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Industrial Performance Scoreboard and Report on Member States' Competitiveness Performance and Policies - Part 3 -

Accompanying the document

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions

A Stronger European Industry for Growth and Economic Recovery
Industrial Policy Communication Update

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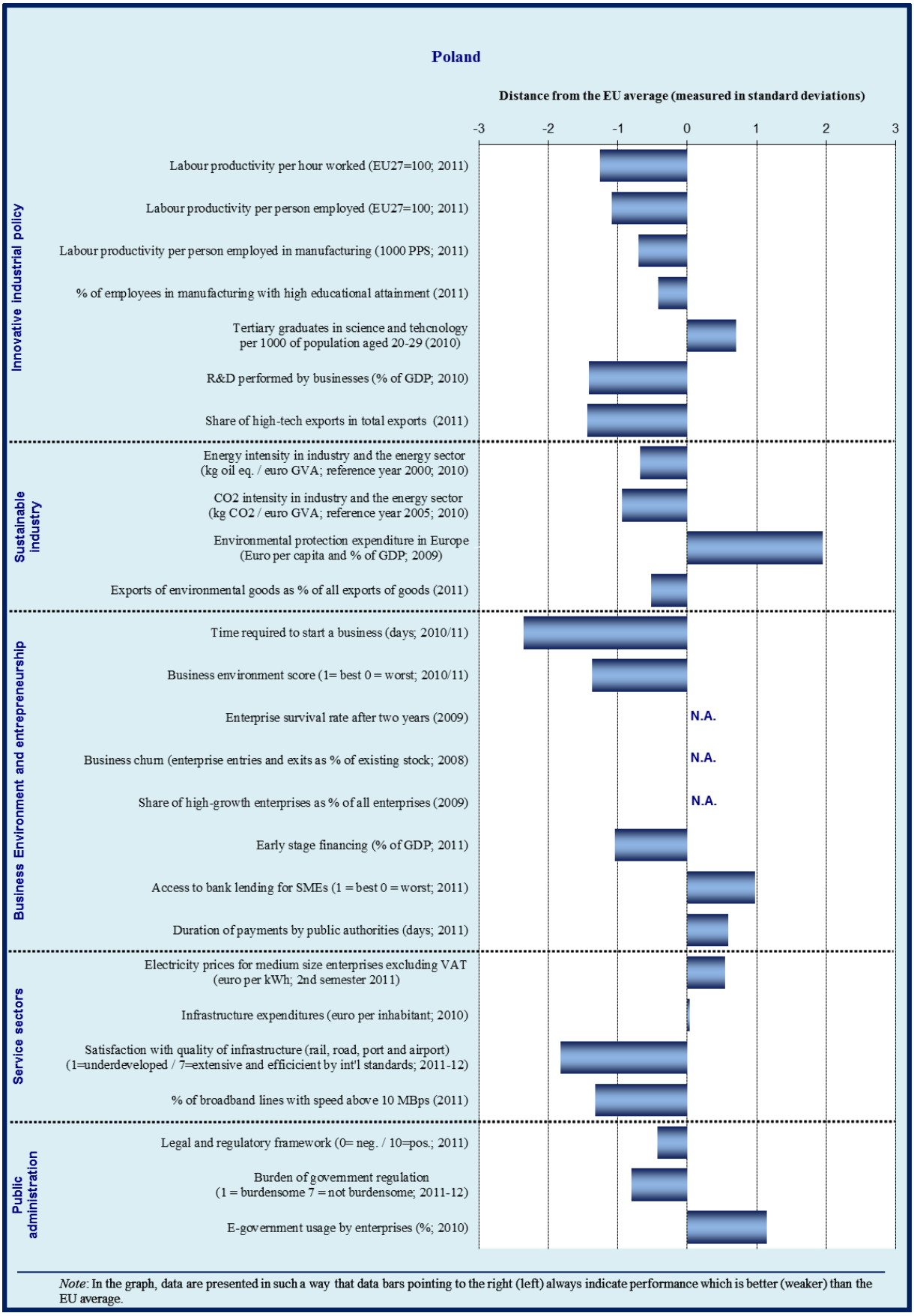

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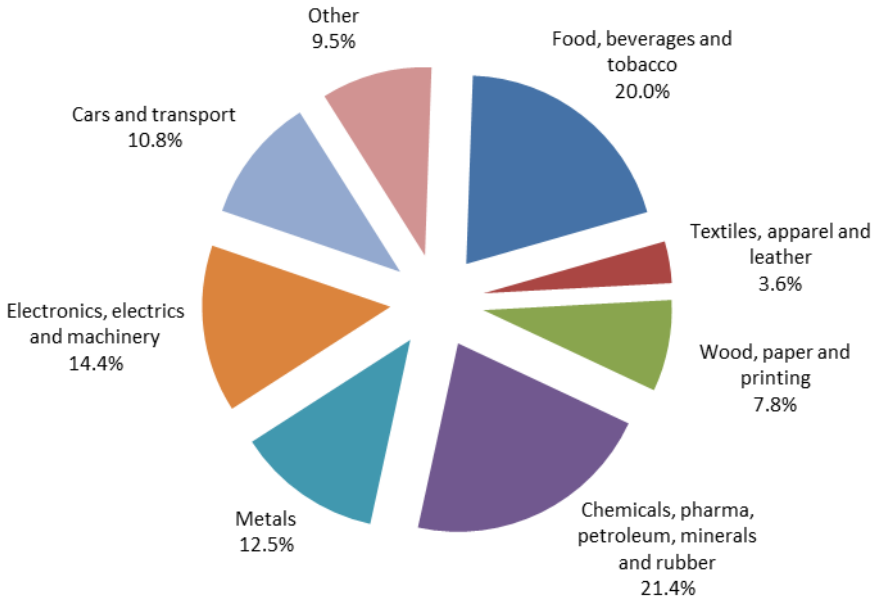
Sectoral specialisation of manufacturing – Poland (2009)



Source: Eurostat

3.20.1. Introduction

Manufacturing is relatively more important in Poland than in the EU, accounting for some 18 % of GDP (EU average 15.5%). However, Polish industry is still more specialised in marketing-driven, labour intensive and mainstream manufacturing sectors. Consequently, the shift to more R&D intensive and knowledge based economy that would offer more sustainable growth in the future is an outstanding challenge which the Polish government tries to address in its various policy proposals.

Due to relatively strong internal demand and good export performance (facilitated by currency depreciation) Polish companies managed to fare through the crisis and even continue to grow. However, the future performance of industry will to a large extent depend on boosting innovation and technological specialisation of companies.

3.20.2. Innovative industrial policy

The latest Innovation Union Scoreboard 2011 ranks Poland among the weaker performers in the 'moderate innovator' group of countries. In addition, the annual growth in innovation performance of Poland was very moderate and translated into a very modest improvement in the last five years.

Poland has maintained its target for R&D intensity at 1.7 % of GDP by 2020. Over the last years R&D expenditures have grown continuously, but nevertheless the level of R&D expenditures in 2011 was at 0.75 % GDP which is one of the lowest in the EU. The 2012 research budget was increased by around 10 % and is the highest annual budget for R&D so far. This increase, though, is mainly funded through structural funds and national co-funding. What remains to be the most concerning issue is the underinvestment of private sector in R&D which accounts for less than one third of all Polish R&D expenditures (with the continuing downward trend). It creates the main challenge related to feasibility of achieving the national target which assumes equal contribution from public and private funding sources.

There is a strong awareness of this challenge at national level and many support mechanisms have been launched recently to induce science-industry cooperation. However, all these efforts have still not led to a creation of well functioning, innovation-friendly framework conditions that would stimulate collaboration of public institutions with private business and stimulate growth of innovative companies. In addition, investments from the structural funds in innovation have been mainly directed towards purchase and absorption of new technologies, which has enabled some catching-up, but also left more necessary support for indigenous innovation projects underdeveloped. What is more, also the measures to support demand side have been very limited.

Concerning the framework conditions, Polish R&D system has undergone major restructuring in the last years. The recent reforms of the science and higher education systems spurred significant changes, including the move towards competitive funding, creation of two R&D agencies for applied (NCBiR) and basic research (NCN) and efforts on tackling fragmentation through concentration of funding on strategic projects and best performing institutions. The two research agencies are now fully operational and have seen increases of their budget and competencies. Still their successful functioning will require coherent strategic management as well as clear evaluation procedures of projects.

In 2011 the 2020 National Research Programme (KPB) was adopted listing seven strategic R&D priority areas that are to be implemented by the NCBiR in its strategic programmes. In parallel, the technological foresight for industry *InSight 2030* was also completed, identifying key lead markets and technologies. Much as these documents are important for further actions, the outstanding issue is linking entrepreneurship, innovation and science policies to have common priority areas and instruments supporting whole innovation cycle.

The currently developed Strategy for Innovativeness and Effectiveness of the Economy is an attempt at an integrated approach to research and innovation embedded in a wider economic context. As the Strategy is rather general and requires follow-up implementation plan, the currently prepared Enterprise Development Programme will be crucial for assuring coherence between science and industrial policies. It is supposed to propose a coherent and more effective set of instruments aimed at supporting all the stages of the innovation process and all the stages of a company development. The Programme should also introduce measures incentivising private research and innovation investments, in particular for young innovative companies and SMEs.

3.20.3. Sustainable industry

Polish economy has managed to reduce its energy intensity, but has still not reached the European average. The biggest improvements in energy efficiency have been registered in industry and the lowest in transport. Consequently, Poland exceeded its intermediate target for energy efficiency in 2010 of 2 % reaching a 6 % reduction. The main potential for further efficiencies is in construction, industry and households sector, but a 20 % reduction in 2020 will be difficult to achieve. The Energy Efficiency Plan adopted in 2011 set a new scheme of white certificates that are the main instrument to stimulate further efficiencies also in the end user sectors. There is a visible rise in social awareness reflected in the improvements mainly taking place in households' sector. However, Poland has still not fully transposed the energy labelling directive which is a key for the promotion of energy efficient behaviour among consumers.

With some effort Poland is likely to reach its target of 15 % share of renewables in the total consumption of energy in 2020. In 2010 it already reached a 10 % share. The main source of renewable energy is bio-mass, including co-firing, and wind. Nonetheless, Poland has not managed up to now to fully implement the Renewable Energy Directive which led to an infringement procedure being launched by the Commission in 2012. The new national legislation that should also set some support mechanisms for investments in renewables for SMEs has been delayed due to controversies around the proposed support mechanisms for investments in renewable energy sources.

There are several initiatives prepared by the government aiming at modernisation of energy sector, such as improvement to energy networks, economic support to diversification of energy sources and non-legislative measures to promote use of local renewable energy sources. Moreover, the National Programme for the Development of Low-Emission Economy is under preparation, following the adoption of the Programme's guidelines in 2011. The comprehensive action plan, referring to all sectors of the economy, with a time frame up to 2050, should be ready by mid-2013. By now however, the incentives to encourage the uptake of low-carbon emitting technologies in the energy sector seem still insufficient. Furthermore, in spite of the fact that road freight emissions are rising sharply (increase by 33 % from 1995 to 2007), there are no specific measures to reduce emissions in this area.

Furthermore, despite gradual modernisation, underdeveloped transport infrastructure continues to be a serious obstacle for industry's growth. There is still a lot to do in rail transport where poor condition and aging network is not sufficiently accompanied by urgently needed investments. Poland has not fully used cohesion funds available for this purpose due to lack of experience and properly elaborated projects. Continuation of road network's upgrading remains one of the government's priorities, but despite significant progress made in the last 5 years and constructing over 1 000 km of new motorways and expressways, the network remains fragmented. Air transport infrastructure has been improving following a number of investments, but still lacks effective connections to other transport modes, especially

railways. Similar situation also concerns port infrastructure. Some progress has been made, especially in modernization of transport connections between the neighboring countries and the host cities of the 2012 European Football Championships, but more investments are needed to remove the infrastructure gaps.

In 2010 Poland had a small negative trade balance in environmental goods and the balance has been marginally deteriorating since 2006. In order to foster development and international transfer of Polish innovative environmental technologies an Accelerator of Green Technologies (GreenEvo) was initiated end of 2009. As a part of the project an analysis of the Polish potential and of foreign markets for environmental technologies has been conducted. A selection of companies to be supported by the programme was completed in 2010 (28 companies selected in total), but the final impact of the project is still not known.

Aging infrastructure, limited competition in the energy market and domination of coal in energy mix continue to pose a potential threat of undersupply and increases of energy costs for industry. There are still some uncertainties around the currently developed nuclear programme and the potentials of the shale gas extraction. Current low CO_2 prices have reduced the pressure from coal generation facilities, but the situation might change in the future. On the positive side, the progress in construction of the LPG terminal in Świnoujście is according to schedule and it should be open in 2014. Besides a new gas interconnection with the Czech Republic has been opened and new ones are planned with Germany.

3.20.4. Business environment

According to the World Bank Doing Business 2012 report Poland continues to be among the worst performers in the EU concerning business environment. The main issues are high administrative compliance costs, slow legislative processes and unstable legislation. As regards judicial and other legal actions, both the duration of procedures and their number are relatively high.

The Polish government sees the improvement of business environment as its priority, but the pace of the reforms is rather moderate. The reforms proposed up to now go in the right directions but are not ambitious enough. More reforms are expected, but the frequent changes in legislation, even if positive, are not well received by business organisations that would welcome a holistic and well-thought reform of regulation. Better implementation of impact assessments and timelier stakeholder consultations of proposed regulatory changes are required to improve the entire law making process.

In 2011 three legislative packages were adopted to improve the business environment. The first package focussed on the freedom of entrepreneurship act (entering into force 1st July 2011) has made one-stop-shop more operational and reduced the time of starting the business. Next, the act on reduction administrative barriers (so-called deregulation Act I, entering into force 1st July 2011), has limited the administrative constraints on business activity, decreased significantly the number of procedures and administrative obligations imposed on businesses, and replaced administrative certificates with own statements. The third package (so-called deregulation Act II, adopted on 16th September 2011, mostly entering into force on 1st January 2012) aimed at reducing information obligations and administrative barriers for citizens and businesses. Currently, a proposal of draft legislation guidelines to the next deregulation act is being discussed within the government. It will concentrate on the solvency enhancement and investments support as well as further reduction of the information obligations and reduction of the cost of running a business.

There has also been some progress in the simplification of legal procedures involved in enforcing contracts. In September 2011 separate legal proceedings for business cases were eliminated and rules on the submission of evidence are to be simplified. The effects of these changes are still to be seen in future. Besides, the government plans to move forward the digitalisation of courts which should shorten the duration of proceedings.

Poland performs similarly with the EU average in access to finance. Decline in demand and number of loans to SMEs has been observed following the crisis. However, the latest ECB lending survey shows that in 2011 net change in willingness of banks to provide a loan improved in Poland in contrast to the negative developments in the majority of the Member States. It also seems that Poland is one of the few countries where collateral requirements for loans to SMEs have not increased much. Thus restoring normal lending to the economy is not a major issue for the government to deal with at the moment.

Nonetheless some challenges still remain. SMEs also complain about the high collateral requirements that limit their ability to get a bank or other type of loan. The venture capital market is still not very developed which limits availability of risk capital for innovative companies at early stages

of development. The National Capital Fund only became operational in 2010 so it is too early to assess its impact on development of start-ups and seed capital funds. On the positive side – the Polish growth stock market NewConnect continues to be a best practice example on the European level. It is important for growth oriented SMEs as a direct financing source or as en exit possibility for the venture capital funds investing in SMEs.

3.20.5. Services sector

Over-regulation in the field of professional services is a significant regulatory barrier for economic growth. Poland has notified to the Commission 368 regulated professions (32 % in construction and industry, 21 % in the transport sector and 20 % in the health sector). Recently, Poland has announced a plan to scale down by 50 % regulation in professional services regarding both educational requirements and licensing. Two legislative initiatives are to be adopted in 2012 following ongoing public consultations.

Concerning services provided by network industries, the functioning of telecommunication market is positively assessed by the majority of the institutional customers. A strong position of the Office of Electronic Communications (UKE) helps maintaining access to infrastructure and competition on the market.

Rail freight services are among the most liberalised markets in Europe, but there are still obstacles to an efficient functioning of the internal market. Poland is working on full implementation of the railway package and on the ways to decrease the current level of railway infrastructure charges which is posing a substantial obstacle for operators. It also intends to strengthen the position of the rail regulator (UTK). Additionally, the existing problems with access to the freight terminals and rail-related services by new entrants have negative impact on the functioning of the market.

