/aktualne/Ramec_strategie_konkurenceschopnosti.pdf and for the MIT report, see <http://www.mpo.cz/dokument83603.html>

² A simplified competitiveness pyramid for the Czech Republic for 2011. Source: Competitiveness Strategy Framework, NERV (2011), elaborated by the IES FSV UK team; data from the Global Competitiveness Index of the World Economic Forum.

Figure 1. GDP per capita according to the purchasing power standard (EU 27 = 100), in %. Source: Eurostat.



Legend:

EU 27, Czech Republic, Slovakia

The world is, however, “shrinking”, and globally it is developing very quickly and unevenly on all continents. The Czech Republic, as a small open economy (and the companies and inhabitants based in its territory), then has to measure itself not only against European competitors, but also other active foreign competitors, regardless of the place of their origin.

As the NERV³ Competitiveness Strategy Report documents in detail, the figures showing macroeconomic growth must be examined in light of the extent to which this growth is healthy and sustainable. If a country does not have its own savings, the private and the public sectors have to borrow to generate economic growth. The convergence statistic (Figure 1) is largely skewed in such an environment, and it must be accompanied by other indicators. Growth that is not based on a country's own savings, but rather on external borrowing, is not sustainable in the long-term for a country of our type.

It is therefore necessary to preserve an environment in which the private sector will continue to save and the public sector will not generate public finance deficits (meaning cyclically cleansed structural deficits). At the same time, public finance efficiency must be increased. Focusing merely on a statistic showing the size of the deficit is insufficient. The quality of expenditures must be measured repeatedly, as we know from the private sector (net present value, indicators of return...) and an effective institutional reform of public spending must be carried out⁴. Added value may be increased, among other things, by the government revisiting its expenditures on certain assets, asking whether the private sector would not provide them better. The quality of

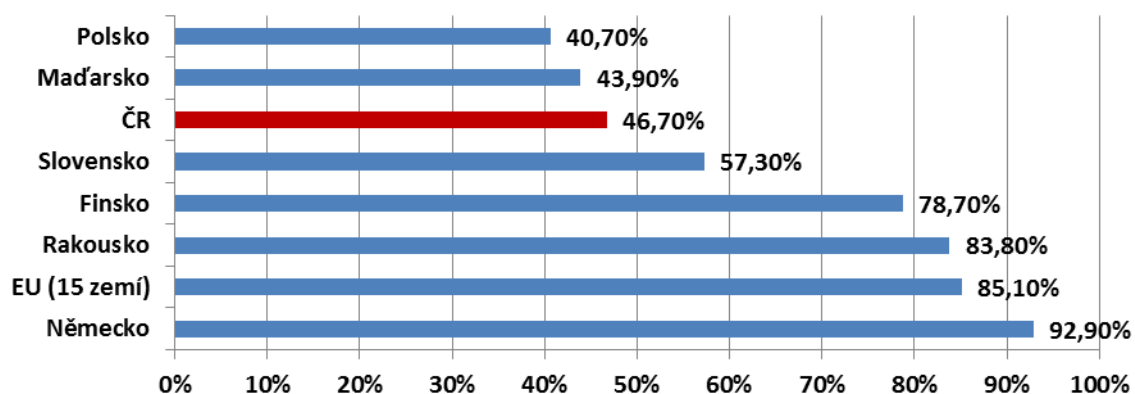
³ National Economic Council of the Government

⁴ See Final Report, NERV, p. 66. <http://www.vlada.cz/assets/media-centrum/dulezite-dokumenty/zaverecna-zprava-NERV.pdf>

the public sector must be fundamentally increased, such that it would not pose a barrier to competitiveness, which should be aided by the key projects and initiatives mentioned below.

We can say that it is especially in those areas where the private sector in the Czech Republic has been exposed to competition that it has managed, during the years of the rise of the economy and international decline, to adapt and come realistically closer to the world, in terms of the structure of what it offers and its costs. In areas where private sector entities were exposed to weaker competition, or relied for example exclusively on government contracts, the unit costs of labour increased, as they did in the public sector. The originally relatively very low level of wages and salaries grew faster vis-à-vis the average EU-27 level, whereas the productivity of labour in the economy, reflecting the added value of the offered structure of goods and services, which changes with changing demand, grew slower. According to OECD estimates, in 2009, the hourly productivity of labour in the national economy reached approximately half the level of developed countries in the Eurozone, and lagged behind that of Slovenia and Slovakia (see Figure 2).

Figure 2. Productivity of labour as the GDP (PPP) in 2009 per hour worked (USA = 100%). Source: OECD.



Legend:

Poland, Hungary, Czech Republic, Slovakia, Finland, Austria, EU (15 countries), Germany

Whereas neighbouring countries, such as Slovakia, are using technological and structural changes to shift employment to high-productivity sectors and are converting rapidly (albeit with certain indebtedness), the growth of productivity in the Czech Republic is slowing down. This is not sustainable in the long-term.

Given the complicated international environment, neither the long-term nor short-term data stated in the cited NERV study (2011) yet signal fundamental breaking-point tendencies in the development of the Czech economy. The traditional components of growth are recovering more slowly, due to the required slowing of public indebtedness, and environmental indicators give rise

to some hope that this growth is environmentally friendly. As an MIT Analysis (2011)⁵ shows, we are not, unlike other countries, managing to adapt with sufficient speed the foundation for maintaining long-term competitiveness (related to the quality of life increasing in the long-term), and we are gradually dropping in competitiveness rankings, because many of our neighbouring countries are developing more dynamically. The ambitious goal of developing a “knowledge-technology centre of Europe with an increasing standard of living and high employment” remains remote for us, although some of our neighbouring countries (Germany and countries in Northern Europe) have maintained their positions as knowledge-technological centres with a high level of international competitiveness, or they have become such centres, in spite of a conscious slowing of the rate of increase of their standard of living. Furthermore, Germany, in spite of the shifting of certain part of its production abroad, has increased employment, and the unemployment level is at its all-time low. Furthermore, new challenges arise: as OECD analyses show, many other countries worldwide are introducing structural reforms in order to develop the conditions for increasing the local and global competitiveness of their companies⁶. That is another reason why well-thought-through reform measures have to be accelerated, simply in order to maintain our present position.

Factors influencing competitiveness can be summarised on three levels: foundational, efficient, and innovative. We must understand that efficiency is hard to increase and innovation hard to develop absent the foundational conditions that enable the “extensive” growth of capital and labour. That is why the foundational level, including the institutional pillar and the microeconomic stability pillar, constitute conditions for the effectiveness of factors on the efficiency and innovation levels.

The Czech Republic has the prerequisites necessary for it to strive for a significant increase and long-term maintenance of the standard of living of its inhabitants in a globalised world. The Czech Republic’s ambition should be, in the coming years, to join the ranks of the top twenty countries on the global competitiveness index.

The concept of this Strategy is based on the principle of the empirical evaluation of government policies (evidence-based policies), a concept without which most of the reform steps proposed by the government cannot be effectively implemented. The introduction of empirical ex ante and ex post evaluations of any policy proposals therefore constitute an integral part of the recommendations made in this Strategy for the entire 2012 – 2020 period. A specific application of the principle, for example, in the sphere of education, would be the introduction of robust and systematic monitoring of the results of educational activities, and the quality of schools, teachers, and other entities in the educational system. The outcome of this approach is the Strategy’s implementation process, based on robust data, as described in the conclusion of this document.

⁵ MIT (2011), Identification of key factors in the industrial and export sectors and their strategic analysis and the processing of entry information. See <http://www.mpo.cz/dokument83603.html>

⁶ For a telling overview, see OECD Reports “Making Reform Happen: Lessons from OECD Countries”, Paris 2010, PISA reports on the quality of education, IMF reports, etc.

In concluding, we must summarise that the advancement of the key measures proposed in this document will be of utmost importance for the achievement of the stated goal, i.e., of joining the ranks of the top twenty most competitive countries in the world. The Czech Republic must move from a development model largely based on cheap labour to a system based on high-quality institutions and infrastructure, in which the potential of a well-prepared labour force will be used to the maximum, and in which the economy will be driven by creative enterprise and innovation.

1 Institutions

Vision: Public institutions as providers of services to individuals and entrepreneurs - efficient and free of corruption

1.A A Brief Description of the Present Situation and its Problems

High-quality public institutions are the key factor in the development of a competitive and innovation-based economy. On the other hand, inefficient public institutions hold the economy back. All the more serious therefore is the fact that, in all international comparisons, the institutional environment is rated as one of the Czech Republic's weakest points. Inefficient institutions, excess regulatory burden, and corruption are the phenomena due to which the Czech Republic currently lags behind developed EU and OECD countries.

The need to make changes in the institutional environment and reduce bureaucracy has been discussed for some time. The performance of public administration is far lower compared to the private sector, which is evident from a macroeconomic comparison made, for example, in the competitiveness study by government's National Economical Council, but also in World Bank and IMF studies.

In this Strategy, public institutions are understood relatively broadly - there are projects here focused on state administration, local government, and on the organisations they set up and fully or partially subsidise from their budgets, as well as on the legislative and judicial branches of power. The common goals of all of the measures proposed are to increase the productivity of the institutions and enhance their client focus, i.e., their focus on individuals and entrepreneurs, and to remove inefficiencies in their operations, in particular corruption and wastefulness. In general terms, the measures proposed in this pillar should contribute to improved coordination and communication between the institutions themselves and in their relations to individuals and entrepreneurs.

Ultimately, the implementation of the proposed measures should significantly contribute to enhancing the Czech Republic's competitiveness in the face of tough international economic competition and should also increase the credibility of public institutions in the eyes of the public, which would bring the country closer to the developed democratic countries of Western Europe.

1.B Objectives of the Pillar

- Systemisation and improvement of the operation of public administration, greater professionalism and efficiency of public administration.
- More economical and efficient use of public assets and funds, focusing on management and control in public finance and on measures concerning transactions with public assets, forced auctions, and public purchases through public tenders.
- Easier access for the public to public administrative services and to the information provided by public administration.

- Systematic improvements in the regulatory drafting process and its products (legislative and non-legislative documents), targeted communication with the public in the legislative process (including transparent lobbying), and better public access to legal regulation.
- Improved law enforcement in the Czech Republic through judicial as well as alternative means, and improvement in the functioning of the judiciary.

1.C International Comparison

In terms of institutions, the Czech Republic significantly lags behind the EU and OECD average in all major international comparisons (the World Business Forum Global Competitiveness Index, the World Bank Doing Business Index, and the World Competitiveness Yearbook). The most pronounced is the poor position of the Czech Republic in terms of the regulatory burden and law enforcement. Corruption is also seen as a significant disadvantage for the Czech Republic.

In terms of the functioning of public institutions, the following countries could serve as sources of inspiration for the Czech Republic: in Finland, the operation of public institutions is coordinated by the Economic Council, in which the most important parties concerned and economic analysts are represented. Finland has also set up mechanisms for ensuring that its citizens have easy and open access to public institution services. Singapore and New Zealand have efficient, client-oriented institutions, a perfect system for publishing information and data about public administrative activities, and developed public administrative service management. The United Kingdom has a conceptual approach to the measuring of public sector productivity and to evaluating the economy of its expenses, and has efficiently set up and put into practice an RIA (regulatory impact assessment) process. As a part of open governance, public sector data and information is shared, and there are programmes for involving highly qualified professionals in the work of public institutions. South Korea systematically fights corruption in the public sector, including using the CIA (corruption impact assessment). Germany can be a model in terms of law enforcement and the education of public sector bureaucrats. The European Commission applies mechanisms for involving the public in consultations on the drafting of legislative and non-legislative documents, and it also regulates transparent lobbying.

1.D Key Initiatives

Given that the reform of public institutions is a very complex issue, many sub-measures and tools have been proposed for addressing it. The most important of those are briefly presented below, and a comprehensive list of the measures proposed is presented in project cards in an appendix to this document.

1.1 Efficient Public Administration

At the moment, there is no comprehensive overview of what public administration is doing or a well-elaborated concept of what public administration should provide, as well as how that should be done, and at what cost. An analysis of its responsibilities and services should yield the first detailed picture of productivity in public administration and provide material for the subsequent restructuring of public administration and its functional arrangement, such that the funds invested into public administration could be optimised and the services it provides standardised.

This measure includes, above all, a modification of the structure of public institutions (back-, middle-, and front-office) and the related change in the position of public administration employees and their remuneration. The implementation of the measures proposed should, for the first time in the country's history, contribute to an across-the-board evaluation of productivity in public administration, allowing for the implementation of systematic cost-cutting measures (e.g., the sharing of certain activities by several public administrative institutions, etc.).

1.2 More Efficient Handling of Public Assets and Funds

Public budgets and their management are presently unclear and insufficiently transparent for the public.

