



Brussels, 20.9.2013
SWD(2013) 346 final

Volume 2/4

COMMISSION STAFF WORKING DOCUMENT

**Member States Competitiveness Performance and Implementation of EU Industrial
Policy**

4 Country chapters

4.1. Belgium

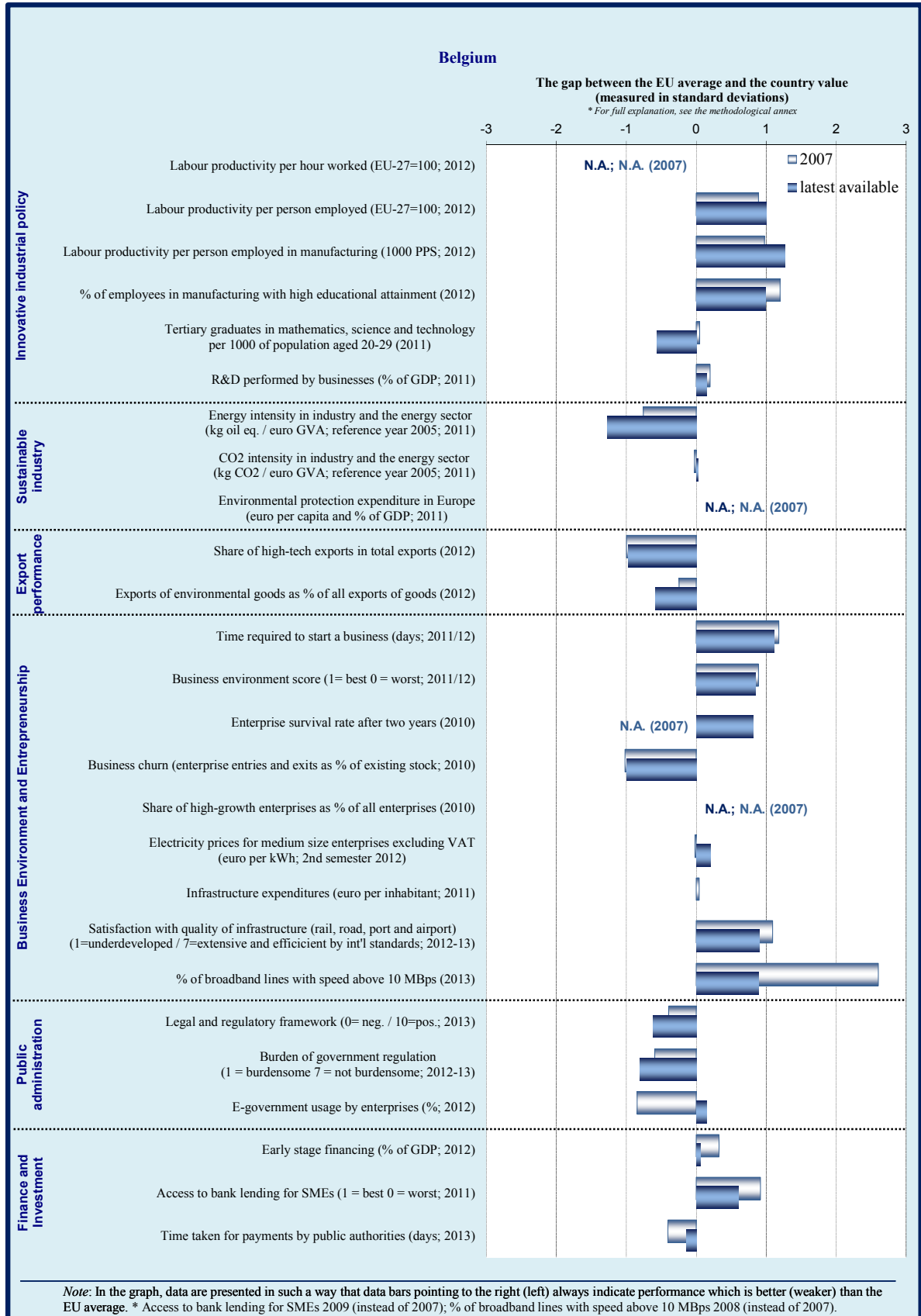
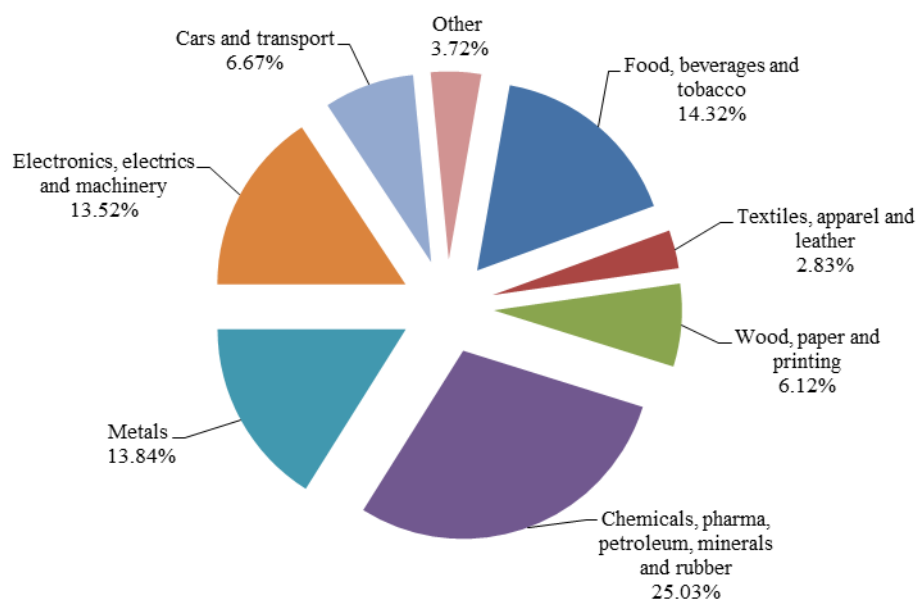


Figure 4.1: Manufacturing sectors – Belgium (2010)



Note: No data available for sectors C12 (tobacco products), C15 (leather and related products), C21 (manufacture of basic pharmaceutical products and pharmaceutical preparations)

Source: Eurostat

4.1.1 Introduction

In relation to manufacturing industry by individual sector, Belgium is specialised in capital-intensive industries, such as fabricated and base metals, chemicals, food and electronic equipment. At the more aggregated sector level, it is specialised in sectors featuring medium-high educational and innovation intensity, such as chemicals, petroleum industries, and textiles. Overall, in 2012, manufacturing produced 13.3% of total value added, as compared with the EU average of 15.3%. Belgium is more service-oriented than the average EU economy, as services represent over 77% of value added (EU average: 73%) and contribute over 75% of employment (EU average: 69.1%).

While, in absolute terms, Belgium still has among the highest productivity levels in the EU, productivity growth has been weak in recent years. In 2011, for instance, labour productivity declined by 1.3 %, while the euro area as a whole increased productivity by 1.2 %. However, the average number of hours worked per person in Belgium was higher than the EU average.

Given Belgium's low productivity growth, emphasis should be placed on factors promoting non-cost competitiveness such as infrastructure,

innovation and human capital.¹ In terms of infrastructure, Belgium would benefit greatly from effective measures to reduce road congestion which is a considerable burden on the Belgian economy. With regard to innovation, the key challenge for Belgium is to broaden its innovation base and to strive for a broader distribution of business R&D expenditure across a wider range of sectors.

Belgium has already a relatively qualified workforce and its 2020 target for people aged 30-34 completing higher education is 47 %, which would be a 3.1 percentage point increase compared to 2012. Nevertheless, the number of graduates in science, mathematics, engineering and technology is lower than the EU average and labour market mismatch hampers growth. Measures have been taken at federal, regional and community levels to support professional training and increase linkages between the education system and the business sector.

¹ SWD (2013) 351.

4.1.2 Innovation, skills and sustainability

Innovation

According to the Innovation Union Scoreboard 2013, Belgium is an ‘innovation follower’ with a performance above the EU average. Its relative strengths are in the indicator categories ‘open, excellent and attractive research systems’, ‘linkages and entrepreneurship’ and ‘innovators’. Relative weaknesses are in ‘finance and support’ and ‘intellectual assets’.

The business enterprise sector, the main contributor to R&D, reduced its investment from 1.51 % of GDP in 2001 to 1.37 % in 2011, although this is still above the EU average. This decrease was mainly due to three factors: the economy becoming more service-oriented;² a reduction in R&D activities in the telecommunications and chemicals (excluding pharmaceuticals) sectors; and the shift of R&D activities to other countries. Services are dominant and are growing at a faster rate than manufacturing, which would justify specific measures to improve the knowledge intensity of the service sector.³ Despite a slightly positive trend since 2005,⁴ Belgium is unlikely to reach its 2020 R&D expenditure target of 3 % of GDP. Business R&D is highly concentrated in only a few sectors, and in a small number of large companies and multinationals.

A challenge for Belgium is how to speed up the transition towards a more knowledge-intensive and innovation-based economy by fully exploiting the strengths of its research and innovation systems, including by translating R&D results into innovative products and services. This requires further improving the support to clusters, and better conditions for the growth of innovative firms. Moreover, despite the availability of highly-qualified human capital, there appears to be a mismatch between labour demand and supply in some sectors. Shortages of skilled professionals, particularly in sciences and engineering, could

become a major barrier to improving the innovation performance of the Belgian economy.

The authorities have acknowledged that innovation is essential for productivity growth and for improving the competitiveness of the economy. This is reflected in budgetary decisions taken by all political entities in recent years.⁵ Federal level measures include a payroll tax incentive to decrease R&D personnel costs and a tax credit to decrease the costs of R&D investment, and more flexible conditions for tax exemptions on royalty income from patents.⁶

The Belgian regions have developed strategic innovation approaches covering all major aspects of a comprehensive innovation strategy. In the Walloon region, the focus has been on supporting a limited number of competitiveness poles (a cluster approach); in 2012, EUR 40 million was allocated to R&D projects on competitiveness clusters under the ‘*Plan Marshall 2.Vert*’.⁷ New approaches have been developed under the ‘Creative Wallonia’ programme to support market take-up of new products and services (whether technology-based or not), and the promotion of cultural and creative industries. In the Flemish Region, a main driver of research and innovation policy is to address major economic and societal challenges through innovation. For instance, five living-labs platforms were set up to facilitate innovation in the area of electric vehicles. In the Brussels Capital region, an updated innovation strategy, including a ‘smart specialisation’ approach, was launched in 2012. The region is intending in 2013 to implement innovation vouchers to support financing for innovation. The communities and the regions continue to support excellence in science and they have increased participation in EU cooperation initiatives such as joint programming or the European Strategy Forum on Research Infrastructures. Initiatives are developed to foster better coordination of the efforts made by the communities, regions and federal government on R&D, and technological innovation.

² From 2000 to 2009, the services share under business expenditure increased from 26 % to 33 %.

³ For details see “Research and Innovation performance in EU Member States and Associated Countries, Innovation Union progress at country level, 2013”.

⁴ In the period 2005 to 2012, private expenditure on research and development (R&D) increased from 1.24 % to 1.37 % of GDP. In the same period, public R&D expenditure increased from 0.56 % to 0.65 % of GDP.

⁵ Public R&D budgets increased from EUR 2.29 billion in 2009 to EUR 2.47 billion in 2012.

⁶ The existence of a research centre constituting a separate activity branch is no longer a condition to exempt 80 % of royalty income from patents.

⁷ *Plan Marshall 2.Vert* is an action plan to take up the economic, social and environmental challenges facing Wallonia, with a budget of EUR 2.75 billion for the period 2009-14.

Skills

Although participation in higher education is high, and while Belgium pursues ambitious targets in this field, there are skills mismatches in terms of levels and relevance to labour needs, which makes it more difficult to tackle unemployment and support growth. There are skills shortages for technical and future-oriented occupations at all levels of education. The number of graduates in science, mathematics, engineering and technology is lower than the EU average, as in 2010, there were 12.2 graduates per 1000 in the age group 20-29 compared to 15.2 in the EU.

There are concerns on the level of entrepreneurship. According to the latest Eurobarometer⁸ survey, the proportion of people who would like to be self-employed is lower than the EU average.⁹ Entrepreneurship readiness has been an issue for some time, and policies will have to be maintained to achieve a shift in attitudes, especially among young potential entrepreneurs. Although there is a need to increase occupational and interregional mobility, adult participation in lifelong learning is below the EU average (6.6 % vs. 9 % in 2012), notably for older and low-skilled¹⁰ workers, and has declined recently.

In Flanders, a project to reform secondary education and vocational training was initiated in 2010. An agreement on an orientation note aiming at a profound reform of secondary education was reached in 2013 with the final decision to be taken by 2016. The francophone community has also taken measures to reform its vocational education, with a draft decree on higher education modernisation currently under debate.

Sustainability

The high energy use of industry and the low energy efficiency performance of households make the economy highly energy-intensive, although some progress is being made in reaching the 2020 targets. The target of increasing the share of renewable

energy in energy consumption is likely to be met but probably not for greenhouse gas emissions in sectors like buildings, transport and farming. Road transport and energy are the largest sources of greenhouse gases.

The high energy use of industry is explained by the importance of energy-intensive metals and chemicals production. These two activities represent one-fifth of all industrial value added¹¹ and consume almost two-thirds of all final energy used in industry.

There is a series of measures on energy efficiency that cover most sectors, with a particular focus on the refurbishment of existing buildings. The economy's emissions intensity is high in some significant sectors (such as heavy industry or residential heating), but this is mitigated overall by the importance of nuclear energy production. In particular, emissions from road transport have increased over the past two decades, whereas most other sectors have cut emissions. In 2010, road transport produced 17.7% of all greenhouse gas emissions, indicating that it should be a central part of future emission reduction policies.

4.1.3 Export performance

Exports of goods and services have been growing at a lower rate than exports from the euro area (23.9% from 2006 to 2012 compared with 28.02% for the euro area).¹² Exports consist mainly of intermediate goods to the euro area, in particular neighbouring countries. Export specialisation is in low and medium-technology goods, for which price competition is higher and which are easier for other countries to copy or replace. Over the past decade, there has been increasing specialisation in intermediate goods. It should be noted that although the proportion of high-tech exports has increased since 2000, it is still relatively small.

The range of destinations of exports has become more diverse. In 2012, 69%¹³ of exports of goods and services were directed to other EU member States (notably Germany, France and the Netherlands) but the share of exports going to the

⁸ Flash Eurobarometer 354, 2012

⁹ http://ec.europa.eu/public_opinion/flash/fl_354_en.pdf

¹⁰ At 30.4 % this figure is much lower than the EU average of 45 %.

¹¹ Learning participation rate of adults is 7.1 %, older workers 3.9 %, and low-skilled 3.1 % - Eurostat 2011.

¹² 'Greenhouse Gas Emissions and Price Elasticities of Transport Fuel Demand in Belgium', OECD Economics Department Working Paper No 955 p.9.

¹³ L'Institut des Comptes Nationaux (ICN).

L'Institut des Comptes Nationaux (ICN).

largest emerging markets (China, Brazil, Russia, India, Mexico, Indonesia and Turkey) has increased from 4.7% in 2000 to 8.4% in 2011. Exports outside the EU accounted for 28.8% of the total in 2011 and 30.6% in 2012.¹⁴ It is worth noting that Belgian exporters have benefited indirectly from new markets through exports to Germany.

Belgium appears to be losing some share of goods exports — partly as a result of delocalisation of the production of certain goods — but it is performing better in services. The share of goods exports as a proportion of total EU exports has decreased slightly in the past six years.¹⁵ However, the share of services as a proportion of total EU service exports has increased from 4.5% in 2006 to 5.1% in 2011. Services may be partially replacing goods in international trade, but their contribution remains small. Hence, increasing the competitiveness of Belgian goods exports remains a challenge.

4.1.4 Business environment and public administration

Business environment

In general, the business environment is considered to be good. The World Bank ranks the country 33rd out of 185 for doing business. The World Economic Forum views Belgium as one of the 20 most competitive economies in the world. It was also ranked 13th by Bloomberg's *Best Countries for Business* in 2013.

Strengths of the business environment include the short time it takes to start a business, the ease of enforcing contracts and resolving insolvency, although the ease of obtaining business licences differs between regions.¹⁶ However, the picture concerning competition is mixed, as there continue to be operational constraints in the retail sector. Competition could be improved by easing procedures for obtaining authorisations for commercial premises. In general, though, business

operations are characterised by high levels of professional management and sophistication.¹⁷

Infrastructure is well-developed and the country is ranked 21st in the world by the World Economic Forum. The penetration rate of fixed broadband in January 2012 was 32.4% of the population (EU average 27.7%). However, mobile broadband penetration is still among the lowest in the EU, and the rollout of mobile networks is slow, hampered by administrative obstacles.¹⁸

Some indicators, such as the procedures for property registration in Belgium, signal that there are further weaknesses.¹⁹ Belgium has fallen two places in the *Global Competitiveness Report* and is now ranked 17th. There are some concerns regarding government inefficiency and the tax system; the country would benefit from shifting taxes away from labour to less growth-distortive areas such as environmental taxes.²⁰ The macroeconomic environment also suffers from persistent deficit spending and high public debt.

Public administration

According to the World Bank's government effectiveness indicator, Belgium continues to do better than the EU average for overall public administration performance. The perceived quality of public services is considered to be good, and the rule of law prevalent.²¹ There has been some reduction in the administrative burden in the last decade but inefficient government is still listed as one of the three major problems for doing business, and other countries have improved more. The use of tools such as ICT solutions to improve public

¹⁴ l'Institut des Comptes Nationaux (ICN).

¹⁵ From 5.6 % of total EU exports to 5.5 %.

¹⁶ Brussels Capital Region and Wallonia have one-stop-shops while Flanders is lagging behind. Sources: Commission assessment on Belgium's National Reform Programme, SWD(2013) 351; and World Bank — *Doing Business*. Note that information on the time needed to resolve litigious civil and commercial cases for Belgium has not been made available for the EU Justice Scoreboard 2013.

¹⁷ Commission assessment on Belgium's National Reform Programme, SWD(2013) 351; and World Economic Forum, *The Global Competitiveness Report 2012-13*.

¹⁸ Commission assessment on Belgium's National Reform Programme, SWD(2013) 351.

¹⁹ The World Bank's *Doing Business* report ranks Belgium 176th out of 185 for registering property.

²⁰ This was captured by the 2013 country-specific recommendation no 5: "Establish concrete and time-specific proposals for shifting taxes from labour to less growth-distortive tax bases, notably by exploring the potential of environmental taxes, for example on diesel, heating fuels and the taxation of the private use of company cars. Simplify the tax system by reducing tax expenditures in income taxation, increasing VAT efficiency and improving tax compliance by closing existing loopholes." <http://register.consilium.europa.eu/pdf/en/13/st10/st10623-re01.en13.pdf>.

²¹ Government Efficiency Index, World Bank.

administration could be more widespread. Belgium is, however, one of the forerunners in the recent European ‘e-government benchmark’, in particular in back-office automation.

A package has been introduced to modernise public procurement legislation and initiatives have been taken at federal level to simplify investment procedures. Examples include the introduction by the Flemish government of a single permit integrating environmental and urban planning licences, and the implementation of the administrative simplification plan by Wallonia and the French community. Further measures have also been taken to extend the confidence principle — i.e. streamlining administrative procedures by replacing documents with a declaration of honour and the use of internal sources to locate data.

4.1.5 Finance and investment

Small and medium-sized enterprises (SMEs) rely mostly on bank loans for accessing external sources of finance. According to the European Commission’s 2012 Small Business Act (SBA) fact sheet, access to finance is on average better than in the EU. According to the survey, SMEs continue to have greater access to public financial support (including guarantees) than similar firms in other EU countries. Also, the share of loans to SMEs is higher than the EU average. On venture capital, there continues to be strong flow to early-stage investments, running at the level of almost three times the EU average.

The World Bank ranks Belgium 70th of 185 for obtaining credits. In particular, the strength of investors’ legal rights is slightly below the EU average, as is the availability of credit information.

The federal level and the regions have taken measures to stimulate access to finance for SMEs. Examples of measures taken by the federal government include the *Initio* scheme providing loans to small enterprises and aiming to finance the launch of companies. The Brussels Capital region

has developed the *Brussels Regional Investment Company* to offer financial support for firms to start, reorganise or expand in the region. Flanders has provided guarantees through the *Gigarant* programme totalling EUR 203.9 million. The Flemish government has approved a banking sector plan that proposes a number of ideas to bolster the economy and channel funding to the real economy. In 2011, Flanders introduced a consultancy service that gives entrepreneurs the opportunity to present their projects to a panel of financial experts who will advise them on the optimal financing mix for their specific situation. Wallonia offers a variety of financing schemes through its specialised SME financing institutions, including micro-credits. Furthermore, the Walloon government, in partnership with the banking sector, has set up an automatic guarantee scheme (up to 75% of a loan) to a limit of EUR 25 000, with the possibility of additional funding (up to 50%). The measure targets micro-enterprises, the self-employed, artisans and freelance workers.

4.1.6 Conclusions

In many ways, the competitiveness profile of Belgium reflects the average of the northern EU Member States. The good competitive position has been deteriorating in recent years, in particular because exports are mainly composed of low and medium-tech goods, facing international competition from lower-cost countries. The exports are mainly oriented towards the EU market.

The key challenge ahead, therefore, is to regain both cost and non-cost competitiveness, and to speed up the transition towards a more knowledge-intensive economy by increasing and improving the use of innovation, and addressing the skills mismatch. The implementation of burden-reduction initiatives at the federal and regional levels is important to accelerate the simplification and streamlining of procedures.

4.2. Bulgaria

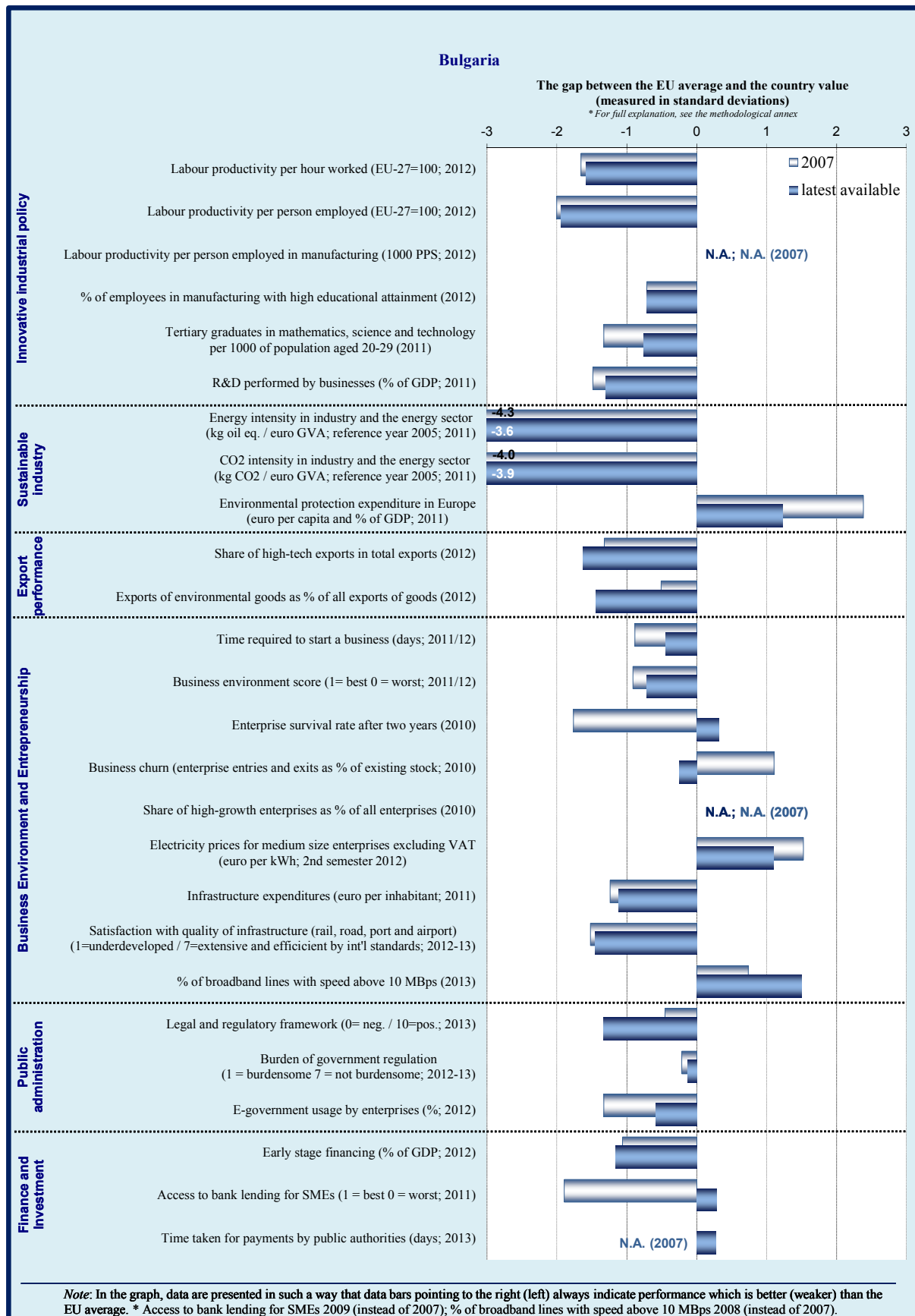
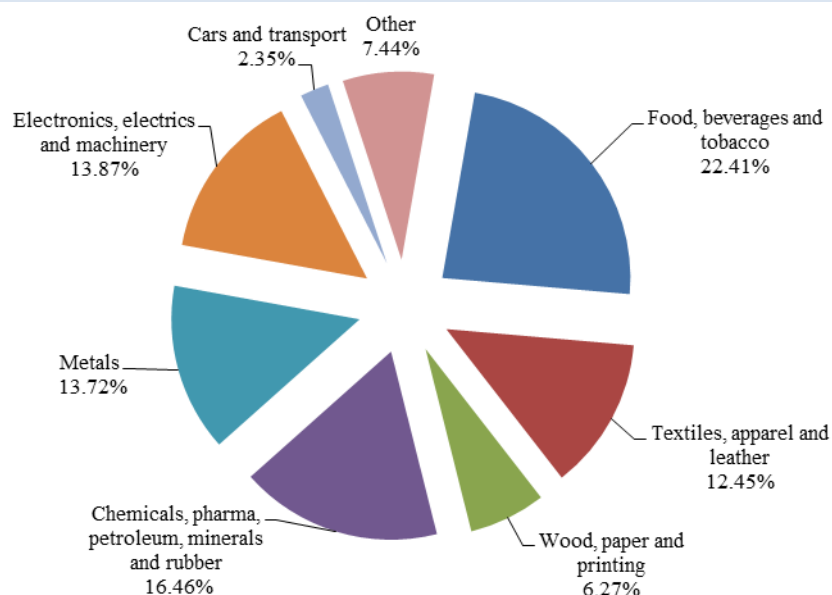


Figure 4.2: Manufacturing sectors – Bulgaria (2010)

Note: No data available for sectors C19 (coke and refined petroleum products) and C21 (manufacture of basic pharmaceutical products and pharmaceutical preparations)

Source: Eurostat

4.2.1 Introduction

Despite relative progress between 2007-11 Bulgaria is still characterised by low productivity and dominance of low-tech and medium-low-tech industries, with food, beverages and tobacco as the biggest sector. The transition from a resource-based to an innovation-based economy is a challenge. However, high- and medium-high-technology firms produce 29% of the total value added and employ 21% of the labour force in manufacturing.

4.2.2 Innovation, skills and sustainability

Innovation

The Innovation Union Scoreboard 2013²² ranks Bulgaria in the 'modest innovators' group. Weaknesses exist in particular in open, excellent and attractive research systems; finance and support; firm investments; and linkages and entrepreneurship. Only 17% of SMEs have introduced marketing or organisational innovation (EU average 39%), and only 21% have introduced a new product or a new process (EU average 34%).²³

Under the Europe 2020 strategy, Bulgaria aims to invest 1.5% of GDP in R&D by 2020, which is an

ambitious target as current R&D intensity is slightly above 0.5%. While R&D investment by business has increased slightly to 0.3% of GDP, some of this is due to a change in accounting practices.

The World Economic Forum ranks Bulgaria 97th out of 144 countries in innovation and sophistication; although in efficiency enhancers it is 59th out of 144 countries.²⁴ Relative strengths in the completion of tertiary education and upper secondary education lay the basis for improvement. Recent policy initiatives include measures to improve competitiveness in science; identifying and promoting projects that would be suitable for commercialisation; and supporting private sector capacity for research and innovation. Further initiatives have been taken to improve the linkages between academia and businesses, but the legislation was delayed by the government's resignation in February 2013 and the subsequent general elections.

A National Innovation Fund was set up in October 2012, and should be up and running by the end of 2013, with the overall objective of promoting research and carrying out feasibility studies on new or significantly improved products or processes.

²² Innovation Union Scoreboard (Apr 2013).

²³ Eurostat (Community Innovation Survey) (2008).

²⁴ Efficiency enhancers comprise higher education and training, the efficiency of goods and labour markets, the status of financial market development, technological readiness and market size.

Two grant schemes to support research and innovation activities by SMEs either in-house or in partnership with R&D organisations were set up in 2011. Seventy-seven grant agreements were signed for research, and 110 start-ups received innovation support in 2012.

Skills

Labour productivity in Bulgaria is low, and the percentage of employees in manufacturing who have completed higher education is below the EU average. To increase competitiveness by enabling specialisation in higher value added sectors, Bulgaria needs to improve the education system and introduce basic business training.

Unemployment varies across the regions, with the national unemployment rate at 12.3%. Youth unemployment has been increasing constantly since 2010, and in the fourth quarter of 2012 reached 28.4%.²⁵ This has to be seen in the context of a structural labour market mismatch: the annual demand for graduates with engineering and technical skills has been estimated at 64 000, against 23 000 available graduates with those skills. At the same time, there are 46 000 graduates in business and economy against a demand of 23 000, and 24 000 humanities graduates with an estimated need of 2000. Investment in education is below EU average at 3% of GDP against 5.6% for the EU. The gap between the supply of graduates and labour market demand worsens structural unemployment and hampers the development of high-value, innovative sectors. Implementation of the reform of higher education, effective governance and sufficient investment would help to promote growth and competitiveness.

Sustainability

The Eco-Innovation Observatory ranks Bulgaria seventeenth in the EU on its eco-innovation scoreboard,²⁶ although only a quarter of SMEs have introduced environmentally friendly innovations or received public support for their resource efficiency measures. A grant scheme is in place to help SMEs to improve the efficiency and productivity of environmentally friendly technologies.

Bulgaria is heavily dependent on a single source of energy and energy system liberalisation and modernisation has not been completed. Energy prices have remained regulated as they are seen to have an impact on economic and political stability. Although a large majority of SMEs have taken resource-efficiency measures, there is room for

improvement, especially in the energy front. Benefiting from very low electricity prices, industry is Bulgaria is the most energy intensive in the EU;²⁷ and the CO₂ intensity is also the highest. Reducing energy intensity should also increase energy independence.

Bulgaria is committed to reaching its goal of renewable energy sources representing 16% of its final energy consumption, and 10% in transport, by 2020. In 2010, the renewables accounted for 13.8%, which exceeded the first interim target of 10.7% set for 2011.²⁸ In the transport sector, renewables accounted for 0.4% in 2011. The law on renewable energy sources was amended in February 2013 to introduce a mandatory share of bio-fuels in the fuel mix used for transport.²⁹

The political developments in January and February 2013, with the resignation of the government and the general elections, were partly prompted by flawed energy sector liberalisation and a resulting rise in the price of electricity. Energy-sector reform and strategic targeting of energy and resource efficiency, along with improvements in household energy intensity, are essential to economic development, and will have beneficial effects on both competitiveness and political stability.

The energy efficiency law requires certificates for all buildings, industrial, public or private. An amendment reduced the minimum size from 1000 square metres to 500 square metres as from March 2013.³⁰

4.2.3 Export performance

In 2012, total exports of goods and services increased to 68.8% of GDP from 47.5% in 2009, and were 163% of the 2006 level, indicating a recovery after a fall of over 20% between 2008 and 2009. Extra-EU exports rose by 40% between 2010 and 2012 while intra-EU exports rose by 28%, but the EU is still the destination for 63.4% of total exports.

Exports of non-financial knowledge-intensive services and high-tech manufacturing rose by

²⁵ Eurostat, Unemployment Statics, April 2013.

