3.3 Czech Republic

Labour productivity per hour worked (EU-27=100; 2013)
Labour productivity per person employed in manufacturing (1000 PPS; 2013)
Total exports as a % of GDP (2013)
Knowledge-intensive exports (% of total exports; 2012)
Exports of environmental goods as % of all exports of goods (2013)
Innovation Union Scoreboard (2013)
R&D performed by businesses (% of GDP; 2012)
Non-financial high-growth enterprises as % of all enterprises (2012)
Manufacturing GVA as % of total GVA (2013)
SME Access to Finance Index (SMAF; 2012)
Year-on-year growth of loans to non-financial corporations (%; Q1 2014)
Investment in equipment as % of GDP (2011-13)
Employment in knowledge-intensive activities (manufacturing and services) as % of total employment (2012)
% of employees in manufacturing with high educational attainment (2013)
Tertiary graduates in mathematics, science and technology per 1000 of population aged 20-29 (2012)
Energy intensity in industry and the energy sector (kg oil eq. / euro GVA; reference year 2005; 2012)
CO2 intensity in industry and the energy sector (kg CO2 / euro GVA; reference year 2005; 2012)
Electricity prices for medium-sized enterprises excluding VAT (euro per kWh; 2nd half of 2013)
OECD indicators of product market regulation / services (2013)
Trade integration in the single market (2013)
Satisfaction with quality of infrastructure (rail, road, port and airport) (1=underdeveloped / 7=extensive and efficient by int'l standards; 2012-13)
% of broadband lines with speed ≥ 30 Mbps (2014)
Time required to start a business (days; 2013)
Number of hours needed to comply with tax return rules across the EU (2013)
Legal and regulatory framework (0= neg. / 10=pos.; 2014)
Business environment score (1= best and 0 = worst; 2012-13)

Note: Early data for % of broadband lines with speed ≥ 30 Mbps refer to 2011.
3.3.1 Introduction and performance

The Czech economy is slowly coming out of a period of negative growth. The manufacturing sector is still one of the most important sectors in the economy, representing 24.7% of value added in 2012. In fact, the manufacturing sector’s share increased during the crisis. (1) Labour productivity per hour worked in 2012 declined when compared to 2008 but labour productivity per person employed in manufacturing improved somewhat during the same period. (1)

Exports as a percentage of GDP stood at 78.6% in 2013, an increase compared to the 64.4% of GDP recorded in 2008. Even though R&D carried out by business increased to 1.01% of GDP in 2012, innovation in the Czech Republic remained below the EU average according to the innovation union scoreboard.

3.3.2 Access to finance and investment

Access to finance

The Czech Republic suffers from a lack of programmes providing early stage equity financing to SMEs. The government’s planned seed and venture capital fund worth EUR 53 million and co-financed by the private sector was due to be operational by the end of 2013. However, the official projects of the seed/venture capital fund have been stalled and will be revisited during the 2014-2020 programming period. In the meantime, the government is looking into possibilities of seed fund realisation. A new law on investment companies and investment funds, (2) in force from 1 January 2014 may encourage more involvement from private investors in funding SMEs in their different stages of development.

Investment

CzechInvest is the main administrative body aiming at attracting FDI. The biggest investments in recent years have been channelled to the automotive and mechanical engineering sectors. The investment incentives act, which was amended in 2012, is thought to have had a positive effect in attracting FDI, notably due to the extension of a reduced corporate tax rate to a 10 year period from the five year one applied previously. However, while gross fixed capital formation in real terms increased slowly in 2010 and 2011, it decreased by 4.5% in 2012 and 3.5% in 2013. It is expected to rebound again in 2014 and 2015. (3)

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(1) Eurostat manufacturing production indexes
(2) No 204/2013 Coll.
(3) Eurostat and 2014 Spring European Economic Forecasts
3.3.3 Innovation and skills

Innovation

The Czech innovation system suffers from certain weaknesses such as the weak link between business and academia and the need to improve the relevance of its science and technology output.