The Ministry of Finance does publish information about public budgets (and other information in the comprehensive system ARES); nevertheless, budgets are often elaborated with insufficient quality, reports on the meeting of budgets are structured such that, essentially, much important information cannot be ascertained from them (e.g., the volume of funds expended on direct purchases and small-scale contracts, etc.). Information about public budgets should be made available to the public in a comprehensive form (e.g., click-on budgets), thereby facilitating public control over them.

Related to this measure is the uniform and user-friendly publication of information about dispositions made with public assets (in particular sale and rental), which will enhance competition among private entities for those assets and thereby also the yield for the state. Similarly, improvements in the form of the publication of public procurements will make them more financially efficient.

1.3 Simplified Access to Public Administration Services

The complicated structure of public administration can best be described as a system comprising an immense number of authorities interlinked with many ties, which manage data related to the execution of their activities. According to a qualified estimate, there are some 30,000 authorities responsible for some 1,000 agendas. Public administration information systems do not use a harmonised database and are independent of one another, due to which changes in factual data in one database are not reflected in other information systems and people are obliged to report various changes to multiple authorities. The issue of interconnectedness is to be resolved by basic registers - a project that should do away with the obligation of the addressees of public administration, i.e., citizens, to repeatedly document information. Each piece of information will only be reported once and then be reflected in the basic registry and through it to other public administration information systems. There are also other proposals designed to simplify access to the services provided by public administration – in particular a single collection point and a single contact point for entrepreneurs.

The provision of information is a public institution service. A citizen or entrepreneur who has sufficient data and information can make better decisions and contribute through his activities to international competitiveness. The key to the efficient communication of information to the public is, in this case, a vision and a concept that must be focused on the needs of the client/user. A conceptual system for the publication of public administration data, data from the judiciary

(e.g., the proposed publication of court decisions), and other public institutions in a format that can be processed will result in significant savings in public budgets (public institutions will, for example, not commission identical studies several times over) and contribute to the development of enterprise and research based on the use of public data.

1.4 Greater Quality and Accessibility of Regulation

A necessary prerequisite for greater competitiveness is high-quality legislation that does not pose undue administrative burdens. The process of enacting regulations must be set up in the future so that needless or incomplete measures would not be adopted. The regulatory impact assessment system (RIA), in spite of its unquestionable benefits, is still not used effectively. An enhancement and improvement in the application of the RIA has been proposed, and newly also a CIA - corruption risk assessment. Greater expertise must be incorporated into the legislative drafting process, and the risk of the illicit advancement of special interest minimised. That is why we are proposing a modification of the advanced stages of the legislative process (to prevent the making of non-conceptual, unrelated additions to statutes – compulsory RIA and CIA for bills in the Chamber of Deputies and Senate) and the establishment of an apolitical institution comprised of experts that would oversee the quality of RIA and CIA results and the systematic development of impact assessment models, including an assessment of administrative burdens.

Improvements to the legislative process include projects concerning its electronisation (e-Legislation) and a project for the electronic publication of official consolidated versions of legal regulations (e-Collection). These should, among other things, fundamentally improve access to the current legal regulations and ensure a better quality of regulation.

1.5 Better Law Enforcement

One of the ways of relieving overburdened courts is to enhance the use of alternative dispute resolution mechanisms (mediation, arbitration, etc.), including electronic arbitration (ODR, online dispute resolution), which offer a fast and efficient alternative to lengthy disputes, in particular in the case of cross-border disputes. In most cases, these are disputes from transactions of a relatively low value, of which there is a great number, both between entrepreneurs themselves and between entrepreneurs and consumers. In addition to procedural measures, the accelerated electronisation of the judiciary should also contribute to reducing the costs related to law-enforcement in court.

2 Infrastructure

Vision: A country's competitiveness increases with the quality of its infrastructure

A country's economic success is to a large extent determined by the quality of the infrastructure that serves as the backbone of the economy and enables the development of business activities. The quality of the connection of less-developed regions to the economic centre significantly enhances the possibility of growth in the regions, to the same extent as their physical proximity is important in this regard.

Although the country's transport policy speaks of rapid progress in the construction of important roads as well as railway corridors, development and maintenance lag behind. This leads to significant internal indebtedness that is manifest in the lower quality of transport routes, both roads and railways. The lack of quality connections to the European transport network is felt strongly. That is why measures in this pillar focus not only on interconnecting the Czech road and railway networks to main European routes, but also on improvements in transport infrastructure quality management, related to which is also the search for efficient means of financing infrastructure projects. In the context of creating more comfortable and more systemically linked transport services that contribute to the development of business and trade, certain measures in this pillar are also devoted to air and water transport.

Energy and its reliable supply are necessary conditions for the development of business in the Czech Republic. Presently, the energy infrastructure lacks a systemic connectedness of energy sources, in using alternative electricity generation in wind and photo-voltaic power stations, which poses a risk to the energy security of the Czech Republic. For this reason, measures are required in relation to the construction of back-up sources and the strengthening of energy networks, and changes are also required in the heat-generation sphere.

Nevertheless, not only the transport and energy infrastructures have an impact on competitiveness, but also the electronic communications network – in particular broadband Internet connection systems. Given that business and services directly tied to Internet access are developing with increasing intensity in the Czech Republic, measures in this pillar focus on broadening the coverage of the territory of the Czech Republic with electronic communication services.

Advanced infrastructure is a fundamental prerequisite for increasing a country's competitiveness. The implementation of the proposed measures will significantly contribute to improving the quality of infrastructure and bring the Czech Republic closer to a standard that is commonplace in Western European countries.

2.A Objectives of the Pillar

- Building faster, more reliable, systemically linked, and more comfortable transport routes and transport services to create a competitive environment in the country, including the finding of cost-efficient methods for its financing and enhancing an effective competitive environment in the field

- Create a quality management system for transport route maintenance and renovation and high standards in transport
- Evening out the energy mix, enhancing the transmission network and its resistance, for the purpose of the development of industrial production, services, and the heat-generation business, and the development of smart grids
- Economically sustainable development of renewable sources of energy, increasing energy efficiency and savings, and reducing the environmental burdens arising from the energy sector
- In electronic communication, it is important, above all, to expand access to high-speed Internet, both in all settled as well as less accessible locales, such that the possibility of doing business by means of the Internet and of accessing the electronic services of public administration would increase.

2.B International Comparison

Compared to developed EU countries, the quality of road infrastructure in the Czech Republic is average, which reduces the country's attractiveness for foreign investors and has an adverse impact on domestic businesses, as well. Examples for improving road infrastructure can be found, according to the World Economic Forum assessment, in France, Germany, Austria, Portugal, and Denmark. In those countries, in addition to the state, the private sector plays an important role in infrastructure financing and operation.

Railroad infrastructure is on an average level in European terms, but the reconstruction of main corridor tracks has not been completed, a sound competitive environment has not been successfully created, and the technology for combined systems lags behind. An example of a foreign "good practice" is Switzerland, where road and railroad transport are being successfully implemented. Great attention is also paid to the building of fast-track sections as a supplement to the conventional railroad network, which will significantly improve the international accessibility of Switzerland.

In terms of the energy sector and the securing of supplies, the Czech Republic has been doing relatively well; nevertheless, the developments in the world energy sector in the last decade, in particular an ambivalent attitude to nuclear energy and increased use of renewable sources and the demands they pose on the distribution networks, etc., reduce energy security vis-à-vis other EU countries.

The Czech Republic does not excel in terms of the density of high-speed Internet coverage, either. In an international comparison among OECD countries of the number of connections per 100 inhabitants, the Czech Republic does not reach the OECD average, which is 23.3%, trailing the average by about 4%. The situation is similar in a comparison with EU countries, where the average level of connections per 100 inhabitants is 24.8%. In Europe, inspiration can be found, for example, in Germany and its broadband strategy, which includes the development of a passive infrastructure register, an information portal, etc.

2.C Key Initiatives in the Sphere of Infrastructure

Transport infrastructure is a basic prerequisite for enhancing a country's competitiveness and also a tool that helps reduce interregional disparities. In the Czech Republic, there is presently no long-term strategy that would ensure the coordinated development of all modes of transport – i.e., road, railroad, water, and aviation, their connectedness to European networks, and the long-term sustainable management of their repair and maintenance. Although each mode of transport faces different challenges and problems, the first stage of development will be the same for all modes. At that stage, it will be necessary to create a sustainable system for financing the individual components of the transport infrastructure and to set criteria for the selection of projects with the highest economic added value, in line with the International Competitiveness Strategy:

2.6 Road Transport

The achievement of the goals identified in road transport is conditioned on the optimisation of the source-side of the budget earmarked for transport, and on the use of private resources. The goal will be achieved gradually by completing the backbone network of motorways and high-speed roads and by the building of ring-roads around major settlements on main 1st class roads, based on the results of the prioritisation of individual projects according to their real economic added value.

2.7 Rail Transport

On the basis of an evaluation of the needs and priorities in this area, building the main railroad network for long-haul passenger and freight transport and urban and commuter transport in densely populated areas, and optimising the network for backbone regional transport. Where appropriate, the conventional railroad system must be supplemented with a system of fast and super-fast railroads that will ensure that the Czech Republic is connected to the existing European high speed lines network. This will ensure, in the future, transport to major European centres that is both financially and environmentally sustainable. Related to this issue is also support for the development of a network of public logistical centres and combined transport terminals, as connecting hubs between networks of various modes of transport, using public budgets. Support will only be granted to viable projects that do not require operating support.

2.8 Air and Water Transport

To create, pursuant to an analysis of internal and external relations in Central European, European, and global air transport, in particular in terms of the forecasted capacity, and in terms of demand as to fleet structure and required airport parameters, a strategy of support for the competitiveness of airport infrastructure. Related thereto are the implementation of a rail transport connection to the centre of Prague and the development of a concept of related logistical systems, hotel and conference capacity, etc.

In terms of water transport, its benefits for the productive function of the regions will be assessed and priorities will be recommended, as to making individual sections navigable, in order to increase the country's competitiveness by the construction of waterworks. An important part of the project is the concept of related logistical systems, as is the case in Germany, the Netherlands, and other countries with a wealth of inland water shipping, but in an extent that corresponds to the parameters of our water courses.

2.9 State Energy Conception (SEC) and Strategic Regulation

The energy sector makes a fundamental contribution to the functioning of the economy and society and to ensuring the standard of living of the population. It constitutes the backbone network of the country, on which a number of other areas depend – from industry to the execution of state administration. The energy sector can be viewed from various angles. In addition to the security and sustainability of supplies, the ensuring of competitiveness will play an increasing role in the future, both in terms of acceptable prices for industry and the population and in terms of the enhancement of export abilities. To increase the competitiveness of its energy sector, of key importance for the Czech Republic will be, in particular, the drafting of a State Energy Concept (SEC), with an emphasis on the evening out of the energy mix, increased use of renewable sources, development of smart grids, etc., as well as the setting up of a Permanent Working Group for a R&D&I strategy in the energy sector, in the framework of the Government Council for the Energy and Raw Material Strategy of the Czech Republic.

2.10 Implementation of the Digital Czech Republic Policy

Electronic communications, through their networks and services, speed up, expand, and improve the quality of communication, to the benefit of the development of the entire society, in accordance with the requirements of individuals, companies, and state institutions. Efficient use of information and communication technologies (ICT) increases a country's productivity and competitiveness.

The digital agenda – the first flagship of the Europe 2020 Strategy – focuses on the role and use of ICT, aiming to remove various electronic barriers in Europe. Given that demand for telephone services, including mobile telephone services, has practically been saturated, the measures selected primarily support the development of high-speed Internet and the use of a single digital market by households and companies. These measures are as follows:

- 1) Development of a methodological aid for harmonising practice in the application of certain provisions of the Electronic Communications Act and the Building Act.
- 2) Establishing a passive infrastructure register whose existence will result in a substantial reduction of the costs of building access networks.
- 3) Preparation of development criteria in the allocation of radio frequencies in the 790-862 MHz band.
- 4) An analysis of the portfolio of public-interest services (e.g., e-safety) that will ascertain the scope of those services, requirements as to their qualitative parameters, and then their demands in terms of frequency.

3 Macroeconomic Stability

Vision: We are standing on a sound and flexible foundation

A stable macroeconomic environment that creates an internal and external balance is a key prerequisite for promoting economic growth and increasing employment. National stability can be viewed from the point of view of the business sphere and public finance. Czech companies coped with the recent economic shock with honour and, in spite of the strengthening Czech crown, have maintained a positive foreign trade balance, which indicates that for the time being Czech companies are competitive. On the other hand, public finance has been, for an extensive period of time, financed with an increasing debt, which does increase aggregate demand, but, on the other hand, creates an imbalance that is not sustainable in the long-term. The economy is becoming dependent on public finance. Furthermore, the increasing volume of interest paid drains a significant portion of the funds that could be used for purchasing public services. It is therefore necessary to put into practice fiscal measures that will improve the financial management of the country, make a Czech fiscal imbalance impossible in the future, and help create a competitive tax system that is sustainable in the long-term.