²⁶ Eco-innovation in Bulgaria, EIO Country Profile 2012.

²⁷ Eurostat and EAA data figures indicate that industry in Bulgaria is the most energy intensive in the EU, at 0618 kg oil eq./EUR GVA against 0184 for the EU-27. CO₂ intensity is also the highest at 5998 kg CO₂ eq./EUR GVA against 0919 for the EU-27.

²⁸ Renewable energy progress report (COM/2013/0175 final).

²⁹ Law on energy from renewable sources, published in the Official Journal, No 35, 03.05.2011, as amended on 15 February 2013.

³⁰ Law on energy efficiency, published in the Official Journal, No 24, 12.03.2013.

almost 156% between 2007 and 2012. Exports in these two categories represent only 3.8% of the total value of exports, which rose by 144%. In 2013, the time required for imports was 17 days, and for exports 21 days, against an EU average of 11.

Support for SME access to international markets is provided by the agency for the promotion of SMEs. Available schemes include participation in international professional fairs and trade missions. A national export portal has been part-funded by the ERDF and provides export strategies for 18 sectors.³¹ The Bulgarian Development Bank provides loans of between EUR 250 000 and EUR 3 000 000, and loan guarantees, for export-oriented companies.³²

4.2.4 Business environment and public administration

Business environment

Bulgaria's ranking in the World Bank's Doing Business report fell in 2013 to 66th out of 185 countries, largely due to the stagnation in institutional modernisation.³³ The World Economic Forum's 2012 Global Competitiveness Report indicated an improvement in its global competitiveness index, at 62nd out of 144 countries in 2012-13 (as compared to 74 out of 142 in 2011-12). The country is characterised as efficiency-driven, and its performance as better than many other countries in this group, except for the 'institutions' ranking of 108th out of 144.³⁴

Recent measures to improve the business environment include lowering the starting capital requirement; introducing e-government services to facilitate tax compliance; enabling tax payments using a single account and internet banking; and lowering bank charges.³⁵ Tax compliance remains burdensome, although the average total compliance time fell from 500 hours in 2010 to 454 in 2011.³⁶

A package of 24 measures was adopted in August 2013 aiming at reducing time, cost and number of documents to be provided. These concern for instance administrative services provided by local authorities, and by the food safety and maritime agencies. Further 70 measures are announced for adoption in autumn 2013.

Corporate income tax is charged at a flat rate of 10%, and there is the possibility to take advantage of a shorter period for VAT refunds and apply self-billing for VAT on imports of equipment for investment projects worth over EUR 5 million with maximum duration of two-years that create at least 50 jobs. This is designed to attract foreign direct investment. An automotive cluster³⁷ was set up in July 2012 with more than 20 multinational and local businesses, complementing the existing Electromobil industrial cluster.³⁸ A national action plan for sustainable automotive transport, including electronic vehicles, has also been adopted.³⁹

The licensing complexity index, measuring the economic impact of legal and administrative procedures for post-registration licensing, is 25% higher in Bulgaria than elsewhere in the EU.⁴⁰ It is easier to start a business than last year, as both the time needed, and the cost have fallen.

Investment in infrastructure could unlock wider growth and investment, particularly in railways and ports, but also in multimodal hubs, as these would allow Bulgaria to exploit its geographical location at the crossroads of EU, the Balkans and Turkey.

A national programme 'Digital Bulgaria 2015' was adopted in 2012.⁴¹ Although fixed broadband covers about 90% of homes, the take-up is 51%, which is below the European average of 73% of homes. Broadband infrastructure is still lacking, in particular in rural areas.⁴² Equipment providers and infrastructure operators have suffered delays in payment by the public authorities, although the late payments directive should change this.

Overall, businesses would benefit from more transparent and simpler regulations and procedures. The results of the action plan to reduce the administrative burden (2012-14) that was adopted in June 2012 remain to be seen.

³¹ See export.government.bg.

³² See <http://www.bbr.bg/bg/кредити-по-програма-партньори.html>

³³ Doing Business 2013; Bulgaria ranked 57th in 2010 and 59th in 2011.

³⁴ The 'institutions' indicator measures bureaucracy and red tape, overregulation, corruption, dishonesty in dealing with public contracts, lack of transparency and trustworthiness, inability to provide appropriate services for the business sector, and political dependence of the judicial system.

³⁵ National reform programme 2013.

³⁶ PWC Paying Taxes 2013: The Global Picture.

³⁷ <http://www.automotive.bg/?go=news>

³⁸ <http://www.emic-bg.org/content/item/1>

³⁹ http://www.emic-bg.org/files/files/SAP-NPD_EV_2012-2014-final.pdf

⁴⁰ SBA (Small Business Act) Fact Sheets 2013.

⁴¹ Decision of Council of Ministers No 953, 16.11.2012.

⁴² Digital Agenda for Europe Scoreboard, 2013.

Public administration

Government effectiveness is below the EU average⁴³ and deficiencies in administrative capacity limit the absorption of EU funds. However, improvements have started to be made. The recent incorporation of management of the competitiveness Operating Programme in the Ministry of Economy and Energy is aimed at reducing the administrative burden on beneficiaries and could simplify reporting obligations. Legislative improvements to public procurement have been introduced, but require sound implementation, including broader ex-ante control of procedures. Further amendments were proposed by the Government in summer 2013, with the stated objective of improving transparency and access to public procurement markets, including by SMEs.

Transparency International's 2012 corruption perceptions index⁴⁴ ranks Bulgaria 75th. To improve the stability and competitiveness of the business environment, the government has made tackling corruption a major objective.

The EU Justice Scoreboard⁴⁵ shows that the judicial system has improved, as the disposition time of civil cases has shortened to 67 days in 2010 from 148 days in 2008. The clearance rate is 99%, with a slight increase in pending cases.

An integrated strategy for the prevention of corruption and organised crime has been drafted. Further action on the independence of the judicial system and on the efficiency of the legal framework in settling disputes would be warranted, however. Strengthening customs performance would also help to protect national and EU financial interests.

4.2.5 Finance and investment

The financial system is stable but the operating environment is challenging, with low growth and decreasing asset quality. Innovative start-ups and SMEs have problems in accessing finance, in particular bank loans, because banks' balance sheets adjustments and the upward trend in non-performing loans (rising from 6.4% in December 2009 to 16.9% in June 2012).

A new funding scheme was adopted in 2012 to support start-ups,⁴⁶ and Structural Funds are being used for SME finance under the Jeremie scheme. Further, a new initiative has been announced this year to support SMEs in rural areas with investment in areas such as technology. However, there are some doubts about the effectiveness of the government schemes.⁴⁷ The World Bank is providing technical assistance to help to absorb the Structural Funds.

More progress has to be made in improving the insolvency procedure and to fight the upward trend in non-performing loans. The time needed to wind up a business has remained constant at 3.3 years.⁴⁸

4.2.6 Conclusions

Bulgaria faces considerable challenges in improving its competitiveness. In the short term, industry needs to move towards products and services with higher added value, and labour productivity needs to be improved. Higher productivity should also be pursued in service sectors, including tourism.

A national strategy for SMEs 2014-20 is being prepared. It indicates that Bulgarian authorities are grasping the problem, as the draft aims to improve Bulgarian competitiveness by covering issues concerning both SMEs and industrial sectors.

These require a favourable operating environment for businesses, particularly with regard to the administrative burden on businesses; improved energy and resource efficiency; and access to finance. In the medium term, the move towards a more knowledge-oriented economy requires improvements in the quality of infrastructure, in education, and in research and innovation.

⁴³ Excellence in Public Administration for Competitiveness in EU Member States, 2013.

⁴⁴ Transparency International Corruption Perceptions Index 2012.

⁴⁵ EU Justice Scoreboard 2013.

⁴⁶ The Entrepreneurship Acceleration and Seed Financing Instrument, worth €21 million, is currently operating with investment in innovative projects, mostly in ICT.

⁴⁷ Economist Intelligence Unit (2013): 'Country report: Bulgaria', World Bank (2013), AECM (2013).

⁴⁸ World Bank (2013): 'Doing Business: Bulgaria', European Commission (2012): 'SBA Fact Sheet: Bulgaria', Minutes of the meeting between the European Commission Secretariat-General and the Bulgarian Ministry of Finance (February 2013).

4.3. Czech Republic

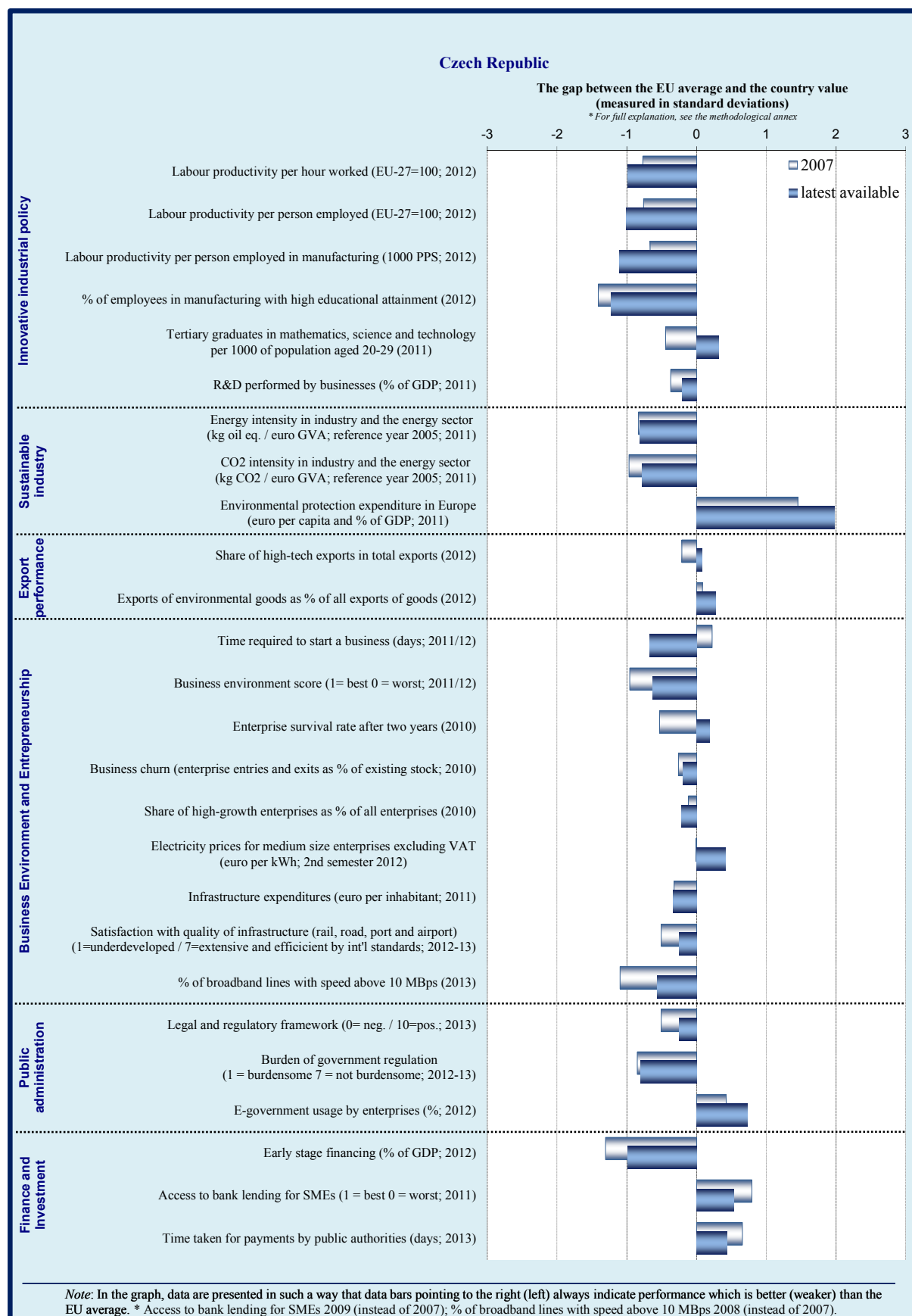
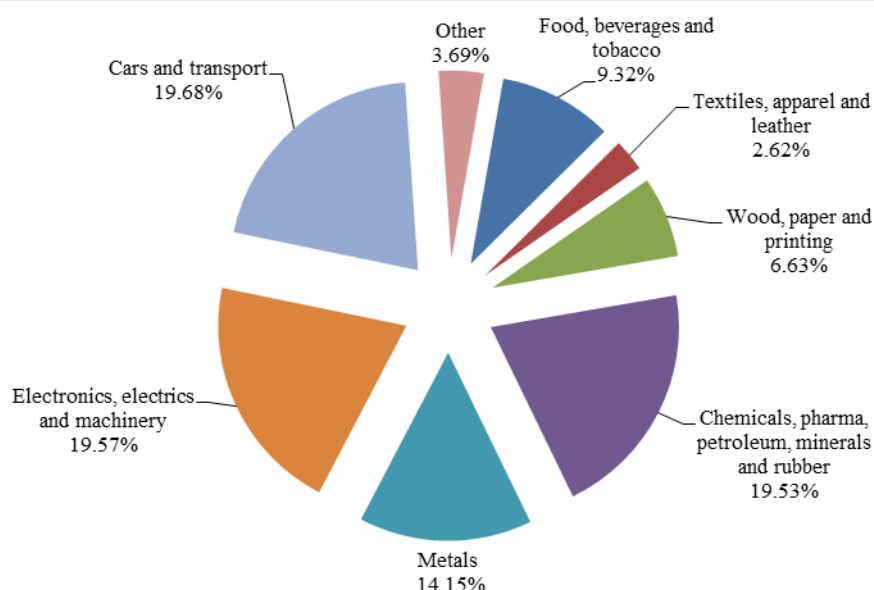


Figure 4.3: Manufacturing sectors – Czech Republic (2010)

Note: No data available for sectors C12 (tobacco products) and C33 (installation of machinery and equipment)

Source: Eurostat

4.3.1 Introduction

The Czech economy contracted in 2012, having continued to shrink for four consecutive quarters. Domestic demand has been significantly hit by increases in energy and food prices, continued fiscal consolidation and weak wage growth. The outlook for 2013 is one of stagnation, with domestic demand expected to remain weak. The industrial sector represents an important segment of the economy, measuring approximately 38 % of the Czech economy and employing around 40 % of the active population.

The manufacturing sector plays a very important role in the economy, representing 24.7 % of value added in 2012, compared to the EU average of 15.3 %. The main sectors of importance are the chemicals, pharmaceuticals, petroleum, mineral and rubber sector, accounting for approximately 20.4 %; the electronics, electrics and machinery sector, representing 19.1 % and the cars and transport sector, with approximately 17.3 % of the total for 2009.

Data from 2010 shows that labour productivity per person employed has been declining and was again negative in 2012. The 2013 Global Benchmark report also shows that labour productivity in 2012 was below OECD and Eurozone averages, and that

growth in labour productivity in 2008-12 was almost negligible.

4.3.2 Innovation, skills and sustainability

Innovation

According to the 2013 Innovation Union Scoreboard,⁴⁹ the Czech Republic is classified as a moderate innovator. R&D (research and development) intensity has been increasing steadily between 2009 and 2011. In fact, business related R&D as a percentage of GDP increased to 1.11 % in 2011 compared to 0.96 % in 2010 and 0.88 % in 2009. The relatively good performance of the research and innovation system is largely due to a strong manufacturing sector with industrial specialisation in innovative sectors such as motor vehicles and electrical equipment along with an increasing level of R&D financed from abroad.⁵⁰

However, the R&D investment faces a number of challenges. These are to increase the motivation and competencies of businesses to move to become innovation leaders in their markets; to achieve or

⁴⁹ http://ec.europa.eu/enterprise/policies/innovation/facts-figures-analysis/innovation-scoreboard/index_en.htm.

⁵⁰ For details see "Research and Innovation performance in EU Member States and Associated Countries, Innovation Union progress at country level, 2013".

maintain excellence in selected areas of research; to enhance the quality of education system; and to set up an appropriate institutional framework. There is no overall authority effectively to govern the R&D and innovation system. While there is a research, development and innovation council, which acts as an advisory body, there is a lack of back-office support to implement strategies. There is also still little co-operation between research institutions and businesses, which is hindering economic progress. The international competitiveness strategy 2012-20 is trying to address these shortcomings, and the government has proposed practical training for students of upper secondary and higher education.

Competence centres have been set up, aiming at encouraging medium to long-term partnerships between the public and private sectors on research and innovation. A first call was undertaken in mid-2012, with a significant amount of proposals being submitted and 22 projects being selected. A second call was undertaken in March with 12 to 16 projects aimed at being supported.

Most research and innovation support for businesses are grants, in particular through the Alpha programme, which has the largest available financial resources, the Beta and Omega programmes which are administered by the Czech Technology Agency. Other useful programmes include the TIP (technology, information systems and products) programme and the operational programme entrepreneurship and innovation. During 2011 and 2012, a number of projects were successfully carried out under the knowledge transfer partnership pilot project, introduced in 2009, to support the transfer of knowledge between universities and SMEs. The Government is currently considering whether this project should be extended on a larger scale in the next programming period.

In addition, there is an R&D tax incentive which has been recently amended to extend the scope of eligible expenses to outsourced R&D, but this is not yet in force. Finally, while the Government has set an R&D target of 1 % of GDP by 2020 for public expenditure, which increased from 0.58 % in 2010 to 0.78 % in 2011, it has not set an overall R&D target to cover both private and public R&D.

Skills

The quality of compulsory and tertiary education is currently an issue, and as such it has been the scope of a country-specific recommendation from the Council. While performance is better than the EU headline target regarding early school leaving, measuring 5.5 % in 2012 as compared to the EU target of 10 %, its tertiary attainment rate is significantly lower than the EU average. Nevertheless, from 2006 to 2012 it has nearly doubled to 25.6% (EU average of 35.7%), covering some distance towards the national 2020 target of 32%, which is likely to be achieved.

On ICT skills, 51% of 16-24 years-old have high computer skills (2012), above the EU average of 40 %.⁵¹ With respect to entrepreneurship, only 39.2 % of Czechs believe that they have the required knowledge, skills and competence to set up a business which is rather low compared to other EU countries.⁵² There have also been calls from stakeholders for more attention to be given to support entrepreneurship in schools, notably at university level.

The Government is preparing a revision of the higher education act which aims at amending the accreditation procedure from 2016, notably to help develop more professionally-oriented bachelor degrees to improve the labour market relevance of higher education. Another goal is to link funding of higher education institutions to their performance. Generally students at schools are obtaining results comparable to international educational achievements, but in mathematics and science the outcomes have worsened over time. In response, the authorities are developing minimum standards and a national computer-based testing. Another set of measures aim at improving the quality and attractiveness of teaching through increasing initial salaries and developing a new career system and in-service training for pedagogical staff from 2015.

Sustainability

In the last decade, industrial production has decreased and there has been a continuing decline in electricity generated from coal-burning power plants. However, given the significant share of

⁵¹ Eurostat ICT household survey.

⁵² 2011 Global Entrepreneurship Monitor.

industry in the national economy, the country remains highly energy intensive. In fact, data for 2010 shows that industry accounts for approximately 34.2 % of energy consumption in the economy, while transport accounts for approximately 24.6 %.⁵³ When compared to other Member States, data for 2011 shows that it is the one of the most energy and carbon intensive Member States in the industry and energy sector. As a result, the energy intensity of the economy is still amongst the highest in the EU. Nuclear power and solid fuels account for almost 90 % of gross electricity consumption. In 2012, a proposal for an update of the state energy strategy was adopted by the Government.⁵⁴

The share of renewable energy in gross final energy consumption for 2011 measured 9.4 %.⁵⁵ The renewable energy target is 13 % by 2020, with a 10 % target of renewables in all modes of transport. Investment has been made in wind and photovoltaic generation over the past years. The national renewable energy action plan seeks to development renewable energy sources but these are not considered to be strong in all sectors, particularly in transport and grid reinforcements.⁵⁶

An updated raw materials policy, also covering secondary raw materials, was prepared in the summer of 2012 but has not yet been approved. Amongst the goals of this policy is to create the conditions to secure reserves and sustainable extraction of raw materials and to support material saving technologies.

The most prominent eco-innovation areas are waste management, small scale hydropower technologies, and specific developments in nanotechnologies. There are initiatives on improving energy efficiency of buildings and development of cleaner vehicles. It is pertinent to note however that the Czech Republic has still not set its energy efficiency target under the Europe 2020 strategy which was due in April 2013.

By the end of 2013 the Government is aiming to present a waste prevention programme. Some goals of the waste prevention plan will be part of the newly prepared waste management plan. Currently the country relies significantly on landfilling of municipal waste.

4.3.3 Export performance

Exports accounted for approximately 75 % of GDP in 2012, with approximately 6 % annual growth rate in 2008-12, which is higher than the OECD and Eurozone averages.⁵⁷ The total value of exports from the Czech Republic has steadily increased from 2009 with the internal EU market representing approximately 83 % of the total in 2011.⁵⁸ Germany is a particular important destination. The share of high-tech exports in total exports measured 16.2 % in 2011.

The Czech export strategy 2012-20 remains the Government's strategic document aimed at improving export performance. The strategy focuses mainly on SMEs, aiming at increasing the number of SMEs exporting to third markets by 50 % by 2020. An annual progress report was also prepared. CzechTrade is the Government agency responsible for export promotion with over 30 offices worldwide. It is envisaged that a one-stop-shop for exports will be set up to offer information to interested entrepreneurs in various regions.

4.3.4 Business environment and public administration

Business environment

The ownership of the competitiveness strategy 2012-20 has moved to the Office of the Government from the Ministry of Industry and Trade, which should allow for improved execution given the co-ordination role of the Office of the Government.

The SME support strategy for 2014-20 was launched and adopted by Government in December 2012. The strategy sets out 50 specific measures and defines the priority areas for support for the 2014-20 programming period. The four policy

⁵³ Country factsheets of DG Energy (2012): <http://ec.europa.eu/energy/observatory/countries/doc/2012-country-factsheets.pdf>.

⁵⁴ Government Resolution no 803/2012.

⁵⁵ Eurostat data.

⁵⁶ Europe2020 Staff Working Document for the Czech Republic.

⁵⁷ Global Benchmark Report 2013.

⁵⁸ Czech Statistics Office.

priorities are enhancing business environment; development of enterprise based on R&D and innovation; SME internationalisation; and sustainable energy management and development.

According to the World Bank Doing Business Report 2013, the Czech Republic ranks 65th on ease of doing business out of 185 countries. Some of the main bottlenecks for businesses identified relate to starting a business,⁵⁹ getting electricity, protecting investors and paying taxes.

As in many other Member States, the tax rates change often, placing additional administrative burden on businesses. The establishment of a single tax collection point for personal and company income taxes should start operating in 2015, focusing on the collection of direct taxes and health and social insurance contribution in one place. This should help to reduce the administrative burden of paying taxes, even though it is not cover all types of taxation.

There are also a number of services which aim at assisting businesses, in particular SMEs, such as the points of single contact (PSC), SOLVIT centres and the contact point for products that have been integrated into a single platform through the internet portal for entrepreneurs.⁶⁰

In 2012, the Government carried out a successful pilot project on the introduction of common commencement days. The project foresees the introduction of the majority of legal acts concerning the business environment on two days only, namely 1 January and 1 July, thus decreasing uncertainty and administrative burden. The evaluation of the pilot project should be submitted to the Government for a decision on whether the common commencement days will be introduced on a broader scale.

There have been a number of legislative acts recently which may have a positive effect on the business environment, such as the new act on business corporations, which is to be effective from 2014. This act should provide improvements for limited liability companies. There have also been

amendments to the trade licensing act. Moreover, a new law on investment incentives extended the five-year reduction in corporate tax rate to a 10-year period.

Services account for approximately 58 % of the total value added.⁶¹ The importance of services is also reflected in the fact that according to data for 2011, export of services as a percentage of total exports accounted for 16.3 % as opposed to 6.6 % of goods accounting for total exports.

The Czech Republic is the Member State with the highest number of regulated professions. A public consultation on the review of the regulatory framework for professions has been conducted in 2012 and results are to be presented in 2013.⁶²

The transport infrastructure faces challenges with respect to its quality and functionality and as such it hinders possible economic growth. As highlighted in the 2013 national reform programme, the completion of backbone infrastructure, and connecting remaining regions and main industrial centres to Czech and European routes is a pre-requisite to improving the business situation.

The transport system suffers from a lack of interconnectivity between railways and other forms of transport. Given the difficult economic climate, the completion of planned rail and highway projects is now uncertain. The government intends to adopt a new transport policy for 2014-2020, as well as a medium-term plan of transport infrastructure development, both of which should improve the strategic planning in transport development.

Public administration

Issues relating to public administration and corruption are some of the most pressing issues for the Czech Republic. In June 2013, a draft public servants act was approved by the Government (an act had been approved in 2002 but entry into force was postponed). In the effort to ensure a stable,

⁵⁹ World Bank Doing Business 2013 calculates that it takes 20 days to start a business in the Czech Republic. The Czech Republic disputes this figure, stating it takes 10 days to start a business.

⁶⁰ Businessinfo.cz.

⁶¹ OECD Economic Survey Czech Republic November 2011.

⁶² The 2013 country-specific recommendations for the Czech Republic included "Drawing on the on-going review, proceed with a reform of regulated professions, by reducing or eliminating entry barriers and reserves of activities where they are unjustified." http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index_en.htm

more transparent and professional public service, it should be noted that a strategic policy framework for reinforcing the administrative efficiency with several elements to be put in place an process of being implemented is known as ex-conditionality for the use of EU funds in 2014-20.

Another important area of action is to ensure the appropriate enforcement of the public procurement act which was substantially amended on 1 April 2012. The adoption of this amendment was a good example of wide consultation between government, businesses and NGOs. While Government advisory and support services for bidders currently exist, the time taken to respond to requests is still quite long (in particular the capacity of the office for the protection of competition is not sufficient). Further administrative capacity at local and regional level would be useful.

The Czech Republic also permits anonymous shareholding, whereby a lack of transparency of ownership of shares can lead to issues related to corruption, money laundering and tax evasion. A legal act to address this has been approved by Parliament.⁶³ According to it, bearer shares will now be permitted to exist, but only if they are deposited in the collective depository of a securities trader, the records of which allow for the identification of share ownership, with access limited to selected public authorities. Measures will enter into force in 2014.

There is a two-year anti-corruption strategy, with the strategy for 2013-14 building on that of 2011-12. While a number of measures have been completed, a significant amount of legislative proposals from the previous strategy were transferred to the new strategy. Even though monitoring is done on a quarterly basis, the department dealing with this strategy within the Office of the Government has limited resources and limited political clout when measures are not fulfilled.

The administrative burden on businesses has been reduced by 23 % by the end of 2012, when compared to 2005 levels, narrowly missing the 25 % target. An eco-audit exercise is being continued which aims at reducing unjustifiable administrative and finance burdens on businesses

with respect to environmental legislation. Efforts were also undertaken to consult with the business sector on the most troublesome issues for entrepreneurs.

Finally, in July 2012, the basic registry system, i.e. the unifying of fragmented data stored by public authorities, came into operation. As a result there has been a rise in e-government use to 92 % of businesses in 2012.

4.3.5 Finance and investment

SMEs tend to suffer the same difficulties in access to finance as in other Member States, including difficulties to obtain credit due to lack of collateral, short business history etc. Moreover, the current economic climate is causing banks to be more risk-averse, leading to banks tightening credit. Banks have recently launched a guarantee facility for innovative start-ups. These types of projects tend to be aimed towards companies with a high return and have been taken up by solar energy, ICT, and machinery sectors.

However, there is also a lack of seed and growth capital, and so equity financing has been limited. The Government, however, is to launch a venture capital fund financed through the operational programme enterprise and innovation. The fund will have EUR 53 million at its disposal and financing will go towards early stage financing and growth capital. EUR 31.7 million will be dedicated to early-stage funding, while the remaining EUR 21 million will go to growth capital, for more developed companies. Private co-financing will consist of 30 % for those applying for the seed financing and 50 % for the growth financing. There is significant interest from SMEs to take up these funds. The aim is for the funds to become operational at the end of 2013.

With respect to foreign direct investment, the inflow was the highest in the last five years. Investors have increased mostly reinvested profits but also equity of their companies.⁶⁴ The strong inflow of direct investment has resulted in a significant surplus in the financial account of the balance of payments.

⁶³ Law No 134/2013 Coll.

⁶⁴ Czech Statistical Office.

4.3.6 Conclusions

Issues pertaining to public administration, such as an effective implementation of the anti-corruption strategy and a robust public servants act, are some of the major challenges. Sustainable industry and improving the quality of education and skills are also areas where there are significant challenges.

On the other hand, with respect to business environment, it is encouraging that a venture capital is being set up by the Government, given the lack of such instruments in the past. There is keen interest in this by enterprise and is likely to be taken up rapidly.

4.4. Denmark

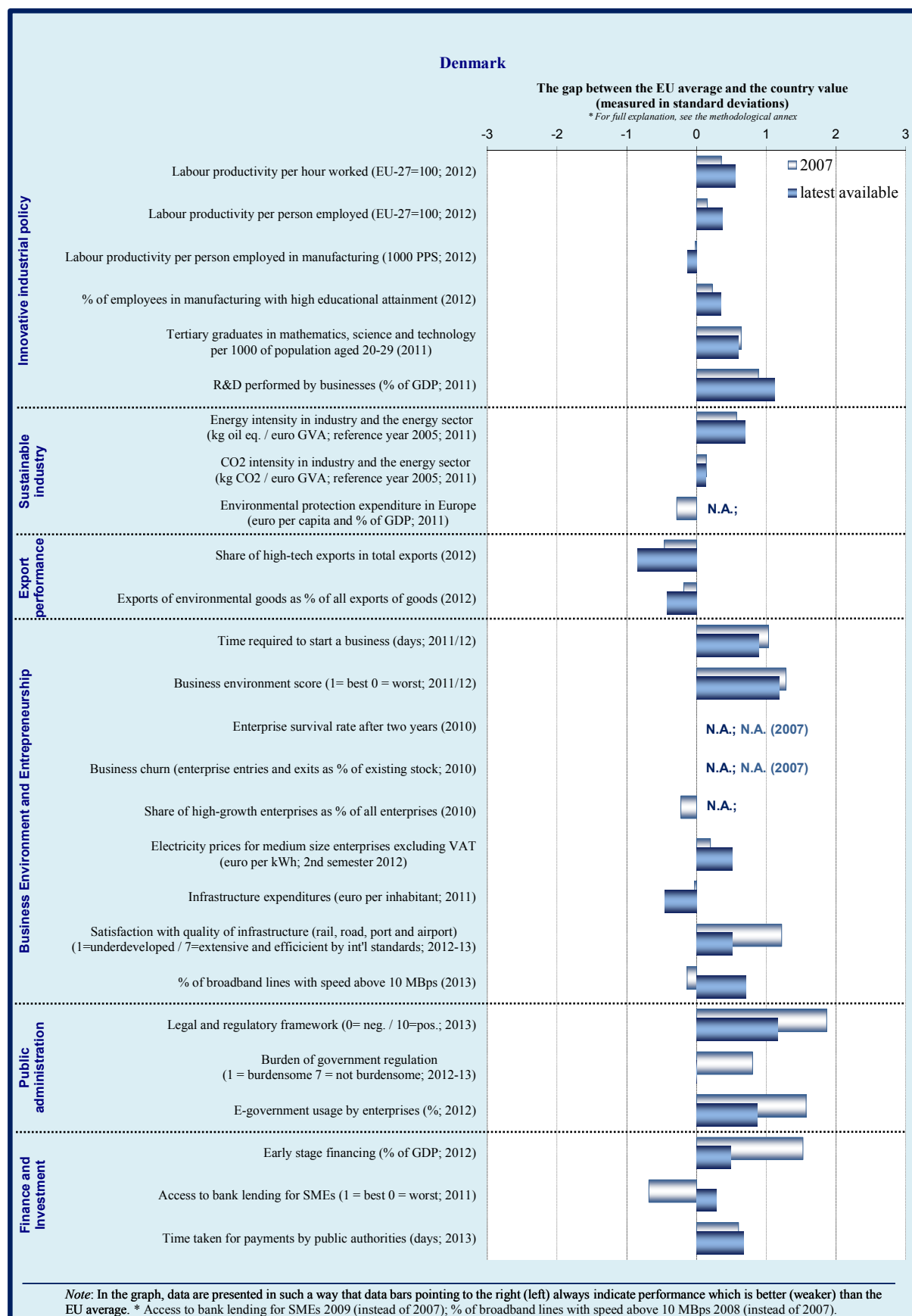
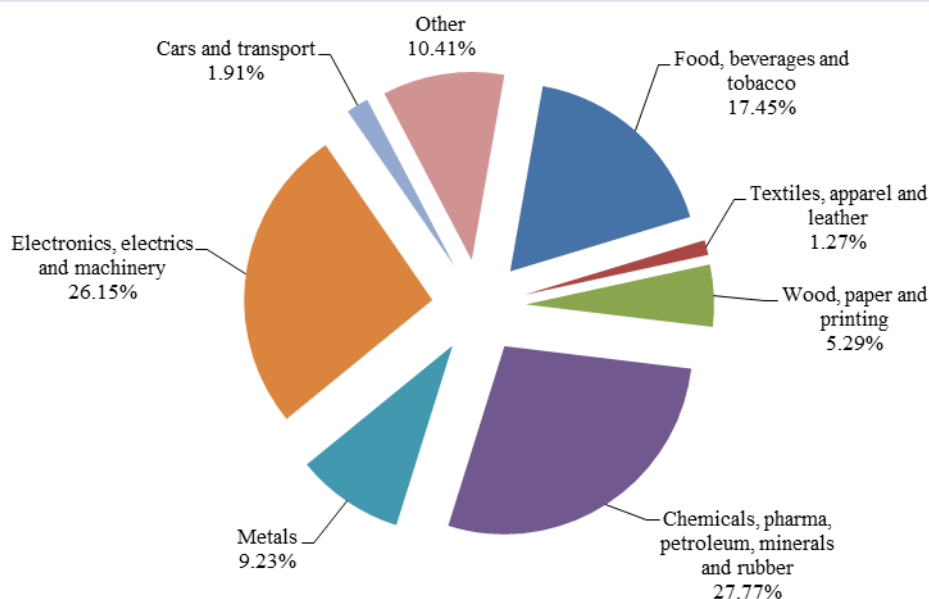


Figure 4.4: Manufacturing sectors – Denmark (2010)

Note: No data available for sectors C15 (manufacture of leather and related products) and C19 (coke and refined petroleum products).