In contrast, the liberalisation of the gas market is not progressing fast enough. The government plans to facilitate the competition on the market by introducing gas release programme on commodity exchange. The withdrawal of obligation to approve tariffs for commercial customers is expected in 2013. The relevant legislation is under consultation, but with no specific adoption day has been set. There are still no plans for liberalisation of the market for households or proper impact assessment of liberalisation on prices.

3.20.6. Public administration

As measured by the World Bank's Government Effectiveness Indicator, the *overall public administration performance* scores for Poland are considerably below the EU average. Perceptions of the respondents to the World Bank survey point to a relatively lower quality of public services, policy implementation and commitment of public servants compared to the EU average.

In terms of *tools for administrative modernisation* (e-government, impact assessment, performance and service orientation, accountability) the composite indicators also highlight a performance slightly below the average for Member States. Various initiatives to improve electronic contacts with administration have been undertaken, but the general problem is insufficient coordination of these initiatives resulting in a lack of integrated system. A major change was the introduction of the central electronic register (CEIDG) in July 2011, which allowed electronic registration of a business for natural persons. However, the government itself has noticed that the system required improvement and further extension of functionalities, and announced to upgrade the register still this year. Registration of limited liability companies (registered in the National Court Register) is also to be improved, following amendments to the legislation that are envisaged for the second half of 2012.

The composite indicator on *corruption* exhibits a notably lower score compared to the EU average indicating that corruption is still an issue in Poland. Whereas diversion of public funds due to corruption and the commonness of irregular payments and bribes by firms are assessed at similar level to this of EU average, the experience of corruption in interaction with public authorities is more common.

Measured by the composite indicator on *starting a business and licensing*, Poland's performance is significantly worse than EU average. It is mainly a consequence of relatively much longer time as well as higher costs needed for incorporation compared to the EU average. Furthermore, Poland still lacks a fully operational one stop shop for start-ups and obtaining licenses is assessed as more complex than the EU-benchmark.

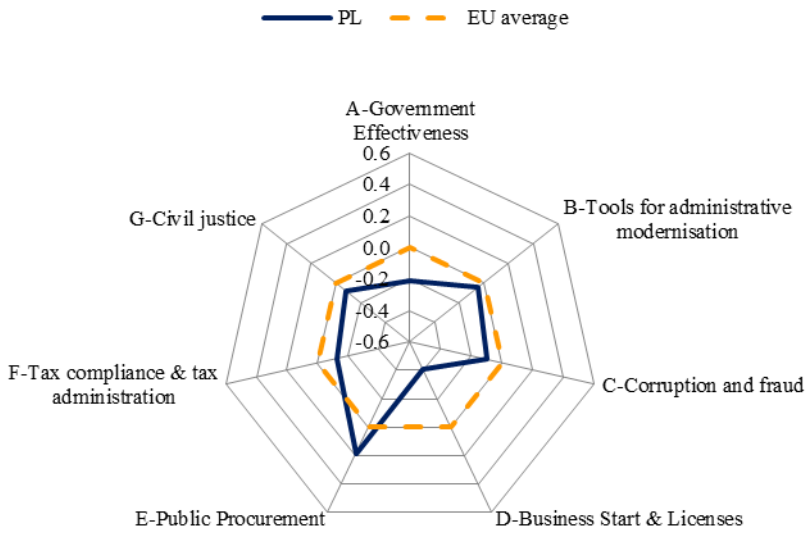
Concerning *tax compliance and tax administration* our composite indicator reports a score that is lower than the EU average. This holds true for both the time requirements to prepare tax returns as well as tax administration costs which are substantially higher than on average in the EU. Although tax

burden on labour is relatively low compared to other EU countries, it is the complicated tax system that is perceived as a serious burden by Polish companies. What is worse, the World Bank Doing Business Report 2012 indicates that there has been no improvement in the Polish Paying Taxes indicator compared to 2011.

In terms of *efficiency of civil justice*, Poland again performs slightly below the EU average according to the World Bank analysis. While the costs of enforcing contracts are estimated to amount to 12 % of the claim, which is below the EU average, the time requirements exceed by some 50 % the EU average for both enforcing contracts and resolving insolvencies. Moreover, the WEF's Executive Opinion Survey indicates that the judiciary is also perceived to be less independent from political influence compared to the EU average.

In contrast, the composite *public procurement* index shows a significantly better performance than the EU average. This holds true for all three aspects covered in the composite indicator. For instance, while on average time requirements for the competition for public tenders amount to more than 16 days and payments by public administrations are delayed up to 28 days, for Poland these values are only 11 and 19 days, respectively. Nonetheless, Polish companies complain about restrictive criteria, stringent conditions and inefficient appeal procedures in the area of public procurement.

Overall profile of public administration



Source: WIFO

3.20.7. Conclusion

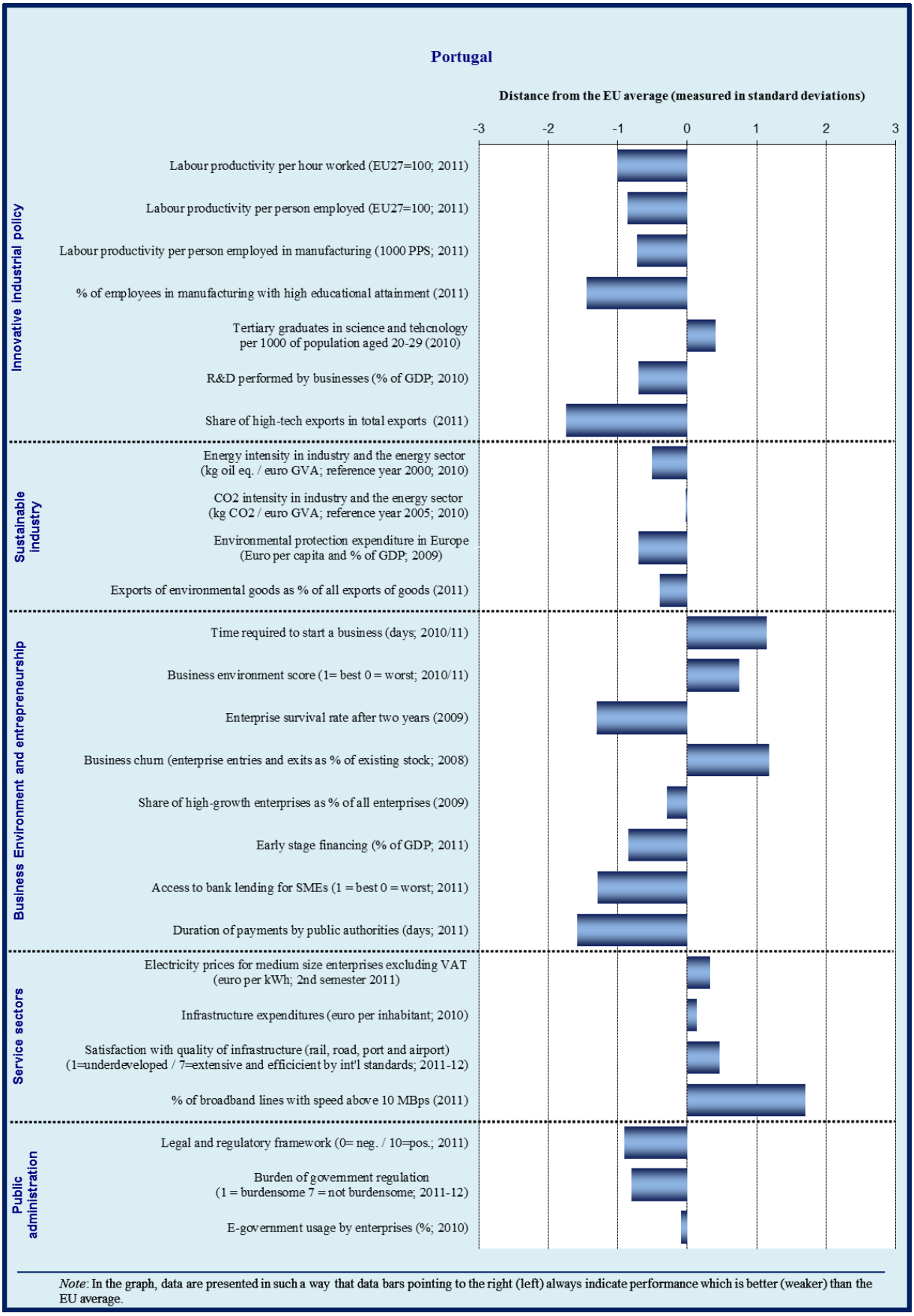
In 2011 Poland managed to prepare and implement some additional reforms that should lead to an improvement of business environment and help industry boosting its competitiveness. Thanks to relatively good situation of the economy and the implementation of the EU cohesion funds Poland has also been able to maintain its growth and investments in infrastructure. What is more, despite the underdeveloped capital market, Poland has avoided credit crunch and access to finance is not as serious problem as it is the case in some other member states.

However, there are concerns that without further structural reforms the current growth model might not be sustainable. Despite the reform of education and science system, the innovation performance of companies is poor. Without better strategic linkages between industrial, education and innovation policies the existing instruments might not improve the situation. Furthermore, sustainability needs to be better incorporated in the energy and transport policies to avoid future adjustment costs and encourage companies to adopt environmental technologies.

In addition, the approach of public administration to regulation and law making does not sufficiently engage and consider the voice of business stakeholders. While the proposed changes seem to be relevant, lack of efficient control and monitoring mechanisms weakens the chances of proper implementation. Similarly, the deployment of e-administration and e-services is rather slow and lacks coherence. Finally, despite recent

deregulation proposals there is a clear need for a better regulation agenda that would be implemented in a more elaborated and systematic manner.

3.21. Portugal



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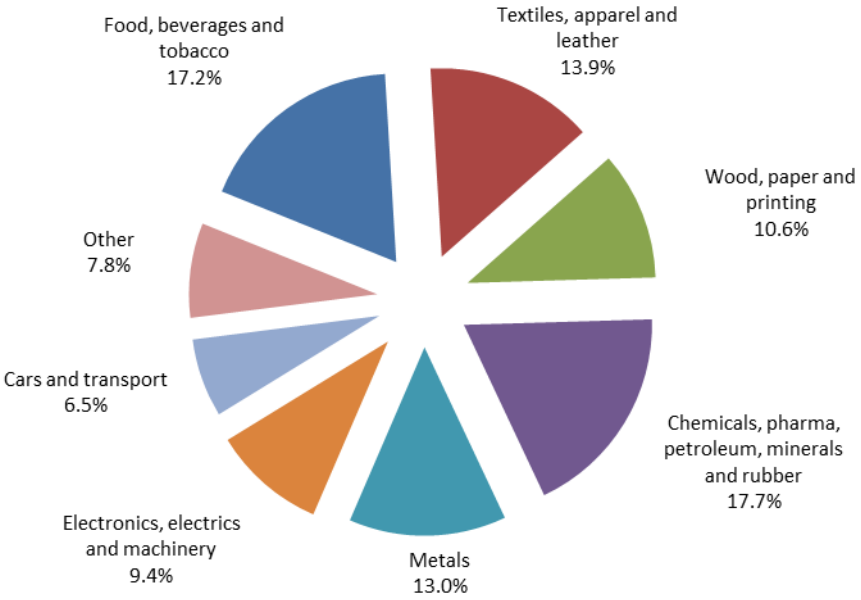
Sectoral specialisation of manufacturing – Portugal (2009)



Note : No data available for sectors C12 (tobacco products), C19 (coke and refined petroleum products) and C21 (basic pharmaceutical products and pharmaceutical preparations)
Source: Eurostat

3.21.1. Introduction

Manufacturing plays a broadly similar role in Portugal than in the EU as a whole (13.1 % against 15.5 %). At the detailed manufacturing industry level, Portugal has a relatively high degree of specialisation in low-skills (labour-intensive) industries (wood and cork, cutting and finishing of stone, made-up textile articles) as well as in capital-intensive (cement, refined petroleum) and marketing-driven industries (footwear). Sectors of medium and high technological intensity are still under-represented in parallel with a still relatively high specialisation in low technology sectors.

The series of economic reforms that are being implemented should facilitate and speed-up structural change and contribute to foster productivity and competitiveness. Portuguese exports are relatively concentrated in the EU markets. The share of exports to the BRIC countries is low but it is increasing, taking advantage of the opportunities offered by these and other high-growth emerging economies.

3.21.2. Innovative industrial policy

R&D expenditure weakened slightly (from 1.64 % in 2009 to 1.59 % of GDP in 2010) but Portugal continued to be one the leading countries in the group of 'moderate innovators' in the IUS 2011, reinforcing its relative strengths in areas such as the research system or the number of SMEs introducing innovations. Main relative weaknesses are still in business R&D and in the outputs and economic effects of innovation (measured e.g. by the relative importance of exports of high tech products and knowledge intensive services or intellectual assets).

A new strategic programme promoting entrepreneurship and innovation '+ e + i ' was adopted in December 2011 and some measures have already been implemented such as: the National Council for Entrepreneurship and Innovation was created for policy coordination and steering at the highest level of the government; R&D and innovation vouchers were merged into a single instrument (an incentive of up to EUR 25 000 is granted for innovation and R&D projects done by micro and SMEs in cooperation with a number of universities and research institutes) and new competitions were launched for this instrument.

Standards on innovation management systems and manuals on best practices for the protection and valorisation of Industrial Property and for the evaluation of Intangible Assets are being developed by the Standards and the IPR offices, in cooperation with COTEC. A 'highway' project streamlining decision making for bilateral patent applications was agreed between the Iberian countries.

Portugal is committed to implement the Digital agenda 2015 (adopted in 2010) and will align it with the forthcoming mid-term review of the Digital Agenda for Europe.
Portugal needs to sustain and improve the efficiency of the research and innovation investments and their contribution to foster productivity and speed-up structural change, fully exploiting budget and project re-allocations and the temporary high EU co-financing rates.

3.21.3. Sustainable industry

A number of contracts were signed and new competitions launched for the exploration of several metallic minerals (Portugal has known important deposits of copper, silver, uranium and several critical raw materials such as tungsten).

The National Plan for Dams involves six investments and projects (including the capacity reinforcement of some existing hydropower plants). Smart grids and other innovative eco-products and services are being promoted (within an energy technology and competiveness pole and other 'eco-clusters"). The pilot project ("InovGrid") in the city of Évora reached 30 000 households and businesses in 2011 and was chosen by the Commission and Euroelectric as a case study for smart grids in Europe.

The Energy Audit Scheme and rationalisation action plan in industry covers more firms and energy intensive industrial installations. On-line energy audit tools and a study with technical industrial/sectoral energy efficiency measures were made available. The '+ e + i' programme foresees several eco-innovation actions (such as an 'energy voucher' promoting energy efficiency and green business models). Awareness and communication campaigns on eco-innovation were organised, trainings and certifications were given in the management of energy in industry and buildings and 500 'energy and carbon local managers' were nominated for public administration installations (within the ECO.AP programme promoting energy efficiency in public administration, aiming to reduce the State's Energy bill in 30 % by 2020).

The green public procurement programme is being revised (raising the number of green categories, the use of green awarding criteria, the green coverage target -from 50 % to 65 %- and the coverage of regional and local entities).

The powers and independence of the water and waste-treatment regulator are being reinforced and the state-owned enterprises in these sectors will be rationalised. The national low carbon roadmap to 2020-2050 is being finished and the two National Action Plans i) for renewable energy and ii) for energy efficiency were revised.

The revision of the National Renewable Energy Action Plan included reviewing the weight of the objective of each renewable energy source in the national energy mix to achieve in 2020 and estimate, per renewable energy source technology, the stages of adoption, promotion and entry into the system.

The revised National Energy Efficiency Action Plan has the horizon 2020 and establishes targets in terms of primary energy (namely a 25 % reduction of energy consumption until 2020).

The effective improvement of energy efficiency in industry remains an issue.

3.21.4. Business environment

Access to finance

A series of measures have been adopted to mitigate the increasing constraints on credit and lending conditions faced by SMEs: extension (for an additional year, until December 2012) of the existing credit insurance instruments for exports; deferral of capital reimbursements by one year – from October 2011 to October 2012 (for existing PME INVESTE credits, potentially involving EUR 1.85 billion and more than 50 000 SMEs); creation of a new credit line 'PME CRESCIMENTO' (of EUR 1.5 billion, primarily for SMEs); adoption of a plan for the gradual normalisation of late payments in the public sector.