Responding to external economic shocks depends, to a large degree, on the condition of the national economy itself. Economic stability is a prerequisite for resisting any further economic shocks successfully. Thanks to the openness of the Czech economy, the country's relationship to other countries plays a great role. The Czech Republic has the opportunity to become a full-fledged member of the European Monetary Union, which, at the time of its establishment, ensured stability for the entire European region. The situation in the EMU is, however, constantly changing, and the euro currency is coping with the crises of its members. The opportunities and threats related to the potential adoption of the currency must therefore be taken into account, with a view in particular to the national interests of the Czech Republic. An early warning system could form a solid foundation for our route to greater competitiveness.

3.A Objectives of the Pillar

- A long-term balanced budgetary policy
 - Introduction of tools and processes for maintaining public budget balance
 - Application of an optimum tax mix in the Czech Republic, completion of the tax reform
- High flexibility of the Czech Republic with respect to external economic shock
 - The implementation and integration of a European early warning system

3.B International Comparison

In an assessment of macroeconomic stability, using the Global Competitiveness Index⁷, the Czech Republic ranked 48th (of the 139 rated). In the chapter on foundational competitiveness prerequisites, that is the second worst result. The GCI identifies a key problem of the Czech Republic in the government policy of public budget financing, and the government budget imbalance is seen as critical (102nd place).

A potentially dangerous indicator is the declining rate of national savings (78th place) which is noted not only qualitatively, from the point of view of GCI 2011 respondents, but also quantitatively, in a comparison of national statistics that clearly shows that the Czech Republic has been gradually losing its good position.

In terms of a simple tax system, we can look to Ireland for inspiration, which traditionally ranks high in international comparisons, due, above all, to the simple tools for communication between businesses and state administration. A good example in terms of budgetary responsibility is Finland, which has not only behaved responsibly with respect to its budget, but even negated the impact of the political cycle in increasing the state budget deficit. Unfortunately, the Czech Republic can only dream of such an ideal situation.

3.C Key Initiatives

3.11 Budgetary Oversight – Transparent and Sustainable Public Finance

The fiscal imbalance (debt and structural deficit) is not sustainable in the long-term in the Czech Republic. The entire fiscal policy framework, from the institutional arrangements to the discretionary interventions in cases when the deficit is exceeded, is undergoing fundamental change. The present problems of certain EU countries show that a country with poor financial management in effect inhibits competitiveness and the entire performance of its economy. Hence, more features that will stimulate public finance efficiency and lead to the reduction of the indebtedness of Czech public institutions must be introduced. The pillar of the entire project is the implementation of the EU Council Directive on Requirements for the Budgetary Frameworks of Member States, which is supplemented with foreign experience with fiscal consolidation, such as to ensure that the financial management of the state does not act as a brake on Czech competitiveness.

The project strives to put into practice financial measures that make the financial management of the state more efficient. Measures focused on government deficit and debt reduction include both short-term policies aimed at a rapid budget deficit reduction as well as structural public finance reform focused on fiscal sustainability. The main specific measure includes the Act on Budgetary Discipline, the fiscal numeric rule, budgetary rules for local governments and the entire government Treasury Information System.

⁷ World Economic Forum (2011) – Source: <http://www.weforum.org/>

3.12 A Competitive Tax System

Czech taxes can only be truly competitive if they meet the conditions of maximum administrative simplicity and minimum distortion. The tax system plays an extraordinarily important role in a small open economy. Taxes must be sufficiently high for the Czech re-distributive system, but in areas with high competition, they must also bow to that pressure. The economic crisis has not refuted most of modern tax design theses.

The Czech tax system reduces employment and profits more than is necessary, prefers debt financing, and is not sufficiently simple for regular consumers / taxpayers. The main measures proposed are directed at the functioning of Single Collection Point, the preferred shift from the taxing of labour to the taxing of consumption, the harmonisation of VAT rates, minimisation of unnecessary exemptions or the creation of tax floors – minimum non-taxable bases in the calculation of health and social insurance premium payments.

3.13 The International Macroeconomic Stability of the Czech Republic – An Early Warning System

Presently, a plan for European early warning system is being drafted in the EU, which puts several challenges before the Czech Republic. This system is entirely new and the Czech Republic must therefore prepare for it not only as a passive recipient - the possibility of active participation in its establishment is also offered. That is why it is necessary to integrate the system on an inter-ministerial level.

A new challenge is the document Euro Plus Pact , which articulated many diverse measures on the European level. Whereas the vast majority of the measures are in line with Czech policy, the plan for a further deepening of tax rate convergence must be analysed from the Czech point of view and a position with respect to it must be prepared. The measure also includes informing the Czech business sector about the potential consequences of the adoption of the euro currency and other potential international risks.

4 Healthcare

Vision: A financially sustainable European standard of healthcare

Czech healthcare has improved dramatically over the last twenty years and according to numerous international comparisons, including GCR WEF 2011, it has solid results⁸, with relatively favourable costs⁹.

⁸ 6.1 points in the aggregated healthcare and elementary education pillar; for a comparison, Denmark 6.36, Austria 6.41.

⁹ For example, OECD Health Data 2010: In 2008, the Czech Republic had healthcare expenditures at an internationally very low 7.1%; however, in 2009, total expenditures amounted to approximately 8% of GDP, due to a drop in the GDP in the Czech Republic and the continuation of the growth trend.

In the future, it will not be easy to sustain the very acceptable existing relation between, on the one hand, the qualitative level and general availability for the population, regardless of individual socio-economic level, and, on the other, the relatively low overall healthcare expenditure. One of the reasons is that financial tensions have been manifest in the Czech healthcare system since the second half of the 1990s, but without any significant modifications being made in the system, such as would create desirable stimuli for the rational provision of healthcare, and without responding to future challenges, arising, above all, from the adverse demographic developments, in terms of the ageing of the population. That is, according to the available economic studies¹⁰, and at least for the time being, the main explanatory factor of the future growth of healthcare expenditure in the Czech Republic up to 2030. However, other cost factors which are driven by medical progress (new, very expensive technologies, pharmaceutical products, and treatment procedures) as well as by the gradual convergence with Western European countries in terms of the remuneration of healthcare staff and increasing demands from patients, must not be neglected.

These strong pressures on costs represent a major future challenge for the Czech healthcare system and for public finance in general, and the ambition of this pillar is to ensure, through a series of mutually related reforms, the financial sustainability of the Czech healthcare system, such as would guarantee that a European standard of healthcare would be available to every inhabitant of the Czech Republic.

4.A Objectives of the Pillar

The entire healthcare system in its present form is not easily financially sustainable in the long-term, and given the overall tension in public budgets and the clear need of financial stabilisation, room must be sought “inside” the system for increasing its efficiency. The objectives of the pillar can be fulfilled through a set of measures from several cross-sectional thematic fields that respond to long-term problems in Czech healthcare – from the low rate of utilisation of information technologies to inappropriate payment mechanisms that do not interest care providers in the outcomes of the treatment and its financial efficiency; the lack of competition among health insurance funds focused on an efficient purchasing of healthcare for policyholders; the weak definition of the scope of reimbursed care and the responsibility of individuals for their own state of health and for respecting the treatment process.

4.B International Comparison

There is no single benchmark for Czech healthcare; various healthcare systems are good in different ways, in managing particular problem areas.

- e-Health: Denmark (e.g., ePreskripce), Spain – Andalusia (the Diraya system – sharing of medical records and coordination of care), USA – Veteran Affairs (sharing of medical records to eliminate duplication and errors and better coordination of care)

¹⁰ Public Health Spending in Advanced and Developing Countries: Trends and Outlook (IMF, March 2011)

- Health insurance: Netherlands (optional programmes, two-component premiums), Germany (optional programmes, incentive bonuses for policyholders, coordination of care for the chronically ill)
- Policyholder motivation: Singapore, Netherlands, Germany, Switzerland
- Prevention programmes: Germany, Netherlands, United Kingdom
- Clinical effects of new medications and technologies, capacity planning: United Kingdom
- Reimbursement mechanisms: acute care – Germany (DRG); partially Spain (risk capitation with a private operator – Valencia, Valdemoro-Madrid)

4.C Key Initiatives

Potential reform measures in the Czech Republic that would lead to the more efficient provision and drawing of healthcare include cross-sectional areas concerning the extent of reimbursed care; the selection, gathering, and allocation of resources; healthcare network density – the offer of healthcare; the purchasing of care and the form of payment; rules determining the draw-down of healthcare; the information and monitoring system; increased competition and the responsibility of health insurance funds for organising care for policyholders; and last but not least the state of health and lifestyle of the population, with prevention and the promotion of a healthy lifestyle. Key topics and specific measures are listed in the overview that follows, organised by broader thematic areas:

4.14 Medications and Technologies

Changes aiming at rationalisation and combating corruption, in terms of the reorganisation of the purchasing of medical equipment and medication, including ensuring access to generics, the development of a concept of a regulatory foundation, and the public availability of information concerning contracts.

- Allocation of resources with a view to opportunity costs (e.g., by testing new technologies and pharmaceutical preparations, in terms of the ratio of their use to costs)
- Transition to the extensive use of transparent mass purchases through electronic auctions
- Electronic prescription

4.15 Increased Efficiency of Healthcare Financing

More efficient flow of funds from the payer to public budgets, optimisation of the reimbursement system, adaptation of the mechanisms for the re-allocation of the premiums collected, and support for a competitive environment, including guaranteeing the competition of insurance funds for policyholders.

- Potential administrative savings due to the introduction of a single collection point (SCP)

- Transition to prospective reimbursements, not only in acute care (in acute bed care represented by DRG¹¹), but also for example in the practice of private physicians (inclusion of the costs of specialised examinations and laboratories into reimbursements)
- Key competence of health insurance funds – selective purchases of care based on the price/quality principle, while ensuring a minimum standard of material and temporal availability that must always be attained
- Coordination of care between providers, in the interest of ensuring the rational organisation and financing of care for policyholders, in particular in the case of chronic diseases
- Medical record sharing, especially in the case of care for the chronically ill, the elimination of duplicities, and the setting up of motivating reimbursements
- Monitoring of the quality and results of the care provided by insurance funds in the case of chronic patients (the provision and monitoring of the markers that are followed as a condition of reimbursement in disease management programmes)

4.16 Increased Efficiency of the Functioning of Health Insurance Funds

Comprehensive institutional set-up of the functioning of health insurance funds, including the uniform legal regulation of their form and position, regulation of their accounting method, and oversight over health insurance funds.

- Harmonisation of legislation concerning the functioning of public health insurance funds
- Hiving off of functions thus far provided by the General Health Insurance Fund to the Office of Health Insurance Funds
- Definition of the powers of oversight over health insurance funds in terms of:
 - Financial stability
 - The rights of policyholders
 - Harmonisation of corporate governance for health insurance funds
 - Enhancement of the responsibility of the members of statutory bodies, for the activities of health insurance funds and their financial results.
- A significant increase of the disclosure rules for health insurance funds, including both the contractual area and the satisfaction of the rights of policyholders in terms of the material and temporal availability, and financial stability.

¹¹ Diagnosis Related Group <http://www.nrc.cz/drg-pro-laiky>. DRG is, however, not immune to abuse through so-called upcoding.

- Introduction of alternative insurance plans, primarily disease management programmes for the chronically ill
- Introduction of a third tier of re-allocation based on morbidity, as a condition for the introduction of disease management programmes and correct competition among health insurance funds
- Introduction of combined premiums, with a nominal premium amount and a solidarity part that is the subject of re-allocation based on the Dutch model – again in order to enhance competition
- The possibility of patient choice of provider – choice must be retained in any case, drawing must be directed through economic tools (gate keeping, funds follow the policyholder through case-reimbursements)

4.17 Bed-care Restructuring

The rationalisation and restructuring of bed care, aimed at a reduction of fixed costs and the development of a long-term care concept in healthcare and social terms, including financial arrangements.