The Czech economy is a dual economy, made up of a number of foreign affiliates, who carry out most business R&D, and a large number of domestic SMEs. Increasing the level of innovation carried out by local SMEs remains a challenge. The Czech Republic is currently classified as a moderate innovator,\(^1\) whose innovation performance is below the EU average. However, within this group, it is one of the top performers with the rate of innovation growth being close to the EU average (measuring 1.7%).

Public sector funding for R&D decreased between 2008 and 2012, measuring 36.8 % of gross domestic expenditure on R&D in 2012.\(^2\) Nonetheless, it still remains above the EU average. Business expenditure as a source of funding of R&D also declined over the same period, totalling 36.4 % of gross domestic expenditure on R&D in 2012. However, business related R&D expenditure as a percentage of GDP has been steadily increasing from 2008 to 2012 increasing from 0.76 % in 2008 to 1.01 % in 2012. Still, this has not yet translated into a visible improvement of the quality and relevance of scientific output in the form of the patents numbers and worldwide publications.\(^3\)

There are a number of R&D programmes which continue to be implemented by the Czech Technology Agency. Amongst them is the new Epsilon programme, launched in December 2013, which aims to strengthen the competitiveness of Czech enterprises by funding applied research and experimental development projects with a high potential for application in new products, production processes and services. Competence centres continue to play an important role in encouraging partnerships between public and private sectors in R&D. These are being reinforced through a second call for competence centres in which several new centres have been chosen for support. There has also been an extension of the R&D tax incentive which will allow research activities to be outsourced by businesses to public research institutions as from 1 January 2014. Also, an international co-operation strategy on R&D is to be finalised by the end of 2014 with the aim of enhancing Czech participation in international R&D organisations and improving networking of R&D programmes in the EU and third countries. The government is currently preparing a new system of evaluation of results of research organisations and their funding with its implementation foreseen for 2016. It is also preparing a new methodology to evaluate R&D programmes but the preparation is rather slow.

Better links between industry and universities, good use of the relevant operational programmes for structural funds and ensuring the commercialisation of R&D into economic activity are the main challenges for the Czech Republic.

Skills gaps

The quality of compulsory and tertiary education is currently an issue. While the share of the population aged 30-34 having attained tertiary education level is increasing, it is still significantly below the EU average in 2013, measuring 26.7 % compared to the EU average of 36.8 % in 2013. International surveys also point to concerns about the labour market relevance of tertiary education. There has been a sharp increase in the number of students studying at tertiary level in recent years which, combined with weak and formalistic accreditation rules, has resulted in a surge in varying quality tertiary education institutions and declining quality of tertiary students. Skills shortages, particularly in the manufacturing sector, are also an issue as students tend to follow non-technical subjects. In fact, the Czech Republic has the second highest level of skills and labour shortages in European manufacturing companies.\(^4\)

From 1 January 2014, tax credits for companies wanting to co-operate with training institutions

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\(^2\) Eurostat GERD

\(^3\) Only 5.6% of Czech scientific publications score amongst the 10% most cited publications worldwide (EU average being 11%); number of patents produced remains low by international standards, reaching only 0.84 patents per billion purchasing power standard (EU average 1.98) Commission Staff working document assessing 2014 NRP and Convergence Programme SWD(2014) 404

\(^4\) ECS and Eurostat EUROIND database, 2009
became part of the Income Tax Act. The public employment services are also taking measures to train the unemployed according to the current skill shortages. Given these shortages, further measures to promote training amongst young people in relevant fields and in view of the needs of the labour market would be beneficial.

3.3.4 Energy, raw materials and sustainability

The energy intensity of the Czech Republic has been declining over recent years but still remains high when compared to other EU countries, even if corrected for the high proportion of industries with high energy intensity. Surveys show that over half of Czech firms consider electricity infrastructure, pricing and provision as a major business constraint. However, electricity prices for medium-sized enterprises have declined somewhat from 2008 to 2012.

The Czech Republic’s attempts to improve energy efficiency consist largely of projects under the EU’s operational programmes. For the 2007-2013 period these funds have been used to improve energy efficiency through upgrading existing energy production facilities, reconstruction of distribution facilities for electricity and heat, and improving the thermal properties of buildings, and energy savings in industrial processes. After a significant delay, in 2013 the Czech Republic notified to the Commission its indicative national energy target. In May 2014, the third National Energy Efficiency Action Plan was submitted to the Commission for assessment.