Remaining Structural Funds have also been reprogrammed to facilitate access to finance. Over EUR 500 million will be allocated to this purpose, in particular by using a significant part of a framework loan of EUR 1.5 billion from the ECB.

Some other actions can help in lowering SMEs high leverage levels and dependency on bank loans: the public system of venture capital was reorganised into a single fund (allowing for a greater coordination of public intervention and offering SMEs new, innovative forms of finance); there are plans to develop the stock exchange for small caps, 'the Alternext Lisbon"; commitment in the MoU for presenting a proposal aimed at diversifying the financing channels of the corporate sector.

Regulatory and support environment

Business conditions and the functioning of markets are improving through the implementation of a

large number of structural reforms, encompassing labour and products markets, network industries and business services[1].
The performance of Portugal on the share of fixed broadband lines at 10 Mbps and above was 77.5 %, the 3rd highest in the EU. Portugal is addressing broadband with a national plan, under which tenders were signed by the Government for the deployment of NGA networks in rural areas (providing a minimum guaranteed download speed of 40 Mbps. The roll out of the contracted services started in December 2011 and is underway until December 2013[2].

Many other reforms are targeted at improving competition and insolvency laws or the efficiency of the judicial system. Competition law procedures and enforcement regimes were strengthened and two new specialized courts were created for competition and IPR cases (respectively). Court fees were simplified and harmonised (penalising frivolous litigation and promoting voluntary out-of-court settlements). A new law was adopted on voluntary arbitration and fast-track resolution of debt enforcement cases (close to ¾ of the total number of pending cases in courts). Forthcoming reforms include the revision of the Code of Civil procedure (aimed at simplifying and accelerating court procedures) and introduction of mediation.

The conciliation framework facilitating early (extrajudicial) corporate debt restructuring and the insolvency laws and procedures were streamlined and a 'second chance' mechanism was introduced (aimed at proactively enhance rescue and firm restructuring; e.g. firms are granted protection from creditors for 60 days).

On-going simplifications of administrative procedures include: the 'Zero Authorisation' project (offering simplified/tacit licensing and services for setting up businesses such as shops, restaurants and bars) and the 'sistema de indústria responsável' (a simplified licensing regime for a large number of industrial activities) are being implemented; a simplified uniform regime for mobile retailers is being drafted; the 'simplex Autárquico' reached a 75 % implementation rate (complete coverage of all 308 municipalities is foreseen for 2013); the 'simplex Export' programme simplifying export procedures for firms is almost completed.

Further actions are being planned such as: extension of the 'Zero Authorisation' project to other sectors; a new 'simplex Export' with additional simplifications; a 'simplex Mar' for sea related activities; a 'Guichet Ambiente' for environmental protection services and authorizations.

Exports and the internationalisation of SMEs continued to be promoted by QREN and by a large set of measures (e.g. visits of importers; participation of SMEs in trade fairs and missions and information about IPR protection and enforcement in some high growth markets).

Following the adoption of '+ e + i' programme, a national entrepreneurship competition ("concurso INOVA") was launched for lower and upper secondary students; there is an action plan for developing a common platform for entrepreneurship education and its inclusion in the curricula; the program 'Academia das PME' organizes training courses and workshops for the development of managerial skills in SMES (and had targeted actions in specific sectors such as creative industries or agro-businesses).

3.21.5. Services sector

A series of measures are being implemented to liberalise services, easing barriers to entry and restrictions to cross-border activities. A Commission was created in order to review and reduce the number of regulated professions (around 120 regulated professions had been analysed until March 2012). An ambitious draft framework law has been prepared to remove unjustified restrictions on the access to and the exercise of highly regulated professions (where professional bodies are involved, such as lawyers or doctors). The draft has been submitted to the Parliament following a public consultation. The proposal aims to ensure that the national rules are in conformity with EU rules.

3.21.6. Public administration

As measured by the World Bank's Government Effectiveness Indicator, the *overall public administration performance* scores for Portugal are lower than the EU-average. Perceptions point to a relatively lower quality of public services, policy implementation and commitment of public servants to those when compared to the EU-benchmark.

The use of tools to improve public administration (e-government, impact assessments, performance and service orientation, accountability) is close to the average use in the Member States. On the one hand, all eight *business related e-government*

[1] See http://ec.europa.eu/economy_finance/publications/occasional_paper/2012/pdf/ocp95_en.pdf and http://www.portugal.gov.pt/media/424132/compromisso_crescimento_competitividade_emprego.pdf.

[2] http://ec.europa.eu/information_society/digital-agenda/scoreboard/countries_2012/country_pt.html.

services are available in Portugal and the use of evidence based instruments is quite widespread, but there is some scope for improvement by using modern human resource management tools (performance-related pay, flexibility, skills development) as these are not used to the same extent than in most other Member States.

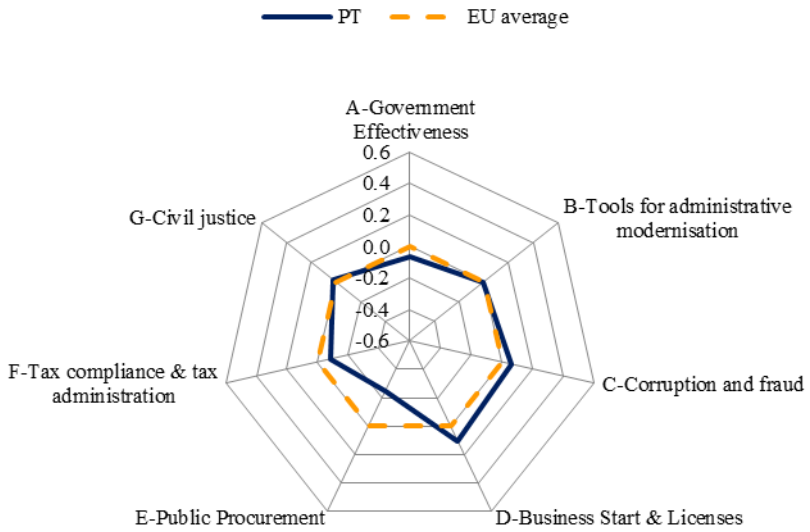
On the dimension *corruption and fraud* Portugal is performing slightly better than EU Member countries on average, although irregular payments and bribes and diversion of public funds are to a minor extent more common than average. This is however in contrast with the individual experience or respondents of corruption, which is better in Portugal than in the EU.

The *civil justice system* is almost similar to the EU average in terms of global value. Both the time to enforce contracts and to resolve insolvency is very close to the EU-average, but the cost to enforce contracts (as a percentage of the claim) is almost 8 % lower in Portugal. However, the judiciary system is considered to be less independent than in other EU countries.

The performance of Portugal on the *tax compliance and tax administration* indicator is slightly worse than average. In Portugal it takes 275 hours yearly *to prepare and file tax returns and to pay taxes* as compared to 208 hours in the EU. The performance of Portugal on the a*dministrative costs of taxation* sub-indicator is equally situated slightly below the EU average level.

The tax compliance costs for firms, in particular for SMEs, are high due in great part to the complexity and the too frequent changes of the tax code provisions and procedures. However, the tax administration has been progressively developing e-government procedures: a large number of services is available on-line; an 'electronic invoice plan' was adopted aimed at fighting the informal economy and easing tax compliance costs for firms; a specific accounting regime was introduced in 2012 exempting micro-entities from filing certain VAT tax forms, but a simplified corporate tax regime for SMEs was abolished (the simplified taxation scheme was kept only the self-employed or micro-firms subject to the personal income tax, with up to EUR 150 000 of annual income) and certified invoicing software was made mandatory. Further, an integrated reform and simplification of the tax codes are issues to consider for the future.

Overall profile of public administration



Source: WIFO

Starting a business and obtaining licenses is globally slightly easier in Portugal than in the EU on average. One stop shops to start up a company are fully operational and the time required to start up a company is clearly better than average (5 calendar days as compared to 14 calendar days in the EU). To a lesser extent, the cost to start up is also more than half of the average amount in the EU (expressed as a percentage of GDP per capita). Nevertheless, licensing complexity is higher in Portugal than on average in the EU.

The performance of Portugal on the *public procurement* indicator is well below EU average. It is mainly due to important payment delays from

public authorities (79 days in Portugal as compared to 28 days in the EU, being almost 3 times higher than the EU average. The typical cost of competition in terms of percent per capita GDP for firms in competition is also 6 percentage point higher than average. The cost in terms of person-day units per individual firm is however slightly above EU average.
A comprehensive set of measures has been adopted or is being implemented to reform Public Administration. Many of these reforms were set out in the MoU and encompass central, regional and local Administrations and in some cases state-owned-enterprises (examples of horizontal measures involving all these sectors include reductions in the number of management positions and administrative units -avoiding duplications and inefficiencies-; adoption of a rationalisation program for ICT and e-Government infrastructures and ICT services; a public consultation was launched for reducing the number of parishes).

Many other reforms are targeted at specific parts of the public sectors, such as the tax administration, the judicial system, network industries and state-owned enterprises. An independent Fiscal Council and a new 'Autoridade Tributária e Aduaneira' (merging the tax, customs, and IT services) were created and a plan to fight Fraud and Evasion for 2012-2014 was adopted. Tax compliance management was reinforced with the creation of a large tax payer office and the creation of a task force of judges to speed-up and clear high-value tax cases in courts. Transparency will increase with the decision to publish quarterly reports on recovery rates, duration and costs of tax cases in courts and an annual report on tax expenditures.

A roadmap for improving efficiency of the court system is being implemented, reducing the number of court districts and closing down underutilised courts and improving personnel management systems and the mobility of court officials.
A comprehensive set of measures are being taken in order to rationalise transport enterprises and networks, promoting competition, energy efficiency and integrated logistic conditions (for road, rail, ports, airports).

Vocational training and employment services are being reformed enhancing job-skills matching and employability outcomes of active labour market policies.

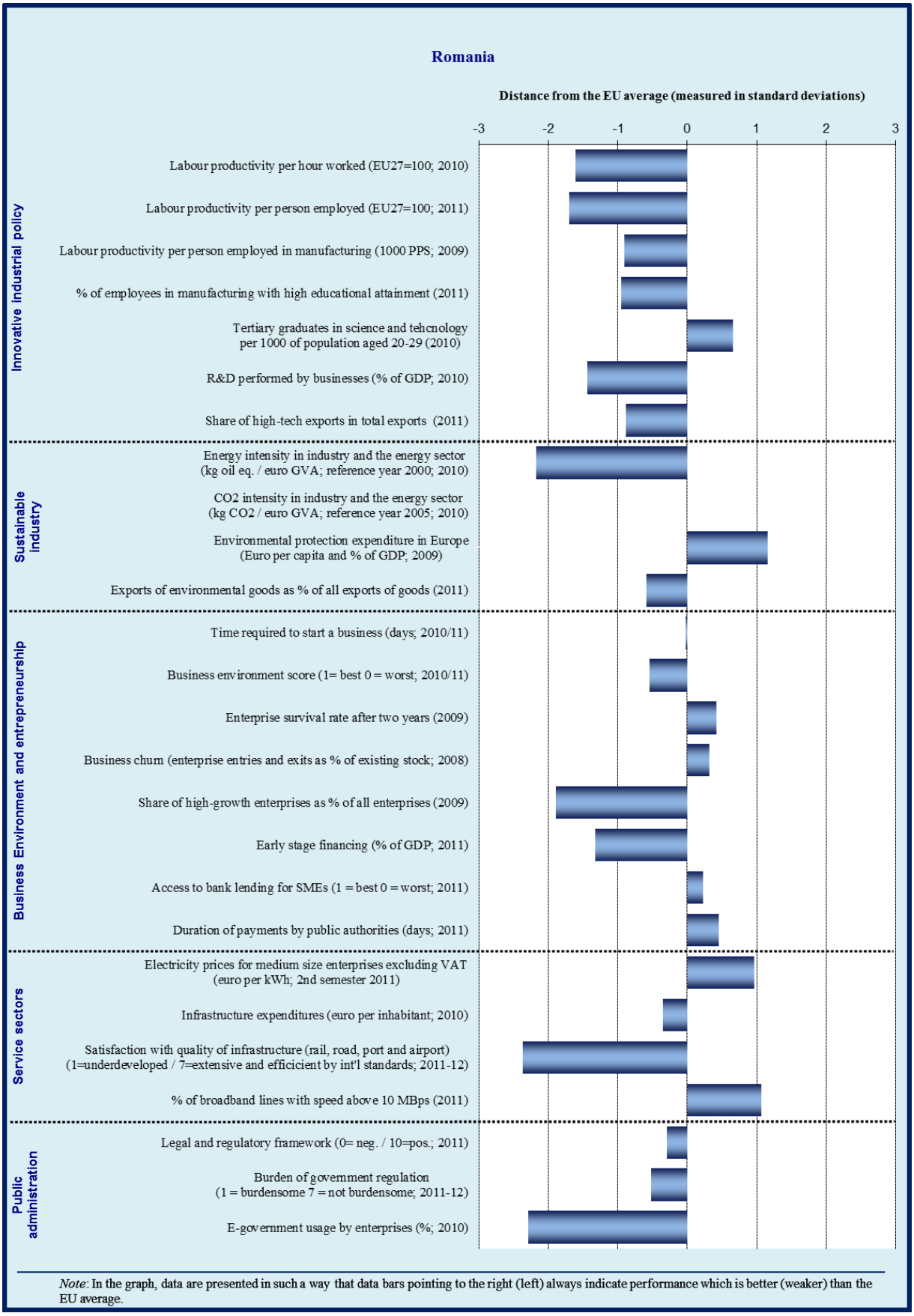
Portugal has a track record of sustained investment in a number of simplification and E-government programmes. Some landmark examples include: the *Simplex Program* (with around 2 250 simplification projects as from 2006); the '*Enterprise Portal*' (providing about 670 services on-line by 100 public entities, including the 'Enterprise Online", a one-stop- shop for the creation of enterprises); the *Port and Logistic Single Window* (for port and logistic services); the *Public Procurement System* (a best practice example in E-procurement, leading in the EU with a rate of 75 % in 2010).

3.21.7. Conclusions

Portugal is actively engaged in the implementation of a series of reforms, improving key areas such as competition and the functioning of labour and several product markets, business conditions, efficiency in public administration and the stability and resilience of the financial sector.

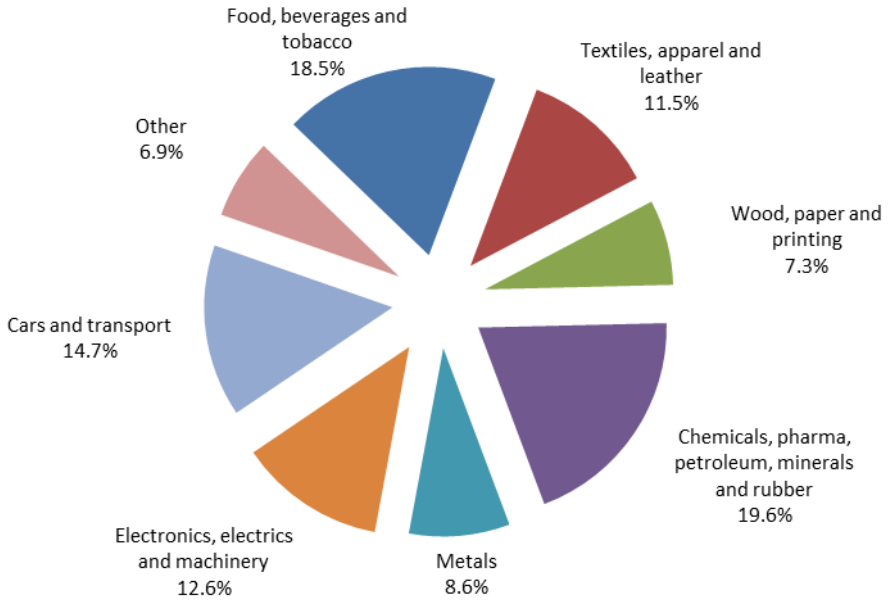
It is important to complement these reforms with the development of effective alternative funding and recapitalisation mechanisms for firms, easing credit constraints for SMEs and facilitating the reduction of their high leverage levels and dependency on bank loans.
It is equally important to sustain and improve the efficiency of the investments in research, innovation, entrepreneurship, education and overall skills development.

3.22. Romania



Note: In the graph, data are presented in such a way that data bars pointing to the right (left) always indicate performance which is better (weaker) than the EU average.