Source: Eurostat

4.4.1 Introduction

Denmark is a small and wealthy⁶⁵ open economy that is also very competitive. Its GDP contracted 0.5% in 2012 but the outlook for 2013 and 2014 is positive, although the wider prospects for the EU economy will strongly influence this. The three largest Danish manufacturing sectors represent both knowledge-intensive (electronics, electric and machinery, chemicals and pharmaceutical), and traditional sectors (food).

Competitiveness has deteriorated in the past decade. Real wage growth has exceeded productivity growth and unit labour costs have increased by around 20%. The need to improve competitiveness and productivity has been the topics of considerable debate and the government set up a productivity commission⁶⁶ to identify the major drivers and the main barriers. The mandate of the committee lasts until the end of 2013, but it is issuing policy recommendations along the way. The commission has confirmed that productivity growth in the domestic Danish services sector has been slower than in countries like Germany, Sweden and

the Netherlands. Productivity growth in manufacturing is in line with global developments, as Danish businesses operate in competitive markets.

To improve the conditions under which businesses operate, the government has also set up business-government task forces (growth teams) to make recommendations in eight key sectors where Danish businesses have traditionally been strong. These are tourism, food, energy and climate, health and welfare solutions, creative industries, water/bio/environmental solutions, ICT, and maritime industries. So far the task forces have made proposed initiatives in the areas of regulating better, improving public-private partnerships, attracting more foreign investment and focusing on export and branding.

4.4.2 Innovation, skills and sustainability

Innovation

The Innovation Union Scoreboard 2013 classifies Denmark as an innovation leader. The national research intensity target is 3%, of which 2% should come from the private sector, and 1% from the public purse. The same target was in place in 2006-12 and has been reached. The research and

⁶⁵ GDP per capita is 56 147 USD; 'Global Competitiveness Report 2011-12', World Economic Forum.

⁶⁶ Produktivitets Kommissionen, <http://produktivitetskommissionen.dk/publikationer>.

innovation system functions well, with dedicated councils and funding schemes, ranging from basic research to commercialisation and entrepreneurship.⁶⁷

The new innovation strategy that was launched in December 2012 aims to improve effectiveness and increase productivity. The strategy involves moving to a simpler and more flexible research and innovation system, in particular through the integration of the existing research bodies. It also focuses on research and development (R&D) initiatives to support advanced manufacturing, such as automation and robot technologies. By 2020, the policy aim for Denmark is to be among the top five OECD countries in terms of the proportion of innovative firms, level of business investment in R&D, and the proportion of firms that employ highly-skilled workers. Reaching this goal would require strong, consistent and long-term policies

Commercialisation of research is one of the weak points of the Danish research and innovation system, in particular taking new technologies into marketable products. Stronger links between research and businesses and more effective knowledge transfer could help in combining business skills to research and innovation competencies. In practice, work along these lines is progressing, and some of the Danish research centres provide good examples of effective cooperation.

Skills

On skills and education, Denmark has already met⁶⁸ its two headline objectives of the Europe 2020 strategy, as early school leaving rate was 9.1 %, and tertiary attainment rate was 43 % (2012). However, the education system could be more cost-effective, there is a lack of apprentice places, and drop-out levels are high. Denmark is above the EU targets in reading, mathematics and science, but the performance in mathematics worsened significantly between 2006 and 2009, whereas the share of low-achievers in reading and science fell during the same period.

To address the deficiencies, the main skills initiatives are the youth package of August 2012 and the reform of the public school system launched in December 2012. The youth package finances job rotations and apprenticeship programmes to help young people improve their skills to match industry demand.

The aim of the school reforms is to reduce early school leaving through more hours spent on core subjects such as Danish, maths and English, and more emphasis on practical training.⁶⁹ Furthermore, a committee of experts, including representatives of trade unions and employers, is due to make proposals in autumn 2013 to find a solution to the problem of a lack of private apprenticeships and high drop-out rates. There are discussions on introducing flexible, shorter vocational training cycles for the most vulnerable learners. Denmark is one of the EU leaders in adult participation in lifelong learning with a rate of 31.6 % in 2012 against an EU average of 9 %.

Sustainability

The national energy efficiency action plan sets out the energy efficiency policies required to reach the 2050 target of achieving independence from fossil fuels. Steps have been taken to increase the energy efficiency of public buildings, increase green procurement and make energy consumption and energy savings more transparent. A long-term roadmap sets out how the minimum energy performance standards of buildings will be improved. Some of the policies that apply to industry include energy saving obligations and higher tax rates for energy. Cars are also subject to a high tax rate, as part of the 'green transport' policy.

4.4.3 Export performance

Danish exports are characterised by the large proportion of food and beverages, albeit with a focus on the higher value segments of these markets. Exports of high-tech, higher value added

⁶⁷ ERAC Peer Review of the Danish Research and Innovation System Outcomes Report 2012.

⁶⁸ 'Rethinking education', European Commission 2013.

⁶⁹ The country-specific recommendation no 2 of 2013 specifically concentrated on the Danish education system. http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index_en.htm.

products have grown, although at a slower pace than in many competing countries.

Between 2000 and 2012, Denmark lost export market share in goods, partly reflecting the deteriorated competitiveness.⁷⁰ More than two thirds of exports go to other EU countries. Certain sectors, including renewable energies and pharmaceuticals, are likely to benefit from increasing demand from outside Europe. However, exports to the BRIC countries (Brazil, Russia, India, and China) have not grown in line with the opportunities provided by these countries, and the government developed strategies to improve trade and investment cooperation with them. It is also focusing on its strengths and competencies in fields such as climate and energy, architecture, research, education and food.⁷¹

4.4.4 Business environment and public administration

Business environment

An annual survey of investors⁷² tries to identify the features of the economy that are the most attractive for foreign businesses. The latest survey cited the competent workforce as the most important reason for investing in Denmark. Other reasons were R&D competence, market access to Nordic countries and to the EU in general, the flexible labour rules, and the quality of infrastructure and services. The high level of taxes and the high living costs were investors' main concerns.

The national regulatory framework is being examined with a view to making life easier for SMEs. A business forum advises the government on how to reduce the administrative burden, and an on-going impact assessment programme seeks to ensure a net reduction in that administrative burden. Furthermore, the Danish authorities have established a market development fund to promote growth, employment and exports, help SMEs to

bring new products to market and make it easier for public institutions to purchase innovative products and services.

The low level of competition in services and construction lowers productivity growth and innovation. For construction, one reason seems to be the national building standards that make it difficult for foreign competitors to enter the market. The government is seeking to address the issue by enforcing competition legislation better, modernising authorisation schemes and reforming the national standards.

The Danish Competition and Consumer Authority has identified four service markets that should be further reformed, namely telecommunications, postal services, taxis and pharmacies. The competition policy package of October 2012 consisted of initiatives to tighten up the competition law, including in public procurement. Options for the liberalisation of pharmacies, taxis and plumbing services are being analysed, and the extent of the reforms remains to be decided. A new competition act came into force in March 2013 that introduced the possibility of custodial penalties and increased fines in cartel cases.

The wholesale energy market was liberalised in 1999 and Denmark is part of the Nordic electricity pool, with continuous spot trading. Since 2003 consumers have been able to switch their electricity supplier, although only about 20% have done so. This has been due in part to regulations restraining competition,⁷³ in particular fixed retail prices that do not fluctuate with the wholesale price. A number of initiatives are expected to increase competition and the government is considering abandoning the regulation of the retail electricity prices. In 2014 the network operators will become wholesale suppliers of transport capacity, which implies that consumers will only have to pay one bill regardless of whether they have switched supplier or not. Smart meters will be supplied to more than 50% of users in the next couple of years, and the government has recommended that every consumer should have a smart meter installed before 2020. With smart meters, consumers will be able to choose a price that fluctuates with the wholesale price. Taken

⁷⁰ 'In-depth review for Denmark', 2013, European Commission.

⁷¹ 'Aftale om Danmark som vækstnation.' Danish Government (2011). http://www.fm.dk/Nyheder/Pressemeddelelser/2011/05/~/_media/Files/Nyheder/Pressemeddelelser/2011/05/Vaekstnation/Aftaletekst_danmark%20som%20vaekstnation.ashx.

⁷² 'Invest in Denmark', Danish Ministry for Foreign Affairs.

⁷³ 'Detailmarkedet for elektricitet', Danish Competition and Consumer Authority, 2011.

together, these measures are expected to increase competition in the retail electricity market.

The tax reforms of 2009 and 2012 are gradually lowering taxes on labour. In 2013, the government announced that it would gradually reduce the corporate tax rate from 25 % to 22 %, reduce excise duties on energy and packaging, and lower the costs of waste water, and reintroduce previous tax credits for construction work in private homes. These measures have the potential to contribute to stimulating demand, including for small-scale construction work.

While it is relatively easy to start a company in Denmark, stakeholders complain that the administrative burden increases at the later stages of firm life. This may be having an effect on the survival rate of firms, as about half of them cease operations within five years.⁷⁴

Public administration

The public administration system performs well. The indicators on government effectiveness, corruption and fraud, business start-up and ease of acquiring licenses, public procurement, tax compliance and administration and civil justice are all better than the EU average.⁷⁵ Denmark ranks sixth in the EU in terms of payment delays from public authorities, with an average payment period of less than 15 days.⁷⁶ Widespread use is made of ICT applications, modern human resources management techniques and evidence-based steering and planning instruments.

However, public procurement rules and practices could be improved, as the burden on firms participating in tenders is slightly above the EU average, both in terms of costs and time needed. In civil justice there seems to be room for improvement as regards the costs of contract disputes, including court costs, enforcement costs and average legal fees.

4.4.5 Finance and investment

The financial sector is stable and banks are well capitalised, but despite this, it seems unlikely that lending to SMEs will get back to the pre-crisis level in the near future.⁷⁷ In 2012, the volume of outstanding loans to non-financial corporations fell by 2 % and the cumulative decrease since 2008 amounts to almost 5%.⁷⁸ Access to loans has become increasingly difficult for SMEs since the beginning of the economic crisis and the rejection rate for loan applications is 20 %, as against an EU average of 15 %. The cost of credit for SMEs is 50 % higher than for large companies. This is likely to deter SMEs from investing in research and innovation, which will not help in solving the identified problems with commercialising research.⁷⁹ Many newly established businesses find it particularly difficult to find financing to build proofs-of-concept, stage technological demonstrations, and develop pilot lines. Another potential concern as regards access to finance is that Danish SMEs are often not well known, making it difficult for them to attract investment.

The authorities have launched several initiatives⁸⁰ to tackle the issue of access to finance. In particular, loans to new businesses with high growth potential are administered by *Vækstfonden*, a fully state-owned investment fund. Second, there is a credit guarantee scheme for smaller bank loans of up to DKK 2 million for 2013-15. Third, the Export Credit Fund will provide guarantees to help finance export-oriented production facilities in Denmark.

Furthermore, in the budget negotiations of 2013, an agreement was reached to establish a special green guarantee scheme of up to DKK 350 million. The purpose of this scheme is to improve the conditions and provide support to SMEs to finance new green investment in resource efficiency and resource recycling.

⁷⁴ <http://erhvervsstyrelsen.dk/file/291799/Ivaerksaetterindeks-2012-endelig-version.pdf>.

⁷⁵ 'Excellence in public administration for competitiveness in EU Member States', European Commission (2011-12).

⁷⁶ 'Industrial policy indicators and analysis — April 2013', European Commission.

⁷⁷ Danish Business Authority (ERST).

⁷⁸ European Commission, Small Business Act Fact Sheet 2012.

⁷⁹ As set out in the 'Member States' Competitiveness Performance and Policies' report of (European Commission, 2012).

⁸⁰ 'Danish Growth Capital Fund' (Dansk Vækstkapital, a partially owned state investment fund), the 'Development Package' (Udviklingspakken, March 2012) and a 'Credit Package' (Kreditpakken, November 2012).

The latest initiative being launched by the Danish government is the Growth Plan DK (April 2013) that aims to improve the conditions under which businesses operate. Several of the plan's initiatives target access to finance for SMEs, including boosting the small growth guarantees by an additional DKK 350 million. A new type of loan will target skilled entrepreneurs with solid business projects, providing additional funding of about DKK 1 billion in 2015-17. The guarantee capacity of the Export Credit Fund has been increased, with a further DKK 15 billion made available to finance export projects and investment.

The government is also preparing a legislative proposal to improve the Danish corporate bond market. Legislation will be presented this year that would allow the use of a representative ('trustee') for bond issues. The government will also give banks more opportunities to securitise corporate loan portfolios.

4.4.6 Conclusions

Denmark is one of Europe's most competitive economies, with highly skilled workforce, strong research and innovation capacity, flexible labour rules and high-quality infrastructure as its strong points. Danish exports are diversified, and

government policies seek to build on the identified strengths. However, in the longer term, some weaknesses in the education and training system could endanger its position.

There is scope for improvement in the research and innovation environment, as better links between research and businesses could help investment in research and innovation to be more effective. In this spirit the new innovation strategy that was launched in December 2012 aims to improve effectiveness and increase productivity. Further, the low level of competition in services and construction restricts productivity growth and innovation and measures are being taken to enforce competition legislation and removing obstacles from competition.

The Danish public administration works well and widespread use is made of ICT applications, modern human resources management techniques and evidence-based steering and planning instruments.

In line with other Member States where access to finance is a problem, the government has taken measures to improve the provision of publicly funded financial instruments for SMEs and widen the potential financing sources, in particular for SMEs.

4.5. Germany

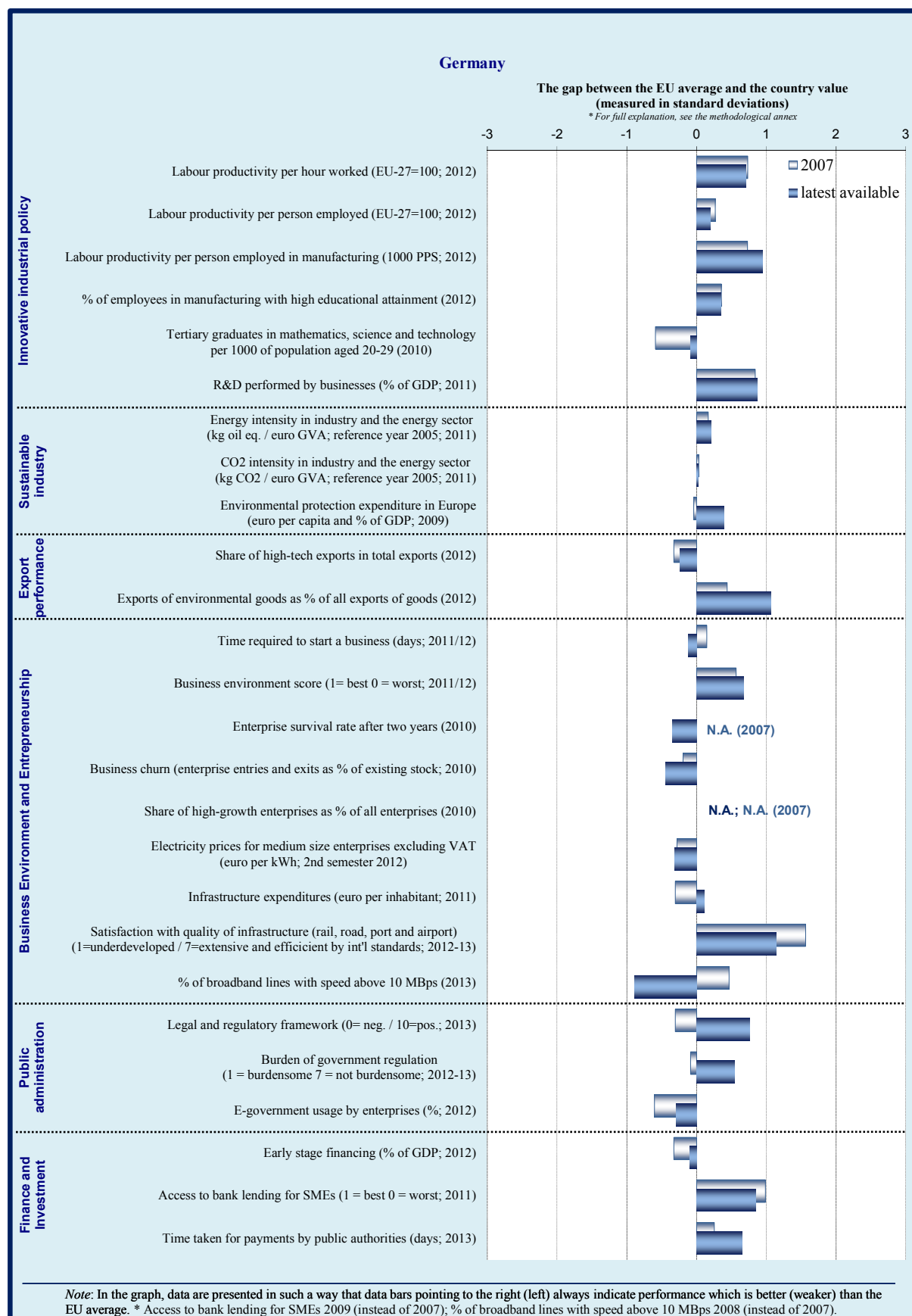
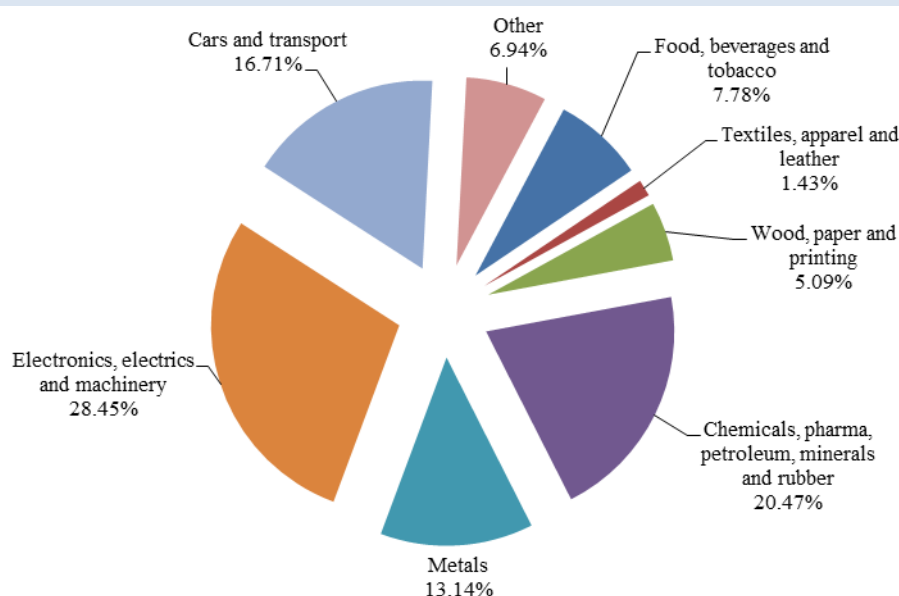


Figure 4.5: Manufacturing sectors – Germany (2010)

Source: Eurostat

4.5.1 Introduction

Manufacturing plays an important role in the German economy and contributes 22.3% to the total value added, as compared with an average of 15.3% in the EU as a whole.⁸¹ Germany is particularly specialised in technology-driven and capital-intensive industries. The World Economic Forum's *Global Competitiveness Report* ranks the country in fourth place.⁸² Cost competitiveness has improved over the last decade, as indicated by a depreciation of the real effective exchange rate. Labour productivity per hour worked is about 24 percentage points above the EU average and about 11 percentage points above the euro-area average.⁸³ Overall, industry is very competitive, although it faces important challenges in securing its competitive position in both the medium and long term.

4.5.2 Innovation, skills and sustainability

Innovation

The Innovation Union Scoreboard 2013⁸⁴ confirmed Germany's position among the 'innovation leaders' of the EU.⁸⁵ Despite the overall good performance, a decline was observed in non-R&D innovation expenditure and sales of new-to-market and new-to-firm innovations. The capacity of Germany's industry to innovate – and to remain at the technological frontier – is of increasing importance in securing Germany's competitive position. Innovation strategies of small and medium-sized enterprises (SMEs) often concentrate on high value added and high-quality products in niche markets. The resulting innovations are often modifications or further developments, and not so much real market innovations.⁸⁶

Germany is close to achieving its R&D expenditure target of 3% of GDP,⁸⁷ but some leading economies are investing even more in research and

⁸¹ Eurostat data for 2012.

⁸² <http://www.weforum.org/issues/global-competitiveness>.

⁸³ Eurostat data for 2012.

⁸⁴ Innovation Union Scoreboard 2013, <http://ec.europa.eu/enterprise/policies/innovation>.

⁸⁵ Together with Denmark, Finland and Sweden.

⁸⁶ KFW Economic Research, *To be the leader of the pack? Innovation strategies in the SME sector*, November 2012 <https://www.kfw.de>.

⁸⁷ R&D intensity in 2011: 2.9% of GDP with about two-thirds by the private sector (Eurostat).

innovation, and emerging markets are catching up in traditional areas of competence. The Expert Commission on Research and Innovation appointed by the federal government has recommended increasing the R&D expenditure target to 3.5%.⁸⁸ Moreover, significant disparities exist at regional level in terms of R&D investments as well as innovation performance.

The *High-Tech Strategy 2020*⁸⁹ defines the central goals of research and innovation policy. It concentrates public R&D resources for scientific and technological research in areas that face particular global challenges.⁹⁰ The strategy also supports the development of key enabling technologies, which act as drivers of innovation and provide the basis for new products, processes and services. Some stakeholders consider that the strategy could be further strengthened, including by increasing awareness and involvement of SMEs.⁹¹

The *Central Innovation Programme for SMEs*⁹² has been a success in helping SMEs, in particular in enhancing their research and innovation efforts to develop new products, processes and services. Over 10 000 companies have been supported so far.⁹³

Skills

Skill shortages are emerging in various sectors and regions; these are becoming an increasingly important obstacle to future growth and innovation performance, in particular for SMEs.⁹⁴ A way to alleviate these shortages would be to labour market participation through better the education and

training.⁹⁵ Current initiatives on skills have recognised that mobilising domestic labour potential will not be sufficient and that economic progress will also depend on attracting skilled workers from other EU and non-EU countries. The introduction of a nationally standardised system for the assessment of qualifications acquired in foreign countries helps in this respect.⁹⁶

A recent report noted some positive developments but also highlighted that further progress will be necessary.⁹⁷ Measures include an information campaign⁹⁸ and a web portal⁹⁹ to provide information on job opportunities and the conditions for taking up employment in Germany. The University Pact aims to better use all available capacities; the “Qualitätspakt Lehre” improves teaching; and the “Ausbildungspakt” has been extended until 2014 to ensure additional 60 000 training places a year. A competence centre has been established to support SMEs in attracting and retaining skilled employees.¹⁰⁰ Moreover, a new employment regulation aims to make it easier for medium-skilled people to work in Germany, supplementing the ‘blue card’ for highly-qualified workers introduced in 2012.

Sustainability

Overall, the environmental performance of industry can be characterised as good, but further improvements should still be possible. Green technologies, products and services play an increasingly important role. In 2012, about 34 % of companies offered green products or services, compared to 26 % in the EU.¹⁰¹ In 2012, a resource efficiency programme¹⁰² was adopted, aimed at further improving the environmental performance of industry. The dependence on high quality raw materials of many industry sectors, and further

⁸⁸ Expertenkommission Forschung und Innovation (EFI), ‘Jahresgutachten zu Forschung, Innovation und technologischer Leistungsfähigkeit Deutschlands 2013’, <http://www.e-fi.de/gutachten.html>.

⁸⁹ High-Tech Strategy 2020 for Germany <http://www.hightech-strategie.de>.

⁹⁰ These include energy and climate protection, health and nutrition, mobility, security and communication.

⁹¹ <http://www.e-fi.de/gutachten.html> and <http://www.dihk.de/innovationsreport>.

⁹² ‘Zentrales Innovationsprogramm Mittelstand’ <http://www.zim-bmwi.de>. For 2013, the planned annual budget is EUR 500 million, which is estimated to finance about 5 000 new applications.

⁹³ The Association of German Chambers of Commerce and Industry identifies the programme in its ‘Innovation Report 2012’ as a ‘best practice’ example; <http://www.dihk.de>.

⁹⁴ See also the Staff Working Document ‘Assessment of the 2013 national reform programme and stability programme for Germany’, <http://ec.europa.eu/europe2020>.

⁹⁵ Commission Staff Working Document to assess the National Reform Programme 2013.

⁹⁶ Bundesagentur ‘Perspektive 2025: Fachkräfte für Deutschland’, <http://www.arbeitsagentur.de>; Berufsbildungsgesetz (2011).

⁹⁷ ‘Fortschrittsbericht 2012 zum Fachkräftekonzept der Bundesregierung’ <http://www.bmas.de>.

⁹⁸ ‘Fachkräfteoffensive’ <http://www.bundesregierung.de>.

⁹⁹ <http://www.make-it-in-germany.com>.

¹⁰⁰ ‘Kompetenzzentrum Fachkräftesicherung, Unterstützung für kleine und mittlere Unternehmen’ <http://www.kompetenzzentrum-fachkraeftesicherung.de>.

¹⁰¹ Flash Eurobarometer 2012, European Commission, http://ec.europa.eu/public_opinion.

¹⁰² ‘Deutsches Ressourceneffizienzprogramm (ProgRess)’, <http://www.bmu.de>.

price increases, could weigh on the competitiveness of German industry in the future.

The new energy strategy opens the door to new growth opportunities for German industry, but it also involves significant challenges. Electricity prices are already among the highest in Europe.¹⁰³ If the energy strategy is to be successful, overall economic costs need to be minimised, including by increasing the cost-effectiveness of renewable energy, by stimulating competition in energy markets, by further enhancing energy efficiency and by improving the coordination of its energy policy with neighbouring countries. The timely deployment of the required infrastructure is an important prerequisite for achieving the strategy's objectives.¹⁰⁴

Due to its size, the public procurement system has considerable potential to support the deployment of environmentally friendly products. Public procurement is increasingly integrating innovation and sustainability aspects.¹⁰⁵ For example, current legislation requires high standards of energy efficiency performance.¹⁰⁶ Since 2012, a competence centre has assisted federal, regional and local administrations in integrating sustainability aspects in their procurement processes. In addition, in early 2013, a competence centre for innovative public procurement was launched.¹⁰⁷

4.5.3 Export performance

Overall, Germany accounts for 23.6% of EU exports.¹⁰⁸ In 2012, motor vehicles and their parts were the main export products (accounting for 17.3% of exports), followed by machinery (15.0%) and chemical products (9.5%). About 69% of exports went to European countries. The second most important sales market was Asia (about 16%), followed by the Americas (about 12%). In 2012,

exports increased by 3.4%.¹⁰⁹ Compared with the EU average, German SMEs tend to be more active internationally¹¹⁰ and their relatively strong presence in emerging markets indicates further growth potential.

The federal government supports the internationalisation of businesses, especially SMEs, through a wide range of measures, including by providing information about key export markets and customs procedures, but also through trade fairs and export credit guarantees.¹¹¹ Of particular importance is the support provided by chambers of commerce and other craft and business associations, both in Germany and abroad. The iXPOS internet portal¹¹² serves enterprises as a one-stop shop for information on how to expand their business abroad. In recent years, the initiative 'new target markets'¹¹³ has focused on increasing the presence of German businesses in new emerging markets beyond the BRIC countries.

4.5.4 Business environment and public administration

Business environment

In general, the business environment is favourable, encouraging the competitiveness of enterprises, although there may still be scope for further improvement in some areas. It scores particularly well for overall satisfaction with the quality of infrastructure, while it is around average for the administrative burden of the regulatory framework.¹¹⁴

The business environment is also favourable for entrepreneurial activities, and there are federal and regional programmes in place to support the development of SMEs through a broad range of services. Due to low unemployment, emerging skill shortages and demographic trends, however, the number of entrepreneurs¹¹⁵ is expected to decline

¹⁰³ DG Energy, Market observatory & Statistics: http://ec.europa.eu/energy/observatory/index_en.htm.

¹⁰⁴ See also the Staff Working Document *Assessment of the 2013 national reform programme and stability programme for Germany*, <http://ec.europa.eu/europe2020>.

¹⁰⁵ Allianz für nachhaltige Beschaffung, <http://www.bmwi.de>.

¹⁰⁶ Novellierte Vergabeverordnung (VgV), 20 August 2011.

¹⁰⁷ <http://bmwi.de/DE/Themen/Technologie/innovation-beschaffungswesen.html>.

¹⁰⁸ Eurostat, 2012.

¹⁰⁹ Statistisches Bundesamt, <https://www.destatis.de>.

¹¹⁰ Small Business Act Fact Sheets, European Commission, <http://ec.europa.eu/enterprise/policies/sme>.

¹¹¹ <http://www.bmwi.de/DE/Themen/Aussenwirtschaft>.

¹¹² <http://www.ixpos.de>.

¹¹³ Initiative Neue Zielmärkte <http://www.bmwi.de/DE/Themen/Aussenwirtschaft>.

¹¹⁴ Germany is ranked 20th of 185 in the World Bank *Doing Business 2013* report.

¹¹⁵ DIHK-Gründerreport 2012, <http://www.dihk.de>.

further, which could hamper Germany's future growth and innovation performance. Moreover, women still represent only one-third of entrepreneurs, indicating further untapped potential. A systematic integration of entrepreneurship in the school curriculum could contribute to reversing this trend.

Germany is systematically assessing the administrative burden associated with newly proposed regulations at federal level. An expert committee scrutinises new legislative proposals and publishes an index of estimated overall changes in compliance costs.¹¹⁶ According to this index, overall compliance costs have increased by EUR 1.3 billion since 2011. So far, not all the simplification measures agreed by the federal government in December 2011 have been implemented.¹¹⁷ Defining a new target for additional simplification measures could help stimulate this process. Recently, there has been progress in defining standards for e-government and electronic invoicing.

Overall, the tax system is relatively complex. While Germany still scores slightly better than the EU average in terms of the tax compliance burden, SMEs in particular would benefit from further simplification. Despite the complexity of the tax system, the corresponding administrative costs are less than the EU average.¹¹⁸

There is scope for further increasing competition in the services sector.¹¹⁹ While competition has increased noticeably in telecommunications, it seems to be making less headway in other sectors, including in particular postal and railway services.¹²⁰ In 2012, the long-distance bus transport market was partially opened up, which may in time contribute to stimulating competition in the passenger transport sector. Market transparency agencies are currently being set up to ensure better

monitoring of competition and pricing in the fuel, gas and electricity sector.¹²¹

Public administration

Overall, Germany has an efficient and transparent public administration¹²² and the perceived quality of public services is ranked above the EU average. Nevertheless, there is still scope for further improvement in certain areas.