3.3.5 Access to markets, infrastructure and services

Internal market

The vast majority of trade is carried out in the EU market. The EU accounted for 73% of all trade in 2012 with the majority of this being in the euro area. Exports to the EU accounted for 80% in 2013 while imports from the EU market were 68% in 2013. The share of high-tech exports as a percentage of total exports represented 16.2% for the same period. Czech exports tend to be used as an intermediate input in the German supply chain.

Internationalisation

The Czech Republic is a very open economy. Exports of goods and services accounted for 78.6% of GDP in 2013. Exports as a percentage of GDP were high in 2010 and 2011 measuring 66.6% and 72.9%, respectively. A hike in the export to GDP ratio was recorded in 2012 (78%) and 2013 (78.6%), and a further increase in the ratio can be expected again in 2014 as exports are expected to pick up on the back of the weakened koruna and a gradual acceleration in economic growth of the country’s main trading partners.

The Czech Export Strategy 2012-2020 is the underlying framework guiding export policy. One of the main goals is to diversity exports. Twelve priority countries were identified for the first five years of implementation of the strategy, amongst them Brazil, China and India.

The Ministry of Industry and Trade (MIT), together with the CzechTrade agency, provide support services to Czech exporters. The main change in the structure of services offered as compared to 2012 is that these services are now divided into three main packages. There is a basic package designed especially for first time exporters; a business package for companies that are already exporting; and a plus package which provides services of a long-term nature and which puts exports in touch with representatives of foreign networks of the MIT. There was significant increase in enquiries about these services in 2013. The number of SMEs exporting outside the EU between 2009 and 2011 has increased.

Business services and network industries

The Czech Republic has one of the highest levels of regulated professions in the EU and the regulation of professional services is stricter than the EU average. The Czech authorities announced a reform of the regulatory framework to reduce the number of regulated professions in 2012. Since the reform was

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(4) OCED Economic Survey Czech Republic 2014, p69
(5) Eurostat
(10) Eurostat
launched in 2012, the process has been sluggish with only a limited number of professions being opened.

Competition in the electricity market is also constrained as it tends to be dominated by incumbents who hold licences for electricity distribution and electricity trading. With respect to the gas market, since the opening of the market in 2007, there have been a significant number of gas suppliers and importers competing in the market.

Infrastructure

Infrastructure in the Czech Republic suffers from a number of challenges. This includes a relatively underdeveloped transport infrastructure and insufficient investment in maintenance and reconstruction of the transport network. The railways tend to suffer from a lack of competition due to regulation, operational barriers and limited public tendering of public service contracts. Moreover, national public funding on transport infrastructure has been decreasing in recent years with EU funding being the main source of funding for transport infrastructure. A strategic document, the Transport Policy for 2014-2020, was adopted in June 2013 along the Transport Sector Strategies that sets the medium and long term vision for transport development, also in regard to use of funds from operational programmes.

3.3.6 Public administration and business environment

Entrepreneurship and the SBA

The business environment in the Czech Republic faces a number of challenges. According to international surveys, some of the main challenges are obtaining construction permits, protecting investors and enforcing contracts and improving ties between the business sector and academia.

The over-riding International Competitiveness Strategy had plans to improve competitiveness. However, in December 2013, the government reviewed this strategy following poor results in competitiveness indicators. This revised strategy will now focus on tackling three main issues, namely infrastructure, institutions and innovation.

With respect to the Small Business Act (SBA), the Czech Republic performs more or less on par with the

Note: Values have been scaled so that the best observation (Member State) gets 1 and the worst gets 0.
Source: World Bank Doing business; Intrum Justitia; OECD; World Economic Forum; European Commission
EU average in the areas of entrepreneurship, access to finance, single market and skills/innovation but considerably underperforms in the areas of second chance, think small first, responsive administration, state aid and public procurement and internationalisation. (12) SMEs account for the vast majority of businesses in the Czech Republic, representing approximately 99.8% of all companies corresponding to 68.5% of employees and 54.9% of value added. Given their significance, a specific SME strategy for 2014 and beyond has been adopted, which will also provide guidance for the use of European Structural funds for the 2014-2020 period.