- Restructuring of the offer of acute bed care where there is significant potential for budget re-allocation
- Enhancement of follow-up and long-term care from the savings achieved in acute care
- Use of the outpatient network for increasing the efficiency of the entire system (transfer to the outpatient sphere)

4.18 Patient's Ties to Health

- Defining what is “above-standard” and a simultaneous rationalisation of the system of regulatory fees, increased motivation to lead a healthy lifestyle by introducing appropriate incentives, and an e-health system for checking on the care reported, and for feedback for one's lifestyle.
- A more precise definition of the right to care that is reimbursed from public health insurance, including the line between standard / above-standard
- Conditions for the draw-down of care by the policyholder (e.g., the obligation to adhere to a treatment regime)
- Allocation of a more significant part of the healthcare budget to preventive measures
- Disease management and promotion of the continuity of care across providers
- Gate keeping – it is urgently necessary to enhance it through financial tools that motivate the policyholder as well as the provider towards promoting prevention and disease management (typically an increased fee for treatment by an out-patient specialist that was not requested by a general practitioner)

- Motivation towards prevention (free preventive examination and the examination of key medical markers as a condition of receiving incentive bonuses from healthcare insurance funds)
- Motivation towards a healthy lifestyle through fiscal measures (“taxation of sin” through consumer taxes)
- Incentive bonuses for adhering to the treatment regime by waiving regulatory fees for persons participating in a certified treatment plan
- Electronically accessible overview of care for policyholders
- Signed recognition by the policyholder of the care provided, as a control instrument

4.19 Training and Remuneration

Stabilisation of the labour market with adapted access to post-graduate education, in order to increase the efficiency of labour.

- Setting up payment conditions to ensure labour force retention
- Optimisation of the education system by changing the system of specialised education financing and changes in the scope of activities of the accreditation committee
- Increased efficiency of labour through the re-allocation of selected powers to non-medical professions

5 Education

Vision: Education as the engine of future economic and social development.

The importance of education as a factor contributing to the economic and social success of an individual and the quality of life of the society as a whole has been constantly increasing worldwide. High-quality education will be a decisive factor in increasing the standard of living of the society in the 21st century and this will apply to the Czech society as well. That is why measures in the sphere of education constitute an integral part of the competitiveness strategy.

The measures proposed in the sphere of education reflect the fact that the Czech Republic is a small, open economy with its own currency and without any significant supplies of mineral resources. The educational system therefore must count on constant changes in the comparative economic advantage of disciplines and professions and on the repeated impact of economic fluctuations and shocks from abroad, and provide flexible and broadly applicable labour force competence, supplemented with the ability and willingness to engage in lifelong education.

It is necessary to reverse the adverse trend of the declining literacy of Czech elementary school pupils, not only vis-à-vis the world, but also in absolute terms. A combination of strategic measures must strengthen the adaptability of the education system to dynamic socio-economic changes, so that the country is not passively at the mercy of global changes. The development of education must expect the productive importance of the creative human intellect to continue to grow, to the detriment of manual labour, routine, and isolated knowledge.

Of key importance is to increase the public's appetite for change and interest in education and training, and the requisite reforms must be well explained, thereby weakening the resistance of interest groups to changes. Increased specialised attention must be paid to the administrative and legislative processes of reforms.

5.A Objectives of the Pillar

- The goal is to better prepare the youngest generation for life and work in a world of global competition and in an environment of dynamic economic and social change. The educational system must prepare this generation for life in the future, which we know will differ from today's world in many respects, but we do not know precisely how. The excessive concentration of instruction on skills for which the demand is time-limited results in financial and social losses that will be borne by individuals and the state, not by individual employers. Education must therefore allow for flexible adaptation to changing conditions for the long decades of one's work career and life. Employers have the right to expect from the educational system that graduates will be teachable and willing to learn, and that they will have sufficient broadly applicable skills and competences to ensure that their on-the-job training is not lengthy and costly and could be changed and amended as they go, and as changes occur in the comparative economic advantage of sectors and professions.

- Employers must bear their share of responsibility for that part of training that is company-specific or is related to time-limited demand for skills in narrowly defined professions.
- At a time when long-held economic certainties are disappearing and problems with the long-term sustainability of public budgets are manifest, education should become a priority of public discussion and interest.
- The purpose is to ensure access to high-quality primary education regardless of the place, social background, and dispositions, and children with weak dispositions should be identified in time and a suitable form of help should be directed to them.

5.B International Comparison

- Foreign empirical studies show that the quality of preschool and primary education is the most significant determinant of educability in later life and is determinative for the social integration of individuals. It helps reduce social differences and represents an effective measure for significantly reducing the costs of future social policies. Examples of good practice for the functioning of the preschool care for children can be found in our neighbour countries - Germany and Austria (mutual parental assistance – Tagesmuetter or Tagesvaeter).
- Scandinavian countries (which rank high in international literacy tests as well as in overall competitiveness) put extraordinary emphasis on preschool education, monitoring, diagnostics, and teacher quality.
- Austria and Germany, upon agreement with employers and regions, regulate the educational activities of schools in relation to the expected needs of the labour market. In most EU countries (in particular the EU15), there are functional systems of effective employer involvement in professional education (finance, practice).
- Examples from a number of countries show that school reform can bring about a significant improvement in students' results, even in the relatively short period of several years. These include Nordic countries (in particular Finland – a world leader in knowledge transfer), as well as Hong Kong, Singapore, Boston (USA), England, Saxony, Lichtenstein, Belgium, and Poland.
- Denmark makes significant investments in further teacher education and into their retraining through the so-called globalisation fund.
- Nordic countries (in particular Finland), the United Kingdom, and the Benelux countries can serve as examples for tertiary education, in terms of its diversification, regulation (accreditation), financing, and financial assistance for students.

5.C Key Initiatives

5.20 Preschool Education

Increasing the availability and quality of preschool education. The state must support, through its tax and employment policies, the possibilities of combining active and high-quality parenting with a work career, and provide children with quality education and care in a stimulating social environment. Measures must ensure the high-quality and general availability of preschool education for children from families from all social groups and all locales. These include measures for the functioning of a network of broadly available kindergartens supplemented with a system of alternative forms, guaranteed by the Ministry of Labour and Social Affairs.

5.21 Primary and Secondary Education

In regional education, a long series of sub-measures must be implemented, many of which are relatively complex, either technically or politically, or relatively specialised; hence, their implementation must be carried out in close cooperation with professional public. The key measures include the introduction of standards for results and the monitoring of their achievement, measures leading to increasing the quality of teachers, and measures aimed at improving the work of school management and at improving career counselling at schools. In terms of professional and vocational training, where links can be assumed to specific segments of the local labour markets, measures must be introduced that support the involvement of employers in professional training.

5.22 Tertiary Education

Many changes must be made in tertiary education, as well. They should focus primarily on achieving diversification and on the increasing of quality and excellence. This must be achieved by the state through financing tools and through the regulation and modification of the internal and external systems of management. This cannot be done without a fundamental improvement in the quality of information about the quality of the educational and research activities of universities. That will require changes in the accreditation system and the introduction of systems for assessing the outcomes of research and development at universities. The state should regulate the increase of the ratio of BC programme students to students in MA programmes and support the share of students in professionally oriented BC programmes. A tuition system must be introduced, accompanied by a system of universal student loans with a contingent form of repayment. Competition and the rational decision-making of actors must be promoted by the establishment of a public information system concerning universities.

5.23 Changes in the Content of Education

Through a number of direct and indirect measures, the emphasis of instruction on generally applicable and transferable competences must be increased, especially on competences for further education. It is desirable to better harmonise vocational training and professional bachelor education with the expectations and needs of specific employers – with actual demand. The content and form of education must be adapted towards independent creative thinking, the ability to continue learning, and the ability to cooperate. Reading, mathematical, and financial literacy must be enhanced and the quality of the practical knowledge of foreign languages and of

soft skills must be increased. Better teacher training requires many partial measures, which are, however, not easy to advance.

6 The Labour Market

Vision: A flexible labour market that allows for the efficient use of the sources of economic and social development

The Czech labour market has become a standard European market, with most of its strengths and weaknesses. On the way to greater competitiveness, many obstacles will have to be removed, although we do achieve relatively satisfactory results on a number of indicators.

The indicators of the aggregate employment level (medium-high in EU terms), unemployment level (relatively low), and participation in the labour market (medium-high) can certainly be improved significantly. The application of human resources must be improved: a significant increase in the employment and participation of the older generation (over 55 years) must be increased significantly; the growth of the average age when people leave school and enter the labour market must be stopped; the low rate of employment of women with smaller children must be increased; the employment of people with medical and other disadvantages must be made easier; and the Czech labour market must be made more attractive to highly educated foreign workers, who now experience rather complicated access to it.

Globalisation and the fact that our small, open economy has its own currency result in permanent, rapid, and not easily foreseeable changes in the comparative advantage of whole sectors, companies, and professions. Adaptability to changing conditions on the part of employers and employees is essential for increasing competitiveness, which is why:

- A greater offer of part-time and otherwise flexible jobs must be achieved;
- Residential mobility must be increased, and hence flexibility in the labour force supply. That will make it possible to reduce high regional differences, even among areas that are relatively close to one another;
- It is necessary to revise the regulatory framework for the functioning of the labour market (Labour Code), especially in terms of greater employer flexibility in laying off staff, where the current legislation is restrictive, relative to international standards.

Competitiveness requires the ability and willingness of employees to further educate themselves during their careers. It will therefore be necessary to support natural and voluntary participation by the labour force in effective and purposeful lifelong education.

Strategic decisions must take into account the fact that, due to recent and not-so-recent historical circumstances, the processing industry in the Czech Republic has one of the greatest shares of aggregate employment, relative to the EU, which is highly concentrated in the automobile sector and in related and similar production, while, on the other hand, services, and especially sophisticated services with a high added value, have a low share of overall employment.

An active employment policy must become an important tool for implementing a policy that suitably combines labour market flexibility without fundamental impact on social certainty (flexicurity).

6.A Objectives of the Pillar

- Competitiveness that sustainable in the long term is not born of job protection, but of a policy supporting employment. The competitiveness of an economy is comprised of the competitiveness of individual employers. Therefore, employment support must not slide towards artificially maintaining non-competitive industries, professions, or companies. The objective of employment policy must be employment that is sustainable in the long-term, rather than the sustainability of individual jobs or support for the survival of non-competitive employers.
- Taxes and subsidies must be set up with the view of motivation to work is ensured, both in intensive (work hours put in) and extensive (increased employment rate) terms.
- Measures on the labour market may be beneficial as much as they can have unintended negative side effects. Where possible, it is therefore required to pilot-test the effectiveness and functioning of intended measures, and to assess their impact.
- The government must create an institutional background that enhances employer and employee flexibility, facilitating smooth and rapid restructuring, while ensuring adequate protection for people from adverse social consequences.

6.B International Comparison

The United Kingdom uses the services of commercial entities for employment services, which provide comprehensive advisory services and guidance in the search for employment. Those services function on a competitive basis and agencies that are successful in the long term get greater space.

- Following Denmark and the Scandinavian countries, more and more EU countries are enhancing the elements of flexicurity policy.
- Evidence-based economic policy is increasingly an integral part of employment policy throughout the world. All proposals for changes in taxes and subsidies are accompanied by detailed analyses of impact on work motivation, and active employment policy instruments are subjected to impact assessment.
- Sweden, Finland, and other EU countries have well-elaborated instruments for integrating disadvantaged groups into the labour market.
- Scandinavian countries, France, and the Netherlands for many years, and Germany in the last decade, have devoted great attention to ensuring accessible and high-quality services for the preschool education for children.
- The United Kingdom is seriously considering the centralisation of the payment of support in the form of so-called joined-up government.

- A number of developed countries support the offer of rental housing in various forms: France (the HLM system), United Kingdom, and Austria.

6.C Key Initiatives

6.24 Harmonisation of Family Life and Employment Careers

In the employment of women when they have small children, the Czech Republic reports the greatest drop in the EU. The cause is an inappropriately set up pro-family policy and the lack of accessible and high-quality preschool education services. The consequence is the failure to use the human capital of women, a great wage gap between men and women, and reduced interest in parenting in general, which in aggregate has an adverse impact on fiscal balance. The objective of this project is to increase the offer of alternative forms of preschool education, thereby supporting the harmonisation of the work and family lives of parents, staying in touch with one's profession while caring for a child, and a smooth return to the labour market based on personal preference.

6.25 Development of the Labour Market

In the aggregate, the Czech labour market manifests a relatively solid rate of flexibility in European terms. In spite of that, there are areas to which increased attention must be paid and where the unsatisfactory situation will persist unless appropriate measures are taken. That is why it is necessary to adapt existing measures or adopt new measures promoting the inclusion of specific groups into the labour market. In certain dimensions, flexibility must be increased, both internal (in the framework of employment) and external (hiring and laying off), the implementation of employment policy must be made more effective (targeting and impact), especially active policy. Hand in hand with that the use of rules and procedures for evidence-based policies must be developed. State-imposed measures may help to some degree, but enhanced competition must play a role, which will force the introduction of flexible jobs by employers.

6.26 Increased Availability of Rental Housing

The labour market in the Czech Republic manifests great regional differences. Regional labour force mobility remains relatively low, both due to insufficiently developed transport infrastructure (commuting to work) and an insufficient offer of rental housing (residential mobility). This is probably due to the combination of a market failure and an imperfect legal framework, which cause the offer of rental housing to be limited, thus weakening labour force flexibility. The lack of social housing also has an adverse social impact. In this measure, the causes of market failures and institutional imperfection will be identified and measures will be proposed and implemented aimed at a significant improvement of the situation in rental housing.