Sectoral specialisation of manufacturing – Romania (2009)



Note : No data available for sectors C12 (tobacco products) and C19 (coke and refined petroleum products)
Source: Eurostat

3.22.1. Introduction

Manufacturing plays a bigger role in Romania than in the EU on average (22 % vs. 14.5 % of total value added in 2009). As a consequence, Romania ranks among the EU Member States with the highest share of manufacturing in GDP and the lowest share of market services. At the detailed manufacturing industry level, Romania is highly specialised in labour-intensive industries (preparation and spinning of textile fibres, sawmilling, wearing apparel and accessories), as well as in capital-intensive industries (cement), and marketing-driven ones (value-added only; footwear). At the more aggregated sector level, Romania features specialisation in low innovation and education sectors (wearing apparel, leather), but also in medium-high innovation sectors (textiles, basic metals). Overall, Romania is catching up with respect to competitiveness, but needs to pay attention to sectoral upgrading in terms of quality and R&D.

3.22.2. Innovative industrial policy

Romania is classified as a modest innovator according to the Innovation Union Scoreboard 2011, with a performance well below the EU average (24 out of 27 EU Member States). Still, its growth rate makes Romania one of the growth leaders in the 'catching–up' group of countries.

This situation is due to a large extent to chronically low public and private R&D and innovation expenditures. At the same time, innovation and industrial policies are not coordinated and integrated due to the absence of national strategies as well as to the insufficient cooperation and consultation at inter-institutional level between the institutions responsible for policy design and implementation in these fields.

A functional review of the Romanian R&D and innovation system was performed by the World Bank in 2011, in the framework of the IMF/EC assistance. The review identified four key priorities to improve the performance of the R&D and innovation over the short and medium term: strengthening the governance of the R&D and innovation system, improving the management of public R&D, accelerating the transmission of R&D, and encouraging the demand for R&D.

While steps are being taken to improve the performance of R&D activities within the public sector, more efforts should be directed to foster private sector R&D and innovation, which is key for the country's longer term competitiveness and growth.

In this respect, the functional review undertaken by the World Bank identified several key challenges. To improve the climate for private sector R&D and innovation, targeted fiscal and regulatory actions are needed, as well as a revision of the overall intellectual property rights framework with the view of removing the barriers for the private sector

to undertake research and innovation activities and attracting R&D-intensive FDI. Another key aspect is the support of knowledge-based start-up companies. Nurturing services (consultation, business and technologically related services) are of particular importance to facilitate the transition of ideas to the market. Also, funding for innovative product development and launch – almost non-existent in Romania - should be adequately addressed. Moreover, the private sector should be better connected to the public research efforts to accelerate the translation of R&D into innovation, and the existing emerging clusters should be supported to develop into fully fledged industrial clusters.

A cross-cutting problem is the shortage of a medium and highly skilled labour force. The relative high share of science and technology graduates compared to other EU Member States and the quality of math and science education are not converted into competitive advantages, partly due to the higher-education system suffering from repeated institutional changes, and substantial brain drain. Therefore it is fundamental to improve the R&D and university career prospects to retain and repatriate human capital.

3.22.3. Sustainable industry

The sluggish restructuring of the industrial base which, prior to 1989, was characterised by a high-share of energy-intensive and non-sustainable industries and a poor energy-saving culture, has resulted in out of date technologies and equipment which does not meet contemporary environmental standards. In addition, foreign direct investment in manufacturing industries has shown a clear preference for low-technology and energy-intensive sectors. As a consequence, the environmental performance of the Romanian industry remains relatively poor. Although considerable improvements can be noted, energy-intensity in industry is still the second highest in the EU.

The main funding instrument for environmental policy is the *OP Environment*. Funding for the development of eco-efficient production, for increasing energy efficiency and for promoting renewable energy sources is also provided through the *OP Increase of Economic Competitiveness*. Recent measures with direct relevance to industry are the state aid scheme to promote high efficiency cogeneration operation since April 2011, the support scheme for the promotion of electricity produced from renewable energy, and the information and raising awareness campaigns on the importance of increasing the energy efficiency. Also, the *2011 – 2013 National Energy Efficiency Action Programme* was adopted in May 2012.

On an institutional level, main developments include the government decision to implement the various Regulations and Directives on eco-design requirements for the energy performance of energy-using products as well as the on-going development of the *National Climate Change Strategy for 2013-2020*. The *National Action Plan on Green Public Procurement* (GPP) setting multi-annual green procurement targets for different categories of products and services was planned to be finalised by the end of 2011, but no specific measures have been taken so far, partly because a more thorough knowledge of the green products and services available on local market would be needed.

Several controversial foreign investment projects – such as the cyanide gold mining at Roşia Montană, the planned sale of the copper mining company 'CupruMin Abrud', or the projects to exploit the shale gas – are currently being discussed by the Romanian government. Projects approvals have been delayed as they raise serious concerns in terms of environmental consequences as well as huge environmental costs.

As one of the most energy-intensive economies in Europe, improving energy efficiency and developing complementary actions in energy efficiency and renewable energy should be a key priority in Romania. Moreover, complying with environmental standards, which is essential for industrial competitiveness, will require significant financial efforts to support the adoption of standards, upgrade productive processes, and implement environmentally friendly, eco-efficient technologies.

3.22.4. Business environment

Romania has a cumbersome business environment, characterised by a lack of transparency in the decision-making process, insufficient cooperation and consultation at the inter-institutional level and with the relevant stakeholders, and significant red tape. At the same time, the underdeveloped road (particularly motorways) and rail infrastructure act as a drag on economic competitiveness.

Institutionally, reform efforts are underpinned by the functional review of the Ministry of Economy, Energy Sector and Business Environment (MECMA) led by the World Bank in framework of the IMF/EC assistance. The review, finalised in 2011, identified the fragmented institutional set-up and the rapidly changing governance arrangements for business environment as being the major

bottlenecks to a sound business environment. The nomination of a minister delegate for business environment in May 2012 should contribute to increasing the high level political support to the business environment issues. However, further efforts are needed to improve coordination at inter-institutional level and consultation with stakeholders, in particular SMEs.

Access to finance

In a general context dominated by uncertainties in financial markets and sovereign debt developments in the euro-area periphery, access to finance is a pressing problem facing Romanian SMEs. Financial support to SMEs is primarily being provided via multi-annual national programmes and guarantee instruments. The risk facility of the JEREMIE programme became operational at the end of 2011, but its success is rather limited. Other recent initiatives started in 2011 include the *Mihail Kogalniceanu Programme for financing the SMEs,* aiming at facilitating the access of SMEs to guarantees and credit by granting a credit line with subsidized interest and, if need be, partially guaranteed by the state under certain conditions, and the *Programme for Young Entrepreneurs,* aiming at stimulating young entrepreneurs to set up and develop small business, with a target group of young entrepreneurs under 35. However, existing public measures should be made easier to obtain, in particular through providing assistance on the application procedures and cutting red tape.

Entrepreneurship

A number of measures have been taken to promote entrepreneurship. During the school year 2011-2012, a new curriculum comprising entrepreneurship learning has been introduced in secondary level. A program aiming at increasing the number of business incubators throughout the eight development regions was started in 2011. Finally, a new law regarding non-fraudulent bankruptcy and duration of fiscal criminal record was approved in 2011, reducing - in some cases and under some conditions - the period of full discharge after bankruptcy and non-payment of fiscal obligations from five years to one year.

Regulatory and support measures

In the area of regulatory tools and mechanisms to improve the business environment, no major advancement has been achieved so far. Currently, there are several strategies containing provisions for the business environment and better regulation: the *Strategy for the improvement and development of the business environment until 2014* and the *Strategy for the development of the SMEs sector until 2013* were elaborated, but not yet approved; the *Strategy for Competitiveness until 2020* is currently in work; and the *Strategy for Better Regulation 2008-2013*, the implementation of which has been very slow.

These different strategies are uncoordinated, unarticulated and overlapping; they cover some aspects of the business environment, but none of them is comprehensive and intends to align the whole administration in coordinated efforts. The challenge is to integrate the strategies currently in place in just one single, explicit, coordinated, efficient and effective strategy to deal with the business environment and regulatory reform issues, with clear principles, objectives, targets and monitoring indicators, to be applied to the whole government sector.

The need for fiscal consolidation left little room for manoeuvre to launch costly supporting measures. There are several actions, financed by the *OP Increase of Economic Competitiveness* and the *OP Regional Operational Programme*. Related to this, increasing support to enterprises, particularly SMEs, in accessing EU funds through more simple and transparent procedures remains a key challenge.

To offset the decline in domestic demand, more efforts should be made to facilitate the access of Romanian companies to markets. In this respect, using public procurement in a more proactive manner and further supporting the internationalisation of SMEs could be important steps. A *National Export Strategy for the period 2012-2016* has been drafted, but not yet approved. It identifies a number of sectors with comparative advantages (e.g. creative industries, renewable energy, ICT, manufactured products but also some raw materials). Notwithstanding this, a number of challenges remain to support SME internationalisation, in particular providing training and practical guidance on procedures as well as enabling access to financing instruments.

3.22.5. Services sector

The transition to a market economy since the early 1990 resulted in a complex change of the economic structure characterised by an increased importance of the service sector in employment and value added. The services sector grew to account for 51.6 % of the gross value added (GVA) in 2011 (from 28.8 % in 1990). The rapid growth of the ICT-related services - supported by the valorisation of local skills and the good quality of math and science education – is one of the country's major competitive advantages, making Romania an

attractive location for software out-sourcing and research.

In the area of professional services, Romania adopted in February 2012 a memorandum for a one year pilot project that aims to liberalise tariffs on public notaries, and to foster competition between notary offices.

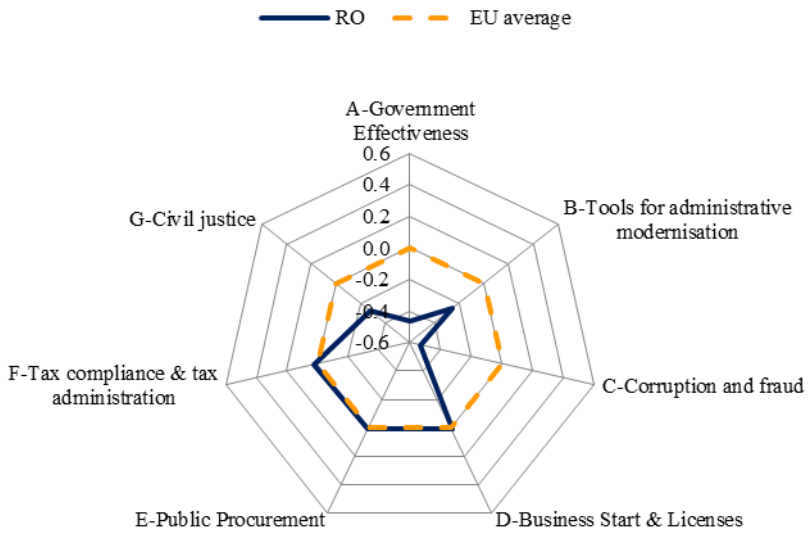
In the area of network industries, the MoU concluded in June 2011 in the framework of the precautionary EU medium-term financial assistance for Romania has a strong focus on product market reforms, in particular in the energy and transport sector.

3.22.6. Public administration

The reform of public administration is a key concern in Romania since the early 1990s. Insufficient structural and institutional reforms have resulted in a chronically weak administrative capacity for policy design, strategic planning, analysis, enforcement, monitoring and evaluation of the public policies. Under these circumstances, it is not surprising that in terms of *overall public administration performance*, Romania scores significantly below the EU average.

To improve the efficiency, effectiveness and independence of the public administration, a functional review of the central public administration led by the World Bank (and financed by the European Commission) was carried out between 2010 and May 2011. Based on its outcomes, both the government and the individual institutions under investigation have adopted action plans on how to streamline decision making processes and strengthen strategic planning. However, the implementation of the action plans remains challenging. Although an inter-ministerial group was set-up to coordinate and monitor the implementation of the action plans, there is little progress, mainly due to the lack of commitment and reform ownership.

Overall profile of public administration



Source: WIFO

In terms of the use of *tools for administrative modernisation* (e-government, performance and service orientation, accountability), Romania's performance is below the EU average, principally due to a lower availability of business related e-government services as well as to existing limitations in the implementation of modern human resource management tools.

The National Agency of Civil Servants (ANFP) is implementing several training projects to enhance the administrative capacity in areas like strategic management, human resources, and project management. However, further efforts are needed to professionalise the civil service at all the layers of the public administration, in particular through ensuring a transparent and merit-based recruitment process and improving the career prospects for civil servants (including remuneration and training), making the civil service independent from the political cycle, and combatting the political interference in the administrative practices.

Romania has committed to modernise and streamline the relations between different levels of government and between the government and citizens and businesses by greater reliance on electronic data exchange and online interfaces. Some progress has been made regarding the completion of the Point of Single Contact, tax e-filling and online services provided by the Business Registry of Romania, so that entrepreneurs can now request for data to be sent via email. Although ambitious objectives for e-government and e-business have been set through the Governmental Strategy for Broadband Communications Development in Romania for the period 2009-2015, adopted in 2009, very little progress has been made in the implementation of this Strategy and the adoption of another strategy for broadband communication is planned for 2012.

In the area of *starting a business and licensing*, Romania's performance is fairly equal to the EU average. Although obtaining licenses is considerably more complex than the EU average, the time needed for starting a business is equivalent to the EU average, and the corresponding costs are lower.

In the area of *public procurement*, the indicator used here is driven by the average payment delays by public authorities. While short delays are a positive sign, the indicator does not capture the fundamental problems of public procurement in Romania. The Commission has noted[3] that weak implementation of public procurement legislation leads to corruption and misuse of public funds. Romania has not addressed the systematic shortcomings in this area, including institutional capacity, effective control, and conflicts of interest. Public procurement rules are often circumvented through practices like establishing the tender criteria according to the specificities of a participant company or providing confidential information to a participant to the tender[4].

In the area of *tax compliance* and *tax administration,* Romania's performance is slightly better than the EU average, mainly due to lower costs of tax administration. A number of measures were taken recently to reduce the tax compliance burden on companies. The number of taxes and tariffs in the area of para-fiscality has been reduced substantially from 491 in early 2009 to a total of 237 today. The single statement regarding social contributions and record of insured persons was implemented by January 2011. 'Ghiseul.ro', the electronic system for the payment of taxes, duties and fines, was launched in March 2011; at present it is operational only in several local administrations (and only for individuals). In spite of these developments, the key challenge remains to significantly reduce the number of payments and the time spent to pay taxes, notably through establishing an efficient and fully functional electronic filling and payment system.

In terms of *efficiency of civil justice*, Romania performs worse than the EU average. While the time required to enforce contracts is below the EU average, the corresponding costs, the perceived level of judicial independence and the time necessary to resolve insolvency all indicate a weaker performance. Furthermore, in the area of *corruption*, the performance of Romania is significantly lower compared to the EU average, the key issue being the diversion of public funds due to the influence of vested interests.

Romania has undertaken a number of measures to pursue judicial reform and the fight against corruption in response to the Commission's recommendations under the Cooperation and Verification Mechanism. In spite of these developments, further efforts are essential. [5] Improvements need to be made concerning state capture and other forms of administrative corruption, notably through establishing transparent lobbying rules, controlling the revolving doors between the public and the private sectors, guaranteeing comprehensive access to information legislation (in particular by municipal authorities), and ensuring transparency and integrity of the procurement process.

3.22.7. Conclusions

To improve its competitiveness, Romania faces the challenge of setting and implementing national strategies for industry and innovation defining clear, coherent and coordinated policies and priorities, and refocusing the scattered national resources on areas of comparative scientific and economic advantage.

Further, an effective reform of the public administration at central and local levels would be essential since weak administrative capacity limits reforms, hinders the absorption of EU funds and is dissuasive for investors. Moreover, transparency in decision-making processes and greater

[3] 'On Progress in Romania under the Cooperation and Verification Mechanism', COM(2012) 410 final, http://ec.europa.eu/cvm/docs/com_2012_410_en.pdf

[4] Transparency International, Money, Politics, Power: Corruption risks in Europe (2012). .