In general, enterprises benefit from relatively short payment times by public authorities.¹²³ Also public procurement processes seem to be well-organised and transparent, although they often remain complex and the value of the contracts published under EU procurement legislation is below the EU average.¹²⁴

Although the online availability of both information and basic public services seems satisfactory, small enterprises still use e-government services less often than their counterparts in some other Member States.¹²⁵ While the time required and costs for starting a business and for obtaining the necessary licences are broadly in line with the EU average, there may still be room for further simplification. Moreover, the single points of contact differ across *Länder* in terms of procedures and information provided, indicating possible scope for further improvement.

4.5.5 Finance and investment

German businesses mainly rely on bank loans. At the moment, access to bank finance is good and, given the current level of interest rates, firms (including SMEs) benefit from very favourable financing conditions.¹²⁶ While the availability of risk capital is broadly in line with the EU average,

¹¹⁶ <http://www.normenkontrollrat.bund.de>.

¹¹⁷ *Eckpunkte zur weiteren Entlastung der Wirtschaft von Bürokratiekosten*, 14 December 2011 <http://www.bundesregierung.de>.

¹¹⁸ *Paying Taxes Report 2013*, World Bank. Costs measured as a percentage of tax receipts: Germany 0.8%, EU average 1.3%.

¹¹⁹ See also the Staff Working Document *Assessment of the 2013 national reform programme and stability programme for Germany*, <http://ec.europa.eu/europe2020>.

¹²⁰ www.monopolkommission.de.

¹²¹ www.bundeskartellamt.de.

¹²² European Commission, *Excellence in public administration for competitiveness in EU Member States*, <http://ec.europa.eu/enterprise/policies/industrial-competitiveness/monitoring-member-states>.

¹²³ European Payment Index, Intrum Justitia.

¹²⁴ European Commission, *Cost and effectiveness of public procurement in Europe*, http://ec.europa.eu/internal_market.

¹²⁵ Survey on ICT use, 2012, Eurostat.

¹²⁶ European Central Bank (2013), *Bank lending survey and Survey on the access to finance of SMEs in the euro area*.

there is potential to do better in this respect.¹²⁷ Risk capital is particularly important for fast-growing, innovative start-ups in the ICT and other high-tech sectors.¹²⁸ Publicly funded programmes provide new firms with a range of financing instruments to start and develop their business, and a number of additional measures were introduced in 2012 and 2013.¹²⁹ It remains to be seen if these additional measures can further stimulate the relatively under-developed risk capital market. While changes in the regulatory framework may further contribute to promoting private investment, market characteristics and cultural aspects also seem to be important factors.

The Germany Trade and Investment Agency¹³⁰ provides international investors with a wide range of information and support services. Of all FDI stocks, 76% originate from within the EU. North America accounts for about 10%, while Asia holds a 5% share. Investments from outside the EU, especially Asian countries, continue to grow.

Despite the currently favourable conditions, industry faces important challenges in securing its competitiveness in the medium and long term. In particular, demographic challenges may act as a brake on growth and innovation in the future. Moreover, the declining number of entrepreneurs could have an increasingly negative impact over time. At the global level, Germany is in danger of losing ground as emerging markets are catching up in its traditional areas of competence. In order to remain at the technological frontier and to secure its competitive position in the future, continued investments in education, R&D and innovation are essential.

The new energy strategy is creating growth opportunities for many sectors, but also presenting considerable challenges in terms of energy costs, and timely deployment of the required infrastructure.

4.5.6 Conclusions

Overall, Germany ranks among the top performers in many of the competitiveness indicators of the Industrial Performance Scoreboard and the manufacturing sector remains one of the key drivers of value added and employment. Firms benefit greatly from a favourable and stable business environment, a strong competitive position, and the global reach of Germany's external trade. While the regulatory environment is generally good, there is room for improvement and SMEs in particular would benefit from further simplification.

¹²⁷ European Commission, SME Access to Finance Index, <http://ec.europa.eu/enterprise/policies/finance>.

¹²⁸ *Studie über schnell wachsende Jungunternehmen (Gazellen)*, February 2012, Federal Ministry of Economics and Technology, <http://www.existenzgruender.de>.

¹²⁹ The most important existing programmes which provide financing for start-up companies include the *High-Tech Gründerfonds*, the *ERP Startfonds* and the various programmes under the *EXIST* initiative. In 2012 the *European Angels Fund Germany* was launched in cooperation with the European Investment Bank. Since March 2013, the *WIN programme* by KfW Bank can provide additional later stage financing of up to EUR 5 million per company. Finally, since May 2013, the new programme *Investitionszuschuss Wagniskapital* has been able to provide private investors — particularly business angels — with financial incentives of up to 20% of their investments in young and innovative companies.

¹³⁰ Germany Trade and Invest, <http://www.gtai.de>.

4.6. Estonia

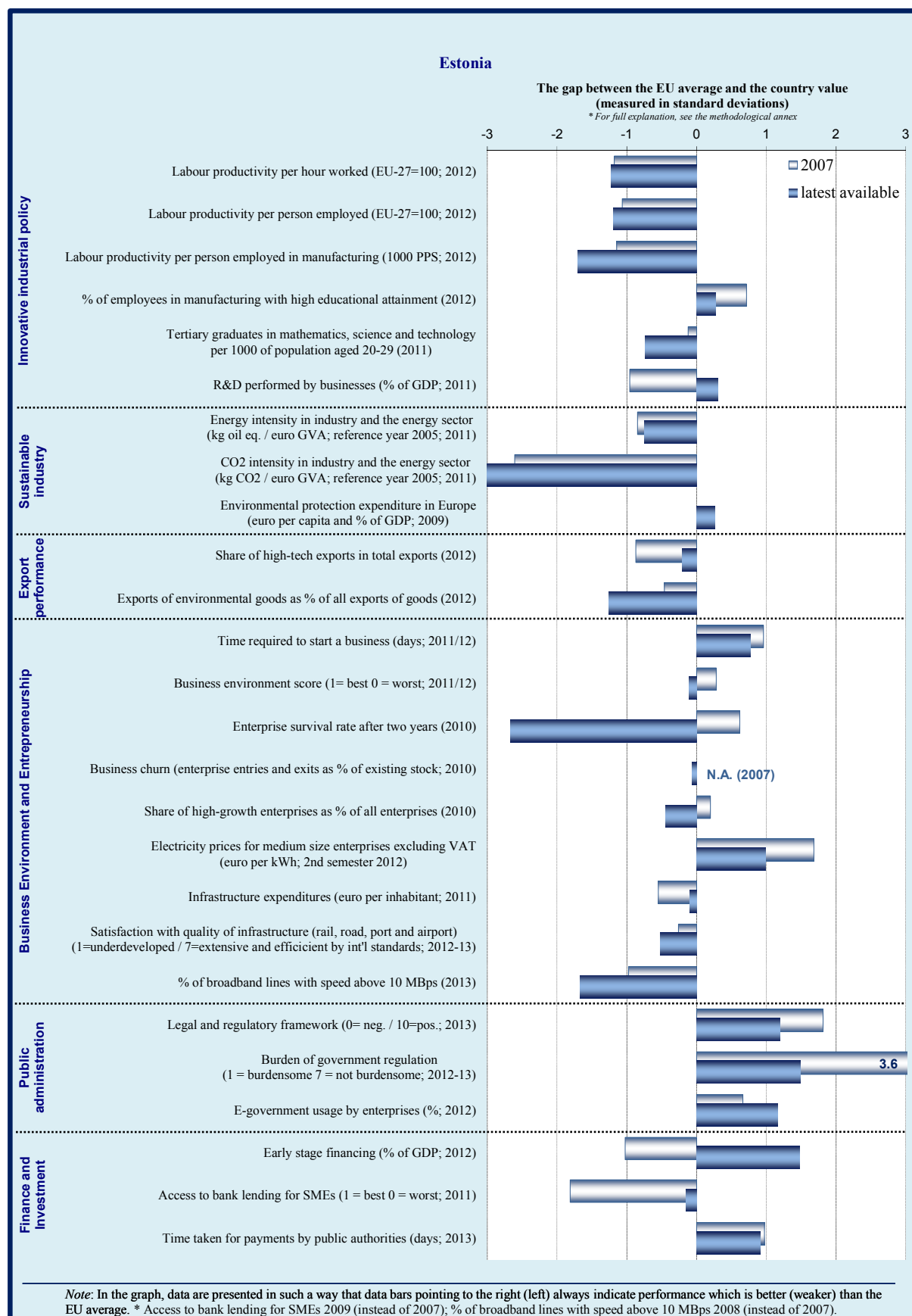
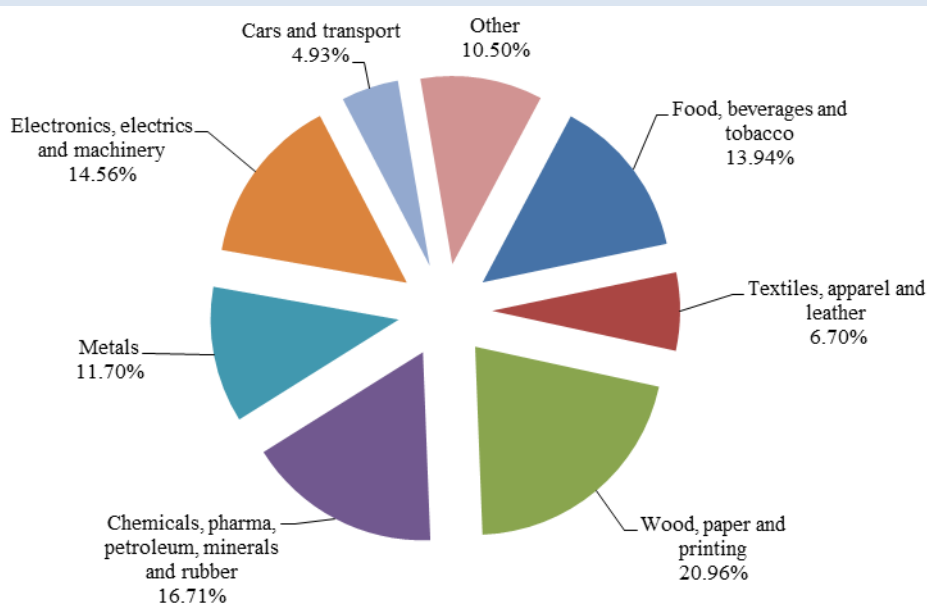


Figure 4.6: Manufacturing sectors – Estonia (2010)

Source: Eurostat

4.6.1 Introduction

Estonia is a small and open economy specialising in export-driven manufacturing, such as electronics, machinery and wood products. Manufacturing represented 16 % of gross value added in 2012, slightly more than the EU average of 15.3 %. According to national data, which is more recent than the harmonised Eurostat data presented in the graph above, the higher value-added sectors are increasing their share of total manufacturing output. This confirms Estonia's long-term trend towards convergence with its Nordic neighbours. While the gap with other Nordic countries may not close completely in the near future, the trend appears to be consistent, and is confirmed by the improvement in labour productivity per person employed. This went up substantially between 2001 and 2011, from about half to two thirds of the EU average according to Eurostat, and with a shift towards higher value-added activities.

4.6.2 Innovation, skills and sustainability

Innovation

In the 2013 Innovation Union Scoreboard¹³¹ Estonia scores slightly below the EU average, but is improving at a much faster pace than any of its EU peers. In particular, expenditure on research and development (R&D) has increased considerably¹³² (from around 1 % in 2005 to 2.4 % in 2011), with total private investment doubling between 2010 and 2011. Much of this increase is due to large scale investments by the oil-shale related industry in the development of technology for extracting fuel and lubricants from oil-shale. These investments are not only targeted at the exploitation of Estonian reserves, but also aim to export the technology to countries that are geologically similar, like Canada and Jordan. R&D expenditure would have increased by 20 % even without this project, and the dynamism of this field can be seen in the high number of innovative SMEs and the improving quality of academic research.

The goal of the country's research, development and innovation strategy 2007-13 was to move

¹³¹ http://ec.europa.eu/enterprise/policies/innovation/files/ius-2013_en.pdf.

¹³² Source: Statistical Office of Estonia.

upwards in the international value chain. Recent data has rewarded this decision: highly skilled, high value-added industries have weathered the crisis better and have recovered faster. Furthermore, as the labour pool is set to shrink in the future, a shift from labour-intensive to innovative and capital-intensive sectors will be necessary. Estonia is unlikely to be able to compete on the basis of labour costs in the long term.

Support programmes for innovative enterprises are continuing, although with a more targeted approach. In 2014-20 the government will focus on market segments that appear more promising (smart specialisation), and on key companies (based on their importance to the economy and their growth potential). The segments identified are ICT as a key enabling technology, i.e. with the potential to support other sectors; health and medical technologies; and the efficient use of resources. The latter category includes healthy food, smart housing, materials science, shale oil and chemistry. Targeted support makes it easier to access finance but also to tap into skills and knowledge, such as through strategic partners. The strategy is mostly being implemented by Enterprise Estonia, which will gradually move from being a simple grant provider to playing a more strategic and active role. Rather than just financing a project, it will help to shape it in a way that increases its chances of success. The Estonian development fund will monitor the smart specialisation process; the strategy could be further enhanced by stronger inter-ministerial cooperation.

Skills

One of the priorities for the economy is to reduce the skills mismatch,¹³³ as these lead to the coexistence of unemployment and unfilled positions. Also the longer-term demographic challenges require adaptations. Areas where skills are lacking include the high-tech sectors, management, and specialised crafts. To improve the situation, Estonia has modernised its vocational education and training¹³⁴, and has undertaken other

initiatives, for example on ICT skills.¹³⁵ Lifelong learning capacity has been strengthened but there is room for further improvements.¹³⁶ A task force was set up in 2012 to investigate the situation, draw up forecasts of future demand for skills, target the right sectors and groups, and provide the necessary support and financing. The government will provide a quantitative forecast of demand for skills, and the Estonian Qualifications Authority will map the occupational fields and develop the required qualification standards. The first steps are a register of competencies in the state register of occupational qualifications, and a link between online registers, with full implementation of the scheme foreseen for 2014-15.

One of the main bottlenecks in the economy is a dearth of trained managers who have experience in customer management and can call on a network of contacts. The current initiatives to increase the supply of qualified technical personnel, such as scholarships for students in the technical fields where the demand is greatest, are unlikely to solve this problem. Estonian companies have indicated that it is easier for them to produce interesting technology than to find a market for it, or to find the managerial skills needed to grow and internationalise a business. Training providers and the government are aware of the issue, and are trying to remedy it. However, this is a long-term project; in the short term, many companies are forced to bring in expertise from abroad. This solution might lead to companies leaving the country, as foreign managers can be less committed to Estonia, but can still have positive effects: for example, Skype kept development in Estonia despite the headquarters being moved elsewhere.

Procedures for hiring foreign workers in sectors with high demand have been streamlined. Foreign workers are able to enter and work in Estonia before the paperwork has been completed, instead of waiting abroad.

¹³³ The parliament is discussing a VET Institutions Act and the government is studying a Life-Long Learning Strategy for 2014-20.

¹³⁴ The VET Institutions Act to be adopted and implemented by September 2013.

¹³⁵ Updating the ICT skills of students and teachers; “Õppiv Tiiger” - The Learning Tiger Programme 2008-13 in general as well as vocational education and the “Tiigriülikool” Tiger Programme 2009-12 in higher education.

¹³⁶ Adult participation in lifelong learning has increased from 6.5 % in 2006 to 12.9 % in 2012. But it remains much lower for the 50+ age group and the population of Russian origin. A new national LLL Strategy for 2014-20 is under discussion.

Sustainability

As regards the sustainability of its industrial policy, Estonia lags behind the EU average in terms of the energy intensity of GDP. This is largely due to the oil shale industry, which accounts for a high proportion of the energy mix. In addition, the district heating system uses energy inefficiently. The government is developing plans to reduce energy consumption and to let efficient users sell the resulting CO₂ permits, as successfully done with the creation of an electric car pool (500 cars) for social workers, a project including also purchase grants for private persons and a quick charging network to cover the whole country. The related CO₂ permits have been sold, and the project had also a spin-off effect, as Mitsubishi established a research project on electric car batteries and their performance in cold climates. The most advanced new project is for upgrading street lighting.

Given the low energy efficiency of residential buildings and businesses, there is potential for economically sound environmental policies. However these need to be supported with the necessary technical skills. To achieve this, a certification system for energy auditors is planned. This should improve the technical expertise through government-approved training schemes. However, there are financial constraints to be overcome. SMEs tend to have a short time horizon and limited funds, and therefore might not be interested in investing in energy efficiency even when their payback time is relatively short. Therefore, KredEx¹³⁷ will provide loans to support such investment.

Road transportation has very low energy efficiency, but for now there is no political will to introduce vehicle taxation to foster the use of smaller and/or more energy-efficient cars or to favour energy-efficient alternatives, as this would be unpopular among Estonians. Noticeable progress has been made with upgrades to the public transport fleet under the national environmentally-friendly investment programme for 2007-14. The passenger train fleet will gradually be replaced, with the first units already operating. The Tallinn tramway and bus infrastructure is being renovated, with new trams and buses purchased. Many buses operating

elsewhere under public service contracts have been replaced.

The green innovation programme will help to create and distribute green products and services, with a strong focus on ICT. The programme is supported by a EUR 6 million grant from Innovation Norway, and is managed by Energy Estonia. However, effectiveness of these measures is hindered by the fact that share of trips made by public transport continues to drop in Estonia.

4.6.3 Export performance

Estonian exports have one of the highest shares of GDP in the EU and how exports perform is correspondingly important. The recovery that followed the 2009 recession was mainly driven by exports as domestic demand remained weak. Recently manufacturing production has continued to increase relatively strongly, growing 2.7 %¹³⁸ in April 2013 year-on-year, but it has been partly driven by a surge in domestic demand. Consequently, the current account balance has deteriorated, moving from 3.2 % of GDP in 2010 to -3.1 % of GDP in 2012, and is expected¹³⁹ to stay negative in 2013 and 2014 as well.

The policy of moving up the value added chain seems to have brought results. In 2012,¹⁴⁰ the proportion of medium- to high-tech exports increased substantially, with electronics and electrical equipment representing 33.4% of the total. Some of these exports reflect sub-contracting by multinationals and are not a sign of local technology development, but still add value. As international firms move more sophisticated functions to Estonia, goods produced by or for them will add more and more value.

Exporters are supported by two main agencies, KredEx and Enterprise Estonia, with the first focusing on credit insurance and the other on finance. Enterprise Estonia also offers information

¹³⁷ The Estonian SME finance institution.

¹³⁸ Source: Eurostat data reported in the Euro area monthly note on industrial production available at http://epp.eurostat.ec.europa.eu/cache/ITY_PUBLIC/4-12062013-AP/EN/4-12062013-AP-EN.PDF.

¹³⁹ EU spring forecast, as well as Eurostat data, both available at http://ec.europa.eu/economy_finance/eu/forecasts/2013_spring_forecast_en.htm

¹⁴⁰ Source: Statistical Office of Estonia.

and skills development services, including specific services for selected target markets. The penetration of the support measures appears to be excellent. According to government estimates, companies accounting in total for 50% of exports are clients of Enterprise Estonia, while KredEx clients account for more than 5% of private sector employment.

4.6.4 Business environment and public administration

The regulatory environment is cost-effective and business-friendly, and scores particularly well on e-government as the availability and use of e-government tools are exceptionally high. Electronic filing is used by almost all taxpayers (97%), and all procedures can be completed without visiting the tax authority's offices. The authority reports that there were substantially fewer such visits last year, dropping from about 300 000 to 200 000. A EUR 25 million project to improve public services was launched with support from the European Social Fund. Since standard software for e-procurement was introduced, its use has increased significantly, from 5% in 2011 to 25% now and an estimated 50% by the end of 2013. Some 7% of all invoices are electronic, but a common standard still has to be developed.

The government is also looking to improve its insolvency procedure, one of the few areas¹⁴¹ where Estonia lags behind its EU peers. The goal is to facilitate an agreed debt restructuring, to find alternative ways of dealing with insolvencies (i.e. through out of court resolution), while raising the competence of judges that deal with such cases.

Rationalising the municipalities, which are often small and lack the resources to provide certain services, could increase the efficiency of public administration. Moreover, the financing system of municipalities does not currently include incentives for local governments to support entrepreneurship and job creation. However, as such a reform would be politically challenging, the goal is instead to coordinate their activities and pool resources to achieve many of the benefits of rationalisation with

less opposition. At the same time, incentives are being set for their merger on a voluntary basis.

The administrative burden on businesses appears to be reasonable; in December 2012 a methodology to assess the impact of legislative acts has been adopted, which should increase their quality and transparency. There is an electronic system for consulting on new laws and regulations, but some stakeholders report that the minimum time of two weeks is insufficient, and is sometimes not respected. Further, a more robust assessment of the costs and benefits of new regulations could be useful, as in some case the costs imposed on businesses may be disproportionate. This could be the case for the increase in the amount of information collected on sales, which is a measure to enhance VAT collection and fight the black market. This requirement has resulted in an additional burden on 75 000 payers, but has only resulted in EUR 25 to 30 million more being collected.

In some cases the government's preference for a small number of simple rules may have negative consequences. In particular, social charges on labour cannot be lower than a minimum contribution based on the minimum wage, with no exceptions for part-time workers. At the same time the government also needs to be alert to VAT fraud, as it estimates that 22% of the 18 000 new companies founded in 2012 were involved in such activities. The government is working on extending a warranty system that has been successful in reducing fraudulent claims in the fuel sector.

4.6.5 Finance and investment

Access to finance has shown signs of improvement, but remains a priority for Estonian firms. Since the onset of the crisis, access to sources of financing such as the stock and bond markets has been limited. Some large firms, especially utilities that enjoy steady cash flows, have continued to access bond markets, but this has not been possible for SMEs. Many larger firms have been forced to tap foreign markets, mainly London.

The government is considering the possibility of supporting a local stock and bond market, but this would be a medium to long-term project. For SMEs, there is little alternative to bank lending.

¹⁴¹ See http://ec.europa.eu/enterprise/policies/industrial-competitiveness/monitoring-member-states/improving-public-administration/index_en.htm.

The banking sector is doing well with rising numbers of clients, deposits, foreign transactions, leasing contracts and card usage. The growth of their loan portfolios that started in 2012 continued at a moderate speed in early 2013 with the corporate loan portfolio increasing by 5 %¹⁴². The composition of the loan portfolios is also changing, with little lending going to real estate. This suggests that firms in other sectors are getting better access to loans, although the loan approval criteria continue to be strict.

Entrepreneurs often use their own assets as collateral to get loan approval. The growth of leasing can be an indication of a preference for collateralised loans. Such risk aversion can lead to constrained credit and lower growth. On the other hand, it also guards against excessive leverage. Firms have adjusted to the situation by becoming more efficient, reducing their need for capital, and limiting their exposure to external financing. This makes them more resilient, but also curbs their ability to grow.

KredEx, Enterprise Estonia and the Estonian development fund are the government's tools to support firms. The development fund is being reformed and made more project-based. Two new organisations were established in 2012 to facilitate access to seed and equity capital. EstBAN is a network of angel (early stage) investors with 25 members, offering investment in sizes from EUR 20 000 to 500 000. These investors expect to invest in 10-15 firms to a total of EUR 1 million in 2013. Although the amounts are low, the effect of such 'smart money' investment should be more than proportional to their size, since recipients will benefit from the experience of the investor, and the funds will be channelled to firms with rapid growth potential.

Another new institution is the Baltic Innovation Fund, a EUR 100 million fund of funds which will invest in private equity and venture capital funds in the Baltic countries. The EIF is investing EUR 40 million, along with EUR 20 million each from the different national promotional agencies. Foreign

direct investment focuses on five priority sectors¹⁴³ (metals/machinery, electronics, ICT, shared services and logistics), and grew from 27 investments in 2011 to 35 in 2012.

4.6.6 Conclusions

Estonia has recovered quickly from the crisis of 2008-09. Although the growth rate has slowed somewhat, the country is still outperforming the EU average. It is also improving its position in the international value chain, moving towards more innovative and knowledge-intensive sectors and benefiting from growing investment in research and development.

However, efforts will be needed to keep this positive trend going. Particular efforts need to be made to address the high energy intensity of the economy, and the shortage of skills necessary for further growth. Although there have been signs of improvement, many companies, especially new ones, find it difficult to get access to finance. The good business environment is to be admired, and is being further improved.

¹⁴² Financial Stability Review 1/2013, Bank of Estonia. Available at <http://www.eestipank.ee/en/publication/financial-stability-review/2013/financial-stability-review-12013>.

¹⁴³ Data from the Estonian Investment and Trade Agency (a branch of Enterprise Estonia).

4.7. Ireland

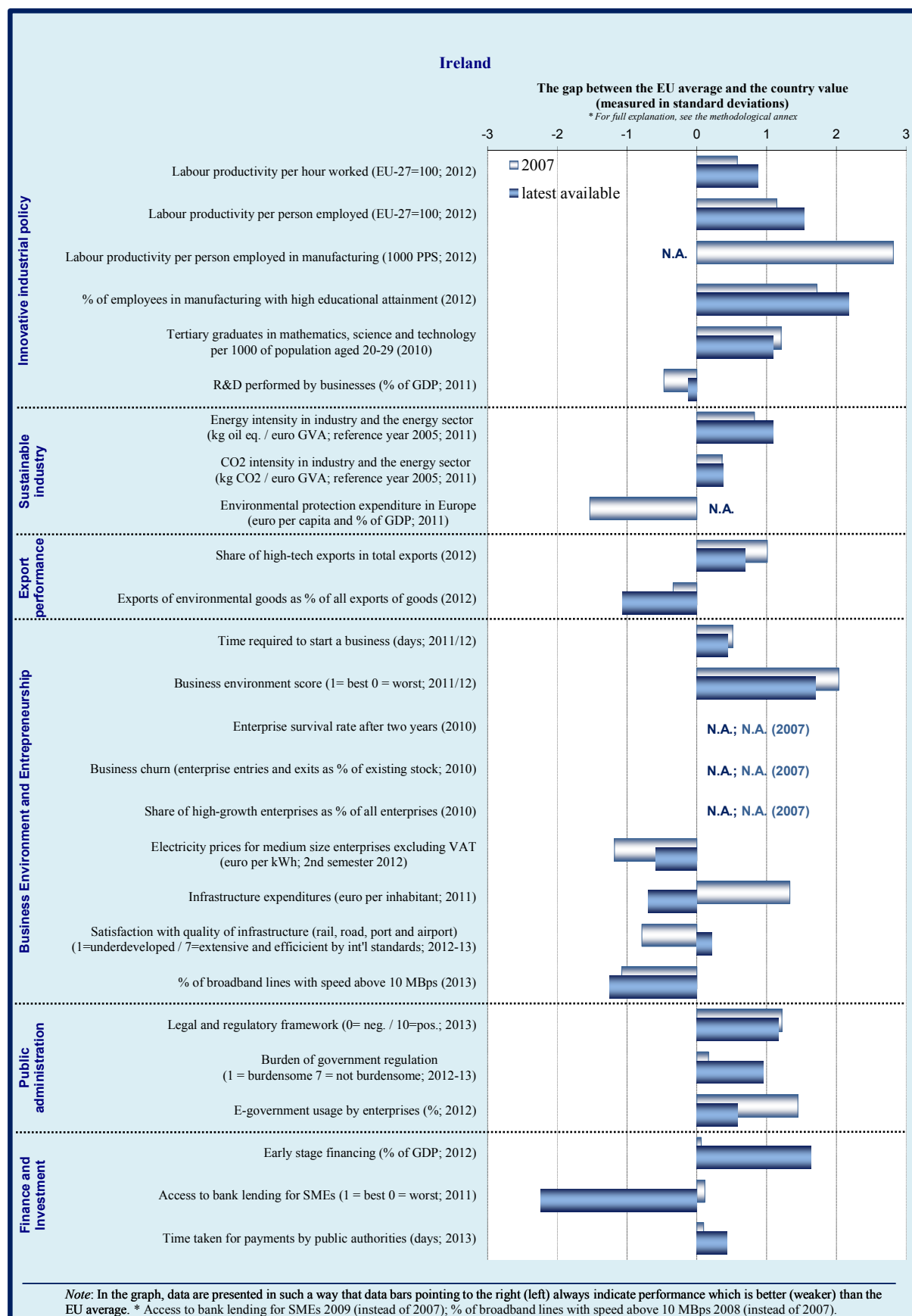
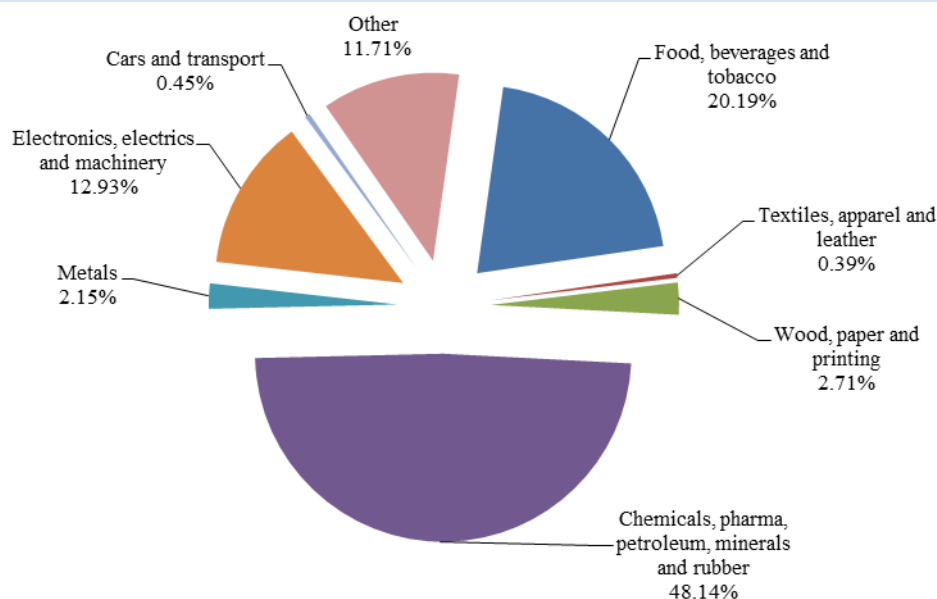


Figure 4.7: Manufacturing sectors – Ireland (2010)

Note : No data available for sectors C12 (tobacco products), C19 (coke and refined petroleum products), C30 (manufacture of other transport equipment) and C31 (furniture)

Source: Eurostat

4.7.1 Introduction

Ireland has done relatively well in carrying out the necessary reforms as prescribed under the financial assistance programme. The main focus of the programme has been to restore financial market confidence by reducing the government deficit and shrinking the banking sector, while reforming the economy at the same time. Real GDP growth figures show that Ireland is rebounding from the crisis with 2.2% growth in 2011 and 0.2% for 2012.¹⁴⁴ Ireland's efforts at economic reform would suggest that it may be ready to exit the programme at the end of 2013, as was originally foreseen.

The Irish economy is principally based on SMEs, which account for 99.7% of companies. Microenterprises account for the bulk of these, representing 89% of enterprises. However, while only roughly 0.3% of companies are large enterprises, they account for approximately 31% of employment and 48.5% of Ireland's value added.¹⁴⁵ Ireland has a large foreign multinational sector with comparative advantages in sectors such as pharmaceuticals and chemicals. In fact, this sector accounted for 51.8% of manufacturing in Ireland in

2009. The other main sectors were the food, beverages and tobacco sector, at 17.4%, and the electronics, electrics and machinery sector, registering 13.7% of the total. The services sector is also becoming increasingly important, in particular high-technology and knowledge-intensive services.

The Irish economy ranks second highest with respect to labour productivity per person employed and ranks first with respect to labour productivity per person employed in the manufacturing sector. However, this data should be treated with caution, given the effect of the large number of foreign multinationals and their use of adapted transfer pricing.

4.7.2 Innovation, skills and sustainability

Innovation

According to the 2013 Innovation Union Scoreboard,¹⁴⁶ Ireland is an innovation follower with an above average performance.

The 'Strategy for Science, Technology and Innovation 2006-13' has been the main tool used for achieving the goal of making Ireland a leading

¹⁴⁴ Revised national Accounts data; European Commission Spring 2013 Economic Forecasts.