**Administrative modernisation**

The Czech Republic suffers from a number of problems in relation to public administration, in particular inefficiency and issues relating to corruption are still of concern. In fact, Czech Republic has received Country Specific Recommendations on this over the past years. Moreover, the Czech Republic is still one of the worst performers in relation to diversion of public funds and irregular payments and bribes (13).

There has been limited progress on the implementation of the anti-corruption strategy for 2013-2014 and the Public Servants Act has not yet been adopted. With respect to the former, the strategy itself provides a detailed assessment of corruption and covers a wide range of policies and measures but in a rather fragmented way without a clear longer term vision. With respect to the latter, a draft law is currently under discussion in the parliament.

Within the framework of the European Structural Funds programming period 2014-2020, the government is working on a strategy on public administration. This will include a framework for the development of public administration beyond 2014 and measures in the area of e-government. The former aims at increasing the efficiency of public administration and transparency in the funding while the latter aims at broadening the e-government usage. In particular, it aims to have 85% of all submissions to government done in electronic form by 2020. If implemented effectively, this will be particularly beneficial given that currently the Czech Republic ranks below the EU average, on user-centricity of e-government services and transparency of e-government services. (14)

**Reducing administrative burden**

According to business surveys, some of the main problems encountered by businesses relate to protecting investors, lengthy and costly procedures in paying taxes and, enforcing contracts. The World Economic Forum’s 2013-2014 Global Competitiveness Report highlights corruption and inefficient government bureaucracy as the two main problematic factors for doing business. The EU Anti-Corruption Report 2014 also shows that amongst the EU Member States, the Czech Republic has the highest perception of corruption in the business environment and problems of patronage and nepotism when doing business, at 71% and 69%, respectively. The OECD Product Market Regulation database also highlights the excessive complexity of regulatory procedures and the above average administrative burden imposed on start-ups. On a positive note, a recent act on public registers of legal and natural persons will enable faster registration of entities into the commercial registry and other related registries while government is preparing a recodification of civil procedural law which aims at significantly speeding up court proceedings. In addition, a new Act on Commercial Corporations, in force since January 2014, abolished the minimum capital requirements for a limited liability company. An amendment to the trade licensing act will also abolish the necessity for businesses to submit documents repeatedly. Moreover, in 2013 an environmental audit project was set up with the objective of reducing unjustified administrative and financial burden of entities in relation to environmental legislation.

Frequent changes in legislation are another cause of concern for businesses. A pilot project was undertaken in three ministries concerning common commencement dates whereby legislation affecting businesses would only be enacted on two dates, (1 January and 1 July), in an effort to decrease uncertainty for businesses. However, the project will now only be extended across other ministries on a voluntary basis.

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(12) Small Business Act Fact Sheet Czech Republic 2013

Facilitating tax payments

Tax rates and regulations are two main concerns for doing business (15) while surveys point to the significant amount of time it takes for businesses to comply with tax returns. (16) It is estimated that it takes 413 hours to comply with taxes as compared to the OECD average of 173 hours. While this has been reduced over recent years, and the electronic system for submitting tax returns has improved, it is still one of the highest in the EU. The establishment of a single tax collection point to centralise the procedural aspect of paying taxes for taxpayers, originally foreseen for 2015 was abolished. Its introduction may have reduced the administrative burden for businesses. Simplifying the tax system would help to improve the business environment.

3.3.7 Conclusions

The Czech economy is coming out of a period of recession with an export-led recovery. It continues to have a strong manufacturing sector compared to other EU Member States. However, there are key challenges, including reducing administrative burdens on business, facilitating more user-friendly tax compliance, providing a less bureaucratic public administration in which to operate, improving infrastructure, improving links between industry and universities to ensure commercialisation of R&D, improving energy efficiency and matching the skills of the workforce with the needs of businesses.