6.27 Introduction of a Single Payment Point

The Czech Republic has a developed and functional network of labour offices and other offices providing social support and assistance. In order to increase its efficiency, their activities must be harmonised and administrative agendas simplified. By combining several related agendas, the overall cost of the system will be reduced, the coordination and targeting of social and other payments will be increased, the quality of information obtained in the field that is required for

high-quality monitoring and assessment will be increased. The room for abusing the system will be reduced. That will create a foundation for the implementation of an evidence-based economic policy.

6.28 A Smart Migration Policy

An educated foreign workforce represents a potentially inexhaustible supplement to the limited domestic labour force. Suitably regulated immigration of a qualified labour force will not restrict work opportunities for the domestic labour force, but enhance its growth. The development of the university sector and the research, development, and innovation sector will be indispensable for the country's competitiveness. This cannot be achieved without an influx of top-level foreign academics in research and experts in development. In addition, the inflow of talented foreign university students is desirable. The existing immigration policy and system, however, present a great obstacle that will have to be fundamentally altered.

6.29 Implementation and Development of the Lifelong Education System

Intellectual human capital is an increasingly more important source of productivity than a simple labour force. The productive abilities of human capital must, however, keep pace with the technological changes in individual professions and with changes forced by changes in the comparative economic advantage of companies and entire sectors. As these changes cannot be foreseen sufficiently well, it is not efficient and essentially impossible to obtain all of the required education prior to the start of one's work career. That is why many measures must be implemented to set up suitable institutional conditions and suitably targeted financial support, enabling the implementation of lifelong education on the basis of the changing needs of the labour market, employers, and the labour force.

7 Financial Markets

Vision: The financial sector can more substantially promote the competitiveness of the Czech economy

Increase in the use of financial engineering tools in implementing state policies offers the greatest opportunity for improving conditions in the Czech economy through financial markets measures based on either national or European resources. These governmental policies can be implemented with reasonable costs, transparently, and with the minimisation of any adverse impact on the market environment.

The course of the financial and economic crisis has confirmed that the financial sector in the Czech Republic is stable. Its services are accessible, thanks to a number of institutions and sales channels, but according to certain comparisons, the prices of those services are high. The financial sector is dominated by banks, the vast majority of which is foreign-owned, nevertheless focused on the domestic market and clients. It is desirable to look for ways to support the development of the capital market and other financial sector segments that would serve as alternative sources of financing for business plans.

The non-banking part of the financial sector in particular sometimes depends on government support policy for certain instruments (e.g., pensions and certain insurance products). Many instruments are influenced by their predominant sale through independent distribution channels and the costs of that distribution. Also, on the dominant financial market – the banking market – measures can be sought for improving the accessibility / price of financial services.

In terms of the needs of the financial sector, above all, the fundamental importance of the foreseeability of government policy must be taken into account, as well as the area of financial education. Of benefit for financial markets is practically any measure that improves the outlook of the development of the economy and contributes to its future stability. The response of the financial markets to them, in the form of a better offer of services or more stable financial institutions, is then positively reflected in the economy.

The level of uncertainty with respect to economic developments, the tax system, or the stability of law that might be acceptable for companies – for example as applicants for loans – may be far from acceptable for the providers of that service. Low predictability, for example in terms of tax policy (and not just that), therefore represents a fundamental risk for the financial sector, due to the asymmetrical impact of those uncertainties on their finances, especially in the case of credit institutions.

Financial education and literacy are tools that can be used, among other things, for retaining the purchasing power of actors in the economy, thereby contributing to an even development of the economy. A poor choice of financial instruments leads either to an overall loss of benefit for the economy or to the shifting of wealth from clients (persons, companies) to the financial industry, which may not be effective from the social point of view.

7.A International Comparison

In terms of financial engineering tools, there is a broad range of international experience with their use and the set-up of institutions. In the case of a “government agency” that carries out particular activities (the Czech-Moravian Guarantee and Development Bank (CMGDB) in this country), the examples of neighbouring countries may be used; in the case of seed fund-type instruments, examples from developed countries are also available (e.g., Ireland – where the results are evident, as they have been functioning for a long time), and current projects, such as Jeremie, may be followed (which is important in terms of the set-up, but less so in terms of their results, as these projects are in their initial stages).

It is difficult to estimate the economic results of the “partial development” of certain segments (the lack of alternative sources of financing), as well as the consequences of the lower use of these instruments on the economy, to the detriment of subsidies in the use of EU funds. A change in these areas would have a positive impact on the economy.

7.B Government Policy Objectives in the Financial Markets Sphere

- The availability and price of financial products through stronger competition on financial markets.
- The use of modern financial instruments that will also conform to the market, for targeted support in areas of the economy that boast a high growth potential.

7.C Key Initiatives

7.30 Implementation of a Pilot Seed Fund

The Seed Fund project represents, in a broader sense, a combination of several instruments. All of its parts deserve the greatest possible attention and priority (fund, financial instruments, other support measures), as the success of the project would have a positive impact on the economy as well as on the “prestige” of the modern financial instruments available to the state. The success of the concept of support for the establishment of new, forward-looking companies has the potential to significantly support the development of the economy and to improve its structure.

7.31 Transformation of the CMGDB for Using Financial Engineering Instruments

In the case of the Czech Republic, the Czech-Moravian Guarantee and Development Bank (CMGDB) is, for many reasons, the optimal institution for implementing programmes using innovative financial engineering instruments. It is necessary that the institution clearly profiles itself in this direction, that financial instruments are concentrated in it, and that it is more broadly anchored in government policies. That is why legislative obstacles and the lack of correlation in the legal system must be identified, and solutions proposed for defining the space for the activities of this specialised financial institution.

7.32 Improvement of the Condition and Functioning of Financial Markets – Analyses

In terms of access to services, analyses show that a verification of the functioning of the existing legal / regulatory environment is of key importance, and also, among other matters, whether, in spite of the great number of financial institutions relative to the size of the economy, there are no needless barriers to access to the market. They could be in legislation (e.g., unduly high capital

requirements applied to the institutions, or other qualification conditions), or in its implementation (e.g., long and unpredictable licensing procedures or costly oversight).

In spite of new legislation of a relatively high quality being enacted, cases still arise when, for example, legal procedures weaken the rights of creditors (usually in insolvency proceedings). The unforeseeable development of legislation and the potential questioning of creditors' rights will reflect in the reduced availability of financial services (loans) and their price (taking into account higher costs and the risk of losses).

8 Goods and Services Market Efficiency and Improving the Characteristics of Business

Vision: An attractive environment for business and trade

The business environment in the Czech Republic is characterised not only by advanced technical skills, but also by the fact that it is based on "lean processes" without excess inventories, highly developed logistics, and a focus on its neighbouring countries, to which an exceptionally high 84% of Czech exports go. International comparisons show that Czech businesses are successful as subcontractors, but their major weakness is their lack of knowledge of foreign markets. The territorial confinement of the trade balance surplus almost exclusively to neighbouring countries indicates that the functional specialisation of the Czech Republic, in the context of global trade, is as a production base for markets in Europe and nearby areas, while the extent and the nature of the usage of this base is largely controlled from abroad.

The domestic business sector has to date been weak, lacks a strong foundation in innovation and direct relationships with end customers, and its development is heavily dependent on demand from multinational corporations located outside the Czech Republic (which have only their branch offices in the country). The following diagram showing the progressively modified form of the value chain illustrates the nature of this specialisation, which is also characteristic of several other EU Member States:

High added value	Low added value	Higher added value	Low added value	Higher added value
Research and development	Processing of primary raw materials into intermediates	Manufacture of more complex components and production modules	Assembly of final product from modules, components and semi-finished products	Services connected with placing products on the market
Design		Tailor-made manufacture and design of specific components		
Planning	Manufacture of simple components and semi-finished products			
↑ Predominate in the Czech Republic ↑				

Source: EEIP, 2009

A closer look at the analysis of the cumulative comparative advantages of exports confirms that there is a high degree of specialisation in both exports and imports. The first 50 commodity groups (out of a total of seven thousand possible groups) account for more than a half of the comparative advantages. Most of these, however, are tied to imports of parts and components, which bears witness to the dominant role of manufacturing and assembly companies in the Czech Republic.

8.A Objectives of the Pillar

- To improve the capability of producers to identify end markets, respond to them, and distribute their products and services directly, so that a large part of the added value does not dissipate among other links in the value chain, and so that the producers can foresee and identify in advance current and future end markets with a good probability of success. The role of the controlling link in the value chain is frequently - though not always - successfully played by multinational corporations or foreign distributors, which often have close ties to emerging markets.¹²
- At least partially to refocus the existing specialisation of Czech companies:
 - By developing their non-technical skills associated with acquiring new markets (strategic management, marketing, innovation management, legal and economic know-how in the field of trade, and direct investment abroad)
 - By making use of the shared "business and competitive intelligence" services developed in the Czech Republic by CzechTrade, and the availability of other quality services for innovative business
- To exploit the fact that, provided certain other conditions are fulfilled, the geographical position of the Czech Republic is itself an important resource, which is often even more effective than tax allowances. And additionally, as regards tax allowances, it is important to shift the focus of the incentives to companies that will rely on domestic research and development.
- To make use of the specific characteristics of the Czech Republic and to create a business environment that will contribute to the selection of such innovations as are appropriate to both existing and anticipated markets with long-term viability (so-called *appropriate efficient technology*) and local regulation (*not all regulation is global*). The "fast second" strategy describes companies' ability to establish themselves on the market also by means of the rapid application of the "second best" innovation, if there is a demand for it on the domestic or global market.

¹² The data that 32% of Czech exports to Germany are with global trading companies (in China alone, it is estimated that there are up to ten thousand registered companies with German participation) is revealing.

- To improve access to quality information relevant for the business community and to provide assistance to entrepreneurs in their business activities on the EU internal market.
- To improve the business environment by reducing the administrative burden and providing greater opportunities for corporate governance.

8.B International Comparison

The small size of the Czech Republic's domestic market is offset by its high degree of openness with a very large share of foreign trade with the EU, and thus also its considerable sensitivity to the functioning of the internal market and the dynamics of both the EU economy and the economies of the final customers of re-exported goods. As has been the case in a number of European countries, the greatest improvement in efficiency has been seen in tradable goods exposed to foreign competition. According to the GCI indicators, operators in the Czech Republic are holding their own in terms of the quantity and quality of local suppliers and their willingness to delegate authority. A weaker rating is given for business from the perspective of the development of clusters, sources of competitive advantage, and the breadth of the value chain, where there is less application of original products and transferred innovations, although so far the Czech Republic still has maintained a certain edge over other new EU Member States, such as Slovenia, Poland or Slovakia. The weakest area is control of international distribution channels, where operators from the Czech Republic and Slovakia are at the very tail end of the global market rankings (117th place according to the GCI), which diminishes the gains achieved. In terms of business sophistication and scope of marketing, which also belong to this group, operators in the Czech Republic are still lagging behind the European leaders. As is shown by the German and Finnish example, imaginative products which respond optimally to existing or emerging (domestic and international) demand will result (albeit only temporarily) in higher profitability, and are more resistant to fluctuations in exchange rates. Given that the sale of standard "commodities" is highly sensitive to prices (and therefore also exchange rates), there is a risk that (as in Greece, Portugal or Spain) with the ongoing convergence of the Czech Republic and the other European states, the advantage of lower labour costs may cease to apply.

Services are developing relatively slowly in the Czech Republic, and the market is dominated by traditional services with relatively low added value (tourism or ground transport services) which are based on the attractiveness and strategic position of the country. For services with high added value, imports dominate over exports.

8.C Key Initiatives

8.33 Improving the Business Environment

The creation of an attractive environment for business and trade is a long-term priority of the Czech Republic. A detailed reassessment of the administrative burden will lay a firm foundation for measures to be taken to reduce it. The Ministries of Industry and Trade and the Environment will work together on an eco-audit, which will reduce the burden on entrepreneurs resulting from environmental regulation, without weakening environmental protection. The extension of the capabilities of entrepreneurs in corporate governance will i.a. reduce the demand for registered capital, increase the accountability of statutory bodies, or lead to a departure from the formal

conception of contracts. We also propose that common commencement dates be introduced for government regulations affecting businesses.

8.34 Business Development Services

For Czech entrepreneurs to succeed, not only at home, but also on foreign markets, it is vital to facilitate their access to quality information that is relevant to their business and to provide assistance if they encounter problems in the course of business. One of the key measures being taken with this in mind is the development of the web portal BusinessInfo.cz, which should dispense sound advice to entrepreneurs and help to facilitate communication with the authorities. Even when entrepreneurs have access to the relevant information, they may still run into difficulties while doing business in the EU. Additional measures are therefore focused on the development of the existing advisory system that is currently in operation at the Ministry of Industry and Trade. The advisory system should in the future be capable of assisting businesses with all the problems they may potentially encounter on the internal market. The last key measure is the draft amendment of the Act on Investment Incentives, which is to set up a competitive environment for investment promotion, both in the manufacturing industry and in the fields of innovation, software development, and strategic services.