¹⁴⁵ Ireland SBA Fact Sheet 2012: http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/countries-sheets/2012/ireland_en.pdf.

¹⁴⁶ http://ec.europa.eu/enterprise/policies/innovation/facts-figures-analysis/innovation-scoreboard/index_en.htm.

knowledge economy. In 2012, the government adopted the report of the Research Prioritisation Steering Group. The group identified 14 priority areas, along with six underpinning platform technologies and infrastructures that will become the focus of the majority of competitive funding in research for the next five years.

Ireland has an R&D target of 2% of GDP by 2020. This stood at 1.72% in 2011 with business R&D accounting for 1.17% of the total. R&D investment by firms does not appear to have been seriously affected by the crisis, to the extent that business R&D investment in real terms continued to increase until 2010 and remained constant in 2011. The provisional estimate of gross domestic expenditure on R&D (GERD) financed from abroad stood at 19.2% in 2011.¹⁴⁷ This reflects the policy of attracting foreign investment with a large R&D component.¹⁴⁸ The key areas of focus are the food sector, agriculture and fisheries, medical technologies, and nano and bio-technologies. Ireland is also strong in ICT compared to the EU and also to the US.

Fiscal measures play an important role. R&D tax credits were established in 2004, providing a 25% tax credit on incremental expenditure and a 25% volume-based credit for eligible capital expenditure. This was complemented with an expansion of tax credits in 2010 to enhance investment in intellectual property by excluding royalty income from withholding tax. The 2013 budget stated that credit would be reviewed with the objective of ensuring that tax credit remains 'best-in-class' internationally and represents value for money for taxpayers.

An Intellectual Property Protocol (IPP) was published in June 2012 as part of the Action Plan for Jobs 2012. The protocol aims to help industry access R&D done in Irish universities, institutes of technology and other public research institutions. It also aims to commercialise IP generated from such research. Among the measures included in the protocol is a new Central Technology Transfer Office which will be hosted by Enterprise Ireland. It will act as a one-stop shop for businesses seeking to use IP from public-funded research. While this has not yet become fully operational, work has commenced on setting up a portal.

However, Ireland also has a number of challenges in research and innovation, in particular the relatively low number of patent applications as well as a decline in the number of innovative SMEs.

Skills

One of Ireland's strengths has always been its well-educated workforce. This is reflected in the fact that it ranks as top among Member States with respect to the percentage of employees in the manufacturing sector with high education attainment levels. Moreover, it currently has the highest tertiary education attainment rate in the EU at 51.1% (2012), with a target of 60% for 2020. Ireland is also making progress in the early school leaving target of 8% by 2020, reaching 9.7% in 2012.

Nevertheless, increasingly long-term unemployment and high levels of youth unemployment are a source of concern. In an effort to return to growth, the government is seeking to up-skill, re-skill and provide education and training opportunities to the unemployed. With this goal in mind, a series of education and training programmes have been set up, such as Momentum, Springboard and Youthreach. In 2010, there were 2 385 Youthreach participants that achieved certification, of which 15% progressed to employment, while 52% continued to further education and training. The development of new training opportunities, in particular the up-skilling of the work force and of the unemployed as well as re-entry into education, is essential to ensure that long-term-unemployed jobseekers do not become permanently excluded from work.

The National Skills Bulletin 2012 pointed to skills gaps, mainly in science, engineering and IT. A joint government-industry ICT action plan was launched in 2012, including the doubling of ICT graduates by 2018. The ICT graduate skills conversion programme has also been developed to tackle this shortage. This is particularly important given the importance of the IT sector in Ireland.

Sustainability

Ireland is the best performer in the EU for both energy intensity and CO₂ intensity. The reason for this is the importance of services and high value-added manufacturing. The key environmental challenges are inefficient building stock, fossil-fuel-

¹⁴⁷ Eurostat estimated EU average for 2010 stood at 8.9% of GDP.

¹⁴⁸ Ireland country report — Research & Innovation Performance in EU Member States and Associated countries 2013: http://ec.europa.eu/research/innovation-union/pdf/state-of-the-union/2012/innovation_union_progress_at_country_level_2013.pdf.

based electricity generation and a culture of car dependency.¹⁴⁹

As part of the Action Plan for Jobs 2012, the government published the policy document 'Delivering Our Green Potential' aimed at developing the green economy. According to this report, 18 750 people were employed in six key sub-sectors of the green economy in 2010¹⁵⁰ and the value of sales of low-carbon environmental goods and services was estimated at approximately 4% of GDP in 2010-11.

The report mentions firms that have developed innovative clean-tech products in areas such as insulation materials, efficient heating equipment, energy management systems and energy-efficient lighting. As envisaged under the policy, a consultative committee involving the ministry and key stakeholders has been established. The committee meets on a quarterly basis to examine key thematic areas of the green economy with a view to identifying opportunities and activities to address barriers and help enterprises take advantage of opportunities. The identified actions may be included in the Action Plan for Jobs in subsequent years.

There are a number bottlenecks preventing business from improving the uptake of cleaner technology, mainly related to access to finance. For smaller companies, another factor is a lack of awareness of low-cost solutions. In an effort to address this problem, a number of specific programmes are being offered to businesses, as is mentoring.¹⁵¹

In March 2013, the government also announced that it was setting up a new energy-efficiency fund, worth EUR 70 million (EUR 35 million to be made available by the government with the rest coming from the private sector), as part of the second National Energy Efficiency Action Plan. The fund provides finance to energy-efficiency projects across all sectors of the economy. It is envisaged that lending will start in 2013.

4.7.3 Export performance

Exports account for over 100% of GDP and Ireland has the largest share of exports as a percentage of GDP, given the significant number of international companies. While the recession has had an extremely negative effect on the economy, it has recovered in part due to the strength of exports by firms in the high-tech sectors. These firms are mainly affiliates of multinational enterprises.

Data for 2012 shows that the current-account surplus surged to 4.9% of GDP in 2012, reflecting not only a contraction in domestic demand, but also competitiveness gains achieved through increased productivity, inflation below the euro-area average, and cost-cutting measures, including on wages. Persistent weakness in trading-partner demand is nevertheless affecting demand for merchandise exports, which contracted on a quarterly basis in the last two quarters of 2012, as a result of the anticipated expiry of pharmaceutical patents. However, the rise in services exports, which have expanded by around 10% in annual terms every quarter since the second half of 2010, has however substituted for weak goods export developments.¹⁵² In fact, 2012 was a notable year in that it was the first year that the value of exports of services exceeded that of goods, and that services exports exceeded services imports.

The Action Plan for Jobs plays a role by helping indigenous companies to export. In 2012, a new potential exporters division within Enterprise Ireland started to provide assistance and guide clients in their international export strategies. A new microenterprise and small business division has also been established within Enterprise Ireland. As of 2013, local enterprise offices will be established to provide support to small and microenterprises on behalf of Enterprise Ireland.

4.7.4 Business environment and public administration

Business Environment

Ireland remains one of the most attractive places to do business in Europe, ranking fifth in the EU and fifteenth globally.¹⁵³ Its strengths include protecting investors, paying taxes and resolving insolvencies. It scores relatively low in dealing with construction permits and obtaining electricity. It is also ranked as the easiest place to start a business in the EU and

¹⁴⁹ Eco-innovation Report on Ireland 2011: http://www.eco-innovation.eu/index.php?option=com_content&view=article&id=474&Itemid=62.

¹⁵⁰ Taken from the Expert Group on Future Skills Needs (EGFSN) the sub-sectors being renewable energies; efficient energy use and management; water and waste water treatment; waste management, recovery and recycling; environmental consultancy services; and Green ICT applications/software.

¹⁵¹ Such as www.cleanerproduction.ie; www.begreen.ie; www.seai.ie/Your_Business.

¹⁵² European Commission Spring 2013 Economic Forecasts.

¹⁵³ World Bank Doing Business Report 2013.

it achieves two of the three main goals of the May 2011 Competitiveness Council recommendations, as it takes approximately two to five days to open a business at a cost of EUR 50.¹⁵⁴

The Action Plan for Jobs contained 270 individual actions for 2012, with over 90% of these being completed. The plan covered a series of small measures aiming to improve the research, innovation and skills base; measures to help SMEs to enter new markets and access finance; attracting entrepreneurs from the diaspora to Ireland; and focusing on some of the most promising sectors.

A new Action Plan for Jobs 2013 has been launched, building upon previous initiatives, but including 333 actions. The new plan is more ambitious, including projects that require cross-government collaboration. Nonetheless, there are still issues of concern for local businesses, in particular for SMEs. While cost competitiveness has improved over recent years, small businesses still face relatively high electricity prices. In fact, Ireland has one of the highest costs of electricity in the EU, because it depends on imported fuel and has under-invested in distribution networks.

Services have become increasingly important in recent years. These mainly consist of high-technology services, such as computer services, and knowledge-intensive services, such as financial services, insurance and other business services. In fact, it has been estimated that while the services sector accounted for 21% of all exports in 2000, for the third quarter of 2012, services accounted for 50% of total exports.¹⁵⁵

Legal services remain expensive,¹⁵⁶ and the high price is hampering cost and external competitiveness. The Legal Services Regulation Bill, which is a programme requirement, addresses many of these issues, in particular by establishing a new Legal Services Regulatory Authority. The bill is expected to be enacted by the end of 2013.

Public Administration

While tax compliance burden is among the lowest in the EU, SMEs see VAT compliance as a major burden. In the 2013 budget, the government

increased the VAT cash receipts basis accounting threshold from a turnover of EUR 1 million to EUR 1.25 million to help companies with cash flow. However, many businesses felt that doubling the threshold to EUR 2 million would have been more useful. The government has also launched a consultation concerning taxation of microenterprises in an effort to identify ways of easing the administrative burden of tax compliance.

The government is pursuing a public-service reform plan which aims to maximise new and innovative service delivery channels. This includes the e-government strategy 2012-15, which is the main policy tool for pushing e-government so as to reduce the administrative burden on businesses and consumers. In all, 91% of enterprises currently use e-government services (2012).

As regards the administrative burden and the goal of achieving a 25% reduction by 2012, a reduction of approximately 20% across all ministries has been achieved. The goal is to reach the 25% target by the end of 2013. This will include creating a business portal where retailers can register once and apply for all licensing requirements. The aim is complete this portal by October 2013.

On the issue of corruption, according to Transparency International, the corruption perception index for 2012, Ireland ranks 25th in the world and 10th in the EU. While this is a relatively good score, since 2009 there has been deterioration in the perception of corruption in Ireland.

4.7.5 Finance and investment

One of the major challenges facing SMEs remains access to finance. This is due both to generally weak demand for credit in a deleveraging environment and to supply side constraints. A recent report¹⁵⁷ noted that access to finance was the third largest problem facing SMEs, after finding customers and competition.¹⁵⁸ Loan rejection rates are among the highest in the EU¹⁵⁹ and the general perception among SMEs is that banks are not lending.¹⁶⁰ This may be due to the fact that many of those who are refused credit do not agree with the reasons for the refusal, or are not given any reasons. Moreover, long time lags for processing can add to firms' difficulties.

¹⁵⁴ The conclusions of the Competitiveness Council of 31 May 2011 are namely to create a one-stop-shop for starting up a business, and a call to Member States to reduce the start-up time for new enterprises to 3 days and EUR 100 by 2012. DG Enterprise and Industry data.

¹⁵⁵ Irish Central Bank Report, Quarter 1 2013.

¹⁵⁶ The World Bank Doing Business 2013 report estimates that as a percentage of the value of a standardised claim in a commercial dispute, the enforcement cost is 26.9% in Ireland, as opposed to an OECD average of 20.1%.

¹⁵⁷ By the Economic and Social Research Institute (ESRI).

¹⁵⁸ 'SME Credit Constraints and Macroeconomic Effects', Gerlach-Kristin, O'Connell & O'Toole, ESRI, April 2013.

¹⁵⁹ Access to Finance Report, ECB April 2012.

¹⁶⁰ Irish Department of Finance Report on SME Credit Demand Survey September 2012.

Improving access to finance is one of the key objectives of the Action Plan for Jobs 2013 with a number of initiatives being undertaken. The objectives are governed by a cross-departmental steering group, known as the SME State Bodies Group, which oversees the activities related to SME bank and non-bank access to finance.

Another government initiative was the establishment of the Credit Review Office (CRO) in 2010. It is designed to resolve disputes between banks and their SME clients about loan refusal, with a power to overturn loan decisions. Leading banks have been set lending targets of EUR 4 billion each in 2013. Banks are required to process loan applications within 15 days, although the average time is 29 days.¹⁶¹ Banks also need to enhance their capacity to assess SMEs creditworthiness based on cash flow rather than property collateral.

SMEs are used to working with bank overdrafts and tend to renew or restructure bank overdraft facilities. There are also skills gaps, in particular among microenterprises, when it comes to presenting the necessary business plans required by banks. While banks have prepared a joint guidance plan to help businesses in this regard, further assistance by government may be warranted. A one-stop website¹⁶² for Irish business has been useful and is jointly supported by banks, businesses and government.

Ireland has an active seed and venture capital market and the Seed and Venture Capital Programme 2013-18 will provide up to EUR 175 million in funding. The majority of these funds will be invested in high-growth innovative firms in fast-growing sectors such as ICT, life sciences, high-tech manufacturing and the green economy. The government is aiming for an additional EUR 525 million in funding from the private sector, which will mean a total of EUR 700 million for investment throughout the lifetime of the programme.

In 2012, a credit guarantee scheme and a microfinance scheme were launched. The former will facilitate access to up to EUR 150 million in additional lending. The latter will provide for an additional EUR 90 million in lending. However, the take-up of these schemes is relatively low. Innovation Fund Ireland has been created to increase the availability of capital for early-stage and high-growth companies. Moreover, the National Pensions Reserve Fund has undertaken to

put funds in place to help meet SME financing needs.¹⁶³

Foreign direct investment was provisionally estimated at EUR 22.8 billion in 2012, a significant increase in relation to the 2011 level of EUR 8.2 billion. This is a significant improvement following a decline in inflows between 2010 and 2011. It was also estimated that inflows for 2012 accounted for 14.3 % of Irish GDP.¹⁶⁴

4.7.6 Conclusions

Ireland is slowly returning to growth, which is also becoming more broad-based. The economic adjustment programme has been implemented consistently, which has had a positive impact, including restored competitiveness.

However, some key challenges remain. The fight against high unemployment, in particular youth and long-term unemployment, is a priority for the government and the 'Action Plan for Jobs' has been at the heart of efforts to foster job creation.

The skills mismatches resulting from structural changes in the economy over the past years also present a significant challenge. Thus, ongoing reforms to provide appropriate further education and training are crucial. Access to finance, in particular for SMEs, is yet another challenge. Although cleaning the banking system has been going on for quite a while, it has not yet reached its conclusion, and further deleveraging of the whole economy would help to establish the credit flows again restore the health of domestic banks, thereby restoring normal lending channels to the economy.

¹⁶¹ Irish Department of Finance Report on SME Credit Demand Survey September 2012.

¹⁶² www.smallbusinessfinance.ie.

¹⁶³ Namely, the SME Equity Fund, the SME Turnaround Fund and the SME Credit Fund.

¹⁶⁴ <http://www.oecd.org/daf/inv/FDIinfigures.pdf>.

4.8. Greece

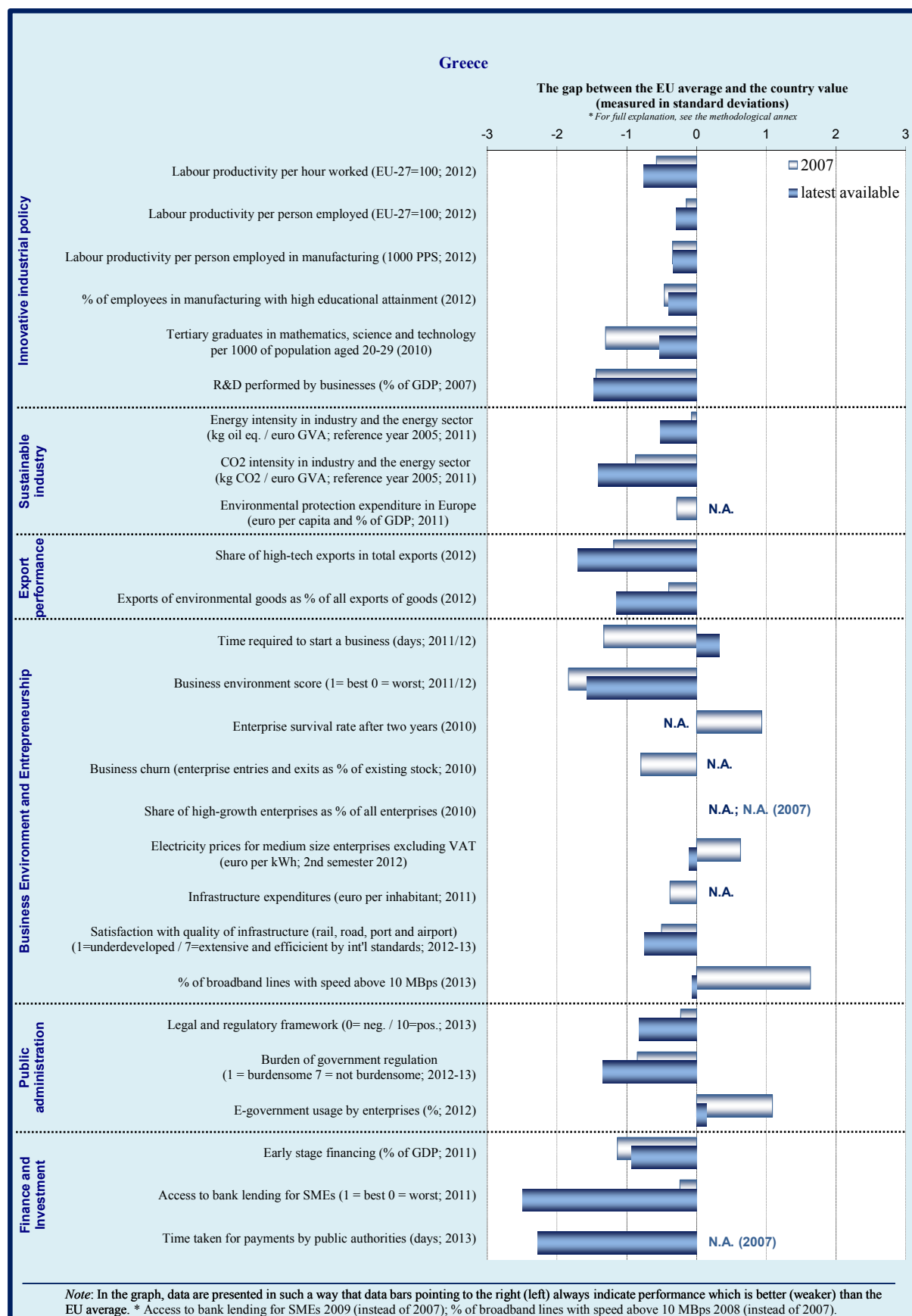
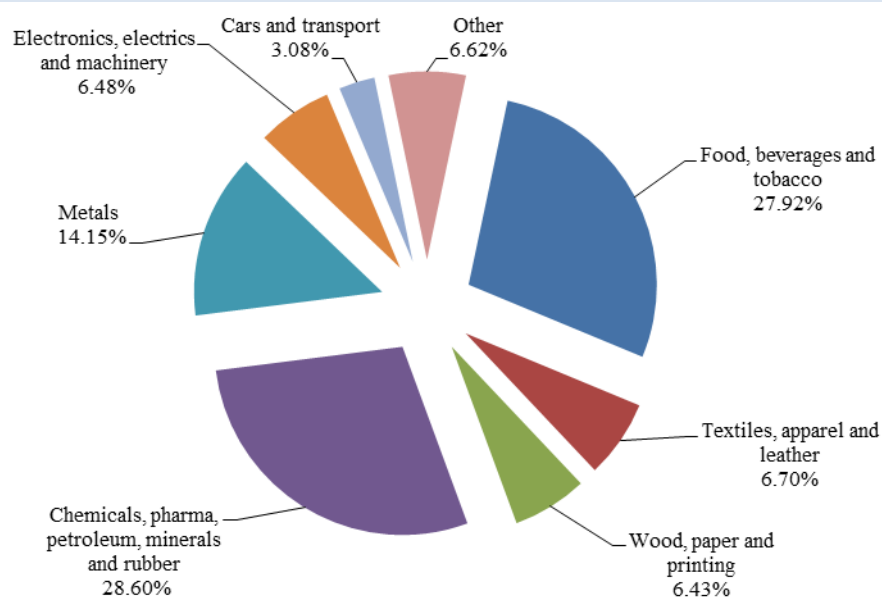


Figure 4.8: Manufacturing sectors – Greece (2009)

Source: Eurostat

4.8.1 Introduction

The Second Economic Adjustment Programme for Greece was approved in March 2012, financed by the European Financial Stability Facility (EFSF). The programme foresees financial assistance of EUR 164.5 billion by the end of 2014.

The economy saw a drastic decline in competitiveness following an increase in labour costs of more than 50% in 1999–2009. In 2012, GDP decreased by 6.4%, and the forecast for 2013 is a decrease of over 4%. However, competitiveness is currently being restored through increased wage flexibility and low inflation. According to the figures from the Hellenic Statistical Authority, labour costs have been reduced by 20% over the past three years.

The services are the biggest sector in the Greek economy, and tourism is a major part of that in terms of both importance to the economy and employment. Manufacturing contributes close to 10% of the total value added (the EU average is just over 15%). Greece specialises in food processing (manufacture of vegetable oils; processing and preserving of fruit and vegetables). Other important sectors are metals, chemicals, cement and textiles.

4.8.2 Innovation, skills and sustainability

Innovation

There are challenges ahead for the innovation system, as the country needs to transform itself into a stable environment for entrepreneurship and create conditions for growth. According to the Innovation Union Scoreboard 2013, Greece is one of the moderate innovators, with a below-average performance. Innovation performance declined at an average annual rate of 1.7% between 2008 and 2012.¹⁶⁵

In the past decade R&D expenditure has stagnated, at 0.58% of GDP.¹⁶⁶ In 2011 Greece set an R&D intensity target of 2%, to be achieved by 2020, but the National Reform Programme for 2013 revised this target downwards to 0.67% of GDP, which is considered as more consistent with current trends and with the economic outlook.

The objective of Greece's innovation strategy is to promote innovation in all sectors as a key driver for restructuring the Greek economy and for the transition to a knowledge-based economy. EU programmes play a major role in the funding of

¹⁶⁵ Innovation Union Scoreboard 2013, p. 6.

¹⁶⁶ Eurostat.

innovation initiatives, but the level of funding available exceeds the amount that the business sector can absorb. Besides the general economic environment, financial constraints can play a role, as many eligible companies cannot provide bank guarantees to receive an advance payment.¹⁶⁷ The commitments to specific innovation policy initiatives for 2010-12 amounted to EUR 596 million and are aimed at programmes supporting technological and knowledge transfer, cluster cooperation and the creation and growth of enterprises.¹⁶⁸ Despite the progress achieved in recent years, further efforts would help, in particular closer links between researchers and industry, and improved technology transfer.

Although policy is emphasising the use of new financial instruments, including funds dedicated to supporting innovation, there are substantial difficulties as almost no national co-finance and no private investment is available. Consequently, subsidies continue to be the main type of support for R&D, though tax incentives are also used. In an effort to boost development through R&D, the government has recently adopted new legislation¹⁶⁹ that further enhances tax incentives for enterprises engaged in R&D.

Skills

Greece faces many challenges to improve its skills base through improvements in education and training aiming to better adapt to labour market needs. This includes in particular teacher training and the quality and relevance of vocational education and training as well as lifelong learning. Reforms in tertiary education are only partially implemented. Among other issues, these reforms would include better use of universities to provide lifelong learning opportunities to local and regional populations and better monitoring of inputs and outputs.¹⁷⁰

An action plan to support youth employment and entrepreneurship was adopted by the Greek government in January 2013. It has been allocated a budget of EUR 600 million, EUR 517 million of which is provided through the European Social

Fund and the European Regional Development Fund. The plan comprises a set of programmes that should benefit 350 000 young people in the age group 15 to 35. The objective is to target employment and entrepreneurship for young people in the two age groups of 15-24 and 25-35. The plan stresses apprenticeship, traineeship and the transition from education to employment.

Active labour market policies seek to facilitate the transition of workers between sectors; improve the quality of training, and promote the employment of vulnerable groups. Further opportunities for apprenticeships and vocational training are due to be introduced over the medium term, with stronger links with employers to increase graduates' chances of professional integration.¹⁷¹

Sustainability

Between 2005 and 2010 Greece cut by 10% the emission of greenhouse gases that are not part of the EU emissions trading system. The reduction seems to be a result mainly of the economic slowdown. Projections show that Greece will increase emissions by 3% by 2020 and will not achieve its reduction target.

Progress has been made on renewable sources of energy. Under the renewable energy Directive,¹⁷² Greece is required to produce 18% of its final energy consumption and 10% of the transport use from renewable sources by 2020. In the national renewable energy action plan Greece committed itself to 20% instead of 18%. In 2011 the share of renewable energy sources in gross final energy consumption was 11.5%. Greece has over recent years granted generous tariffs in particular for photovoltaic installations; as a result 97% of the capacity has been installed over the past three years.

4.8.3 Export performance

Although the economy as a whole remains oriented towards the domestic market, export performance continues to improve, albeit from a low base. The national export strategy has set ambitious goals for boosting exports of goods to 16% of GDP by 2015.

¹⁶⁷ Innovation Policy trends in Greece, 4/9/2012.

¹⁶⁸ Ibid.

¹⁶⁹ Law 4110/2013.

¹⁷⁰ Assessment of the 2013 national reform programme for Greece; SWD(2013) 358

¹⁷¹ Assessment of the 2013 national reform programme for Greece; SWD(2013) 358

¹⁷² Directive 2009/28/EC.

Greek exports in 2012 were EUR 27.6 billion or 13.8 % of GDP, itself a record.¹⁷³

The national export strategy seeks to improve the international competitiveness of Greek companies through export promotion and export facilitation. It is based on three pillars:

1. Enlarging the export base by formulating industry-specific policies to encourage companies to produce and offer internationally competitive goods and services.
2. *Trade and promotion of foreign direct investment* by integrating economic diplomacy efforts, building a national brand and overall support for companies to engage in international trade networks and find trading partners abroad.
3. *Trade facilitation.* The national trade facilitation strategy was announced in November 2012. It features 25 measures aimed at reducing the time needed for export by 50 % and costs by 20 % by 2015. The strategy is focused on simplifying the cumbersome pre-customs and customs procedures. Some changes have already been made to the customs procedures:
 - a. electronic submission of customs clearance declaration for exports (April 2012);
 - b. mandatory presence of a customs broker for customs clearance formalities repealed (December 2012);
 - c. free access to the customs broker profession (December 2012);
 - d. indirect representation for customs clearance (December 2012).
 - e. customs operations launched 24/7 or double-shifts for exports in the pilot offices of Athens airport and Piraeus Port (June 2013);
 - f. simplified pre-customs and customs procedures for kiwi and feta cheese (June 2013).

In an effort to strengthen entrepreneurship and the internationalisation of SMEs, a programme was launched, co-funded by the EU structural funds under the action ‘Internationalisation and competitiveness of SMEs’. In total 746 projects have been selected with a total budget of EUR 143 million.

4.8.4 Business environment and public administration

Business environment

The difficult economic conditions and continuing uncertainty have taken a heavy toll on Greek businesses and the government is grappling with the challenge of balancing budget cuts with structural reforms to spur growth, as economic reforms are fundamental for sustainable growth. The high level of regulation and bureaucracy, as well as corruption, have been a constraint on businesses and hampered entrepreneurship. In addition, the lack of competition has held back productivity and competitiveness.

In the context of the Economic Adjustment Programme, steps are being taken to tackle many of the structural barriers and regulatory failings that have traditionally restricted business. Efforts undertaken in a number of areas are starting to show results, which were reflected in Greece’s improved ranking in the World Bank’s ‘Doing Business’ indicators. Greece was up from 100th place in 2012 to 78th, which is proof that the efforts made to improve the business environment are starting to bear fruit. In particular, there was progress in reducing the time required to get construction permits; more transparency for and protection of investors; and an improved process for resolving insolvent firms. The government has also adopted ten measures in the areas of starting a business, registering property, dealing with construction permits and protecting investors.

The EU Task Force for Greece provides technical assistance for a wide range of projects to improve the business environment. Projects are on-going in areas like the simplification and streamlining of licencing and permit systems for investment, trade facilitation and customs reform, export promotion, and the screening of administrative burden for

¹⁷³ Greek national export initiative.

business. EU structural funds are seen as key to boosting the economy; the available funds came to EUR 20.4 billion for the 2007-13 financing period.

Well-known deficiencies in the business environment have been addressed over recent years. Important measures have been taken to ease the creation of companies and to simplify licence procedures and investment authorisations. The time needed to set up a business is now below the EU average (11 days in Greece against the EU average of 14). Starting up a company and registering property remain expensive, and the cost and time for exports and imports need to be further reduced. It is still four times more expensive to start a business in Greece (% of income/capita) than the EU average, and it is more costly to register property.¹⁷⁴

The full entry into force of the law on simplifying and accelerating the licencing of manufacturing activities¹⁷⁵ and its implementing acts provide an integrated institutional framework for the modernisation and simplification of licencing procedures, covering technical professions, manufacturing and business parks. On technical professions, the right to provide certain services was expanded, while the total number of licences was reduced. As regards manufacturing, there has been a reduction of up to 75% in the time and cost needed to obtain an operating licence for low-nuisance activities.

With support of the OECD, the authorities are reviewing laws and regulations for harmful effects on competition in tourism, retail, building materials and food processing; as well as for administrative burden on businesses in 13 sectors. The government has also presented a strategic vision to streamline and unify investment licenses and strengthen self-compliance with standards and controls. The strategy will be implemented in 2013 and 2014.

SMEs have been hit hard by the crisis, and there are fewer enterprises in 2013 than there were in 2005. The size distribution of firms deviates from the EU average, with the number of large enterprises only half the EU average. Also, SMEs are heavily weighted towards the small end, with microenterprises accounting for 96.6% of all

enterprises. In total, SMEs employ 85.2% of the labour force in private employment, whereas the EU average is 67.4%. This reflects the fact that Greeks are more likely than the EU average to be self-employed.¹⁷⁶ The SMEs are more oriented towards trade than elsewhere in the EU, and the share of SMEs specialising in high-tech manufacturing or knowledge-intensive services is only 18%, whereas the EU average is one-third.

Greece does not always ‘think small first’, as the authorities perform less well than their EU peers in terms of communication and simplification of rules and procedures, and impose a higher burden on companies. However, steps are being taken, including simplified provisions on entrepreneurship and a new private company status with a capital of one euro, seeking to facilitate the life of SMEs.¹⁷⁷

The *General Electronic Business Registry* (GEMI) is being complemented with a self-registration option for companies. This is a state-owned electronic database hosted by the chambers of commerce. Data stored in GEMI include key personnel, annual accounts, tax identification number, company status, company number and relevant court decisions. To date 76 000 companies have been started through GEMI. The registry is linked to the one-stop shop for business start-ups that was launched in 2011.

A new, more flexible, corporate form for private limited companies (IKE) was adopted in July 2012.¹⁷⁸ Judging by the number of firms using this form, it seems to be a success. The advantage compared to other limited companies is that IKEs have a minimum capital requirement of only EUR 1, whereas for regular limited companies it is EUR 4 500.

Reforms to the *public procurement procedures* are being planned. The aim is to promote sound public procurement by making the newly created single Public Procurement Authority fully operational. The establishment of an e-procurement platform is expected to lead to less bureaucracy, prevention of corruption, more transparency and better participation of economic operators. It should also reduce the time and cost of procurement.

¹⁷⁴ SBA Fact Sheet 2012.

¹⁷⁵ Law 3982/2011.

¹⁷⁶ Ibid.

¹⁷⁷ SBA Fact Sheet 2012.

¹⁷⁸ Law 4072/2012.