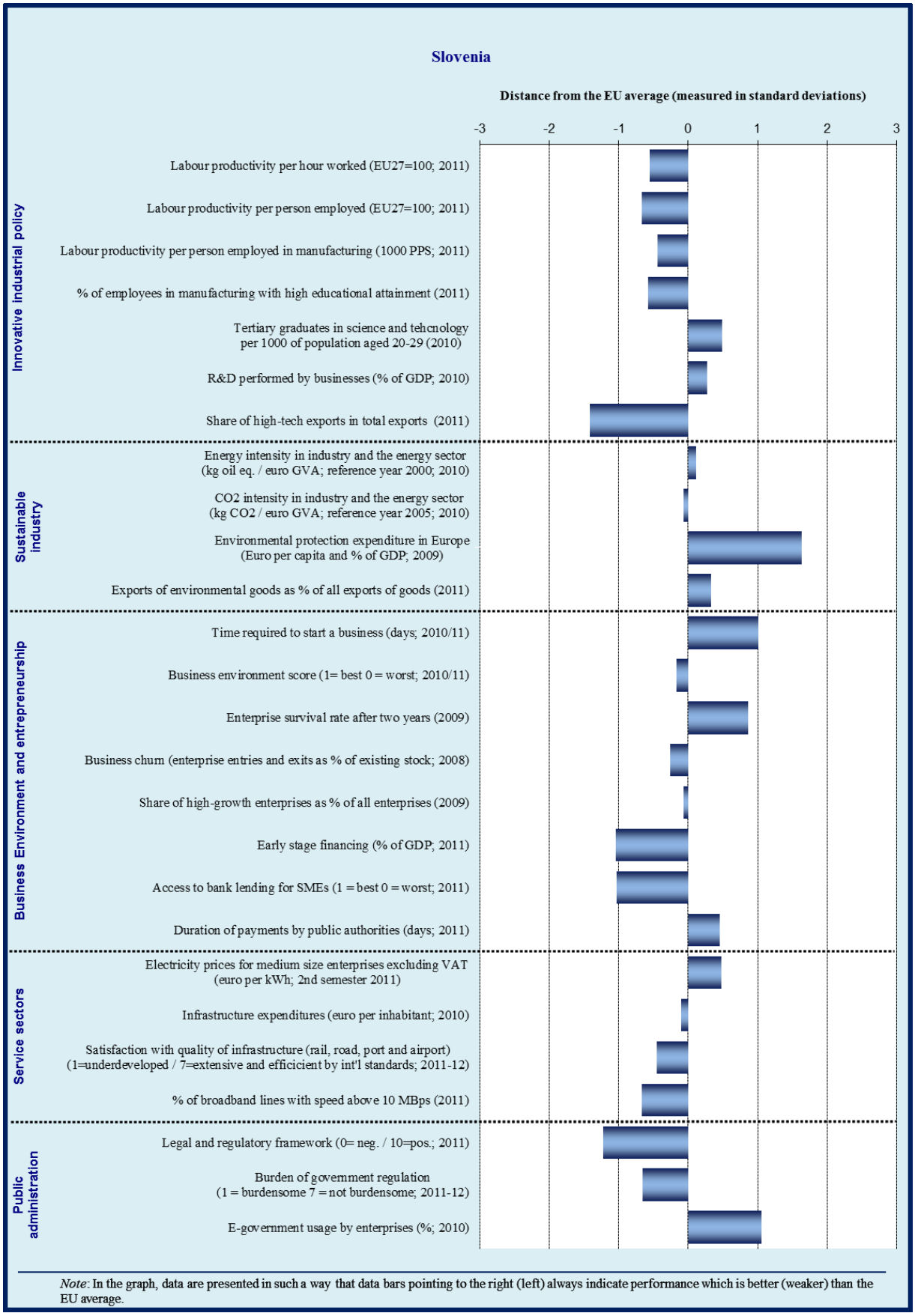
[5] 'On Progress in Romania under the Cooperation and Verification Mechanism', COM(2012) 410 final, http://ec.europa.eu/cvm/docs/com_2012_410_en.pdf

accountability in financial and political institutions are essential cross-cutting issues to consider.

At the same time, it is important to improve the governance in the area of business environment and the quality of regulations. Mitigating further the high financing costs and overcoming the scarcity of credit, including through developing strong and liquid local capital markets are of particular importance to facilitate access to finance for businesses. Furthermore, developing the weak transport and communication infrastructure would be critical to improving competitiveness and attracting investments.

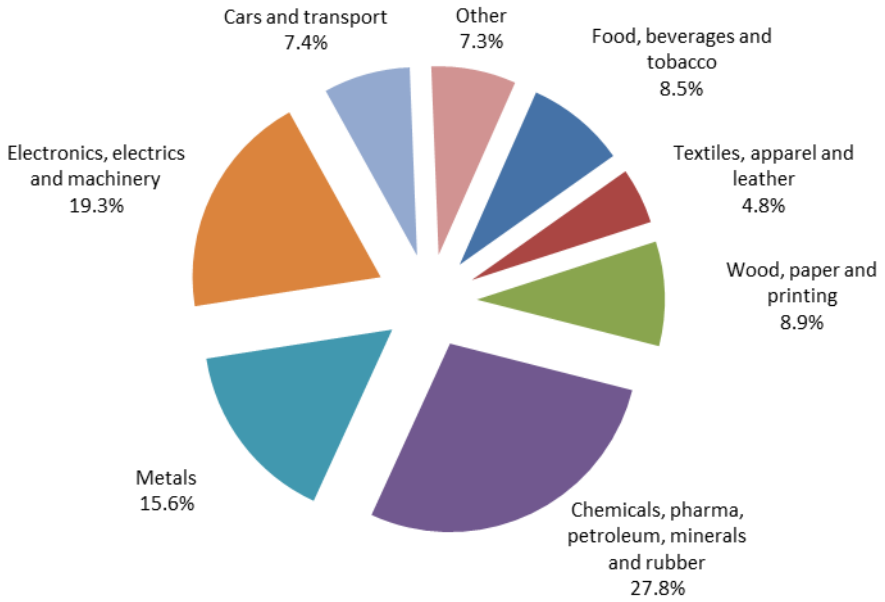
In the long term, the challenge will be to ensure a paradigm shift away from unskilled labour and energy intensive sectors towards more smart, low-carbon and resource-efficient activities.

3.23. Slovenia



Note: In the graph, data are presented in such a way that data bars pointing to the right (left) always indicate performance which is better (weaker) than the EU average.

Sectoral specialisation of manufacturing – Slovenia (2009)



Note : No data available for sectors C19 (coke and refined petroleum products) and C30 (other transport equipment)
Source: Eurostat

3.23.1. Introduction

On average, Slovenian manufacturing has a higher contribution to total value added than the EU average (20.3 % compared to 15.5 % in 2011). At the detailed manufacturing industry level, Slovenia is specialised in labour-intensive industries (sawmilling and planning of wood, made-up textile articles) and mainstream manufacturing (domestic appliances, other non-metallic mineral products). Specialisation in labour intensive industries has decreased considerably in the last decade. At the more aggregated sector level, Slovenia is specialised in highly innovation-intensive sectors (machinery, electrical machinery) and in the low to medium range innovation sectors (e.g. wood and cork).

3.23.2. Innovative industrial policy

According to the Innovation Union Scoreboard 2011, Slovenia is one of the innovation followers with a below average performance. Relative strengths are in human resources and linkages and entrepreneurship. Relative weaknesses are in intellectual assets and innovators. High growth is observed for community trademarks and International scientific co-publications. A strong decline is observed for non-R&D innovation expenditure. Growth performance in open, excellent and attractive research systems and intellectual assets is well above average.

As stated in the Research and Innovation Strategy of Slovenia 2011-2020 (RISS) and in the National Programme for Higher Education (NPHE), Slovenia sees research as a key driver to economic development. Therefore, Slovenian authorities are willing to foster closer links between Public-funded Research Organizations (PROs) and private enterprises and to allow for more autonomy and responsibility of the stakeholders in the R&D area. In this context, the civil servant status of researchers and their subsequent restrictions to being transferred to PROs represent a major obstacle to the development of synergies between research and business. Greater flexibility in the researchers' status would be a step in the right direction.

The former Ministry of Higher Education, Science and Technology together with the Ministry of Economy, following the goals RISS 2011-2020, launched the call for proposals 'strengthening the research departments in companies' in July 2011. The aim of the call was to ensure effective inter-institutional mobility of researchers, to support the employment of researchers or developers in the economy, to increase the number of PhDs and 'young researchers' in companies and to increase the number of inter-disciplinary research departments. The funding available for the call was EU 20 million. More than 60 companies and more

than 500 researchers (100 PhD students) will be financed until the mid-2014.

Since the beginning of 2012, the ministries with responsibilities in innovation are going through a process of restructuring and some reorganization of the implementation agencies is also expected.

It is expected that the on-going process of reorganisation of the public administration will not have any impact on the activities of Excellence-, Competence- and Development centres, since public agencies are not directly involved in the implementation activities of these centres.

Competence Centres deal with R&D in areas considered strategic by the Slovenian government. Development Centres, on the other hand, work as networking clusters with the aim of bringing innovation to traditional industries. Finally, Centres of Excellence are defined as multidisciplinary group of researchers both from academic and business spheres. All these Centres have carried out their activities with the support of the European Regional Development Fund. Thus, for the next financial period 2014-2020, follow up of the funding could be considered.

Although the Slovenian government has reaffirmed its intention to reach an R&D ratio of 3 % of GDP by 2020, the background of economic crisis and fiscal austerity implies a lower availability of resources which can hinder the attainment of this target.

Progress has been made in 2012 with respect to stimulation of private R&D investments through changes in tax legislation. R&D tax allowance was increased to 100 % of the amount invested. At the same time a special state aid scheme was abolished. Abolishment of that scheme allowed for reduction of administrative burden connected with implementation of R&D tax allowance. Also, tax allowance for other investments has been increased from 30 to 40 % and the maximum fixed amount of the allowance per year has been abolished. It is expected that these changes, in connection with the reduction in general tax rate of corporate income tax will have positive impact on the level of new investments in general and in investments into R & D in particular.

3.23.3. Sustainable industry

Slovenia's energy infrastructure could be further improved. Its geographical location involves a central role as an area of transit. The transit of electricity flows is increasing and the national transmission grid is starting to become a bottleneck. No legal framework is in place yet for the rollout of smart metering.

For reasons of both trade and environmental impacts, Slovenia's transport infrastructure requires special attention. Existing gaps in railway infrastructure and the still low quality of the network hold back business potential. By contrast, motorway density is high compared to the EU average. Transit transport is even expected to increase due to Croatia accession to EU in 2013. It will result in a considerable rise in Green House Gasses (GHG) emissions.

GHG emissions from transport accounted for 27.6 % of Slovenia's total emissions in 2009, the third highest share in the EU. The share of renewable energy sources (RES) in transport was 1.9 % in 2009, against a target of 10 % in 2020. However, progress has been limited. While Slovenia supports new design of fuel taxation at EU level, distortions generated by differential taxation across fuel types are still in place as the new legislation has not been adopted yet.

Energy efficiency measures on the other hand seem to have yielded positive results: capital to support investors in the public and private sectors, as well as households, in order to promote efficient energy use will continue to be provided by 'Eko Sklad' and structural funds. The Decree on Green Public Procurement sets minimal mandatory environmental requirements. Currently, the decree covers environmental criteria for 11 groups of products and services that could be updated in the future. To encourage the use of wood and materials on its bases in public buildings, the decree stipulates that 30 % of materials used in the building should be made out of wood, widely available in Slovenia. As for smart grids, they will be obligatory and will be collected through the network fee.

In compliance with the EU directive and the national action plan all energy suppliers must achieve 1 % annual energy savings. In 2010 the final-consumer fuel-prices started to be charged with fees for the use of fossil energy. These fees constitute funds that are used for programs aimed at achieving energy savings. Through the new charge, available funds for efficient energy use programs have been greatly increased (to around EUR 20 million yearly).

However, Slovenia has not set any quantitative energy efficiency target for 2020, and therefore its contribution to the overall Europe 2020 target for energy efficiency remains unclear.

Investment in renewables has grown with the share of renewable energy in gross final energy consumption reaching 16.9 % in 2009 and an estimated 19.9 % in 2010, compared to a Europe 2020 target of 25 % by 2020. The total installed photovoltaic power plants in 2011 grew from 25 MW to 90 MW, representing an annual increase of 260 %. The total installed biogas power plants in 2011 grew from 11 MW to 25 MW, representing an annual increase of 127 %. Resources needed to implement support scheme for renewable electricity in 2011, grew from EUR 48.6 million to EUR 69.5 million, representing a 43 % annual growth. The directive on the promotion of the use of energy from renewable sources has only partially been transposed.

Given Slovenia´s wealth in terms of biomass and wood, Slovenia could develop a comparative advantage in these areas. In addition, a lot of logs have been exported, which means less value added and unexploited development potential. So far, contacts and sharing of good practises have been established with Austria and Finland. An Action plan for increasing the competitiveness of forest and wood sector in Slovenia by 2020, which has been adopted by the Government on June 27, 2012, foresees many measures.

Slovenia faces challenges in the field of waste. The level of landfilling is still relatively high (58 %) but, with a recycling rate that stands at 39 %, Slovenia is making progress towards its recycling target of 50 % by 2020.

In June 2012, SID Bank (Slovene Development and Export Bank) has allocated EUR 44 million for financing of green technologies in Slovene SMEs (e.g. waste or water treatment, reducing of air pollution, renewable energy, greening the business).

3.23.4. Business environment

According to the World Bank´s 'Doing Business Report 2012', Slovenia occupies the world rank 37 in terms of ease of doing business and 28 in terms of starting a business. Indeed, Slovenia has already significantly simplified and shortened procedures for starting a business: it takes only up to 6 days and it does not cost any money and registration can be done online through well-established e-VEM portal.

Nevertheless, with the deepening of the economic crisis, some components of Slovenian business environment and its competitiveness have deteriorated. The structural aspects of the business and competition environment in Slovenia still hold back foreign direct investment. The country also does not have an active strategy for attracting foreign capital, in particular in light of worsened competitiveness. In addition, the lack of an industrial policy further weakens business prospects.

Access to bank loans is extremely difficult in Slovenia, and many viable firms – especially SMEs – face tightened borrowing conditions due to banks' past overexposures and current risk aversion. In particular, firms that lack collateral struggle to obtain funding – not only for investment projects but also for working capital. Large enterprises have enjoyed better access to credit than SMEs. However, the financial engineering products of the Slovenian Enterprise Fund (SPS) and SID Bank have worked well and have significantly helped in providing public guarantees and venture capital to innovative firms. The Slovene Enterprise Fund has also emphasised the importance of start-up firms by supporting them in the first three years of their life. The results have been promising.

On thee Small Business Act issues, implementation remains partial although an SME test was prepared in 2011 and will be integrated into the rules of legal procedures. Each legislative proposal will have to be accompanied by a special form with SME-test-checked areas (economic impact, administrative impact and financial impact). Previous tests conducted by the Ministry of Economy showed promising results. The SME test is due to be introduced to other line ministries in 2012.

Moreover, other legislative measures that should have resulted in a more efficient business regulation, like the Law on Payments Discipline and the act amending the Financial Operations, Insolvency Proceedings and Compulsory Dissolution Act, seem to have generated unforeseen side effects. In fact, criticisms have been raised that these legislative measures are not encouraging payment discipline. Lengthy judicial procedures are also hindering the revival of the business sector and are indirectly delaying cleaning of banks' balance sheets.

In addition, legal and regulatory issues such as rigid spatial planning and related lengthy permit procedures (as every municipality has its own approach to spatial planning) are working as an obstacle to investment. The renewal of legislative acts in this area is currently underway.

3.23.5. Services sector

In Slovenia, the number of regulated professions or professional activities registered amounts to 319,

one of the highest rankings in the EU. A study on this topic was completed at the end of March 2012. On the basis of its recommendations, the line ministries will need to change the relevant legislation. For example, the Ministry of Economic Development and Technology has started with the process of deregulation of craft services.

3.23.6. Public administration

According to the World Bank's *Government Effectiveness* indicator, which can be interpreted as an overall assessment of perceived public administration quality, Slovenia scores slightly below the EU average.

Information on the use of novel *tools for public administration modernisation* (e-government, impact assessments, performance and service orientation, accountability) is only available on two out of three indicators.[6] Among the 8 business-related e-government services under consideration, Slovenia implemented 7, which is also the average of all Member States. On the use of modern human resources management (performance-related pay, flexibility, skills development), Slovenia's performance is close to the average.

As regards *corruption*, Slovenia also ranks somewhat below the EU-mean. Not all sub-indicators, however, point into the same direction. The individual experience of corruption has been recorded in 7 % of the cases, as compared to 10% in the EU. The most important weakness in this field is the perceived high diversion of public funds, which is related to the problem of state corruption.