8.35 Services for Innovative Business

Particular attention should be paid to services for innovative business, which in the future could become a fundamental source for the Czech Republic's competitiveness. It is necessary to support the development of non-technical business skills ("soft skills") and to establish conditions for support of the modernisation and upgrading of companies' technological facilities. The aim of the proposed measure is to encourage firms to move to higher positions in value chains, to foster interaction with the R&D sector, to increase technology transfer, and to place their innovative products abroad. The quality services aimed at commercialisation, internationalisation, technology transfer, and patent protection, provided by state agencies in cooperation with the support infrastructure will be the tool used to reach this goal.

8.36 Increased Exploitation of Positional Rent

In order to more greatly leverage the comparative advantage of the Czech Republic's geographical position (its positional rent), it is crucial to align business development with the development of the respective infrastructure - both physical and institutional. The critical steps to be taken include optimisation of the network of customs offices and increasing the flexibility of their working hours, or introducing an internationally centralised customs clearance procedure, i.e., a single customs procedure upon entry to the EU. Other measures include the "Single Window", allowing an exporter to communicate with just one point of contact within the administration, and also greater use of simplified customs procedures or considering the introduction of fiscal representatives. Another important measure is to examine whether, and how, legislation can be used to regulate the possibility for accounting entities operating under the IFRS framework to use their business results according to the IFRS when calculating their tax base. These steps should lead to low-income and middle-income jobs being saved, even in the longer term.

8.37 Support for Active Self-regulation

For small and medium-sized enterprises in particular, we propose increased promotion of voluntary approaches (including self-regulation aimed at sustainable development), which increase the value of the enterprise and the effectiveness of strategic management. We support the development of the EPC method (Energy Performance Contracting), implementation of environmental management systems, and other voluntary approaches. There is a particular potential for voluntary approaches to increase competitiveness in the context of cooperation with foreign companies, which often require the introduction of an environmental management system (e.g. ISO 14001) not only from their affiliates but also from their suppliers.

9 Innovation

Vision: Innovation - the source of the future prosperity of the Czech Republic

The long-term growth and prosperity of the Czech Republic necessitate an increased emphasis on sources of growth other than the efficiency increase (driven above all by foreign direct investment, which has been the main factor so far). The importance of sources of productivity based on increase in efficiency is gradually diminishing, even though FDI will continue to play a significant role in the economy. **One of the new sources of growth must be entrepreneurship, exploiting (not only new) knowledge to spur innovation.** However, the transition of the Czech Republic to a higher developmental stage, in which a major source of competitiveness, and thus also growth, comes from innovation (i.e., "innovation-driven" competitiveness) is hampered by several problems that need to be addressed.

(i) It will be necessary **to stimulate the so far very limited demand for innovation** in the domestic business sector. Success in business or business growth must involve innovation and the exploitation of knowledge, leading to the development of the hitherto insufficient non-technical skills of businesses. Domestic companies' demand for innovation will also be increased by the removal of external barriers, such as the lack of quality services for innovative business, non-functioning support infrastructure, the lack of R&D organisations readiness to collaborate with companies, and other issues.

(ii) The Czech Republic must focus on **collaboration and in particular on the transfer of knowledge between the business and R&D sectors**, which is currently at a very low level. To this end, it is necessary to change the nature of the demand for innovation at enterprises, just as changes must also be made in R&D institutions, in terms of the "mental" environment, the inadequate state of readiness of the relevant internal procedures, and the capacities of most R&D institutions to cooperate with business.

(iii) It is necessary to **modify the existing system of R&D evaluating and funding**, including additional conditions to support the excellence as a matter of priority (excellence efforts). The R&D excellence is one of the major prerequisites of a functioning national innovation system.

(iv) As previous attempts to increase the efficiency of the institutional system for R&D and innovation support have not yet led to any significant improvement, it will be necessary **to create a "strong central authority"**, ready to define and coordinate policies and to implement instruments across the entire innovation ecosystem (including interlinking the R&D subsystem with the innovative business subsystem). The current undesirable situation, where the existing National Innovation Policy has a one-sided focus on R&D, should be rectified.

9.A Objectives of the Pillar

The main objective is to raise the importance of innovation as a source of the Czech Republic's competitiveness and of its contributions to long-term economic growth, quality jobs creation, and the increase of the quality of life. With this in mind, it is therefore necessary to:

- **Increase companies' demand for innovation** via: (i) quality services that promote the exploitation of innovation by the ownership-management structure of enterprises and start-up businesses, facilitate the implementation of innovations in enterprises, and provide assistance to innovative companies with the technology transfer, commercialisation, and internationalisation of their products; and (ii) supply increase of cutting-edge research results that have commercial potential.
- Increase mutual awareness and motivation aimed at **cooperation between the corporate and R&D sectors**, leading to greater exploitation of the R&D institutions' knowledge potential for innovation and growth in the business sector, by developing the services of the support infrastructure, directing R&D institutions towards obtaining private financing, and other measures.
- Establish the human resources, financial, material, and other preconditions for the **development of research excellence**, taking into account the current state of research excellence and the needs and development potential in the business sector.
- Target public support of entrepreneurship and research primarily on identified **key technological areas**, which will be determined on the basis of: (i) analysis of the envisaged trends in global demand and emerging needs of society (**foresight**), (ii) the specialization of R&D excellence, and (iii) the innovative potential of the business sector in the Czech Republic.
- Create a functional system for **the effective (expert) management and coordination of development policies and supportive instruments for innovative business and R&D**, which will enable or enhance the impact achieved by fulfilling the substantive objectives listed above.

9.B International Comparison

All states with developed market economies are engaged in the development of a national innovation system. In many of them, their national innovation strategy has become synonymous with their international competitiveness strategy (e.g., Finland, Great Britain, Denmark, etc.). The Czech Republic, however, cannot go this way, as it still has serious problems in regard to its basic preconditions for growth (e.g., its public administration efficiency, corruption, etc.). Therefore its innovation strategy must constitute only one of the main pillars of a complex international competitiveness strategy. Meanwhile, successful innovation policies must (i) address the specific problems of respective country, and (ii) reflect the country's unique economic, socio-cultural, and institutional conditions.

A possible example of a functioning agency for the promotion of technology transfer is the Finnish Funding Agency for Technology and Innovation TEKES. Its work consists of active search for potential interlinkages among research institutions and companies. Together with entrepreneurs and researchers, it determines strategically important areas of research and development and, on that basis, sets up funding programmes for the implementation of projects. TEKES also monitors the impact of all funded projects, and evaluates their benefits, not only for

the funding beneficiaries, but also in terms of the impact of the funding on the economy and society.

Similarly, there are also models involving an independent agency, whose mission, aside from export support, is also the monitoring of global markets and signalling newly emerging social, economic, and technological trends (e.g., the Finnish FINPRO). Within the context of these predictions, the agency seeks to identify promising fields and technologies where future potential can be expected, and which should therefore be the focus of interest for innovating domestic businesses.

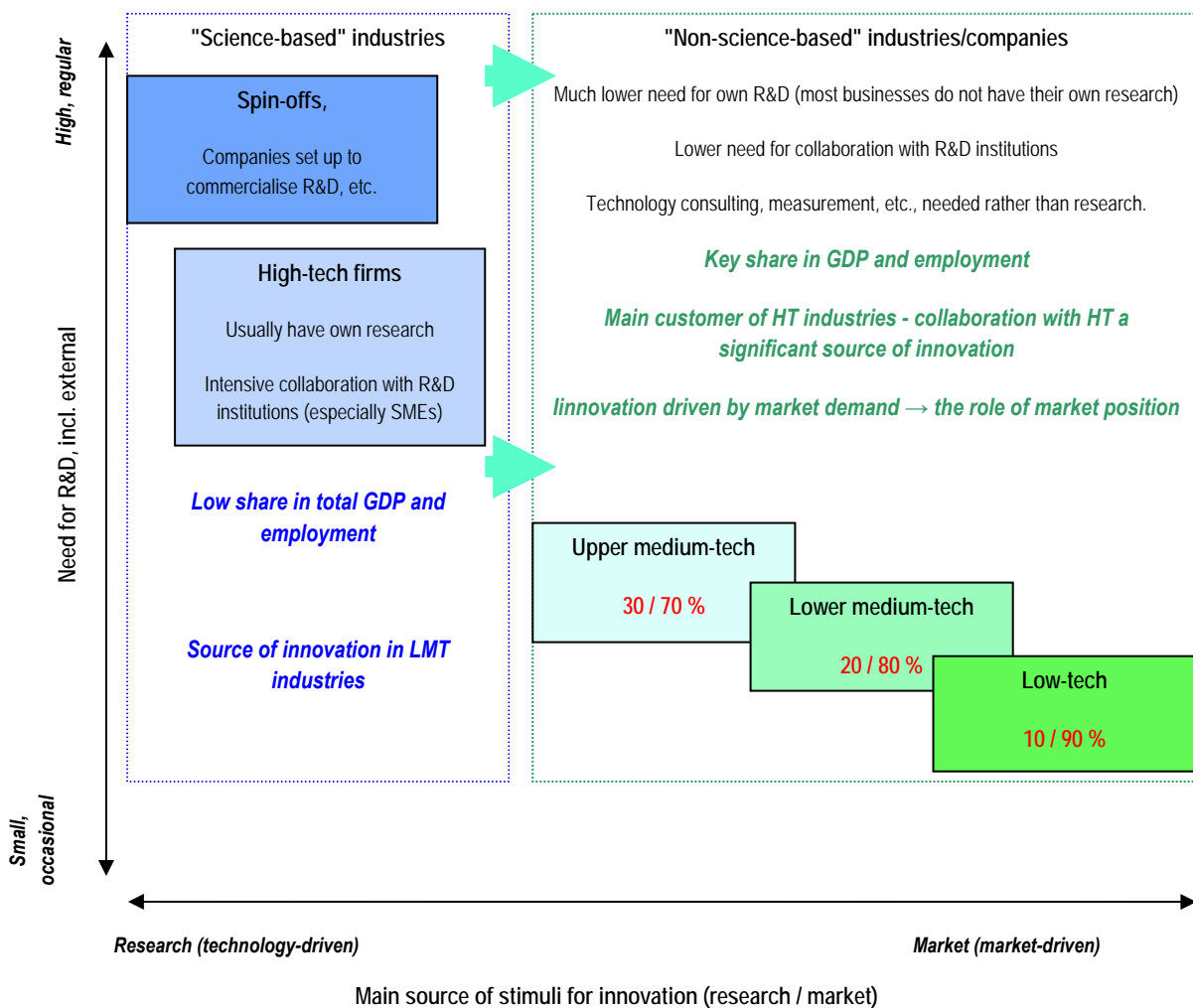
9.C Key Initiatives

Due to the wide-ranging, interdependent relations involved in innovations, Chapter 9 - Innovation does not cover this topic in its full extent. It focuses mainly on: (i) companies, as locations where knowledge (via innovation) is turned into money; (ii) R&D institutions, as the creators and the source of the dissemination of new knowledge; (iii) the relationships between companies and R&D institutions; and (iv) an effective institutional framework for the innovation ecosystem. The proposed measures reflect the importance of other areas that shape the environment for innovation (especially business environment and services for innovative business, education, the capital market); nevertheless, these areas are addressed separately in other chapters. The proposed system of measures is based on the following assumptions:

- The essence of successful innovation is the linking of technical potential with the market demand. The entrepreneurship (defined as a "force" that purposefully combines all the knowledge and resources required to make an innovation successful on the market) is the key element in this interconnection of market needs and technical potential.
- The importance of market stimuli and technological potential for the emergence of successful innovations varies from case to case. A distinction can be made between "market-driven" innovations and "technology-driven" innovations (see the chart below). It is not true that "technology-driven" innovations are more important for economic growth than "market-driven" innovations.
- The quality R&D is an important component for the development of innovations, and in many cases is an indispensable source for innovations. Nevertheless, innovations emerge within companies rather than at universities or in research institutes. That is why the linkage of excellent R&D with the business sector is of the utmost importance for the exploitation of the R&D results in the economy.
- Links with high-tech industries are not the only important factor for the effective technology transfer between academia and the corporate sector (i.e., successful innovation, which thus boosts economic growth). Based on their share in GDP and employment, successful innovations in so-called medium-tech and low-tech industries (companies) are often more important than innovations in the segment of high-tech

industries (companies)¹³. For the Czech Republic, this is especially the case, since the high-tech industries (companies) have not yet been fully developed in this country, and foreign companies keep their core business operations abroad.