The contribution of services to GDP was 71.7% in 2011,¹⁷⁹ which makes them the most important sector of the economy. Tourism alone contributes 18.2% of GDP¹⁸⁰ and over 7% of total employment¹⁸¹ (over 18% if indirectly supported jobs are counted). The shipping industry is another important sector for the economy, as Greek firms have 16.2% of the world's shipping capacity measured in deadweight tonnage.¹⁸²

Public administration

Greece's overall public administration performance, as measured by the World Bank's government effectiveness indicator, is well below the EU average. The perceived quality of public services, including quality of the civil service and policy implementation, is low (a score of 0.52 compared to 1.18 in the EU).¹⁸³

Public services are also less likely to be available online.¹⁸⁴ E-government use by small enterprises in 2012 was slightly above the EU average (86% and 85% respectively) whilst e-government use by citizens in 2013 was below the EU average (43.8% and 52.5% respectively).¹⁸⁵ The duration of payments by the public authorities is above the EU average (174 days compared to the EU average of 66 days).¹⁸⁶

With the support of the EU Task Force for Greece, technical assistance is provided for reforming the public administration. A high-level transformation steering group under the prime minister has been set up to supervise the reform of the central administration.¹⁸⁷

The Greek judicial system is inadequate and, in particular, the length of judicial procedures is long in all areas, including in civil and commercial justice. The rate of resolving cases is low, resulting

in increasing delays and a significant case backlog. ICT systems for the management of cases and for communications between the courts and parties, which could help improving the management of cases, are poorly developed. In addition, the perceived independence of justice in Greece gets the fourth worst rating in the EU.¹⁸⁸

In the framework of the Economic Adjustment Programme, Greece has committed to reforming the judicial system. These include reviewing the civil code, introducing an administrative review of cases, improving the organisation of the magistrates' courts, developing e-justice applications, bringing the insolvency legislation and practice in line with best practice and promoting alternative dispute resolution mechanisms.

4.8.5 Finance and investment

Bank credit to the corporate sector is contracting, making it increasingly difficult to finance production and investments. The main factors contributing to this are the difficulties of the bank sector, state arrears to suppliers (standing at around 4.4% of GDP at the end of 2012), the drop in the market value of collateral assets (real estate), and the country risk, that makes any financing of large businesses by foreign banks almost impossible. In the ECB survey on SME access to finance (March-September 2012), only 36% of Greek SMEs said they had received the loan requested (Eurozone 61%).

To facilitate the financing of the Greek economy, the government with the support of the task Force for Greece has analysed the extent of credit financing gaps in view of setting up an "Institution for Growth".¹⁸⁹ The main findings show that:

- There is an equity funding gap and a structural debt funding gap of the order of EUR 5-10 billion each;
- The current situation in the banking market leads to insufficient supply of project finance, working capital and import/export financing;
- Greece suffers from a lack of specialised financing institutions;

¹⁷⁹ Eurostat.

¹⁸⁰ <http://www.investingreece.gov.gr/default.asp?pid=36§orID=37&la=1>.

¹⁸¹ OECD Tourism trends and policies 2012 <http://www.oecd-ilibrary.org>.

¹⁸² United Nations conference on trade and development, Review of Maritime Transport 2011, p.41, accessible at http://unctad.org/en/Docs/rmt2011_en.pdf.

¹⁸³ European Commission (2012), 'Excellence in public administration for competitiveness in EU Member States'. SBA Fact sheet Greece 2012.

¹⁸⁴ Eurostat.

¹⁸⁵ European Payment Index by Intrum Justitia, 2012.

¹⁸⁶ Task Force for Greece, Quarterly Report of December 2012.

¹⁸⁸ EU Justice Scoreboard 2013.

¹⁸⁹ TFGR Quarterly Report, April 2013.

- A financing vehicle, such as a specialised financing institution for growth, could help to improve the situation, at least partially.

Government efforts to ease financing conditions have focused on the European Investment Bank (EIB) lending to Greek commercial banks so that they can lend to SMEs. Further efforts have been made to provide banks with risk-sharing and additional liquidity facilities. In March 2012, the Greek government and the EIB signed an agreement for the creation of a dedicated guarantee fund supporting lending to small and medium-sized enterprises. It will guarantee EIB loans to SMEs via partner banks, up to EUR 1 billion. The first disbursements under this fund (EUR 150 million) took place in December 2012. Another EUR 212 million of SME loans were lent by the EIB to Greek banks separately in the same month. In December 2012 the EIB launched a pilot project under which it would (counter-) guarantee up to EUR 500 million of export financing for Greek SMEs and mid-caps.

The Hellenic Fund for Entrepreneurship and Development (ETEAN), a wholly owned state corporation, was created in February 2011 with start-up capital of EUR 1.7 billion. It manages and runs projects financed via various channels: the state budget; the public investment programme; an operational programme (on competitiveness and entrepreneurship) under the EU's national strategic reference frameworks; the European Regional Development Fund; and the European Fisheries Fund (EFF). ETEAN provides guarantees for loans, or letters of guarantee, in favour of small and medium-sized enterprises for banks and other financial institutions (such as leasing and venture capital companies). It also co-invests in other funds and uses financial engineering instruments, and has thus far created three funds for energy conservation with a grant of EUR 200 million from the European Union's national strategic reference frameworks; for fisheries promotion with a support from the European Fisheries Fund (EFF) grant of EUR 35 million; and for entrepreneurship with a grant of EUR 460 million, likewise from the national strategic reference frameworks.

ETEAN recently announced the creation of two new funds, operating through the entrepreneurship fund; (a) the fund for business restarting; and (b)

the fund for island entrepreneurship. Both aim to support SMEs' access to working capital for development activities.

The second Economic Adjustment Programme for Greece contains detailed provisions regarding the recapitalisation of Greek banks, which should be completed by the end of June 2013.

Net capital inflows were EUR 2.3 billion in 2012 (vs. EUR 1.3 billion in 2011). The total inflows of foreign direct investment in Greece fell in 2010-12 and are today at the same level as in 2003-05. Between 2003 and 2012, fully 69% of all foreign direct investments were made in the services sector.¹⁹⁰

A new law on the *creation of a development-friendly environment for strategic and private investments*¹⁹¹ aims to accelerate and simplify procedures. It includes provisions on developing the seaside front of Attica and improving the institutional framework for the founding and operation of seaplane ports. For strategic investments, there are proposals for simplified licencing procedures through the General Directorate for Licencing, which will handle all strategic investment requests. The time restrictions for the submission of investment plans (previously every April and October), have been removed, and such plans can now be accepted throughout the year.

4.8.6 Conclusions

The Economic Adjustment Programme has sought to adjust the imbalances in the economy. Greece has started the process of transformation, from an economy based on consumption to one with a bigger focus on investments and exports. Exports have already increased over recent years but, as a result of the recession and the credit crunch, investments are still disappointing.

The regulatory environment has constrained businesses and entrepreneurship, and these, combined with the lack of competition, have led to lacklustre productivity and competitiveness. However, steps are being taken to tackle many of

¹⁹⁰ <http://www.investingreece.gov.gr>.

¹⁹¹ Law 4146/2013.

the structural barriers and regulatory failings. Encouragingly, many efforts are starting to show results, and the ranking of Greece in the World Bank's 'Doing Business' indicators has improved. Further significant measures have been taken to ease the creation of companies, and to simplify licensing procedures and investment authorisations. With the technical assistance of the Task Force for Greece, cumbersome export procedures are being simplified.

The difficult economic conditions, continuing uncertainty, and in particular the credit crunch continue to make conducting business difficult, in particular for SMEs. Economic growth is one of the top priorities of the government, and in this context, reforming the public administration remains central in terms of securing the capacity and competence to implement newly adopted legislation and to improve the business environment. Reforming the economy must remain a priority in order for the required changes to take place. A dynamic corporate sector is crucial to re-starting the economy and achieving growth. By tapping the entrepreneurial potential of citizens and creating the right business environment, Greece can overcome its difficulties and achieve sustainable economic and employment growth.

4.9. Spain

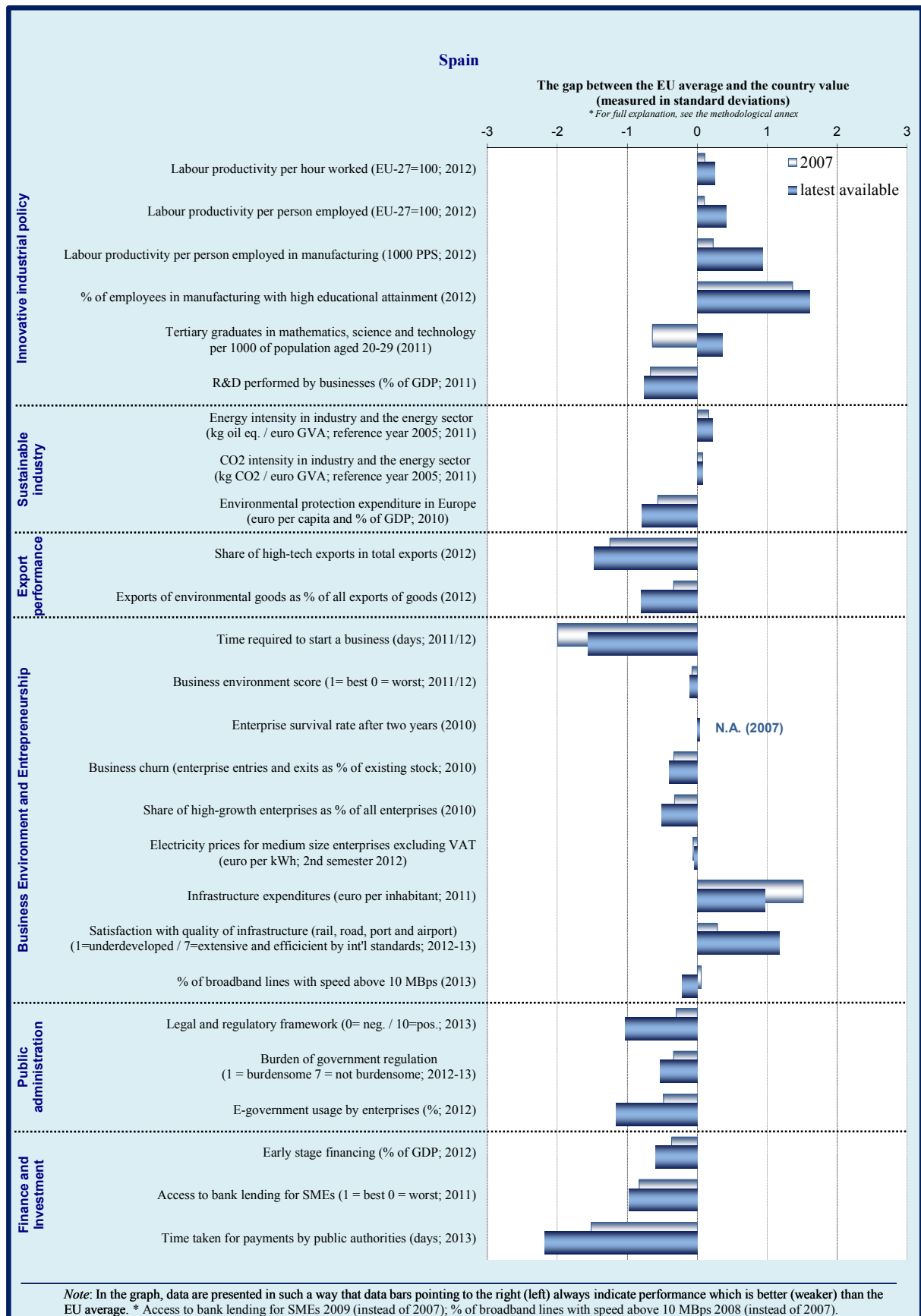
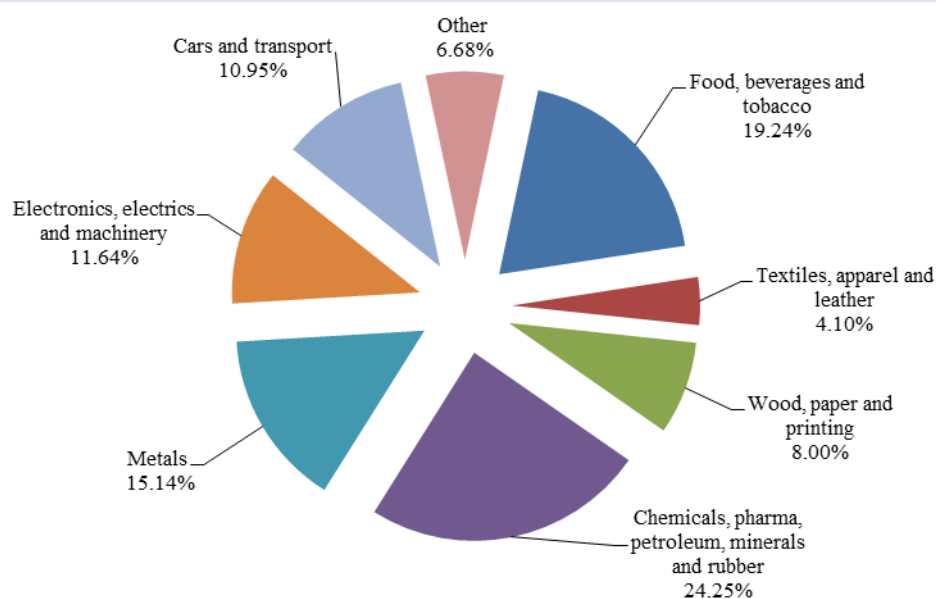


Figure 4.9: Manufacturing sectors – Spain (2010)

Source: Eurostat

4.9.1 Introduction

Manufacturing plays a slightly smaller role in Spain than in the EU on average (13.3% of total value added versus 15.3% for the EU). Spanish firms are specialised in low-tech manufacturing (manufacturing of food products and beverages, textiles and wearing apparel, etc.) and less-knowledge-intensive services (trade, accommodation and food services, travel agencies, etc.). High value added sectors such as high-tech manufacturing and knowledge intensive services are still under-represented in terms of the number of firms, employment and value added.

Spain continues to adapt to the correction of imbalances that started in 2008. In the last couple of years it has recovered about half of the cost competitiveness lost between 2000 and 2008,¹⁹² although this is partly as a result of massive labour shedding in low value added sectors, and longer working hours. The adjustment of current account deficit, investment in construction, and credit growth has progressed. Restoring sustainable external equilibrium requires a move to a sizeable current account surplus, backed by reallocation of resources to the tradable sector. Some improvement

¹⁹² Measured as Unit Labour Cost and based on data from Eurostat and European Central Bank calculations.

is apparent in various indicators, including strong export performance.

4.9.2 Innovation, skills and sustainability

Innovation

Over the last decade, efforts have been made to improve research and innovation performance. However, the impact seems to have been limited, as there has been little movement towards a more knowledge-based economy. Research and innovation suffer from low R&D investment by the private sector and the increasingly regional dimension of innovation policy. These challenges have been aggravated by the crisis, with a fall in public investment in R&D¹⁹³ and a significant loss of technologically innovative firms.¹⁹⁴

The latest Innovation Union Scoreboard places Spain, as before, in the group of moderate innovators with performance below the EU average. In that group, the country had the second-lowest growth rate in the period 2008-12, and has

¹⁹³ In relative terms (as percentage of GDP), Spain has managed to overall maintain its level of expenditure with a slight decrease in 2011 to 1.33% (versus 1.39% in 2010 and 2009, and 1.35% in 2008). Source: Eurostat.

¹⁹⁴ Spain accounted for 44 888 technologically innovative SMEs in 2007, compared to only 25 461 in 2011. Source: Ministry of Economy and Competitiveness, Spain.

been unable to catch up with ‘innovation followers’ and ‘innovation leaders’ – in addition, regional innovation performance is uneven and, taken separately, the regions range from innovation leaders to moderate innovators.¹⁹⁵ Spain’s relative strengths are seen in research (scientific publications); in the percentage of population aged 30-34 with tertiary education; and in the commercialisation of innovation. The main weaknesses lie in the low level of private R&D investment; the small number of innovative SMEs; and the low licence and patent revenues from abroad. The diminishing number of tertiary students in sciences (-27.3% over the last ten years) is a problem for the innovation potential.

The authorities are addressing these challenges with a new ‘Spanish strategy for science, technology and innovation’ and the implementing ‘State plan for scientific and technical research and innovation’, both adopted in February 2013. The new strategy seeks to increase business R&D expenditure, ease the transfer of knowledge between actors, and foster smart specialisation at regional level. The proposed reforms cover the governance system, the quality of human resources, the funding allocation system, knowledge transfer, strengthened public-private cooperation, key challenges for society, and the internationalisation of the system. Although the aims of the strategy are laudable, the impact of the strategy will depend on its effective implementation through the state plan and the regional plans for scientific and technical research, and innovation.

The government has also announced new fiscal incentives to foster private investment in R&D and the transfer of technology.¹⁹⁶ In particular, R&D deductions that are not applicable to a financial year could be recovered subject to the creation or maintenance of employment, and a bigger part¹⁹⁷ of the income that originates from the transfer of certain intangible assets, such as patents, will be exempted.

Skills

The most pressing issues are the difficult transition from education to work, the high rate of early

school leavers, and the skills mismatches between education and labour market. Indeed, the Spanish labour market is characterised by a mix of workers with high skills and even over-qualification¹⁹⁸ (especially among young people) as well as a high proportion of low-skilled workers.¹⁹⁹ This reflects the dominance of construction and tourism activities. The over-qualification points to skills mismatch and lack of relevance of education²⁰⁰ and training, and poor transition from school to work. Further, the education system puts insufficient focus on entrepreneurial skills.

The labour market reform of 2012 significantly amended the system for training and apprenticeship. This was followed by the launch of a dual vocational training system²⁰¹ to better adapt the training supply to business needs, as well as the Entrepreneurship and Youth Employment Strategy 2013-2016. The percentage of 18-64 olds believing they have the right skills and knowledge to start business is above the EU average.²⁰²

In May 2013 the government approved a reform of the education system that is now waiting for parliamentary approval. It seeks to introduce entrepreneurship-related content in the secondary school curriculum. The main goal is to reduce the number of early school leavers and to improve the transition from school to working life.

Sustainability

Various measures were adopted in 2012 to contain the so-called tariff deficit²⁰³ of the electricity sector, including a single tax rate (7%) on all power generation. In addition, premiums for new

¹⁹⁵ Source: Regional Innovation Scoreboard 2012, European Commission.

¹⁹⁶ This measure will be part of the forthcoming law to support entrepreneurs and their internationalisation.

¹⁹⁷ 60 %, instead of the current 50 %.

¹⁹⁸ 22 % of all employees in Spain are over-qualified for their post. In the case of young people (25-34), 38 % of them are over-qualified for their position. Source: Social Developments Employment and in Europe 2012, European Commission.

¹⁹⁹ The employment rate of people with pre-primary, primary and lower secondary education was 48.2 % in 2012 (versus 61.2 % in 2007).

²⁰⁰ About 40 % of young people between 25 and 34 years old with a tertiary education degree are not employed in occupations that typically require this qualification. Source: OECD Economic Surveys Spain 2012.

²⁰¹ Royal decree law 1529/2012 of 8 November.

²⁰² Global Entrepreneurship Monitor.

²⁰³ Access tariffs to the electricity system do not cover regulated costs (e.g. transportation costs, distribution costs, subsidies for renewable energy production or adjustment services). As a result, a so-called tariff deficit is generated within the system at the expense of utilities. The cumulative tariff debt is EUR 29 billion (equivalent to almost 3 % of GDP).

renewable projects were withdrawn.²⁰⁴ To complete these measures, the government has also presented a plan for a comprehensive reform of the electricity sector. There are several projects with France²⁰⁵ and Portugal²⁰⁶ that aim to double the capacity of the electricity interconnections with these countries.

The Government has also taken steps²⁰⁷ to promote efficient use of energy, including through environmental taxes;²⁰⁸ the suppression of some exemptions of the tax rates for gas and coal; and the establishment of a fee for the use of water for producing electricity. Further new measures are in the pipeline to reduce carbon emissions, including the adoption of green taxes, a law to promote calculation of the carbon footprint, and the national framework plan for waste.

Finally, the government is working on a new bill on environmental impact evaluation with the aim of simplifying procedures and bringing together existing legislation on strategic environmental evaluation and on the evaluation of environmental impact.

4.9.3 Export performance

Exports have grown considerably since 2009, although the pace of growth decelerated in 2012.²⁰⁹ This comes on top of a decade-long strong performance, as the export share stayed relatively stable in spite of sustained losses in price competitiveness, and the rise of emerging economies. However, exports as a share of GDP are below that of other European economies, and the share of knowledge-intensive service exports with high added value is well below the EU average.²¹⁰

The recent export dynamism reflects improvement in both cost and non-cost factors. As unit labour costs have decreased, product and geographical diversification have helped to sustain export performance. Indeed, exports of services have grown more rapidly than goods, and now account for about one third of the total. In addition, the services exported have become more diversified, and besides tourism they include transport and business services. There has also been some reorientation towards emerging markets, which has limited the negative impact of the weakness in Europe.

Spain lags slightly behind the EU-average in most indicators on SME internationalisation.²¹¹ The costs of trading are higher than the EU average, although this does not appear to influence the time required to import or export, which is shorter than in the EU.²¹² Moreover, almost 88% of exports in 2012 were by the largest 10% of exporters,²¹³ suggesting a dichotomy between a small number of very competitive large exporters and a large number of less competitive exporting firms.

In 2012, two previous programmes for export promotion²¹⁴ were merged into a new programme called ICEX-next, which provides tailored advice and financial support for the internationalisation of SMEs.²¹⁵ There are also plans to develop new export markets²¹⁶ in 2013, with a focus on Asia. Spain has also strengthened the links between internationalisation and innovation by integrating the external network of the Centre for industrial technological development²¹⁷ into the ICEX network.

²⁰⁴ Royal decree law 1/2012 suspended temporarily all new renewable capacity registration.

²⁰⁵ A study on the viability of the routes for the proposed interconnections will be finalised in 2013. The aim is to duplicate the current capacity to 2800 MW in 2014 and 4000 MW in 2020.

²⁰⁶ Spain is working on two projects to reach an interconnection capacity of 3000 MW, which would be in force in 2014 and 2016 respectively.

²⁰⁷ Law 15/2012 of 27 December 2012.

²⁰⁸ A single tax (7%) on the value of electrical production, a tax on the production of nuclear fuel and waste, and a tax on the storing of nuclear waste and fuel.

²⁰⁹ Spanish exports grew 3.8% in 2012, 15.2% in 2011 and 16.8% in 2010 in current prices according to customs data.

²¹⁰ The weight of exports in Spain's GDP has risen from 23.9% in 2009 to 32.2% in 2012 but remains below the

EU average (42.6%). Source: World Bank, OECD and Instituto Nacional de Estadística.

²¹¹ For further details, see SBA factsheet 2012, Spain. European Commission.

²¹² Source SBA fact sheet for Spain 2012, European Commission.

²¹³ Source: ICEX statistics.

²¹⁴ APEX was a programme to raise awareness of the benefits of internationalisation among SMEs with no or minimal exporting experience; and ICEX PIPE provided consultancy services and economic support to new exporters.

²¹⁵ Around 8000 have benefited from ICEX PIPE over the last 7 years. ICEX-next is expected to support around 400 enterprises per year in the short term, and 500 to 600 per year in the medium term.

²¹⁶ 'Planes integrales de desarrollo de mercado'.

²¹⁷ The Centre for industrial technological development (CDTI) is a public entity which fosters the technological development and innovation of Spanish companies

As part of the forthcoming law to support entrepreneurs and their internationalisation, the government plans to strengthen support bodies, as well as to improve financial instruments for this purpose and firms' access to foreign public procurement of international financial institutions. Further, the government plans to adopt a new law on chambers of commerce to enhance their role in supporting internationalisation.

4.9.4 Business environment and public administration

Business environment

The legal and regulatory framework remains very burdensome, despite improvements over the years. In particular, it is difficult to start a business.²¹⁸ Although the time needed has come down from 47 to 28 days, it remains above the EU average. The licensing system is very complex, and the time needed to obtain an operating licence is the longest in the EU, at 116 days.²¹⁹

However, the government has generalised the use of the 'express licence' regime, whereby a declaration is enough to launch the economic activity, in the case of small and medium retail and other services. The government now plans to extend this regime to larger outlets and other types of activities as part of the forthcoming law to support entrepreneurs and their internationalisation. Promotional activities in retail have been liberalised; the requirements for road transport firms simplified; and the opening of petrol stations facilitated. Liberalisation of passenger rail transport has started with the long-distance tourist train segment that has been opened to competition.

In February 2013 the government announced an 'Economic stimulus plan and support for the entrepreneur'. The first measures²²⁰ included facilitating access to finance; a flat rate of EUR 50 for social security charges for new self-employed persons during the first six months; reconciling

unemployment benefits with self-employment for up to nine months; and lower taxes for new firms and self-employed persons for two years. Other measures are planned for 2013, including a law on market unity, and the omnibus law to support entrepreneurs and their internationalisation that should be adopted by the parliament in 2013. This would include the creation of a 'limited liability entrepreneur'; the establishment of new out-of-court settlement mechanisms for bankruptcies; fiscal incentives;²²¹ measures to facilitate access to finance;²²² exempting more activities from local licences; removing barriers to accessing public procurement; measures to foster the internationalisation of the economy;²²³ and measures to reduce the administrative burden.²²⁴

The draft law on market unity²²⁵ aims at addressing the regulatory fragmentation of the domestic market, which hinders competition and prevents businesses from taking advantage of economies of scale and scope. If effectively implemented, it could facilitate the movement of goods and services, as well as simplify licensing requirements. In parallel, the government has launched a review of the existing regulatory framework in the interests of simplification, rationalisation and coherence. According to the authorities, about 5 000 pieces of legislation have already been identified for revision. Moreover, the government is working to reduce red tape in the fields of restoration and electronic communications.

Finally, the delayed reform of professional services is scheduled for 2013. The government plans *inter alia* to reassess the activities restricted to a selected

through channelling the funding and support applications for national and international R&D&I projects of Spanish companies.

²¹⁸ In the World Bank's 'Doing Business' Indicators for starting a business, Spain ranks 136th for this specific area, while its overall ranking is 44th.

²¹⁹ Source SBA fact sheet for Spain 2012, European Commission.

²²⁰ Through the Royal decree law 4/2013, of 22 February.

²²¹ In particular, tax deductions for the reinvestment of profits and investments in R&D, a special VAT voluntary regime for SMEs to defer the payment of VAT to the State until the invoice has been collected, and tax incentives for providing capital to start-ups in the form of income tax reductions and partial exemption from taxation of capital gains.

²²² Including the elimination of charges linked to the issuance of corporate debt, and new instruments for financing the internationalisation of businesses.

²²³ Including a new visa regime for attracting talent and investment, and the formulation of an internationalisation strategy for Spain.

²²⁴ This includes speeding up and simplifying certain procedures necessary to start up a business, reducing statistical and accounting requirements, and establishing a 'one in one out' clause guaranteeing that at least one burden of equivalent cost is removed for each administrative burden introduced.

²²⁵ Adopted by the Council of Ministers in July 2013.

group of professions and the rules on membership of professional associations.

Public administration

The government set up a commission for the reform of public administration whose final report was issued in June 2013. The report included proposals to be implemented between 2013 and 2015 around the following four axis: reducing the overlap between central and regional governments; streamlining and rationalising public bodies; merging of horizontal services (e.g. procurement); and administrative simplification. In parallel, the reform of local administration will clarify competencies to avoid any overlap with other levels. The government plans to set up a body to report back every quarter on the implementation of the proposed measures.

The law on transparency currently being debated by the parliament will establish good governance requirements for public administration, contributing to simplification of administrative burden and easing access to public information.

The areas of concern in the judiciary include low clearance rates, a high case backlog and relatively lengthy proceedings,²²⁶ but reforms aim at tackling some of these issues. The reorganisation of the courts and judiciary is scheduled for the end of 2013. Information and communication technologies for the judiciary are not yet readily available everywhere.

4.9.5 Finance and investment

Access to finance remains one of the most problematic areas for SMEs,²²⁷ including the need for working capital. They rely heavily on bank lending for their financing needs, but loans are not readily available²²⁸ despite the improvement in

bank balance sheets. This has been in particular due to the difficult macroeconomic and firm-specific outlooks, and the stress in sovereign debt markets. The stresses have been reflected in higher interest rate differentials compared to other countries. Meanwhile, alternative sources of financing remain limited, due to lack of both demand and supply.

The authorities are implementing a comprehensive strategy aimed at restoring the credit flow. This is based on restructuring the financial system and fostering non-bank intermediation. The government is redirecting support towards working capital needs, as this is seen as a higher priority than investment. Despite this, the necessary deleveraging of the private sector weighs on economic growth and defaults are soaring, especially in the construction and real estate sectors, although the number of non-performing loans with a public guarantee remains stable.

The counter-cyclical role of the Public Credit Institute (ICO) has become more important. In 2012, over 10% of business financing for maturities over one year was granted through ICO credit lines.²²⁹ It has simplified its facilities, focusing on two actions: boosting funding for firms and entrepreneurs, and financing internationalisation. The credit lines for 2013 have been supplemented with additional EUR 11.5 billion.

The restructuring of the banking sector²³⁰ has led to the disappearance of some savings banks that were merged with or acquired by other entities. This has left some SMEs, in particular smaller firms, without their traditional banker, increasing the costs caused by information asymmetry at a time when banks are generally reluctant to lend. The government is reinforcing the mutual guarantee companies by increasing the capital of the public counter-guarantor. Its budget for 2013 has been increased to

²²⁶ EU Justice Scoreboard 2013 – Note that there was a country-specific recommendation on these issues in 2013.

²²⁷ 27% of SMEs point to access to finance as the worst problem of all. Source: survey on the access to finance of SMEs in the euro area, April to September 2012, European Central Bank.

²²⁸ 79% of SMEs consider that the situation has deteriorated (37%) or remained unchanged (41%) over the previous 6 months, while only 8% consider that it has improved. The level of interest rates increased (76%) and other costs of financing (80%), collaterals (61) increased, while the available size of loans remain unchanged (42) or

decreased (45). Source: Survey on the access to finance of SMEs in the euro area, April to September 2012, European Central Bank.

²²⁹ ICO granted EUR 11.5 billion through second-floor facilities (which ICO provides through Spanish Credit Institutions) to over 160 000 SMEs.

²³⁰ In June 2012, Spain formally requested financial assistance for the recapitalisation of the Spanish financial institutions. The assistance was granted in July in the form of a programme for the repair and reform of the Spanish financial sector. The core of the programme involves sufficient recapitalisation of Spanish banks, where needed, for which up to EUR 100 billion were made available by EFSF/ESM.

EUR 32 million, an increase of 67% compared to 2012. It has also increased the coverage rate of loans for working capital (up to 60%) and the internationalisation of SMEs (up to 75%).

The government has also adopted measures to promote alternative financing mechanisms, including the launch of a ‘Spain start-up co-investment’ targeting early-stage equity and mezzanine finance. Further, it seeks to reduce the credit requirements for asset securitisation funds, and launch an incubator programme with a budget of EUR 50 million. As regards venture capital, other developments include the launch of the ‘Isabel la Católica’ fund, with a budget of EUR 30 million, and the creation of a fund of funds with EUR 1 200 million to invest. In addition, an Alternative Bond Market should become operational in 2013. The existing support programme for the operating costs of business angel networks will also be extended.

The government also intends to introduce an ‘Elevator Law’ to facilitate transition from the regulated stock market to the alternative market and vice versa. In addition, planned regulatory changes will facilitate the operations of venture capital funds. The omnibus law to support entrepreneurs and their internationalisation includes a number of measures to facilitate access to finance, like tax incentives, amendments to the regulatory framework for out-of-court refinancing settlements, and new instruments to promote export credit. Finally, the JEREMIE scheme of the European Regional Development Fund (ERDF) has been restructured to ease SMEs’ access to credit, with EUR 320 million from the ERDF.

The liquidity problems of firms have been aggravated by long delays in receiving payments, in particular from the public sector.²³¹ To ease this situation, the government has approved a set of measures aimed at regularising the arrears that

regional and local governments have built up.²³² This provided about EUR 27 billion²³³ of liquidity to firms in 2012, and has been extended to 2013 with an allocation of EUR 2.7 billion. In parallel, the government set up in June 2012 a voluntary scheme for the centralisation of public debt issuance, to provide liquidity to regional governments. This mechanism provided EUR 17 billion to regional administrations in 2012, of which EUR 6.7 billion constituted payments to SMEs. Further, the late payments directive²³⁴ has been transposed, and effective implementation is crucial to avoid new arrears.