In contrast, Slovenia performs reasonably well in the policy-link of *starting up a business*. A fully operational one-stop-shop to start up a company is active, the time required to start a company is only 6 calendar days (EU-average is 13.7 days). The costs to start up a business are virtually none. However, a high complexity of *licensing* procedures other than at the start-up phase of a business leads to lower composite index. In this respect, there is obviously some scope for improvement.

With respect to *public procurement*, Slovenia's administrative regulations are also strictly more business-friendly than the EU-average. Both the time and the costs required to take part in a competition are far lower than EU-mean. Payment morale of public authorities is also far better than average: In 2012, average payment delays were 15 days in Slovenia, 28.3 days in the EU. However, problems remain in public procurement implementation, notably as regards payment discipline of contractors using subcontractors to complete the public contract and the skill level of staff of the contracting authority. A Public Procurement Agency was established by the end of 2010 to professionalise and harmonise procurement, but it is now due to be abolished. Its competencies will be transferred to the Ministry of Finance.

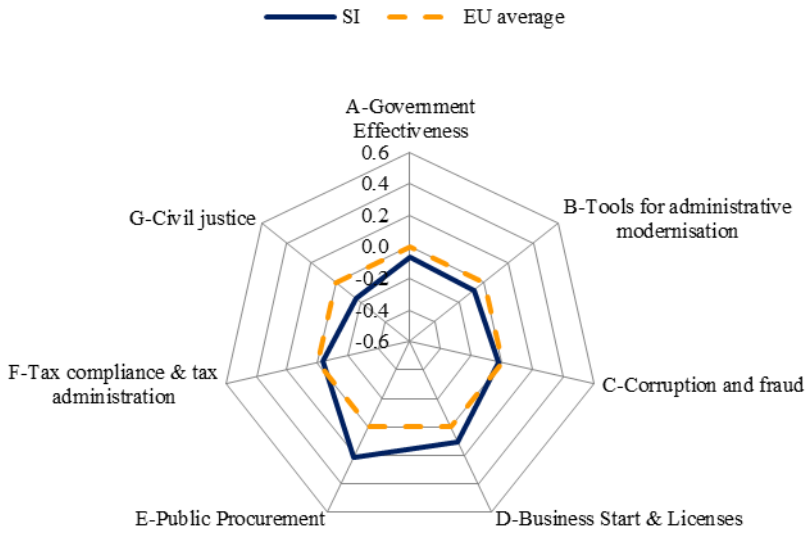
The data for *tax compliance and tax administration* show that the firms' time required to fulfil their tax duties is higher than average (260 hours per year in Slovenia vs. 208 hours on EU-average), but administrative costs of 0.9 % of total revenues are below the EU-average of 1.3 %. Regarding excessive tax compliance burden, Slovenia conducted its own study in 2010 as part of the on-going programme of '25 % reduction of the administrative burden".

As a consequence of this study, changes in procedures and legislation were implemented. For example, since October 2011, electronic tax declarations are available to Slovenian taxpayers alongside a new payment regime. Similarly, the VAT system was simplified with specific tax regimes for SMEs. Administrative burden has also been reduced in the area of application of tax allowances for R&D investments as a special state aid scheme was abolished and replaced with general allowance for R&D investments at the level of 100 % of the amount invested.

Scope for improvement also exists in the *efficiency of the civil justice* system. A major problem is the time required for enforcing contracts, calculated at 1 290 days as compared to an EU-mean of 556 days. This lack of speed in the judicial system can only in part be compensated through comparably lower costs of enforcement of 12.7 % per claim (EU-average is 20.6 %). With a time to resolve insolvency issues of 2 years, Slovenia's system of dealing with bankruptcy issues is at the EU-mean. In general, the perceived independence of the judiciary is significantly below EU-average, confirming these weaknesses.

[6] The respective composite indicator partly rests upon imputed values for the use of evidence-based instruments-indicator and should therefore only be interpreted cautiously.

Overall profile of public administration



Source: WIFO

In July 2011 legislation was passed in order to transform the *Competition Protection Office* (CPO) into an independent agency that was supposed to become operative as of 1 January 2012. However, in November 2011 an amendment to this law was introduced whereby CPO will not achieve its independent status as long as procedural conditions will not be completely fulfilled.

Due to political changes at the beginning of 2012, the directive bodies of the CPO have not been appointed, and hence the independent status has not been granted. Moreover, the CPO continues to have inadequate resources and funding for carrying out its tasks.

In other areas, policy developments have taken place that amount to a modernisation of public administration. Besides the modernisation of tax administration, mentioned above, the 'minus 25 % administrative burden' programme (co-financed from EU Social Fund), has identified areas where savings could be achieved, easing administrative burdens on businesses and citizens. This programme encompasses nearly 300 measures in 14 priority areas.

A new special web portal was set up. The portal enables a two-way communication between the users and line ministries, whereby the former can monitor impact on legislative changes.

Moreover, in reducing administrative burden for start-ups, Slovenia has achieved significant progress in establishing one-stop-shops for businesses and a well-functioning web portal eVEM that is offering several services with no costs for businesses.

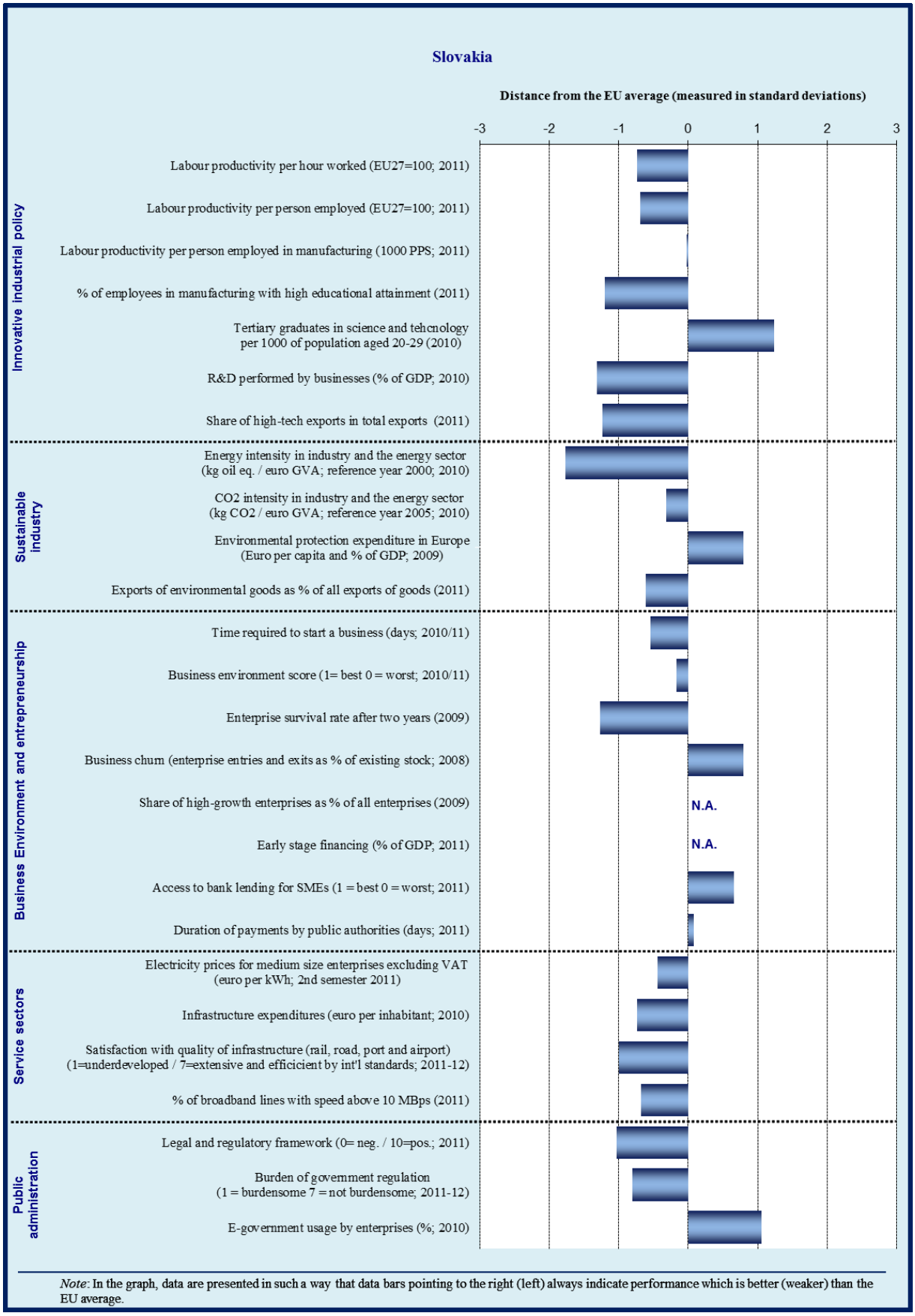
3.23.7. Conclusions

The impact of the economic downturn has clouded the perspectives of the Slovenia business sector and its competitiveness. Besides, budget constraints have the potential to slow down the development of an innovative industrial policy, including the promotion of a more sustainable economy. As required by the country-specific recommendations of the European Semester 2012, inproving the framework conditions for competition could attract investment, also from abroad, thus strengthening the internationalisation prospects of Slovenian businesses.

The deepening of the economic crisis has resulted in weaker demand and narrower borrowing conditions for SMEs. Although the financial instruments provided by the SID bank and the financial engineering tools of the Slovenian Enterprise Fund have helped in relieving the pressure faced by viable businesses and SME, access to finance remains a problem, as noted by the country-specific recommendations.

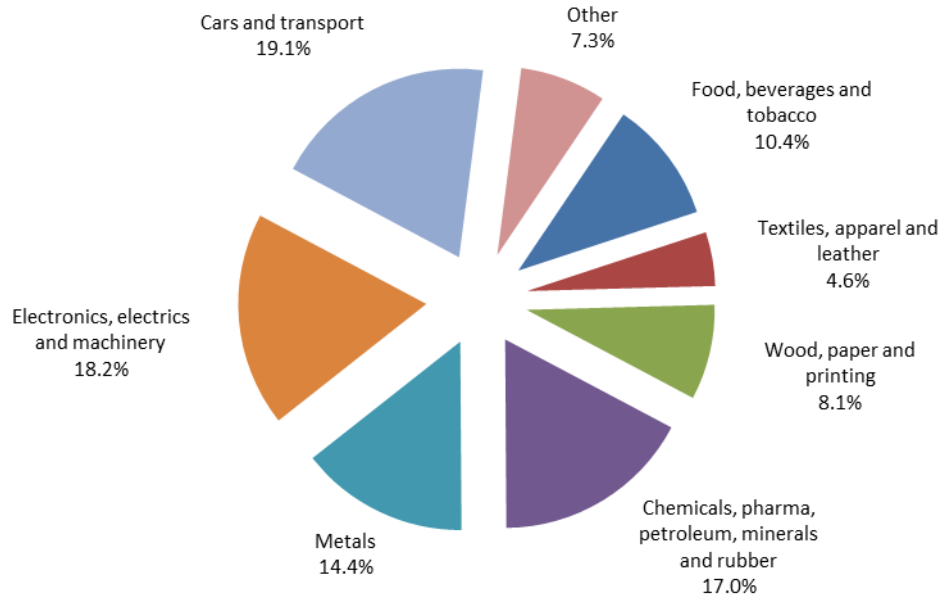
The business environment would benefit from a full implementation of the Small Business Act, including applying the SME test to all relevant legislation. Businesses would also benefit from achieving the aim of shorter payment times, and from a streamlined spatial planning system.

3.24. Slovakia



Note: In the graph, data are presented in such a way that data bars pointing to the right (left) always indicate performance which is better (weaker) than the EU average.

Sectoral specialisation of manufacturing – Slovakia (2009)



Note : No data available for sectors C12 (tobacco products), C19 (coke and refined petroleum products) and C21 (basic pharmaceutical products and pharmaceutical preparations)
Source: Eurostat

3.24.1. Introduction

Mainly due to external demand and strong manufacturing activity, Slovak economy continues successfully recovering. Accounting for 25.9 % of total value added against the EU25 average of 15.5 %, manufacturing plays an important role. Specialized in capital-intensive and technology driven industries, such as automotive, electronics or steel, labour productivity is relatively high in particular when compared to its catching-up peers. However, Slovakia still has to face several challenges to complete its catching up process. In order to foster its long-term growth potential, Slovakia needs to improve innovation capacity and business environment, in particular through more efficient public administration.

3.24.2. Innovative industrial policy

As a moderate innovator, Slovakia has an underdeveloped R&D system. Since 2006, its below-average innovation performance improved only modestly. The total R&D expenditure still ranks amongst the lowest in the EU, although after a decade of gradual decline[7] it has recovered to 0.63 % of GDP in 2010. Similarly, the share of private R&D expenditure remained low. Generation of intellectual assets and patent revenues stayed at low levels, although strong growth was observed for community trademarks. As demonstrated for instance by the low number of frequently-quoted scientific publications, excellence in research and quality of tertiary education remain a major challenge.

Large companies as well as SMEs collaborate with the domestic research facilities only to a limited extent. Innovations in the production system and productivity gains have mainly been driven by technology imports. However the potential for further productivity surge is evaporating due to the declining inflows of FDIs. In recent years, Slovakia has increased its relative value added share in high innovation sectors and decreased its specialisation in labour-intensive low-skill industries. Overall however, Slovak economy has yet to significantly move towards more knowledge-intensive economic activity and employment structure.

Slovakia's innovation policy mix relies to a large extent on direct financial measures. The Innovation Strategy for 2007-2013 sets the general framework for policy intervention, while the Innovation Policy 2011-2013 specifies actions in three areas: infrastructure; quality of human resources; support for innovation. The priority 'Infrastructure' includes support to industrial clusters for which first calls are planned by the end of 2012. Funded mainly by the Operational Programme Competitiveness and Growth, the innovation support for industry is the biggest priority in

[7] from 0.66% in 1999 to 0.48% in 2009.

financial terms. The innovation vouchers are yet to be launched.

Lack of coordinated intervention in the policy areas of research, education and innovation tends to negatively affect the innovation system. Responsibilities are fragmented as is demonstrated by the existence of several strategic policy documents. In 2011 Slovakia adopted two strategy documents: 'FENIX and the 'MINERVA 2.0' both aimed at science, technology, and knowledge-based economy. They proposed a range of measures for increasing the quality of higher education and the research system, and connected them to knowledge-based economy. The main measures included (i) new techniques for project evaluation; (ii) re-allocation of research funding towards strategic projects; (iii) national system for technology transfers; (iv) support for new technology-based firms; and (v) co-operation with multinational companies through the creation of top-notch research infrastructure. The FENIX Strategy also proposed replacing current research and innovation priorities by a demand-driven bottom-up approach. The strategies identified the main problems in the knowledge triangle polices, and also addressed interaction between the key actors. Their coordinated implementation could bring about better innovation capacity.

In April 2012, the new government announced further measures to improve collaboration between the public and private sector. It wants to set up a scheme to attract exiled researchers, and plans an adaption of the internationally successful Small Business Innovation Research programme.

3.24.3. Sustainable industry

Structural and technological changes within the industrial sectors[8] were the main driver of reductions in energy intensity in recent years. Nevertheless, owing to the very minor progress since 2007, in 2010 Slovak industry remained the third most energy intensive in the EU.

In May 2011, government adopted the National Energy Efficiency Plan 2011-2013, targeting energy savings of 8 362 TJ. This would represent a 2.7 % reduction in final energy consumption compared to the 2001-2005 average. With priorities on technology transfers and energy efficiency, most savings are to be achieved by industry (30 %), public sector (27 %) and buildings (21 %). In early 2012, the National Energy Efficiency Monitoring System became operational. As regards energy audits, agricultural and industrial enterprises are obliged to conduct audits by the end 2011. In order to analyse possible carbon leakage, government sent out a questionnaire to 200 Slovak companies.

To work out waste management policies was included among government priorities. Apart from the recycling fund, in 2011 however there were no specific policies assisting industry to re-use or recycle their waste. Similarly, little progress was achieved in diverting waste from landfill or increasing energy recovery, as Slovakia landfills more than 80 % of its municipal waste, while recycling only 4 %.