Chart 1: The importance of research and cooperation with R&D institutions for innovation



¹³ The demand for innovation in LMT industries is crucial. It represents a source of stimuli for innovations in high-tech industries (companies) and increases the demand of enterprises, especially in high-tech industries, for collaboration with academic institutions.

9.38 Functional System for Management and Coordination of National Innovation System Development.

This measure is aimed at increasing the effectiveness of policies and instruments concerning innovative business and R&D. It comprises four groups of activities: (i) the creation of an expert system for evaluating innovation potential and the related barriers, including an analysis of R&D excellence; (ii) initiation and coordination of a professional-level discussion regarding the setting up of new roles and relations among the institutions of the NIS; (iii) amendment of the "Competence Act" and other Acts; (iv) a Government decision on the coordination of the instruments and policies of innovation-based competitiveness.

9.39 Environment for Excellent R&D

This measure is focused on the improvement of the conditions for excellent research that will produce knowledge-generating results and give the Czech Republic a technological advantage in areas where it has potential. In addition to the effective R&D policy management, this will also involve: (i) a new system for evaluating research organisations based on good practices abroad, with impacts on institutional funding; (ii) improvement of the system for evaluation of the R&D projects and programmes funded from public resources, with an emphasis on results; (iii) narrowing the focus of the thematic priorities of R&D, taking into account the identified key technological areas for the Czech Republic, with an emphasis on the concentration of research efforts; (iv) raising the professional qualification level of the management staff of research organisations; (v) long-term support for excellent infrastructure (material and human resources) aimed at keeping pace with leading global workplaces and reflecting the ability of R&D institutions to obtain private funding for their activities; (vi) streamlining the doctoral studies system; and (vii) creating the conditions to attract top foreign researchers, including the reintegration of Czech researchers from abroad.

9.40 Development of Cooperation Aimed at Knowledge Transfers between Business and Academia

This measure comprises seven groups of activities that contribute to the cooperation of research institutions with companies and to the development of services supporting the commercialisation of R&D results. Their resultant contribution will be dependent on measures in the area of business support, especially services for innovative business, without which they will not achieve the desired effect. The following measures are involved: (i) a pre-seed grant scheme; (ii) the Knowledge Transfer Partnership programme; (iii) the development of human resources and services of CTTs; (iv) assistance in the modification and amendment of the internal procedures and regulations of academic institutions promoting collaboration and TT; (v) research and development contracts for the needs of the public sector - public procurement; (vi) amendment of the Income Tax Act; and (vii) policies and tools to foster innovation in the regions.

9.41 Promoting Cooperation among Businesses

This measure is to promote cooperation among companies, which will facilitate the implementation of their innovation activities. The proposed activities will stimulate companies to cooperate in innovation and will also indirectly assist them in management of the innovation process. The measure is focused on the development and management of clusters and other cooperative groupings with the aim of developing cooperation supporting innovation. In view of

the structure of its economy, an important factor for the Czech Republic is the cooperation between companies from high-tech industries, on the one hand, and medium-tech and low-tech industries (hereafter LMT) on the other. Demand for innovation in LMT industries is of a critical importance for the contribution of innovation, both to the economic growth of the Czech Republic and to the development of business in high-tech industries.

9.42 Foresight and Identification of Technological Areas with Strategic Importance for Economic Growth of the Czech Republic

The objective of this measure is to set up a system and develop the human resources capacities to monitor (i) global markets and (ii) developments in the field of R&D and technologies, in order to enable the timely identification of social, economic, and technological trends. These foresight activities, analysing the developments in global demand and the emerging needs of society, will lead to the identification of key technological areas for the Czech Republic. A high potential can be foreseen in these areas in terms of their contribution to the competitive advantage of the business sector in the Czech Republic. Therefore the targeting of public support for business and research will be prioritised on these areas.

9.43 Aerospace Technology

This measure is focused at increase of the number and volume of Czech companies' (and research institutions') contracts in the aerospace sector, and aims at the commercial success of Czech products on global markets and thus at ensuring the maximisation of the economic benefits and the return on investments.

10 Basis for the Pro-export Strategy

Vision: The development and diversification of exports as an engine of economic growth in the Czech Republic

The Czech Republic is a small, open economy, for which exports represent a major source of growth and development. In competition with neighbouring countries that are also strongly pro-export oriented, the Czech Republic must effectively implement a pro-export policy.

Every country's export performance and competitiveness are closely interlinked - in particular, the export performance of a country depends on its competitiveness, and frequently competitiveness is even directly equated with the export performance of the country. Recently, experts have often expressed the opinion that the Czech Republic, like most other advanced European countries (with the exception of, e.g., Germany and Finland), is in danger of losing its competitive edge, due to strong pressure from Asian countries (mainly China).

In light of the strong links between exports and competitiveness, the projects under this chapter focus mainly on coordination measures, i.e., on forging links between the International Competitiveness Strategy and the Pro-export Strategy of the Czech Republic for the years 2012 - 2020, which is currently under preparation. In this project, coordination is understood in very broad terms (as it is conceived of by the advanced EU countries and the OECD) as a set of activities whose focus is directly and primarily pro-export, but also including activities that are complementary to these pro-export activities, that supplement and facilitate them, and which in combination generate strong economic diplomacy for the Czech Republic and strengthen its position at the international level.

10.A Objectives of the Project

Pro-export Policy

The objective of the project will be to identify key measures related to the state's pro-export policy, which can be used as a foundation for building a high quality and dynamic export strategy for the Czech Republic in the years 2012 - 2020. The measures involved in this project are as follows:

- Cooperation between the Ministry of Industry and Trade and the Ministry of Foreign Affairs - building up a backbone network of foreign outposts and revising competencies in the context of B2B, B2G and G2G relations (SLA)
- An information and analytical background support system in the Czech Republic for exports, and smart services for exporters and investors based thereon
- Optimisation of the system for export financing, and the relationship between the Czech Export Bank, EGAP, and commercial banks and the financing of pro-export activities
- Mechanisms for updating the set-up of pro-export activities and their KPIs, and export training programmes.

Building the Czech Republic's Position at the International Level

Objectives complementing the activities involved in the pro-export policy, which are to help build the reputation and position of the Czech Republic on foreign markets.

- Fair and equitable terms of international trade - lobbying organisations for an open market, free trade agreements, the global development of e-commerce and the conditions for its implementation, the fight against infringements of intellectual property rights, the development of exports of services and licenses, etc.
- Coordination of the representation of the Czech Republic abroad with regard to the country's economic interests - in particular, securing the main pro-export activities, along with the related complementary activities, with exporters, in the framework of their independent platforms, in the provision of development and humanitarian aid, the recovery of past foreign debt, the organisation of business trips abroad for official representatives (Czech MPs, regional representatives etc.), and cultural, research and educational exchanges.
- Building the reputation of the Czech Republic abroad - raising international awareness of the reforms), facilitating the granting of business visas to the Czech Republic (FastTrack), construction of a network of Czech expatriates, and the development and targeted presentation of the comparative advantages of the Czech Republic that are to attract foreign investors and increase the country's prestige abroad.

10.B International Comparison

Examples of countries with successful pro-export policies are Finland, Germany, and the Netherlands, which very efficiently coordinate the activities of public institutions into highly forward-looking and effective economic diplomacy.

Coordination within the state, and a strong and united defence of the country's economic interests abroad, is a model whose success has been proven in many countries that employ this approach (e.g., South Korea and its billion dollar in contracts in China; France and its contracts in India; the long-term, effective and coordinated pro-export policy of the Scandinavian countries, etc.).

Inspiration in regard to the effective coordination of economic diplomacy across institutions and through other policies (humanitarian, educational, research etc.) can be drawn, for example, from Germany (billion dollar contracts in China secured by, amongst other things, intensive missions by top-level representatives of German institutions), and from France (and its contracts in India).

Countries like Great Britain, Israel, Poland, and others offer examples both of the effective exploitation of networks of their citizens and compatriots abroad to strengthen their brand, and of the construction of networks of international experts to attract investment and to promote their countries.

As regards cooperation in the collective construction of a position on foreign markets and cost-sharing, a model may be offered by the long-term, effective, coordinated pro-export policy of the Scandinavian countries.

The export strategy of the United States of America is an example of a comprehensive approach to the development of pro-export activities with regard to new trends (e.g., the development of licensing, e-commerce, franchising, etc.).

10.C Fundamental Basis

In the Czech Republic, pro-export activities involve a number of public institutions and private entities; however, the coordination of their activities is far from optimally set up, and this leads to inefficient spending and use of foreign market information.

Backbone Network of Czech Offices and Representations Abroad

For the reasons given above, a number of the measures in this pillar focus on improving coordination and enhancing information sharing among the entities involved in export, to maximise the positive impacts on exports and their development. The specific measures include, in particular, coverage of priority countries by the network of foreign offices of CzechTrade (B2B) and cooperation between CzechTrade and the representations of the Ministry of Foreign Affairs abroad (B2G and G2G).

Clarification of the competencies of CzechTrade and the optimisation of its regional offices should contribute primarily to the expansion of the possibilities for providing smart services for exporters and a strategic approach to their provision. This package of measures therefore proposes modernising the range and provision of such services, focusing on offering structured information (business and market intelligence) and analyses of forecasts and trends specifically aimed at identifying new global trends and their exploitation to the benefit of Czech exports. Another important aspect consists of services connected with internationalisation and generally with identifying opportunities on foreign markets (market research, networking, etc.).

Export Financing and its Coordination

In the context of information exchanges, banks (and to some extent insurance companies) also act as the main partners of the state-owned institutions EGAP and the Czech Export Bank, and export financing and insurance is generally an important aspect of pro-export activities. In this context it is necessary to overcome the lack of "harmonisation" between the CEB and EGAP in assessing projects for export financing, to optimise the activity of the CEB and the way it is set up in relation to the possibilities for club financing of export loans, and to resolve the practical application of the involvement of commercial banks in the interest make-up system (the "IMU" system). It would also be worthwhile to coordinate the transfer of information regarding foreign markets with the CEB and EGAP.

Complementary Pro-export Measures

A key feature of this project is that it focuses on coordination among various institutions within the Czech Republic in the interest of furthering a unified and targeted presentation of the country

in its external relations. The project also focuses to the greatest possible extent on making the utmost use of the comparative advantages of the Czech Republic when presenting it abroad.

The measures under this project include, firstly, active promotion of fair and equitable conditions for international trade and of other projects benefiting international trade (e.g., the global development of e-commerce, the fight against piracy and other violations of intellectual property rights, etc.). Secondly, the measures relate to the coordination of the Czech Republic's representation abroad, with regard to its economic interests and building a good international reputation (across public institutions and in cooperation with exporters or collaborating foreign entities). Thirdly, there are measures connected with building the reputation of the Czech Republic as a trusted business partner, and the maximum utilisation of all its policies and comparative advantages to support exports (projects such as FastTrack for business trips, building a network of Czech expatriates, etc.).

11 Cohesion Policy

Vision: The competitiveness strategy and the cohesion strategy lead in the same direction.

For the 2007-13 period, the Czech Republic has been awarded one of the highest amounts of cohesion policy funding per capita out of the EU-27. It is likely that even after 2013 the cohesion policy will continue to be one of the most important tools for the implementation of development interventions, and therefore also for many of the measures of the International Competitiveness Strategy (ICS), despite the fact that the ICS has a broader coverage and that many of its measures are either unrelated or only indirectly related to cohesion policy interventions.

Due to the current status of negotiations on the future of cohesion policy and of the associated preparatory work, at the time of the elaboration of the ICS it is not possible to determine which of its interventions will or will not be eligible for funding from the future EU cohesion policy. Nonetheless, some matters are already clear. Primarily, cohesion policy offers funds and instruments for specifically defined purposes, whose common objectives are economic growth and also the territorial cohesion newly defined in the Treaty. The traditional concept of social cohesion is not set aside, however. The emphasis in this area now is generally on the context of the transformation of society and the labour market, to which social structures are not capable of reacting adequately and in good time. From the foregoing it is clear that cohesion policy interventions are aimed at the growth of competitiveness, which is a prerequisite for economic growth, which is itself a necessary condition for reducing regional disparities. The objectives of the ICS and the objectives of cohesion policy are therefore consistent and very much in alignment.

In setting up cohesion policy in the Czech Republic, it is important that its objectives be in line with the objectives of accelerating economic development on the basis of intensely concentrated supported activities. In some Member States and among many actors in the Czech Republic, cohesion policy is still seen as a redistributive mechanism for subsidising investments, without these investments having to create conditions for economic growth. This type of thinking jeopardises the application of cohesion policy interventions in the Czech Republic for the successful and effective implementation of (some of the) objectives of the ICS. Naturally, investment subsidies targeted mainly at public investment in economically weak regions will continue to play a crucial role in cohesion policy. Competitiveness and its application for the economic convergence of the regions of the EU constitute the primary objective of cohesion policy interventions. The ICS must therefore reflect the requirements of documents such as Europe 2020, etc., although reflecting them does not mean being subordinate to them, but rather making use of the opportunities they present.