There has been increased interest in investing in Spain from emerging economies (Brazil, Mexico, India and China). The main incentives for such investment are infrastructure, the level of technology, and the structural reforms. The promotional structures have been streamlined and the focus is on attracting foreign direct investment and helping firms to finance their expansion. A new directorate on financing and investor relations has been set up to offer services to businesses that seek international investors. ‘Invest in Spain’ is also linked with the ‘Marca España’ project, which seeks to improve the image of the country abroad. Finally, the omnibus law to support entrepreneurs and their internationalisation will reform visas and residence permits to attract talent and investment from abroad.

4.9.6 Conclusions

Spain is undergoing a profound structural adjustment to correct the large internal and external imbalances built up during the housing and credit booms. Firms are still struggling with the impact of the recession and the worsening credit conditions. The government’s reform agenda has focused on two key areas, easing access to finance, and improving the business environment.

Lack of access to credit remains one of the biggest concerns of SMEs. Bank credit for SMEs is relatively costly and difficult to attain, and the

²³¹ Spain remains one of the Member States with the longest payment delays attributable to public authorities, well above the EU average. At European level the public sector pays its bills, on average, after 65 days, about 13 days later than the private sector (52). National averages are however very different, and in some countries, in some sectors (health, constructions) the bills are settled after more than six months. At national level Spanish public authorities are paying their invoices after 160 days on average. In business to business commercial transactions it takes an average of 97 days to be paid. European Payment Index 2012. Intrum Justitia.

²³² Royal decree law 4/2012 of 24 February, and Royal decree law 7/2012 of 9 March.

²³³ 5.6 million invoices were paid for a total amount of EUR 27.3 million, of which 98% constituted payments to SMEs. All debts had been paid by end of November 2012.

²³⁴ Royal decree law 4/2013 of 22 February.

interest rate differential is high compared to other Member States. Although measures adopted under the banking sector recapitalisation programme should ultimately help to alleviate this situation, for now there are no signs of significant improvement. The government is trying to ease credit constraints through financial instruments, in particular loan guarantees, and promoting alternative financial instruments.

Measures have also been adopted to simplify the business environment. Overall, progress has been slow and some flagship reforms are still pending, such as the law to support entrepreneurs and their internationalisation; the reform of professional services; and the law to guarantee the unity of the market.

The structural reforms need to be completed before their full impact on growth and competitiveness is felt. In particular, this applies to improving the business environment, and to enhancing non-cost competitiveness.

4.10. France

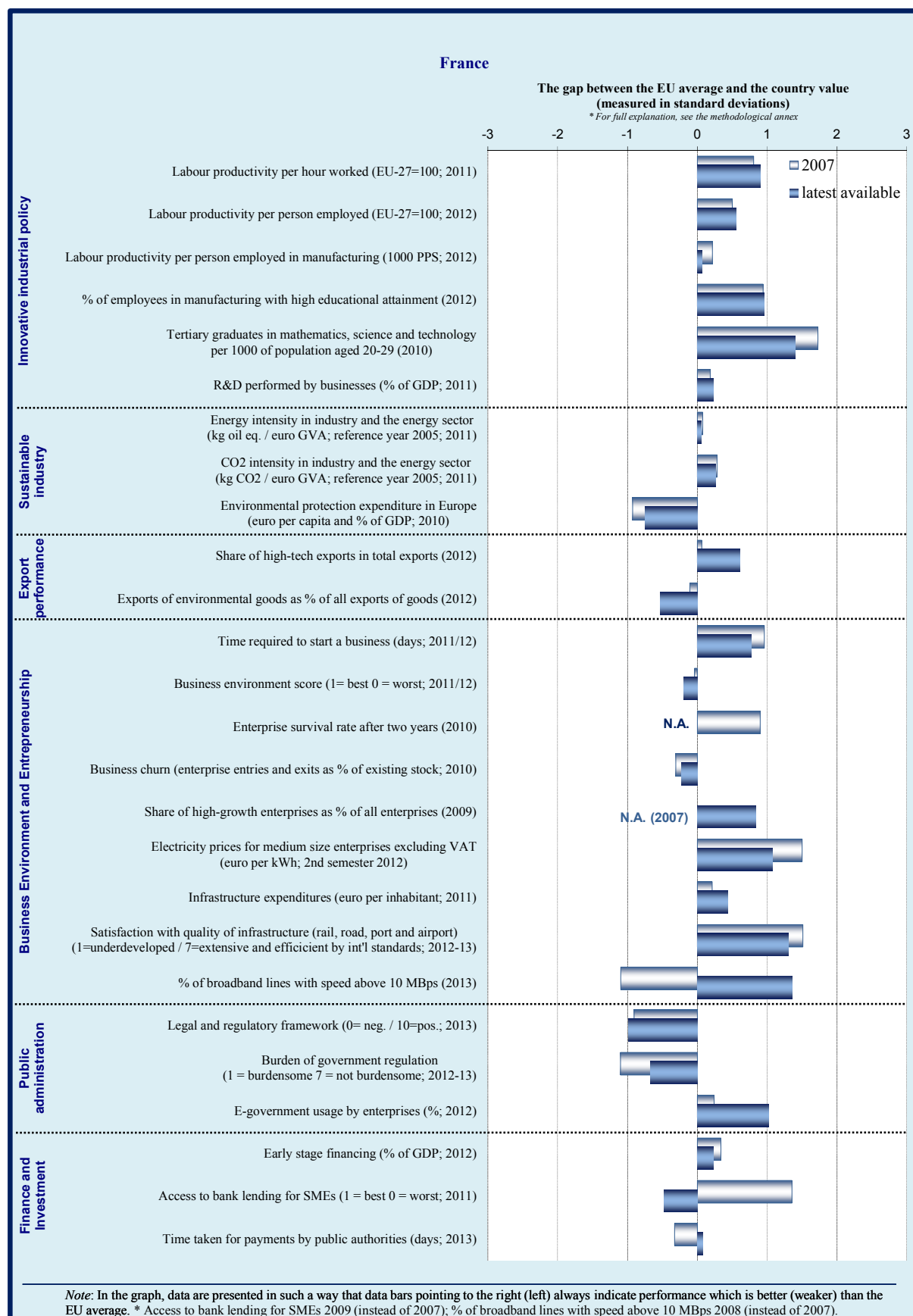
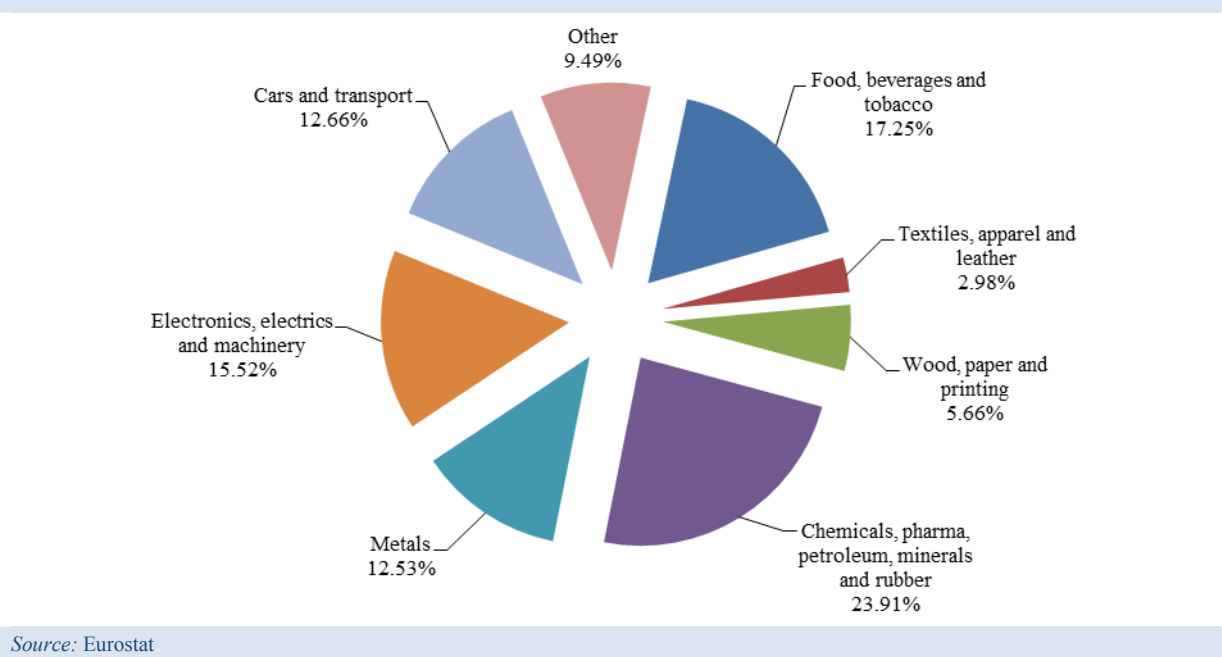


Figure 4.10: Manufacturing sectors – France (2010)

4.10.1 Introduction

Manufacturing plays a smaller role in France than in the EU as a whole (10% of value added vs. 15.3% for the EU in 2012). In terms of the sectoral breakdown, France is specialised both in technology-driven (aerospace) and marketing-driven industries (luxury). Most of the goods and services belong to the category of medium-high innovation, but there is less activity in high innovation sectors.

Although productivity is high, the competitiveness gap vis-à-vis the best performers is widening, driven by both cost and non-cost factors, also in the context of a deteriorating external position and high public debt.²³⁵ To restore competitiveness, the government adopted in November 2012 an overarching strategy — the *Pact for Growth, Competitiveness and Employment* — structured around eight competitiveness policy levers and 35 decisions aimed at lowering taxes and business costs, facilitating access to finance, supporting innovation, and ensuring a simpler and a more stable regulatory, administrative and tax environment. Further, in April 2013, a set of ten enterprise-friendly measures were announced following the *Assises de l'entrepreneuriat*, most of

which will take effect in 2014. The government has also announced a complementary set of measures to further reduce red tape and administrative cost for companies.

4.10.2 Innovation, skills and sustainability

Innovation

The Innovation Union Scoreboard 2013 classifies France as an innovation follower, although R&D intensity has grown from 2.08 % in 2007 to 2.27 % in 2009, and was stable in 2010 and 2011, leaving it well below the national target of 3%. In particular business R&D intensity, which has increased slightly despite the crisis, from 1.31 % of GDP in 2007 to 1.42 % of GDP in 2011,²³⁶ remains significantly below the 2020 target.

The level of business R&D intensity is relatively low compared to the innovation leader countries. Besides a few highly innovative and exporting firms, many small firms are not investing in innovation, particularly in non-R&D innovation, as the percentage of SMEs innovating in-house and introducing product or process innovations is below

²³⁵ In-Depth Review, COM(2013) 199 final.

²³⁶ Business R&D intensity progressed from 1.33% of GDP in 2008 to 1.40% in 2009 and to 1.43% of GDP in 2010 and 2011.

the EU average.²³⁷ While France is a net exporter of services, the share of knowledge-intensive services with high added value is well below the EU average. There is potential to draw larger benefits from the science and technology base, besides making technology transfer more efficient. In particular, non-technological innovation (marketing, branding, product customisation, advanced customer support) and non-breakthrough innovation (e.g. embedded software) provide high added value and contribute to firm growth, promoting competitiveness.

The competitiveness pact identified innovation as the route to improved competitiveness, and a set of measures has been announced, including further public support for innovation by businesses by extending the research tax credit beyond 2013, retargeting the *Pôles de compétitivité* to better focus on projects with market potential, increasing the transfer of public R&D, spreading digital and key enabling technologies, steering public procurement towards innovative goods and services, and setting up a working group at national level to reflect on the various levers of innovation (economic sectors, taxation, innovation culture, support schemes). Also, the *Investment for the future* programme is expected to facilitate investment in innovation through disruptive technologies, including by SMEs. Further, the tax credit for innovative new companies should allow about 2 600 companies (*jeunes entreprises innovantes*) to enjoy full exemption from social security contributions for eight years, with a broader definition of eligible expenses.

Overall, the innovation system would benefit from a stable and clear environment for business research and innovation, and where redundancies and overlaps would be limited.

Skills

The share of the population with tertiary education is above the EU average. However, the skills acquired do not seem to fully match the needs of businesses, in particular for ICT engineering and management skills.²³⁸ Moreover, participation in

lifelong learning is low compared to EU average, which may further aggravate the skills mismatch. The 2013 reforms of compulsory and higher education, and the research system, seek to adapt to the digital age.²³⁹

The guidance available does not seem sufficient to allow students to identify courses offering the greatest employment opportunities despite major reforms since 2007 that have introduced measures to support more informed choice and guidance for students.

Increasing the availability of support services to enhance the capacity of SMEs to anticipate their employment and skills needs, and to manage restructuring would help to manage structural change and improve the use of human capital. A bill on further decentralisation of national competencies would increase the role of regions in training, and improve the match with regional skills needs.

Sustainability

Energy intensity in industry and the energy sector is slightly lower than the EU average, and due to the energy mix, carbon intensity is one of the lowest in the EU. In addition, electricity prices for mid-sized enterprises are well below the EU average. However, increasing energy demand, and the plans to reduce the use of nuclear power, mean that other energy sources will have to be developed. This could lead to higher electricity prices for industrial consumers in the medium term, in particular for energy-intensive industries. However, the electricity generation market remains very concentrated and a commitment to further open it to competition could mitigate price developments.

To reach the Europe 2020 target,²⁴⁰ significant investment will be necessary in renewables. This may create potential for French suppliers to

²³⁷ Research and Innovation Performance in France: Country profile 2013.

²³⁸ 29 % of employers report recruiting difficulties, which is the second highest in Europe. EU skills panorama 2012,

<http://euskillsparanorama.ec.europa.eu/KeyIndicators/Country/NationalData.aspx?lookupid=10&>

²³⁹ The first one encompasses the setting up of a 'public service for digital education' and legal measures to facilitate the use of OER by teachers. The bill on higher education (HE) and research foresees the provision of OER by the public HE institutions as well as related services.

²⁴⁰ 23 % of renewable energy in final energy consumption (13.1 % in 2011).

specialise in technologies such as offshore wind and tidal power, or to develop activities such as maintenance and recycling.

A new tax on lorries (above 3.5 tonnes) has been announced and is due to enter into force in October 2013. It is expected to increase the cost of freight by 5% and lead to optimisation of road freight (e.g. a higher load factor). A significant shift to rail freight remains the long-term objective, but this would require significant investment in infrastructure and an appropriate competition framework.

4.10.3 Export performance

As underlined by the in-depth review,²⁴¹ France has a growing trade deficit, which reflects the long-term decline in export market shares: the trade balance has been deteriorating since 1997 and showed a deficit of 2.5% of GDP in 2011. The market share of exports fell by 11.2% between 2006 and 2011. In 2012 the current account improved because of slow domestic demand and larger exports (in particular in aerospace).

This situation is due to persistent losses in cost and non-price competitiveness. Unit labour costs in business services are higher than in comparable Member States, and the cost of services is an important part of production costs in manufacturing. Compared to Germany, unit labour costs are higher for companies below 1000 employees. At the same time, the structural weaknesses in areas such as taxation, labour rigidities, the regulatory environment, regulated professions, and competition in product markets slow down productivity growth and weigh on the profitability of firms.

France remains the third largest exporter of goods in the EU, accounting for 10.7% of EU exports to non-member countries.²⁴² France exports mainly aircraft, food, chemicals, industrial machinery, iron and steel, electronics, motor vehicles and pharmaceuticals. The share of high-tech exports in total exports is the fifth highest in the EU.

²⁴¹ COM(2013) 199 final (under Regulation (EU) No 1176/2011).

²⁴² Eurostat, International trade in goods (July 2012).

The competitiveness pact sets a national target to achieve a trade surplus by 2017, excluding energy. Supplementary measures to stimulate exports were announced in December 2012, for example accompanying a limited number of SMEs and mid-caps with high export potential on foreign markets or promoting France as a quality brand abroad.

4.10.4 Business environment and public administration

According to various competitiveness rankings, France scores well but has slipped back slightly compared to previous years.²⁴³ While the infrastructure is the fourth best in the world, the labour market appears relatively less flexible than in its peers, and the tax regime is considered as particularly distorting.²⁴⁴

The procedures for starting up a business are less complex in France than in the EU on average, and the cost of starting a company is lower — as is the cost of enforcing contracts. France is close to the EU average in the availability of business-related e-government services, the use of evidence-based instruments and the administrative cost of taxation. However, the perception of the legal and regulatory framework by businesses still scores clearly below the EU average, ranking 17th among the Member States.

The complexity of the legal and regulatory environment was acknowledged in the competitiveness pact and a ‘simplification shock’ was included in the national reform programme. Several measures have been announced, including some streamlining of public subsidies to enterprises (including state aid), some reduction in the existing ‘gold-plating’ of EU legislation, and the inclusion of an SME test in the impact assessment methodology.²⁴⁵ Other measures include the target

²⁴³ In the 2013 World Bank Doing Business Report, France ranks 34th (out of 185 countries), slightly down on previous years (32nd in 2012 and 28th in 2011). According to the Global Competitiveness Index, France ranked 21st in 2012-13 (out of 144 economies), losing three places compared to 2011-12 mainly due to falling confidence in public and private institutions (down four places) and the financial sector (down 13 places in trustworthiness).

²⁴⁴ Global Competitiveness Report 2013-14.

²⁴⁵ Detailed guidance is available to Ministries since 2009. Although the impact assessment methodology is not publicly available, many impact assessments are now published. Their content and level of detail varies

to eliminate ten information obligations by 2016, and a moratorium on new rules (one-in, one-out policy).

The taxation system remains highly complex because of multiple exemptions and derogations, and constant changes. This leads to a lack of transparency for businesses, especially SMEs and foreign investors. The tax wedge on labour is high,²⁴⁶ and the overall tax burden on businesses has substantially increased since 2010.

However, new measures like the tax credit for competitiveness and employment²⁴⁷ are expected to decrease the tax burden on labour for companies by EUR 20 billion. The impact of this measure will mostly be felt from 2014 onwards, although a pre-financing has been set up for SMEs, and it is too early to assess its impact on corporate investment in the medium term, particularly in manufacturing. In any case, this tax credit will only partially offset the increases in the tax burden on companies enacted since 2010. Further steps would help in shifting the tax burden from labour to other forms of taxation that weigh less on growth and external competitiveness.²⁴⁸

Despite the absence of minimum standards of stakeholder consultation, such as minimum consultation deadlines, stand-alone processes such as the *Assises de l'entrepreneuriat* or the consultation during the preparation of the *Gallois report*, have offered significant opportunities for business stakeholders to express their views and have led to something of a consensus on the nature and causes of competitiveness losses, if not on policy priorities and appropriate remedies. A permanent consultation of enterprises on simplification has recently been announced.

In April 2013, as a result of discussions within the *Assises de l'entrepreneuriat*, a set of enterprise-friendly measures were announced, most of which will take effect in 2014. The measures include the encouragement of a second chance in the event of failure (by abolishing the blacklist for single business failure); dedicated funding through the

Public Investment Bank to help business start-ups in disadvantaged areas; special visas for foreign start-up investors; tax relief over five years for equity investments in start-ups; the creation of business incubators (*Maisons de l'international*) in major cities throughout the world (in particular in the United States and Asia) to encourage French SMEs to export their goods and services; the introduction of a student entrepreneur scheme enabling anyone setting up a company after completing their studies to continue to benefit from their student status; and introducing entrepreneurship and innovation learning in secondary school.

If fully implemented, such measures can have a positive impact on the business environment. However, in order to boost competitiveness, it would be helpful to address the challenging structural weaknesses, in particular the competition framework. The cost of services could be lowered by increasing competition. As highlighted by the Commission and the Council in the country-specific recommendations, unjustified barriers persist in several areas, including regulated professions (in particular the legal form, shareholding structure, quotas and territorial restrictions); retail trade (spatial planning restrictions, authorisation procedures for retail outlets); network industries, in particular the electricity market (high concentration with only limited connections to neighbouring countries); and rail transport (no competition in domestic passenger transport).

Public administration

In terms of overall government effectiveness as measured by the World Bank, France performs just above the EU average, but not as well as in the previous year.

Coordination among administrative levels and communication with enterprises could benefit from further improvement. There is no single contact point at local level for enterprises on state aid or other public support. The creation of the Public Investment Bank is expected to provide a single contact point for public loans, guarantees and export financing, and may enable the rules for access to be harmonised. The management of other forms of public financial support, including state aid, remains scattered between numerous local authorities (municipalities, 'inter-municipal'

significantly, not least as regards the analysis of policy options and of stakeholder interests.

²⁴⁶ OECD Economic Surveys: France, March 2013.

²⁴⁷ *Crédit d'impôt pour la compétitivité et l'emploi*.

²⁴⁸ France is among the EU countries with the lowest share of environmental taxes and VAT in GDP.

bodies, ‘departments’, regions, future ‘metropoles’). Policies on economic development and innovation are adopted and implemented by several layers of government. The draft law on decentralisation provides for the creation of ‘conferences’ to coordinate activities between all local authorities.

4.10.5 Finance and investment

The amount of overall outstanding credit to enterprises remained stable in 2012, with variations between sectors and types of firm. In December 2012, the amount of outstanding credit had increased by 0.8% compared to December 2011.²⁴⁹ Outstanding credit to SMEs, excluding individual entrepreneurs and real estate activities, grew by 2.5% year-on-year. Credit to the building (+7.5%) and retail (+5.4%) sectors increased, while that to the manufacturing sector decreased by 3.3%. However, short-term cash facilities tightened by 3.5%.

As a whole, greater non-price competitiveness would require significant additional investment by businesses, not least in R&D and human resources, while the profitability of non-financial companies is declining and at its lowest level since 1985. Most firms are dependent on credit, particularly in the manufacturing sector, as self-financing capacity has tended to deteriorate in recent years, while alternative sources of financing such as venture capital, business angels, equity markets and other equity funding remain limited, in particular for SMEs. In addition, payment times have not improved sufficiently to help to address this lack of financing. However, the situation in France is much better than in many other Member States.

The competitiveness pact has identified these challenges and included several commitments to improve access to finance, in particular through additional public schemes (guarantees and loans); measures on savings taxation (including tax incentives to encourage investment in stocks and corporate debt issued by SMEs and mid-cap firms); and measures to facilitate access to equity markets by SMEs and mid-caps (including the creation of a new stock exchange).

Although the regulated savings accounts are not meant for the financing of enterprises, one option is that a small part could go to the new public investment bank, *Bpifrance*, for equity financing of (non-listed) SMEs and mid-caps. Similarly, a new life insurance contract could be created to allow insurance companies to invest more in listed companies and corporate bonds, which could mainly benefit larger companies. A new specific savings account has also been planned to favour investment by banks in (listed) SMEs. The take-up of pre-financing provided by the *Crédit d’impôt pour la compétitivité et l’emploi* seems to benefit microenterprises that need immediate cash flows. Such measures could improve the external financing of businesses, in particular SMEs, but the impact depends on their effective implementation.

As regards foreign direct investment, the inward stock amounted to 35% of GDP in 2011 compared with 29% in 2000. Overall, foreign companies account for a third of exports and 20% of business expenditure on R&D. The Invest in France Agency is the official body that provides information and support to foreign investors in France and promotes France’s business image and attractiveness abroad.

4.10.6 Conclusions

Improving competitiveness has become the key challenge of the French public reform agenda and a number of measures have been announced, notably as part of the competitiveness pact, and following the suggestions of the *Assises de l’entrepreneuriat*. These initiatives relate to better access to finance, improved support for innovation, encouraging entrepreneurship and improving the regulatory and administrative environment.

While the measures announced would represent steps in the right direction, most of them still have to be effectively implemented. The final impact depends on how effective this implementation is, and how well the measures are coordinated, with a view to avoid overlaps and further complexity, and to maximise synergies.

To achieve a significant improvement in competitiveness, it would be necessary to supplement these reforms with measures removing the structural weaknesses that slow down productivity growth and hamper the profitability of firms, in particular labour market rigidities,

²⁴⁹ Source: Banque de France.

regulatory burden, complex taxation and limited competition.

4.11. Croatia

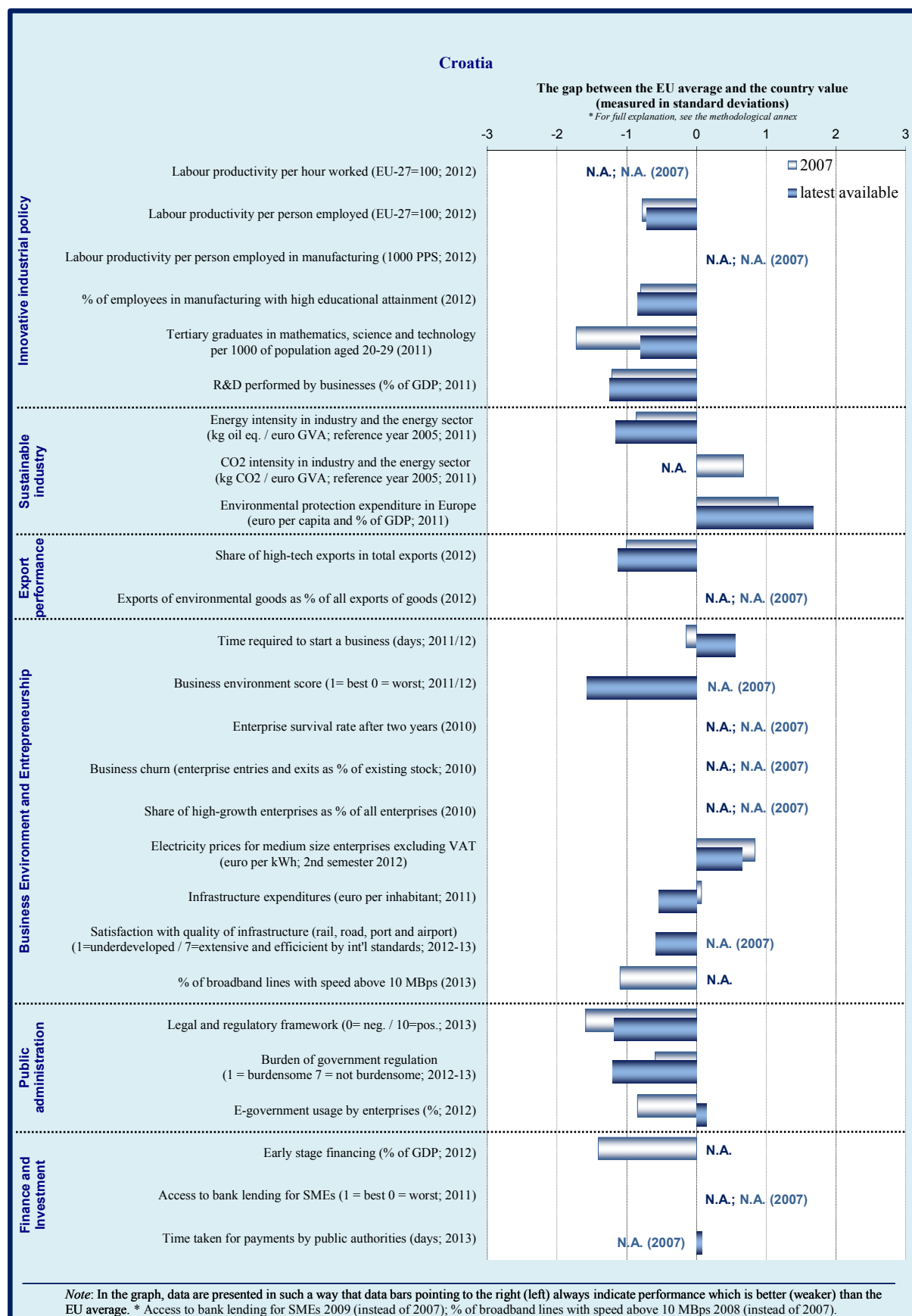
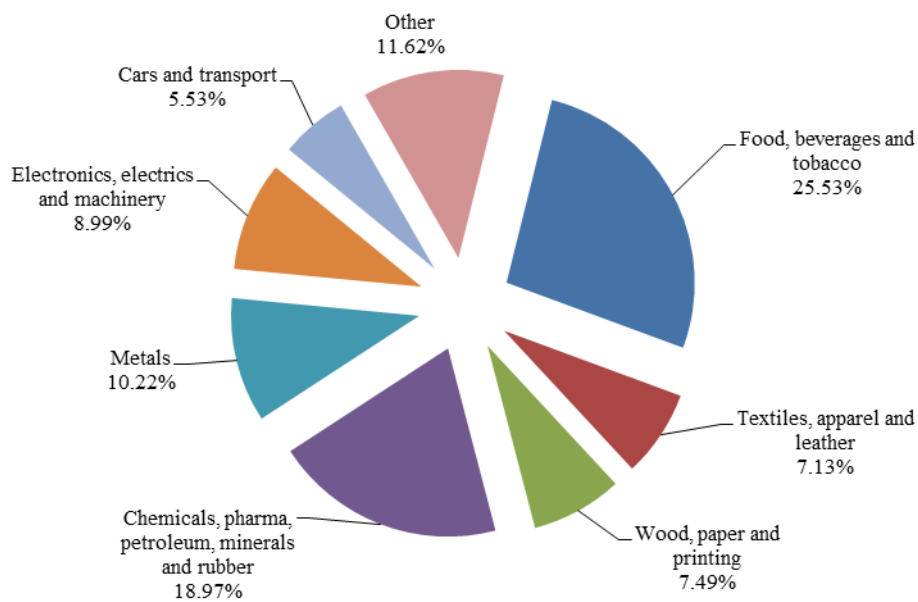


Figure 4.11: Manufacturing sectors – Croatia (2010)

Note: No data available for sectors C12 (tobacco products), C19 (coke and refined petroleum products) and C26 (manufacture of computer, electronic and optical products)

Source: Eurostat

4.11.1 Introduction

In recent years, economic developments in Croatia have been dominated by two issues: recession — GDP growth averaged 4%²⁵⁰ in 2000-08, but under -2% since, and EU accession, which has involved increasing political support, technical assistance and commitment to reform. These factors have had an effect on all aspects of competitiveness. Also, the country is characterised by a problematic degree of regional disparity, with significant differences in performance between Zagreb and peripheral regions.

As part of the process of EU accession, a number of long-term strategies have been developed that did not exist previously. While the final shape of all of these strategies is not yet clear and their effect will depend on proper implementation and enforcement, they present an opportunity to improve competitiveness. One example is the industrial strategy covering 12 priority industry sectors: food and wood processing, automotive, pharmaceuticals, medical equipment, ICT, textiles, defence, the creative sector, chemicals, maritime technologies, and civil engineering. This list immediately raises a

number of issues — not only are there too many sectors for a proper focus to develop, but the sectors are largely low in value added and knowledge intensity, indicating a lack of smart specialisation.

Currently, manufacturing accounts for 16.2% of GDP. While employment in industry in 2009 (at 25.8%) was slightly higher than the EU average (22.9%), the value added (23.2%) was below the EU average (25%).²⁵¹ The main industries were food, beverages and tobacco, chemicals, pharmaceuticals, petroleum, minerals and rubber, and metals. These reflect specialisation in low and medium technology.

In 2012, labour productivity per person employed was 80.2% of the EU average.²⁵² The gap has narrowed considerably since 2007 — including a significant setback after 2008.

²⁵⁰ <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00115>.

²⁵¹ Eurostat (2013) NACE Section C.
²⁵² Eurostat

<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00116>.

4.11.2 Innovation, skills and sustainability

Innovation

According to the 2013 Innovation Union Scoreboard, Croatia is a below-average moderate innovator, one of the ten worst performers when compared with the EU-27 Member States. However, a set of measures are being implemented to strengthen research and innovation capacity.²⁵³ Expenditure on R&D is 0.75% of GDP, business expenditure on R&D 0.34% (EU average 1%) — the 2020 target is 1.4%. The country's relative strength is in human resources — it has had the fastest improvement in the proportion of secondary education attainment — but this has not translated into improved performance. The research system and intellectual assets are rated low, and industrial value added is also low. High-tech manufacturing accounts for 0.4% of total employment and knowledge-intensive services 2.3%, as compared with 1.1% and 2.7% respectively for the EU.²⁵⁴ There is a high degree of regional disparity, with Zagreb clearly ahead of the rest of the country.

Since 2004, the Ministry of Economy, Labour and Entrepreneurship, and since 2011 the Ministry of Entrepreneurship and Crafts, have been operating a system of grants for innovation, distributing EUR 7 million to 1 407 projects, 77% of which has gone to small and medium-sized enterprises (SMEs). In recent years, R&D investment has decreased due to the recession, spurring the government to launch a number of reforms aimed at increasing innovation.