Slovakia failed so far to implement the third Internal Energy Market package, triggering an infringement procedure in October 2011. Electricity prices for industry are the third highest in the EU and the highest for a continental Member State. This appears to be less due to taxes or production prices, but rather because of high distribution and transmission tariffs. These cover not only costs and profit margin of the state-owned grid company, but comprise support for renewable energy, domestic coal production, co-generation, and also support for the new electricity spot market. Moreover, the end price includes a levy financing the phasing out of nuclear facilities. Recent savings at the grid company enabled to lower the tariffs somewhat. In 2011, government also reduced the level of feed-in tariffs for renewables to ensure their sustainability and lesser impact on prices. In March 2011, the Network Industries Regulator (URSO) adopted the Regulatory Policy for 2012-2016, whereby it chose the price cap method as main regulatory instrument, and suggested it could stop regulating electricity prices for the SMEs.

As regards the construction works on two new reactor blocks at nuclear power plant in Mochovce, it is expected that they will be operational by the end of 2013 and 2014 respectively, with an installed capacity of 440 MW each.

3.24.4. Business environment

Business-relevant legislation in Slovakia remains complex and is subject to frequent changes. In July 2011, the government adopted the strategy 'sINGAPUR' aimed at improving the business environment. The strategy contains 94 short- and mid-term measures for the period 2011-2015, out of which 64 cover the Action programme on administrative burden reduction adopted in 2007. With many measures still to be implemented, the strategy risks to fall short of achieving the targeted 25 % reduction of administrative burdens. In 2011 the government took steps to boost the analytical capacities at ministries dealing with economic and

[8] e.g. the aluminium industry.

social policies. In spite of improvements, the regulatory impact assessments are in practice often conducted formally.

As from January 2012, the electronic point-of-single-contact became operational. The administrative fees for electronic filings were abolished. The time to start a business was shortened up from 5 to 3 days to facilitate business activity within the scope of the Trade Licensing Act. To facilitate the creation of a private limited company however further reforms are needed. In 2011, the Ministry of Economy launched the 'Economic Register of Slovak Entities"[9]. In a user-friendly fashion, this online service provides all public legal, economic and financial information[10] on entities registered in Slovakia.

The indicators measuring various aspects of entrepreneurship score clearly below EU average. The attitude of population towards entrepreneurship and school education that insufficiently encourages sense of business initiative poses the main obstacles for higher business dynamics.

As regards the access to finance, the situation deteriorated in the period 2009 - 2011[11]. The rate of rejected loan applications went up, while the number of SMEs using debt financing increased from 61 % to 74 %. Although the amount of loans to non-financial firms[12] naturally followed the downward path of the economic cycle that occurred in 2009, with the subsequent recovery it has continued growing at a moderate pace in 2010 – 2011. With an underdeveloped stock exchange and venture capital market, equity financing remained very limited.

In 2011, the JEREMIE initiative was finally set up. With a holding fund amounting to EUR 100 million, it is made of a First Loss Portfolio Guarantee scheme and a Risk Capital instrument. First calls for both instruments were launched in January 2012, whereas calls targeting SMEs should be launched later in 2012. The OP C&G is also considering a microfinance scheme for SMEs (EUR 12 million).

The specialisation in export-oriented manufacturing places increasing demands on the quality of infrastructure. In eastern regions however, the lack of adequate transport infrastructure remains an obstacle to growth, dragging the catching-up process already evident in western Slovakia. In 2010 - 2011, the government stepped up efforts to prepare motorway and railway projects. Difficulties postponing actual construction however persist, mainly due to public procurement and environmental issues.

3.24.5. Services sector

With 60 % share in 2010 compared to the EU average of 74 %, the services sector is relatively less important for Slovak economy. Except tourism and network industries, services receive only little policy attention.

The competition improved somewhat in the network industries in recent years, and retail consumers start benefiting from the liberalized energy sector. The gas market is dominated by the distributor and network company SPP, which is almost 100 % dependent on imports of Russian gas. The dominance of the incumbent telecom operator slows down the spread of broadband internet. On the other hand, competition among mobile operators improved, owing to the arrival of the third operator in 2007. Following the adoption of the Postal Service Act, the postal market had fully been liberalized as of 2012.

Professional services are subject to entry and to a lesser extent conduct regulations which tend to restrict competition and push up prices. There are no quotas or economic need tests, however legal professions, architects, engineers or accountants face strict licencing and educational requirement before exercising their profession. Lawyers also cannot be partners of commercial companies and have to comply with rules prohibiting advertising or disclosure of prices. Dismantling compulsory memberships in professional chambers and removing unnecessary restrictions would increase competition in this sector.

3.24.6. Public administration

Indicators of governance and institutional quality show that Slovakia needs stronger institutions and more efficient public administration. The Government Effectiveness indicator[13] ranks Slovakia 19th out of EU27, whereas its score has been sliding since 2006. The overall functioning of public administration is impaired by weaknesses in analytical capacity, hampering policy implementation as well as the quality of public services. Slovak administration relies to a greater extent on flexible modes of public employment.

[9] http://www.madeinslovakia.net/eng/ .

[10] e.g. statutes, ownership, tax ID and VAT numbers, payment discipline, annual accounts, ongoing insolvency procedures, bailiff executions.

[11] Commission/ECB Survey on SMEs' access to finance 2011.

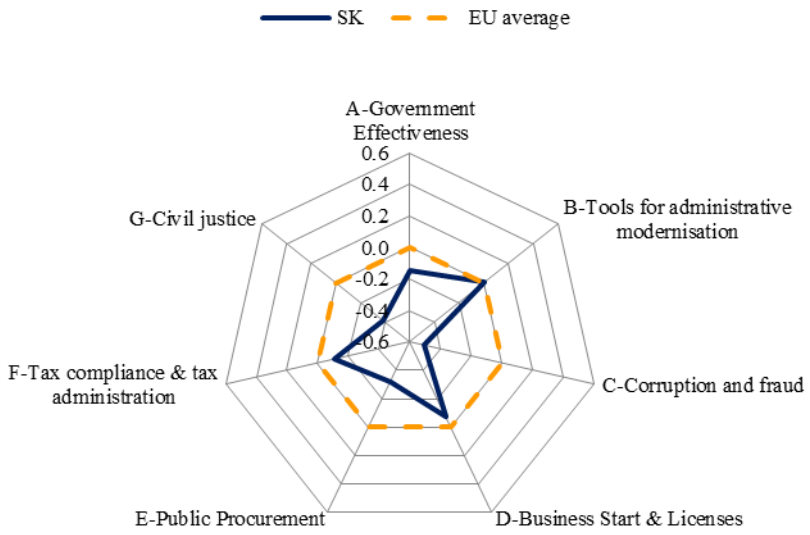
[12] National Bank of Slovakia — Statistics on granted loans.

[13] Worldwide Governance Indicators 2010.

However, modern human resources management (performance-related pay, flexibility, skills development) remains underdeveloped, whereby high turnover of staff impedes capacity building and policy continuity.
Slovakia has a low score on corruption. Perceptions of diversion of public funds due to corruption, and irregular payments and bribes by firms are seen as quite common. Results for the experience of corruption also indicate that it is a major issue with 27 % of respondents reporting an incidence of corruption compared to the EU average of 10 %.

Measured by a composite indicator on starting a business and licensing, Slovakia's performance is slightly below the EU average. This result is mainly driven by time requirements for incorporation, although the related costs are significantly lower. As shown by the indicator on the complexity of obtaining permits, licensing procedures are assessed as rather convenient.
The composite public procurement index for Slovakia reveals a considerably weak performance. While on average time requirements and costs for the competition for public tenders amount to more than 16 days and 0.19 % of per capita GDP, for Slovakia these values are 30 days and 0.26 % respectively. Furthermore, average duration of payments by public bodies is higher than the EU average.

Overall profile of public administration



Source: WIFO

Compliance costs stemming from tax obligations can have significant impact on enterprises. In 2011, a model business company in Slovak had to make 31 payments and spend 231 hours to pay taxes, which is slightly higher than the EU average of 208 hours.[14] Moreover, the efficiency of tax administration appears low as suggested by the ratio of costs of tax administration per revenue collected.

According to the composite indicator on the efficiency of civil justice, Slovakia again performs worse than the EU average. For instance, it takes more than twice as long to resolve insolvency, and the judicial system is perceived to be significantly less independent when compared to the EU average. Due to the existing backlog of cases in courts, the overall time needed for a trial and the enforcement of judgement impair the access of businesses to legal recourse, leaving many commercial disputes unsolved. The alternative dispute resolution systems, which could improve contract enforcement, are still underdeveloped.

In 2010/2011, the availability[15] of basic e-government services for enterprises (87.5 %) was close to EU average (89.5 %). On the other hand, the availability of e-government services for citizens remains underdeveloped (45.8 % against EU average of 80.9 %). Areas for improvement include government-to-government services and use of electronic signature that remains cumbersome.

[14] World Bank — Doing Business 2012.

[15] EU Digital Agenda Scoreboard 2011.

In 2011, Slovakia successfully put in place several transparency-enhancing measures in the area of public procurement and judicial efficiency. All courts decisions in civil, commercial, and criminal cases had to be published on the internet as from January 2012. Recruitment procedures for new judges were made more transparent and regular performance assessment of judges was introduced. The Insolvency register and the Commercial register are now available on the internet.

In February 2011, Slovakia amended the Public Procurement Act, aiming to increase competition and transparency. The amendment significantly lowered the national limits for under-threshold contracts, which were often abused. The use of electronic auctions is more obligatory. As of late 2010, an electronic central registry of contracts and invoices has become operational. All contracts awarded and invoices paid by public authorities at all levels must be published on the online registry to be legally valid. This reform in terms of reporting can be considered a good practice that significantly increased transparency and control of public spending.

To address the problem of high tax compliance burden and to improve the overall tax collection, in 2011 Slovakia launched a major restructuring[16] of the Tax Administration. As from 2013, the tax and customs authorities shall merge into one institution – the Financial Directorate. The reform will unify the collection of taxes and customs duties and later on also social security contributions, whereby it shall simplify the filing of tax returns. In early 2012, the implementation of this reform encountered major technical problems, causing additional administrative burden on businesses. Nevertheless, if successfully implemented, the reform could bring about better tax collection as well as significantly ease the tax compliance burden.

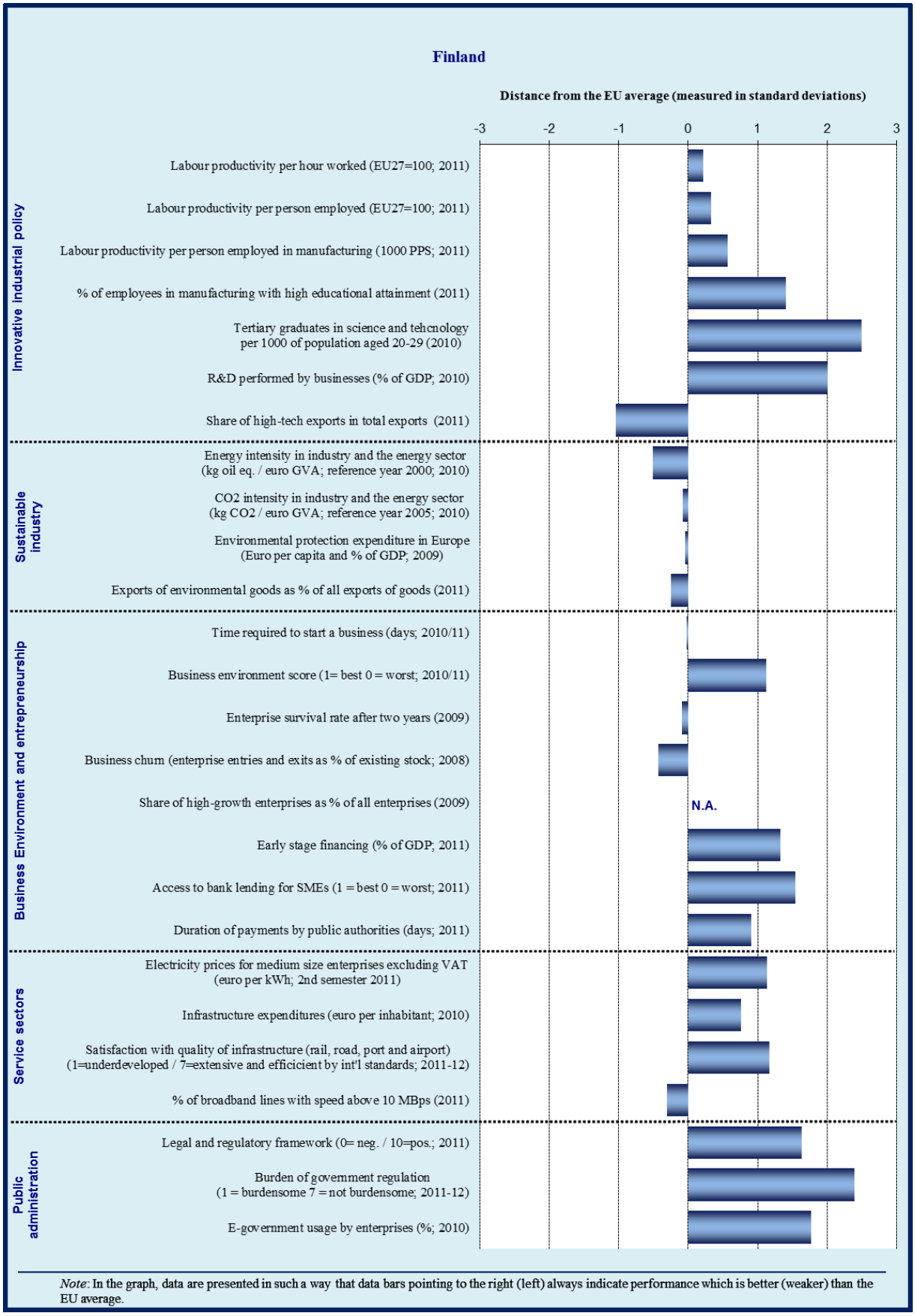
A key priority in 2011 was to set up the legislative framework for universal electronic access to basic public services, enabling uniform implementation of e-services and full electronic exchange with public authorities. The main funding source of e-government is the Operational Programme Information Society (OPIS)[17], with 71 % of its funds allocated for e-government projects. In spite of stepped-up efforts, public procurement, coordination and technical issues delay major projects, whereby overall absorption of OPIS stays very low.

3.24.7. Conclusions

Technology imports were source of major productivity gains in past years, however this potential is evaporating due to declining inflows of FDIs. Specialised in few manufacturing industries, Slovak economy could benefit from diversifying to services sectors. As innovation capacity has improved only modestly, it has yet to significantly move towards more knowledge-intensive economic activity. Transparency of public procurement and judicial authorities improved in 2011. Nevertheless, the overall efficiency of public administration still drags productivity of enterprises, and remains important priority for improving business environment. The combination of very high energy prices with one of the highest energy-intensity in the EU poses another challenge for Slovak economy. The government's policy response to many of the identified challenges was well formulated and translated into action plans with specific measures. To bring about tangible improvement, efforts need to concentrate on implementation.

[16] project UNITAS.
[17] EUR 820 million for 2007-2013 period.

3.25. Finland



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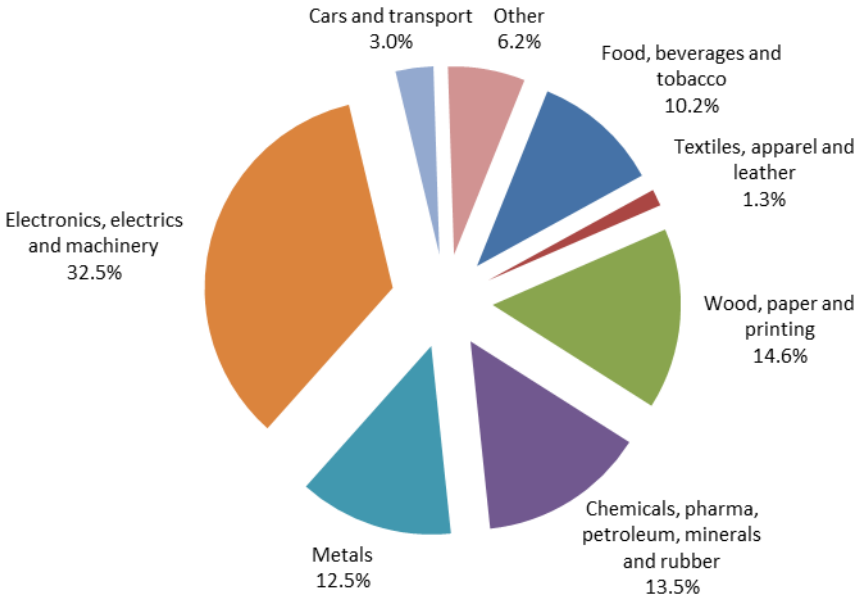
Sectoral specialisation of manufacturing – Finland (2009)



Note : No data available for sectors C12 (tobacco products), C15 (leather and related products), C19 (coke and refined petroleum products) and C21 (basic pharmaceutical products and pharmaceutical preparations)
Source: Eurostat

3.25.1. Introduction

Finland belongs to the group of EU Member States, which is characterised by higher income and a specialisation in knowledge intensive sectors. The contribution of manufacturing to total value added is higher in Finland than in the EU on average (17.3 % against 15.5% in 2011).