First and foremost, therefore, cohesion policy will offer a strong source of support in regard to: (i) the business environment and its quality; (ii) the development of innovations and technological development; and (iii) selected aspects of support for the labour market and the education system. In addition, the Czech Republic, like most of the new EU Member States, still also has deficiencies in its basic infrastructure, and the completion of its development is therefore a

necessary condition for the convergence of the Czech Republic and the EU and a prerequisite for (more balanced) economic growth. Of particular importance is the transport infrastructure; however, support for that must be thoroughly justified by the need to improve competitiveness and boost economic development.

The negotiations on the new form of cohesion policy will also result in conditions to which the utilisation of EU funds will be bound. In this case too, there is a strong relationship between the ICS and the requirements of cohesion policy. For example, macroeconomic stability and performance represent a major potential conditionality for cohesion policy (at the present time such a condition is applied only to the Cohesion Fund). Positive macroeconomic performance also constitutes an important condition for access to the funds required for co-financing from national sources, whose level is to be increased.

In the current programming period, delays have occurred in launching the implementation of Operational Programmes. The actual implementation process is hindered by the complexity of the system and barriers at the national level arising, for example, from legislation. Evaluation studies have repeatedly highlighted these deficiencies and others. For the next programming period, the implementation structures and processes will be set up in a considerably simpler and more functional manner.

11.A Focus of Cohesion Policy in the Czech Republic

As regards the set-up of the cohesion policy programmes and rules in the Czech Republic, the description above indicates that these should conform to the substantive focus of the International Competitiveness Strategy and contribute to the achievement of its objectives. In the 2014+ period, cohesion policy in the Czech Republic should:

- Concentrate interventions on economic growth, with the aim of making significant progress towards the convergence of the national value of GDP per capita and the EU average, along with a substantial increase in GDP per capita at the regional level. An integral part of this should consist of interventions improving social conditions in connection with the growth of competitiveness.
- Support interventions aimed at the creation and transformation of the institutional conditions for higher economic growth and the growth of competitiveness.
- Prepare selective interventions with a narrower focus compared to the current status, while at the same time retaining the flexibility to reflect the development needs of the Czech Republic.
- Simplify the management of interventions and introduce new tools: (i) to reduce the number of Operational Programmes and to simplify their internal structure; (ii) to increase the importance of non-subsidy support instruments, make greater use of financial instruments, and require the return of funds wherever possible; (iii) to increase the level of co-participation for some types of support; (iv) to place greater emphasis on the achievement of results and the alignment of support with the objectives of competitiveness; (v) to strengthen synergy among interventions, particularly in territorial

terms; and (vi) to strengthen the role of central coordination, with an emphasis on ensuring uniform rules and procedures and the greatest possible digitisation of the administrative process.

In the negotiations, the Czech Republic should strive to retain the high overall national allocation (the intensity of support), to maintain the seven-year programming period, and to retain unchanged the method for calculating the allocation of cohesion policy funding to the individual states. At the same time, particular financial instruments or areas should not be detached from cohesion policy, as it provides an integrated approach to addressing problems in a given territory.

11.B International Comparison

Currently, the allocation of the Czech Republic per capita is among the highest in the EU. Romania is larger and poorer, but its allocation is more than a quarter less than that of the Czech Republic (mainly due to capping). Hungary is of a comparable size, but poorer, and yet it also has a lower allocation. In the current programming period, the bulk of funds (more than 55% of the cohesion policy allocation) has been allocated to the 10 new countries of Central and Eastern Europe (which have only around a 12% share in the EU's GDP). The substantive priorities of the Czech Republic are focused, probably to the greatest degree in the entire EU, on "hard" types of investment projects, and "soft" projects account for less than 20% of the total allocation. In the Czech Republic, interventions predominantly take the form of grants, and financial instruments are hardly used, in contrast to the advanced countries of the EU, which make much greater use of "soft" instruments, especially in the field of business support.

11.C Challenges of Cohesion Policy

The Next Multiannual EU Financial Framework (Financial Perspective)

The current European Commission Communication on the EU budget review (October 2010) indicated the possibility of shifting the weight of spending towards support for the objectives of Europe 2020. This could mean a reduction in the weight of spending on agriculture and an increase in the weight of spending for promoting economic growth, including spending on cohesion policy. Such a shift would be good for the Czech Republic, and it should make efforts for it to be implemented. At the same time, it is in the interests of the Czech Republic to push for the ratio of the EU budget to EU GDP to be kept at least at the level of 1%.

Links to Europe 2020

To a large extent, Europe 2020 is to act as a practical platform for cohesion policy after 2013. The content of Europe 2020 is to a very great degree consistent with the content of the ICS, although some regional needs do not entirely correspond with the content of Europe 2020, as they require convergence priorities that are not adequately stressed by Europe 2020.

Development and Investment Partnership Contract

The purpose of the Development and Investment Partnership Contract (the "Contract") is to strengthen the mutual commitment between a Member State and the European Commission in achieving and implementing set objectives, including an agreement on the methodology for measuring progress. In addition to incentive mechanisms, the enforcement of the fulfilment of

such objectives under the threat of sanctions is also being considered. The Contract could assist in the fulfilment of the ICS, provided that the content of the set objectives is consistent with the content of the ICS and provided that they can realistically be achieved.

Conditionalities

The motive for the introduction of conditionalities is entirely reasonable and desirable - it is connected with increasing the orientation of cohesion policy towards results and the potential to punish chronic offenders whose long-term behaviour lacks economic discipline and is unsustainable, and to make their utilisation of funding under the cohesion policy contingent upon their rectifying this situation; however, an excessive number of conditionalities and their linkage to thematic sub-priorities can make the whole system opaque and too administratively demanding.

Integration of Interventions; Place-based Approach

The purpose of this approach is to increase the local and regional consistency of cohesion policy interventions provided on the basis of the simultaneous release of funds from multiple sources of funding. This consistency enables better use to be made of the effects of these interventions, by realising the synergies which are identified among the various projects.

Thematic Concentration

Compared to the present, the priority areas supported from cohesion policy sources are to be significantly reduced, mainly to the priorities of Europe 2020; however, in the context of this undoubtedly desirable trend, it will also be worthwhile to negotiate sufficient space to enable a flexible choice of those thematic priorities that reflect the actual level of necessity for the Czech Republic as a whole and its regions.

Results-oriented Approach

The key common denominator here is the priority orientation of the instruments of cohesion policy on the objectives of the International Competitiveness Strategy and their subordination to these objectives. This is connected with the effort to ensure that cohesion policy interventions achieve a greater degree of efficiency and effectiveness.

Innovative Financial Engineering Instruments

Further to the requirement to increase the efficient and responsible spending of cohesion policy funds and their recovery in the next programming period, there is to be a significant expansion of the use of recoverable financial instruments, based, for example, on the principle of initiatives such as JESSICA, JEREMIE, or JASMINE.

Simplification of the Management of Interventions

The simplification of the management of structural funds interventions is primarily directed towards simplifying and unifying the process from the perspective of the beneficiaries and users of the system, reducing surplus requirements to enable a genuine simplification, and revising the legislation focused on national requirements and the conditions for the beneficiaries and managing authorities of Operational Programmes.

Implementation Structure

It is also clear that the implementation structure must undergo a significant simplification, as is stated in the Declaration of the Government of the Czech Republic of August 2010. The desired result of simplifying the implementation structure should be to overcome the current considerable fragmentation and lack of consistency and coordination for projects aimed at promoting competitiveness and cohesion. The implementation structure should be set up with clear roles and defined powers, competencies, and responsibilities for the various actors.

Direct Community Grants

At present, direct Community grants managed directly by the Commission are still substantially neglected in the Czech Republic compared with the use of cohesion policy instruments, despite the fact that more than 10% of the EU budget (i.e., more than 100 billion EUR) is allocated to them across the whole EU. Many of them are aimed directly at promoting competitiveness, and so greater use should be made of them in the Czech Republic in the future.

Conclusion: Preparing the Czech Republic for the Future

The present International Competitiveness Strategy sets out key initiatives to prepare the Czech Republic for the future. There are more than forty initiatives, elaborated in detail in specific measures, which together constitute a comprehensive set of reforms relating to institutions, infrastructure, public finances, education, the labour market, and other matters. The implementation of these initiatives should create attractive conditions for creative business, innovation, and an improved standard of living.

The Czech Republic is a small¹⁴, open¹⁵ economy with its own currency, a freely floating exchange rate, and long-term growth in its exports and imports of goods and services, but considerable volatility in its volume and balance of trade. Nonetheless, the country's growth and development is not solely dependent on exports alone, and their direct (cash) impacts on the internal economy are limited.

A key mechanism for the implementation of the Strategy consists of setting up an appropriate mechanism for cooperation among the ministries involved. To this end, the implementation of the various initiatives of the Strategy will be regularly discussed by the Government Council for Competitiveness and the Information Society. At six-monthly intervals, the Minister of Industry and Trade will inform the Government of the Czech Republic about the developments in the main areas of competitiveness.

The implementation strategy will include transparent publishing of the benchmarks for price competitiveness and non-price competitiveness and comparative advantages in general. The publication of this data will create a motivational environment and is vital for an open economy with its own currency and a freely floating exchange rate. In the event of the weakening of the currency or the maintenance of the growth of labour costs in line with productivity, this could help domestic companies to increase their global market share, but at the same time it would also influence the attractiveness of the country from the perspective of locating production and thereby promote economic growth.

The set of benchmarks for price competitiveness will include:

The real exchange rate - the nominal rate deflated by the quotient of the domestic and foreign price levels expressed in terms of the unit labour cost index, the consumer price index, or the

¹⁴ Due to its small size, the Czech Republic cannot exert influence on its foreign trading partners, and it is forced to accept the rules of the existing economic system.

¹⁵ An open economy is an economy engaged in foreign economic relations. As a result, part of its domestic production is exported and consumed abroad, and, conversely, part of its domestic income is spent on purchasing goods imported from abroad (the four-sector model - households, business, government, and foreign). (Hembera, 2005)

industrial producer price index. A decline in the real exchange rate implies a real weakening/depreciation (and a growth in price competitiveness), while, conversely, growth in the real exchange rate means a real strengthening/appreciation (and a decline in price competitiveness). From the perspective of price competitiveness, it is more important than the nominal rate.

Unit labour costs - the ratio of average labour costs to labour productivity resulting from added value. The indicator expresses the dynamics of cost pressures from the perspective of labour in relation to performance. A reduction in the dynamics of the indicator means labour productivity is ahead of the growth of costs. It is one of the main indicators of competitiveness.

Labour productivity per hour of work - the development of the share of value added per hour worked. This is based on the same source of data as the unit labour costs indicator - they are interlinked and are compatible. Hourly labour productivity expresses performance more exactly than the frequently used productivity per worker.

Market share of the Czech Republic in global trade - the development of the indicator shows whether the Czech Republic is gaining or losing market share. It is based on WTO annual data on foreign trade, and for the purpose of comparison the development of the share for the EU 27 is also provided.

Terms of trade - the ratio of the prices of exported and imported goods. It is based on data from the Czech Statistical Office and expresses the advantage (disadvantage) of the Czech Republic's foreign trade for generating income. Negative developments in the terms of trade do not necessarily mean a deterioration if labour productivity is growing.

New orders in industry from abroad - the value of ordered industrial products and work which producers have contractually confirmed, regardless of the time of the commencement of the work after such orders were made. This also includes the value of production for an already established customer, even if a written agreement has not been concluded. The volume of the contracts omits the value of goods purchased for resale without processing.

Total factor productivity - this represents the qualitative component of growth that does not result from the growth of the overall inputs. Provided that all the inputs are taken into account, total factor productivity is a measure of the competitiveness of the economy.

In addition to determining the set of regularly published price competitiveness indicators, it will also be necessary to monitor other non-price comparative advantages. The factors involved in non-price competitiveness are tracked by indicators such as the Global Competitiveness Index¹⁶ published each year by the World Economic Forum, whose structure is followed to a considerable extent by the measures proposed in the strategy.

¹⁶ e.g., according to the World Economic Forum
http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf

The preparation and approval of a comprehensive strategy for international competitiveness represents only a necessary condition and the first step of a long and complex process. Precise specification of the problems is important, but will not in itself resolve them. The crucial phase will be the next one, the phase involving implementation and putting the measures into effect. This will not be possible without an integrated and coordinated approach by all the ministries, and the consistent implementation of the approved initiatives. Only then will the Czech Republic be able to hold its own amidst ever intensifying global competition and in a rapidly changing world.