In the first half of 2013, the government plans to complete the national innovation strategy, which aims to strengthen cooperation between industry and research institutions. The strategy includes a plan for a network of competence centres in the 12 priority industries, of which three are already operational. The aim is to promote advanced technologies and market innovative solutions, including in nanotechnology in wood processing. Stakeholders agree that some of the priority industries, in particular ICT and chemicals, have

growth potential. The strategy also seeks to improve the quality of research through an industrial PhDs fund, providing scholarships for post-graduate doctoral studies, in coordination with the private sector.

Skills

Tertiary education attainment is low, at 23.7% (well below the EU average of 35.8%).²⁵⁵ There is a brain drain issue; while Croatia performs well on human capital, especially at secondary school level, its economy suffers from low research quality and lack of knowledge intensity. There are also problems of skills mismatch and low participation in lifelong learning. The recession has led to a reduction in the already low provision of training. As unemployment increases the supply of available labour, employers have fewer incentives to train their workforce.

In 2012, the government started to implement a skills needs verification system, monitoring the structure of the economy (by region and sector), integrating results from three surveys (covering employers, entrants to unemployment and education) and forecasts. The system has identified skills gaps and surpluses at regional level, especially deficits in tourism-related service skills in peripheral regions and technical skills for industry.

Reforms are being implemented to improve the links between the education system and the labour market. The Croatian qualifications framework is geared to increasing the quality and flexibility of the education system. It will also link higher education funding to output indicators.

Sustainability

Croatia scores relatively well on energy intensity and the use of renewable energy sources. Energy intensity is better than the EU average and improving at a similar pace. Between 1995 and 2010, there was general improvement, including in manufacturing.²⁵⁶ In particular, the renewable energy sector has potential for further growth. In 2010, hydroelectric power accounted for 19.4% of

²⁵³ Assessment of the 2013 economic programme for Croatia, SWD(2013) 361.

²⁵⁴ http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Statistics_on_employment_in_high_tech_sectors_EU-27_and_selected_countries_2010.PNG&filetimestamp=201207155622.

²⁵⁵ Eurostat (2013) t2020_41.

²⁵⁶ Odyssee Mure (2012), *Energy Efficiency Policies and Measures in Croatia*.

primary energy supply and biomass a further 3.9%, while other renewables contributed 0.5%.²⁵⁷ The target for electricity generation from renewable sources is 20% by 2020.²⁵⁸

Investments in the transmission and distribution network will be necessary to accommodate an increasing uptake of intermittent electricity in the system. The liquidified natural gas terminal and its connecting pipelines are a very important element of the North-South gas corridor and as such a security of supply asset for the region.

The Croatian Cleaner Production Centre was established in 2000 to promote efficient and environment-friendly solutions for industry, services and the state administration. Its activities include training 204 environmental management system experts and implementing 146 cleaner production projects.

A number of legislative projects are currently being planned that may influence the sustainability of Croatian industry. The Sustainable Waste Management Act is due to be adopted in 2013. Electricity grid operators will propose plans for the development of smart grids in 2013. A climate change adaptation strategy, aimed at controlling greenhouse gas emissions, is planned for 2014.

The plan is for the industrial strategy to include incentives for sustainable production and the development of a green economy; measures include the introduction of sustainability criteria in public procurement and the creation of an environmental protection logo.

4.11.3 Export performance

In 2011, exports accounted for 42% of GDP.²⁵⁹ Between 2000 and 2008, Croatian exports more than doubled in nominal terms and grew 15% from 2011 to 2012.²⁶⁰ The main exports are transport

equipment, machinery, textiles, chemicals, foodstuffs and fuels. As Croatia's main trading partner, the EU is the destination for 63% of its exports.²⁶¹ The trade balance has been in deficit, but has improved slightly since 2008 due to falling domestic demand.²⁶²

The Croatian Chamber of Economy and Chamber of Trades and Crafts represent Croatian exporters' interests abroad. The Entrepreneurial Impulse initiative in 2012 was aimed at raising the international profile of Croatian businesses through international fairs and in new markets. 83 projects received EUR 2.3 million in support. A new export strategy is also being developed, the previous one having run its course.

With Croatia's accession to the EU, trade is likely increase, even though most barriers have already been removed. Exports of services are significant — mainly as regards tourism but also software development and business process outplacement.

4.11.4 Business environment and public administration

Business environment

Croatia's business environment is one of the major problem areas for competitiveness, but also a major area of reform. The World Bank's *Doing Business 2013* report ranks Croatia 84th globally, behind all EU countries except Malta. Although the position has improved significantly since 2005, making the country the 14th fastest reformer in the world (faster than any EU country), its position worsened as compared with the previous ranking. Two aspects of the business environment are especially problematic: access to finance, and inefficient public administration plagued by corruption. The former is largely due to the effects of the recession on growth, export performance and the investment climate. The latter can be traced back to the prolonged transition to a market economy, combined with ageing infrastructure systems, decentralised public administration with many decision-making competences at local level, and the existence of monopolistic state-owned enterprises.

²⁵⁷ Hrvoje Pozar Energy Institute (2010) *Country Energy Profile — Croatia*, <http://www.eihp.hr/hrvatski/projekti/unece/pdf/biblioteka/Energy%20profile%20-%202010.pdf>.

²⁵⁸ Eurostat http://epp.eurostat.ec.europa.eu/portal/page/portal/europe_2020_indicators/headline_indicators

²⁵⁹ World Bank Indicator for 2011.

²⁶⁰ <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00110>.

²⁶¹ Eurostat 2009.

²⁶² Eurostat <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tec00043>.

The World Bank has emphasised the need for reform in dealing with construction permits, registering property, protecting investors, and trading across borders.

In 2012-13, the government has implemented a number of reforms aimed at improving the business environment. The procedures for registering a company have been simplified. Registration times and costs have been reduced, in particular by introducing a two-day online procedure for crafts, and a five-day procedure for limited liability companies. The public-private dialogue, a forum for consultation on aspects of legislation affecting SMEs, has been set up. Also, an SME observatory has been established to collect and provide information.

Furthermore, because of issues raised as part of the EU accession process, the role of the state in the economy is being reduced. The privatisation contract for the Brodosplit shipyard was signed in February 2013 and it is expected that the privatisation process for the Brodotrogir shipyard will be completed in time for Croatia's accession.²⁶³ Further privatisation, albeit slow, is planned.

Adopted in September 2012, the Act on Investment Promotion and Development of the Investment Climate established a working group to monitor the implementation of investment projects and identify and remove administrative obstacles. Businesses can also submit direct requests to the working group to investigate specific barriers.

Significant investment (backed by EU funds) is planned for developing railway infrastructure, sea ports and inland waterways, as improvements are needed, in particular in peripheral regions. The programme for the development of broadband access infrastructure is also being developed, which is necessary as Croatia is below the EU average in all areas on the Digital Agenda Scoreboard.²⁶⁴

There are plans to adopt in 2013 the Strategy for Entrepreneurship 2020, aimed at further improving the business environment and promoting SMEs' use of R&D and innovation. Plans to reform the public procurement system include introducing non-price

criteria and reducing the size of tender lots in order to attract more SMEs.

Public administration

Dealing with the public administration remains a major burden for businesses, especially because of corruption. A 2013 report by Ernst and Young ranks Croatia as the second most corrupt of the EU-28 countries, with 90% of respondents saying corruption is widespread in business.²⁶⁵ Transparency International ranks Croatia 62nd, the 5th most corrupt of the EU-28 countries.²⁶⁶ It seems that corruption has been reduced in recent years at central level, but remains a problem at the regional and local levels.

Although the compliance burden of the tax system is a relative strong point,²⁶⁷ significant work remains to be done to ensure uniform and competent application of the tax code throughout the country, for which the tax administration needs more and better training. The VAT rate has been increased from 23% to 25%, while healthcare contributions lowered from 15% to 13%.

Reforms were implemented in 2012-13 to make the tax system more business-friendly, and the Office for Large Taxpayers was established to provide targeted services and improve tax governance. Amendments to the General Tax Act have established a standard tax declaration form and made it possible to submit forms online.

In February 2012, a Freedom of Information Act was adopted, aiming to make public administration more transparent and efficient, and creating the post of Information Commissioner.

A reform of the judiciary has included a mediation and conciliation process to facilitate insolvency and contract enforcement procedures. Further changes to the civil code and bankruptcy legislation have also promoted alternative dispute resolution. A new Enforcement Agency has been established. Despite this, a large backlog of unresolved cases remains, although case resolution has improved – the clearance rate for enforcement cases was 93.7% in

²⁶³ http://europa.eu/rapid/press-release_IP-13-252_en.htm.

²⁶⁴ Digital Agenda Scoreboard [http://digital-agenda-data.eu/index.php?scenario=4&year=2011&countries\[\]=HR](http://digital-agenda-data.eu/index.php?scenario=4&year=2011&countries[]=HR).

²⁶⁵ Ernst and Young (2013) *Europe, Middle East, India and Africa Fraud Survey 2013*.

²⁶⁶ Transparency International (2012) *Corruption Perceptions Index* cpi.transparency.org/cpi2012/results/.

²⁶⁷ Croatia ranks 42nd on the PWC Paying Taxes report.

2010. However, the length of proceedings is very high compared to the majority of Member States. Shortcomings in the functioning of the justice system undermine the confidence of citizens and businesses in the public institutions and weigh on Croatia's business environment.

4.11.5 Finance and investment

Access to finance is a major problem area for competitiveness. The investment climate has worsened considerably since 2008 and there has been a marked fall in the accessibility of commercial bank loans. Interest rates have increased, with SMEs facing rates of over 8%,²⁶⁸ and banks are demanding higher collateral. Alternative funding sources, such as venture capital, remain essentially unavailable — in 2008-11, fewer than 1% of SMEs used equity finance.²⁶⁹ A report by the Croatian SME Policy Centre described in detail the available funding options (banks, microfinance, venture capital funds, business angels, government incentive programmes and subsidised credit lines), concluding that the dominance of traditional banking products is a systemic problem.²⁷⁰ The report also criticised government financing programmes for insufficient coordination and lack of evaluation. Again, access-to-finance conditions are significantly worse in peripheral regions.

Two state agencies provide financing for enterprises: the Croatian Bank for Reconstruction and Development (HBOR) and HAMAG Invest. HAMAG provides microloans and loan guarantees, and issues letters of intent for SMEs with a good business plan but no credit history. The HBOR provides loans on favourable terms – 1 352 in 2012, 27% more than in 2011. Its 2013 budget for SME loans is EUR 603 million. Currently, only two Croatian financial institutions channel EU funds from the Competitiveness and Innovation Framework Programme to SMEs.

Under a new programme being introduced in 2013 on the basis of a venture capital investment fund with a budget of EUR 46 million, 25% to 50%

stakes will be purchased in projects in the 12 priority industrial sectors. The HBOR is also exploring the possibility of establishing a venture capital fund of EUR 134-201 million for export businesses.

The Act on Investment Promotion and Development of Investment Climate provides incentives for job creation and training, especially in areas of high unemployment, and eases access to incentive measures for micro-entrepreneurs and foreign investors. It concentrates on innovative sectors, manufacturing and high value-added services, including tourism.

Historically, foreign direct investment has played an important role. From 1993 to 2012, this amounted to EUR 26.1 billion, concentrated in the financial sector and the wholesale and retail trade.²⁷¹ However, since 2008, FDI inflows have decreased by over 75%.²⁷² In May 2012, the government responded by establishing an agency for investments and competitiveness. Active promotion programmes aimed at improving the image of Croatia as a safe place for investment include the targeted investors campaign, which presents comprehensive business plans to potential investors. Croatia operates a network of 13 free economic zones.

4.11.6 Conclusions

Croatia has recently implemented a considerable number of reforms. In the framework of EU accession, it has completed all the reforms called for in its progress reports, including those concerning the judiciary and privatisation. Many weaknesses have been acknowledged by the authorities and are partly reflected in the already adopted measures, and in reform intentions.

However, large obstacles remain as regards access to finance, corruption (especially in business), the efficiency of public administration, and the innovation infrastructure. The action plans currently being drafted therefore need to be of high quality and properly implemented. Full implementation of reform plans already adopted is a precondition for better competitiveness.

²⁶⁸ Croatian Ministry of Entrepreneurship and Crafts.

²⁶⁹ DG ENTR, EC (2011), *SME's Access to Finance Survey 2011*.

²⁷⁰ CEPOR (2011), *SME Report for Croatia 2011*.

²⁷¹ Croatian Ministry of Entrepreneurship and Crafts.

²⁷² World Bank Indicator for 2003-12.

While Europe's economy continues to suffer, Croatia is likely to experience limited access to finance, depressed demand for exports, lagging competitiveness and lower foreign direct investment. In the medium term, the benefits of joining the single market and the impact of EU funds could contribute considerably to the growth of the Croatian economy.

4.12. Italy

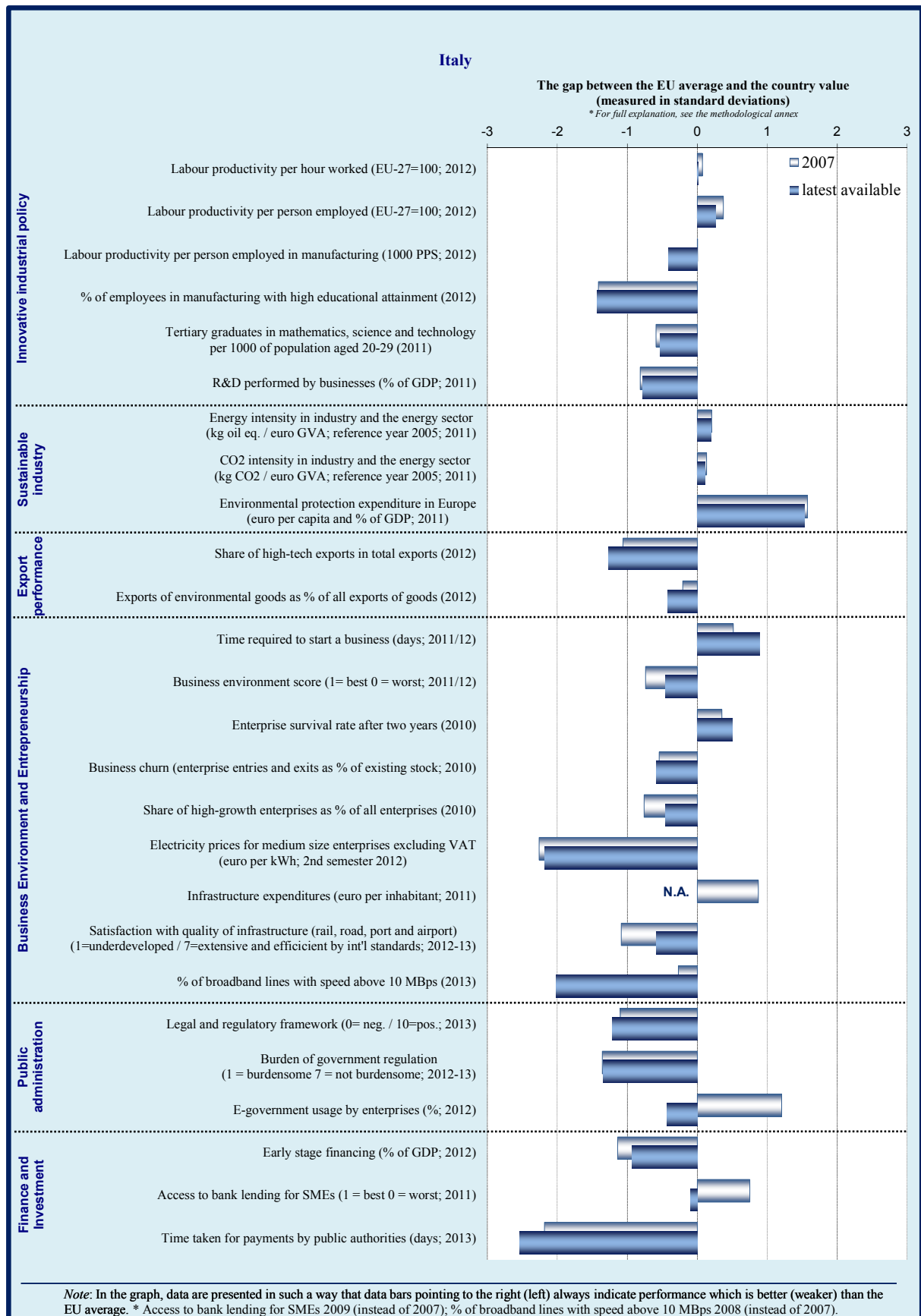
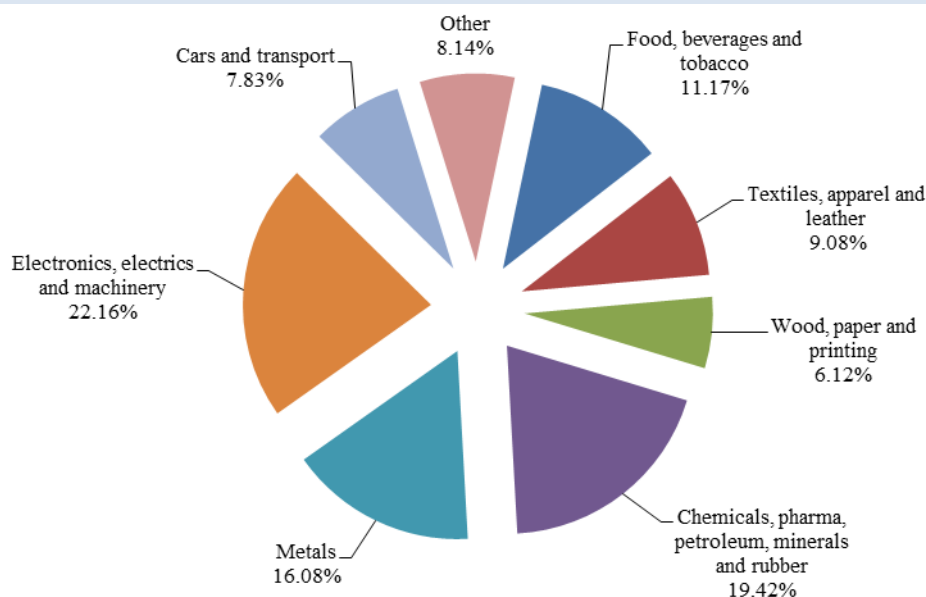


Figure 4.12: Manufacturing sectors – Italy (2010)

Source: Eurostat

4.12.1 Introduction

Manufacturing accounts for 15.5% of total value added in the economy, which is slightly above the EU average (15.3%). It is relatively concentrated in low and medium-low technology sectors, including clothing, leather, textiles, wood and metals, while the share of more innovative high and medium-high tech sectors is smaller than in other EU economies. Beyond sectoral specialisation, the uneven performance of Italian industry has its roots in the fragmentation of the industrial structure, as Italy has the largest number of enterprises in the EU, with more than four million SMEs, twice as many as in Germany.

In terms of average unit labour costs, Italy's competitiveness has eroded considerably over the last ten years, due to an increase in nominal gross wages combined with sluggish productivity growth. However, real wages have remained almost stable, highlighting the importance of addressing the productivity gap while better aligning wages on productivity. Alleviating the tax wedge on labour would also help.

Italy is experiencing a real deindustrialisation, as the industrial production index has lost 20 percentage points since 2007. This development seems to be attributable both to subdued activity

due to the downturn, and to the closure of many plants in some industrial basics (petrochemicals, steel, and biofuels). In order to deal with as many as 150 plant closures, the government has overhauled the relevant legislation to help plant conversion and regeneration of industrial sites.

4.12.2 Innovation, skills and sustainability

Innovation

In 2011, Italy invested a total of 1.3% of its GDP in research and development. This keeps the country close to its national target of 1.5% by 2020, but well below the current EU average (2.0%) and far behind the R&D intensity of countries at the technology frontier. Although the share of public R&D is largely in line with the country's main competitors, the contribution of the private sector to R&D intensity is particularly low (0.7% of GDP). The Innovation Union Scoreboard²⁷³ points to major weaknesses in the Italian system, in particular the limited availability of finance for corporate research and innovation, and the insufficient commercialisation of the results. Thus, the innovation policy would benefit most from focusing on instruments that could enhance

²⁷³ http://ec.europa.eu/enterprise/policies/innovation/files/ius-2013_en.pdf.

technological specialisation, and that would be oriented towards the commercialisation of innovation.

This is the logic behind the bottom-up approach of the ‘smart cities and communities’ platform, to which EUR 890 million have been allocated. The Ministry of Research has identified it as a driver of R&D investments in the priority areas for the improvement of urban services: security, ageing, welfare technologies, waste management, health, transport, last mile logistics, smart grids, sustainable architecture, cultural heritage and cloud computing technologies for smart government. Another strand in innovation policy is the development of national technology clusters, identified as catalysts for growth and structural change. Nine priority themes have been identified: green chemistry, agrifood, ambient intelligence and ambient assisted living, life sciences, smart communities technologies, advanced mobility systems, aerospace, innovative energy systems, and intelligent manufacturing.

Italy lags behind in the adoption of information and communication technologies, and the government’s growth initiative²⁷⁴ has created a new digital agency with the task of promoting demand-led innovation, including through innovative and pre-commercial procurement.

One explanation of the limited investment of the private sector in R&D is the preponderance of small firms, as the average size of Italian firms is much smaller than that of other leading European economies. Thus, an important objective would seem to be to encourage firm growth, while at the same time encouraging cooperation in order to increase the capacity to bear the risks associated with R&D activity. The government has addressed this weakness by simplifying the procedures for concluding network contracts,²⁷⁵ identified as a tool to promote research and innovation. The government has also adopted tax incentives for hiring researchers, but these have not yet been implemented. The European structural funds will also contribute to investment in research and innovation in 2014-2020.²⁷⁶

As the venture capital market remains weak, other measures are needed to enhance the equity capital of many firms as the debt/equity ratio is higher than the EU average, which hampers access to finance and investment, in particular in intangibles (see the section on finance and investment below).²⁷⁷

Finally, the government has devised a new legal framework to support innovative start-ups.²⁷⁸ The scheme can provide welcome funding for many firms that have been denied credit due to the risk aversion of the Italian banking system. It should be noted that the framework contains an ambitious scheme on crowdfunding that is one of the first equity crowdfunding frameworks in the world.

Skills

There are observed shortages of skilled labour in the manufacturing sector. In recent years a series of reforms have aimed to strengthen the provision of technical and vocational training to better respond to labour demand. Of particular importance are the certification of skills, and the introduction of post-secondary technical institutes²⁷⁹ to provide two-year tertiary qualifications focused on key sectors of the economy. Although they still involve only a limited number of students, the 62 institutes have the potential to further develop the vocational higher education system. In the same vein, the government has reformed the apprenticeship system, but at least for the time being, its use remains marginal. Discussions are ongoing about possibilities to improve the attractiveness of the system.

Sustainability

According to estimates,²⁸⁰ almost one in four enterprises (23.6%) have invested in green products and technologies in the last three years. In the context of overall diminishing fixed investment, these figures show that there is business confidence in the potential of the green economy. Further, over 37% of firms that invested in green technologies

²⁷⁴ The decree is called ‘Crescita 2.0’.

²⁷⁵ ‘Contratti di rete’.

²⁷⁶ European Structural and Innovation Funds for 2014-2020.

²⁷⁷ Also in the Council recommendation on Italy’s 2013 national reform programme and delivering a Council opinion on Italy’s stability programme for 2012-17: “Promote further the development of capital markets to diversify and enhance firms’ access to finance, especially into equity, and in turn foster their innovation capacity and growth.”

²⁷⁸ The decree is called ‘Sviluppo 2.0’.

²⁷⁹ Istituti Tecnici Superiori.

²⁸⁰ http://www.symbola.net/assets/files/Rapporto_Green_Italy_2012_1358333078.pdf.

were active on international markets (against about 22% of firms that didn't). Such firms tend also to be innovative, as about 38% of firms that invest in the green economy introduced product or service innovations (against slightly more than 18% of firms that didn't). Even when taking into account employment changes in the difficult period in question, these firms proved more resilient than others, as their workforce decreased by 0.7% against 1.4%.

As far as policy measures are concerned, the government has adopted tax incentives for hiring young workers in the green economy. The network contracts referred to above are also helping firms to go green, as out of 458 contracts, 87 are related to sustainability.

4.12.3 Export performance

Italy's share of world trade trended down between 2002 and 2011 (from 3.9% to 2.9%). However, exports increased by 5% in 2012, helping the trade balance to reach its best level since 1999 – although improvements in trade balance are also driven by a decline in imports owing to weak domestic demand. Italy's exports are now back to pre-crisis levels in value terms, but they remain below in volume terms. The export performance is hampered by two constraints. Geographically, exports go to countries whose economic growth has tended to be below average. Italy is also specialised in low-tech sectors, where the competition from countries with a lower cost base is stronger. Clearly, it would be beneficial to move along the international value chains to activities with higher technological and knowledge intensity.

In 2012, the government made a considerable effort, welcomed by the business community, to improve the governance of its internationalisation policy. Primarily it reactivated and rationalised the operations of the *Istituto Commercio Estero*, a government agency for the promotion and internationalisation of firms. In addition to providing business intelligence, consulting services and investment promotion to Italian firms, one of its main tasks is to implement the *National plan for exports 2013-15*.²⁸¹ The aim is to increase the value

of exports in three years to EUR 620 billion (35-38% of GDP), from EUR 473 billion in 2012, by improving the coordination of internationalisation policies.

The government has also sought to attract more foreign direct investment. To this end it has established *Desk Italia*, which is a one-stop access point for foreign investors on all administrative matters relating to investment projects. In addition, the recourse to the judicial system has been streamlined, as cases involving foreign investors will be dealt with by only three courts (Milan, Rome and Naples), to allow for higher certainty in the decisions.

4.12.4 Business Environment and public administration

Business environment

Overall, Italy ranks 73rd in the World Bank Doing Business, drawn down in particular by construction permits, getting electricity, getting credit, and enforcing contracts. There seem to be too many obstacles to firm growth, as few firms become international players. Although there are policy initiatives to improve its business environment and facilitate the life of SMEs, their implementation is lagging and the administrative burden on businesses remains high. Entrepreneurship issues continue to be problematic, as the relative ranking of Italy worsened in the ease of starting a business,²⁸² and schools are not able to create an entrepreneurial mindset.²⁸³ Competitiveness may improve if the domestic electricity grid is upgraded to remove existing bottlenecks and new gas storage and import facilities are improved.

Italy has introduced market-opening reforms in many of its product and service market regulations. However, challenges remain in local public services, transport and the energy sector, and there are signs that the reform process is slowing down. High electricity and gas prices reflect limited competition and infrastructure bottlenecks. In many cases the necessary decrees to implement the

ministers, the *Conferenza delle Regioni* and social partners (*Unioncamere*, *Confindustria*, *ABI* and *Rete Imprese*).

²⁸² World Bank Doing Business 2013.

²⁸³ SBA factsheet Italy 2012.

²⁸¹ This plan was established by the '*Cabina di regia per l'Italia internazionale*', a policy body composed of four

general liberalisation measures have not been adopted yet. In some cases the liberalisation initiatives have been diluted, and the recent reform of the legal profession seems to backtrack on the previous reform of professions. The implementation of the proposal aimed at eliminating all regulations across the board — except where strictly necessary — is not progressing.

Public administration

Despite the efforts made in recent years, the performance of public administration as measured by the World Bank's Government Effectiveness Indicator is well below the EU average. The main shortcomings include the long proceedings in civil justice, and a burdensome administrative and regulatory framework. The often unclear division of responsibilities between the state and the regions that ensued from the 2001 constitutional reform reduces the effectiveness of simplification measures introduced at the central level.

The regions' exclusive right to regulate economic activities, combined with inadequate inter-regional coordination, has increased differences between regions' administrative requirements. In the same way, the inefficient power-sharing between the state and regions, for example regarding energy, is hampering the development of essential infrastructure. Overall, the administrative complexities place a heavy burden on enterprises. The annual costs of complying with administrative procedures have been estimated at EUR 26.5 billion.

The government has stepped up efforts to reform the judiciary in order to streamline judicial procedures.²⁸⁴ A geographical reorganisation of courts should be completed by September 2013. For civil cases the right to appeal has been limited to controversial cases. Commercial courts have been introduced for cases concerning intellectual property, limited companies and public procurement. However, they will not have jurisdiction in commercial disputes. The government has adopted a decree-law on the compulsory use of mediation in some private law subjects. Further, a range of measures regarding

civil justice have been adopted. Additional staff will help to reduce the case backlog in the Courts of Appeal, and in the courts of first instance; case-handling in the Court of Cassation is being strengthened; and compulsory mediation is being reintroduced with slight adjustments.²⁸⁵

4.12.5 Finance and investment

Bank lending to non-financial firms has continued to contract and was in June 2013 down 4.8% year-on-year.²⁸⁶ This reflects weak demand, higher firm risk and tightening credit standards. The average cost of credit, albeit decreasing, remains 90 basis points higher than the euro-area average. However, survey results²⁸⁷ point to some easing of the overall financing conditions for SMEs.

The government has sought to mitigate credit risk by strengthening the guarantee fund for SMEs. With its new operational provisions, in many cases the guarantee can cover 80% of funding and the amounts guaranteed can be up to EUR 2.5 million.

Other initiatives have been taken to strengthen the balance sheets of firms. The government has introduced rules to make it easier for SMEs to raise debt, in particular through issuing short-term commercial paper and long-term bonds and similar instruments. The introduction of an allowance for corporate equity allows companies to deduct part of the notional cost of newly injected equity from taxable income.

The introduction of the fund for sustainable growth has been a step away from subsidies. It replaces 43 different support schemes, with an allocation of about EUR 600 million in 2012 and EUR 200 million in subsequent years. The fund is organised along three priorities: research and innovation; strengthening the industrial structure; and internationalisation.

In April 2013, the government acted on one of the major problems for businesses, the payment of an

²⁸⁴ For indicators on Justice see EU Justice Scoreboard 2013 available at http://ec.europa.eu/justice/effective-justice/files/justice_scoreboard_communication_en.pdf.

²⁸⁵ The compulsory mediation had been repealed by the Constitutional Court last October; it has been adjusted regarding the areas concerned, the maximum duration of mediation and the fees due in case of failure to reach an agreement. Decree-law 69 of 21 June 2013, "*Decreto del Fare*".

²⁸⁶ Bank of Italy, Money and banking statistics.

²⁸⁷ European Central Bank Monthly Bulletin, August 2013.

estimated EUR 90 billion in commercial debt arrears owed by the public authorities to businesses. An immediately effective provision clears the payment of EUR 40 billion of arrears over the next two years. If correctly implemented, the measure will have a positive impact on the survival rate of businesses, as according to estimates a third of bankruptcies are due to late payments. Effective implementation of the late payment directive, entered into force in January 2013, could also make firms' management and planning easier and their operations more efficient.

4.12.6 Conclusions

Many of the problems that drag down competitiveness in Italy like low private investment in R&D, lack of innovative start-ups, problems in the supply of skills, lack of equity financing, meagre growth of firms, and internationalisation can be at least partially traced back to the administrative and regulatory constraints of the business environment. In particular, paying taxes and enforcing contracts are particularly difficult. Continuing coherent structural reforms of the public sector are needed for a modern and efficient administration to evolve.

The government has continued to pursue reforms improving the business environment and making it more conducive to growth. The reform of the judiciary system in 2013 has introduced some novel provisions (e.g. reduction of judiciary offices, appointment of new auxiliary staff helping judges), the outcome of which in terms of efficiency of justice still needs to be proven. The anti-corruption legislation that was finalised in 2012 is also a promising step.

Encouraging entrepreneurship has been addressed by allowing the possibility of setting up a business with a capital of one euro and by increasing support for innovative start-ups. The system of subsidies to enterprises has been reformed, even if more radical proposals were dropped, including a plan to restrict the use of subsidies to clear cases of market failure, and to use the savings to reduce the tax wedge on labour.²⁸⁸ The tax allowance for new corporate equity has potential to enhance growth when the

recovery starts. However, these effects are likely to be visible only in the longer run, as operating profits will still be low early on in the upturn.

An important message for policy focus can be found in the performance of firms that have adopted a strategy of innovation and internationalisation. These firms have fared far better in the crisis and it appears that the choice to compete internationally is a key factor leading to innovation. While research shows that this choice ultimately rests on the productivity of the firm, the reform of the governance of the internationalisation system can help reduce the productivity threshold at which a firm may enter the international markets and therefore increase the number of exporting firms. From this point of view, the reform of the governance of the internationalisation system can prove a pivotal step for Italian competitiveness.

²⁸⁸ The Giavazzi Report.