At detailed manufacturing industry level, Finland is specialised in capital-intensive industries (manufacture of pulp, paper and paperboard), both in terms of value added and exports, as well as in mainstream manufacturing (agricultural and forestry machinery, electric motors) and labour-intensive industries (sawmilling and planning of wood, steam generators, building and repairing of ships).

As regards export and technology-driven industries (apparatus for line telephony), Finland specialises in high-value added activities such as design and marketing. At the more aggregated sector level (NACE 2-digit), Finland is specialised in highly innovation-intensive sectors (communication equipment) and, in exports, also in medium innovation-intensive sectors (pulp and paper, wood and cork).

Finland does not seem to demonstrate specialisation in sectors requiring high education due to the low relative share in R&D and in business services. Given its industrial structure, Finland's R&D intensity and position on the quality ladder for technology-driven industries are well above the EU average.

3.25.2. Innovative industrial policy

The Innovation Union Scoreboard 2011 ranked Finland as one of four innovation leaders in the EU showing an innovation performance well above that of the EU27 average. The Finnish national research and innovation system shows strengths in a well educated work force, R&D&I funding and support, and linkages and entrepreneurship. High growth in innovation performance is observed for community trademarks and knowledge-intensive services exports, and growth performance in open, excellent and attractive research systems, finance and support and Intellectual assets is well above EU average.

Finland is the top performer in the EU27 in terms of business R&D spending (2.69 % of GDP, 2010). Total R&D expenditure (BERD and public R&D spending combined) reached 3.87 % of GDP[18], which is well above the EU average and close to Finland's national target for 2020 at 4 %. Direct public R&D expenditure is however expected to slightly decline in 2012 compared to 2011, while the ongoing major structural change in the ICT sector may have an impact on business R&D intensity at least in the short term. The Government intends to exploit the opportunities for renewal and

[18] Eurostat, 2010.

growth offered by the structural change and has set up a high-level task force, *Finnish ICT Cluster 2015*, in 2012.

The national innovation system is being reformed and strategic steering is provided by a government working group, which has been set up to coordinate research assessment and foresight activities. The goal is to improve the efficiency of the innovation system and refocus its priorities. The most important reforms relate to streamlining, enhancing the efficiency and refocusing the priorities of the innovation system, as well as internationalisation, which was identified as a weakness in the Finnish innovation system[19]. The focus of public research and innovation funding is being shifted to growth orientated, job creating and internationalising SMEs. The current demand and user-driven innovation policy action plan 2011-2013 will be assessed in a mid-term review in 2012.

Independent evaluations of the activities of Tekes, Finnvera, SHOKs, and the Academy of Finland (to be completed by 2013) will provide additional insights into the effectiveness of the national innovation system. Important research and innovation related decisions were also taken in March 2012 in the context of Central Government Spending Limits for 2013-2016. The planned introduction of an R&D tax incentive in 2013 is representative of the on-going refocusing from direct to indirect R&D aiming at improving the leverage effect of public investments.

Finnish innovation policy and measures are in general geared towards speeding up the development, commercialisation and take up of new technologies. Key Enabling Technologies (KETs) are an integral part of the public technology and innovation programmes funded by the Finnish Funding Agency for Technology and Innovation (Tekes). The technical research center of Finland (VTT) and Finnish Universities have competencies in all KETs.

The share of science and technology graduates among 20-to-29 year olds in Finland is well above the EU average (19 % vs. 14 %, 2009). The knowledge-intensive sectors in the economy in which Finland specialises require high-intermediate skills. In view of emerging new skills requirements and the demographic changes there is however a need to ensure an adequate provision of especially STEM (Science, Technology, Engineering, Mathematics) skills also in the future.

[19] Innovation Union Scoreboard, February 2012. http://ec.europa.eu/enterprise/policies/innovation/files/ius-2011_en.pdf .

3.25.3. Sustainable industry

The Finnish industrial sector is more energy-intensive compared to the EU average. Some sectors in Finland are at risk of carbon leakage, such as, the paper and pulp, iron and steel, non-ferrous metals, chemical and petrochemical industries. Although compliance costs have not been very high during the first and the second period of the EU ETS, a majority of new investments in these industries have been made outside of Finland.

Compared to many other industrial nations Finland has low overall emissions in relation to GDP and per capita. In industry and the energy sector, CO_2 intensity is slightly better than the EU average. The power generation mix is diversified with nuclear and renewable energy as dominant sources. Electricity prices are among the most affordable for medium size enterprises in EU comparison. Regarding other costs, environmental protection expenditure in the manufacturing industry represents a small percentage of GDP, corresponding to 0.31 % of GDP for Finland and close to the EU average.

The Government's goal is to develop Finland into a leading position in environmental technology. In 2012 a new Strategic Programme for Cleantech Business Development has been initiated, which will promote growth, business activity, innovations and the internationalisation of the cleantech sector in Finland. The programme will establish strategic targets for Finland's cleantech business and coordinate operators in the sector. The growth potential of the sector is promising as the environmental technology sector in Finland has steadily been growing by 5-10 % annually since 2005. There are more than 2000 Finnish firms in the cleantech sector of which 95 % are SMEs. Since growth prospects are mainly in international markets (e.g. Russia, India, China), internationalisation of SMEs is an important issue.

Tekes provides funding for environmental technologies and a new interesting initiative in this context is the 'Green Growth Programme 2011-2015". The programme's objective is to identify potential new growth areas for a sustainable economy based on lower energy consumption and sustainable use of natural resources. Although Finland is not specialised in automotive industries, there is also noteworthy developments in electrical vehicles. In 2011 Tekes launched a programme on Electrical Vehicle Systems 2011-2015 (EVE) aimed at companies and research institutes. Another green project funded by Tekes is the Green Mining Programme, whose objective is to make Finland a

global leader in sustainable mineral industry by 2020 by increasing the number of SMEs that target the export market in the mineral cluster.

A majority (87 %) of Finnish SMEs selling green products and services are active only in the domestic market.[20] Green exports are mostly destined for other EU Member States. In 2010, Finland's trade balance of environmental goods was positive reaching 0.06 % of GDP. However exports of environmental goods as a percentage of all exports of goods were clearly below the EU average (0.53 % vs. 0.77 % of GDP, 2011).

The Government has also launched a new four-year Strategic Programme for the Forest Sector, whose key objective is to promote the forest sector's competitiveness and renewal. The programme will monitor and anticipate changes in the forest sector while coordinating measures. A National Wood Construction Programme 2011-2015 will be implemented as part of the Strategic Programme for the Forest Sector.

3.25.4. Business environment

Finland scores clearly above the EU average on all business environment indicators, except high-speed broadband lines. The Finnish business environment shows strengths in a stable legal and regulatory framework and relatively low level of administrative burdens. Finland also scores high on the indicator measuring satisfaction with the quality of infrastructure related to rail, road, port, and airport facilities.

Since July 2010 Finland is implementing an ambitious national broadband strategy 'Broadband for all 2015", which pledges to connect everyone to a 100 Mbps connection by 2015. Telecom operators defined as universal service providers must be able to provide every permanent residence and business office with access to reasonably priced service by 2015. Although Finland scores below the EU average on the availability of high-speed broad band lines, e-government usage by Finnish enterprises is the highest in the EU27 (96 %, 2010).

Finland scores above the EU average on all entrepreneurship and SMEs indicators, except business churn. Finland shows strengths in early stage financing and access to finance, as well as duration of payments by public authorities.

The Finnish small businesses sector is similar in structure to that of other EU Member States. Microenterprises dominate the sector and most Finnish SMEs are active in the service sector, where SMEs account for almost 61 % of all jobs and almost 55 % of SMEs value added. The small businesses sector has been growing rapidly. The number of enterprises and the value added they produce have increased much more dynamically in Finland than in the EU in the past decade.[21]

Since 2007, a website 'Enterprise Finland' provides a one-stop shop for information on assistance available to companies and entrepreneurs, especially SMEs.[22] There is still room for improvement with respect to the Finnish point of single contact. The amount of information available through the portal is generally good, but improvements should be made to increase the possibility of online completion of procedures.[23]

Finland implements a long standing active SME policy, which is reflected in an outstanding Small Business Act profile. While Finland's performance across the ten Small Business Act principles is above the EU average in general, overall progress has been stagnating, but at a higher level than in comparison with other Member States.

The current integrated Impact Assessment system assesses the impacts on SMEs. Government plans to strengthen the impact assessments are welcome, in particular the assessment of business impacts and the cumulative impacts of legislation.

There has been considerable progress in e-procurement. A new law on electronic auctions and dynamic procurement procedures is expected to reduce bureaucracy, while speeding up public procurement procedures. Access for SMEs is promoted through guidance, which is one of the priorities for a public procurement advisory unit funded partly by the Ministry of Employment and the Economy. However, Finland scores moderately well for use of e-procurement in the stages before the award of contracts.

The overall birth rate of new firms and overall exit rate is lower in Finland than in other Member States, implying that business churn is low. Relatively few SMEs grow to become larger companies in Finland. There are less than 700 high-growth companies, predominantly in knowledge-intensive services.[24] Despite Finland's technological sophistication, its current

[20] Eurobarometer on SMEs, resource efficiency and green markets 2012: http://ec.europa.eu/public_opinion/archives/flash_arch_344_330_en.htm#342 .

[21] SBA Fact Sheet 2010-2011 Finland.

[22] http://www.yrityssuomi.fi/web/enterprise-finland .

[23] SWD(2012)148 final.

[24] Kasvuyrityskatsaus 2012, Ministry of Labour and the Economy.

performance in nurturing high-growth companies could be improved. Promoting innovative high-growth companies remains a key policy priority in the new Government Programme. Several growth venture policy measures have been taken, such as:

- A new joint service Growth Track provided by business development organisations has been established, which is intended for enterprises aiming at rapid growth and internationalisation.
- Finnvera's (Export Credit Agency of Finland) export financing schemes have been renewed;
- The Vigo Accelerator Programme has been expanded and currently covers six areas.
- Tekes new strategy is focusing one third of company funding on young innovative enterprises;
- Following the Government decision on the Central Government Spending Limits 2013-2016 in March 2012, tax incentives for growth entrepreneurship will be introduced, starting in 2013.

3.25.5. Services sector

Though manufacturing remains important as a generator of process and product innovation, export income and prosperity in Finland, the economy is increasingly a service economy. In the private services sector, especially business services account for an increasing share of growth and are expected to continue to rise in parallel with further technology developments and IT investments in the sector. In Finland public and private services amount to only about 68 % of GDP indicating that there is growth potential to be exploited. In comparison, services account for more than 73 % of GDP in the EU27 (2010).

Promoting competition in shielded service markets remains a challenge because of the need to restore productivity growth and diversify the Finnish economy. In 2011 and 2012 the Council recommended Finland to continue enhancing competition in product and service markets, especially in the retail sector. Finland has stepped up its pace of reform to address the concerns expressed by the Commission and other fora regarding increasing competition. In 2011 a new Competition Act was adopted, which brings amendments to merger control, penalties, and the procedure adhered to in the review of competition issues and damages. In 2012 the Government has launched a new programme on promoting healthy competition, which aims at identifying and addressing structural barriers harmful to competition. The programme will also evaluate impacts of purchasing power in Finnish retail trade, especially in the food sector. Retailers tend to use their strong position with respect to suppliers in several ways that may be considered questionable for sound and effective economic competition.[25] The Government is exploring merging the Finnish Competition Authority with the Finnish Consumer Agency and possibly the National Consumer Research Center, which would help increasing the impact of competition and consumer issues in Finland.

3.25.6. Public administration

Finland is one of the top performers in public administration according to the World Bank's *Government Effectiveness* Index, and displays the highest value of the EU Member States.[26] This indicates a high perceived quality of public service provision in Finland.

The country's performance is above the EU average in all tools *to improve public modernisation* (e-government, impact assessments, performance and service orientation, accountability). Finland is one of the top performers for e-government and has increased the online availability of services for enterprises considerably in the past years. Also, the usage of a comprehensive evidence-based impact assessment has been improved since its implementation in 2004, while the application of tools that facilitate a strategic management of public sector employees was slightly more intense than average.

The Finnish government is implementing an action plan to reduce the administrative burden on businesses by 25 % by 2012, where developing e-government plays a key role. Transactions between businesses and the authorities will be brought together to operate in line with the 'one-stop-shop' principle and all key business services will be covered by 2013. There has been progress in some priority areas towards the 25 % reduction target, but overall progress is slow. A follow-up study will be finalised in spring 2012 and a government decision on continuing the action plan is expected in autumn 2012.

The composite summary indicators for *corruption and fraud* are significantly above the average performance. With only 4 % of individual corruption experiences, Finland outperforms the

[25] Finnish Competition Authority http://www.kilpailuvirasto.fi/cgi-bin/english.cgi?luku=news-archive&sivu=news/n-2012-01-10.

[26] As many data are unavailable, EU-wide averages are calculated without Malta.

majority of other Member States and the perception of irregular payments and bribes as well as the diversion of public funds is significantly lower than the EU average.

The composite index on *starting a business and obtaining* licenses is slightly above the average, with the exception of the time required to start up a company, which takes approximately as long in Finland as in the average Member State, as stated in the World Bank's Doing Business report. In spite of the comparatively good performance in setting up a fully operational one-stop shop to start up a company, there is still potential for improvement.

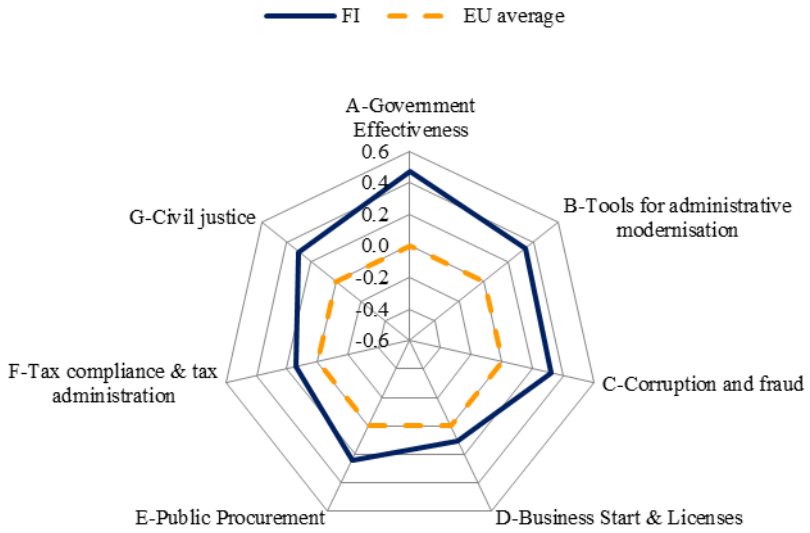
The composite link-level indicator for *public procurement* is well above average, with the average delay in payments (only 4 instead of the EU average of 28.3 days) as well as the cost to participate in government procurements (0.14 %of GDP per capita as typical costs of taking part in a competition, while the EU average amounts to 0.19 % of GDP per capita) being lower than the EU-average.

Finland also observes an extraordinary good performance as regards its *civil justice system*. The time required to enforce contracts (375 days) is far shorter than the EU average (556 days), and the costs thereof are substantially lower (13.3 % of a claim in Finland as compared to the EU average of 20.6 %). Resolving bankruptcy issues is similarly faster (0.9 years) than in most other EU Member States (average of 1.95 years). Perceived independence of the judiciary is one of the highest of all Member States with a score of 6.41 on a scale from 1 to 7.

Finland's performance on *tax compliance and tax administration* indicators are above the EU average. The good scores reflect especially a far better than average performance in the time to prepare and file tax returns and to pay taxes (only 93 days), whereas the administrative costs of taxation are only slightly better than the EU average.

Although Finland scores high on the quality of its public administration, Finland faces a number of challenges, in particular in relation to population ageing. The Finnish authorities are implementing several reforms to redesign public services structures and boost productivity at both the central and local government level.

Overall profile of public administration



Source: WIFO

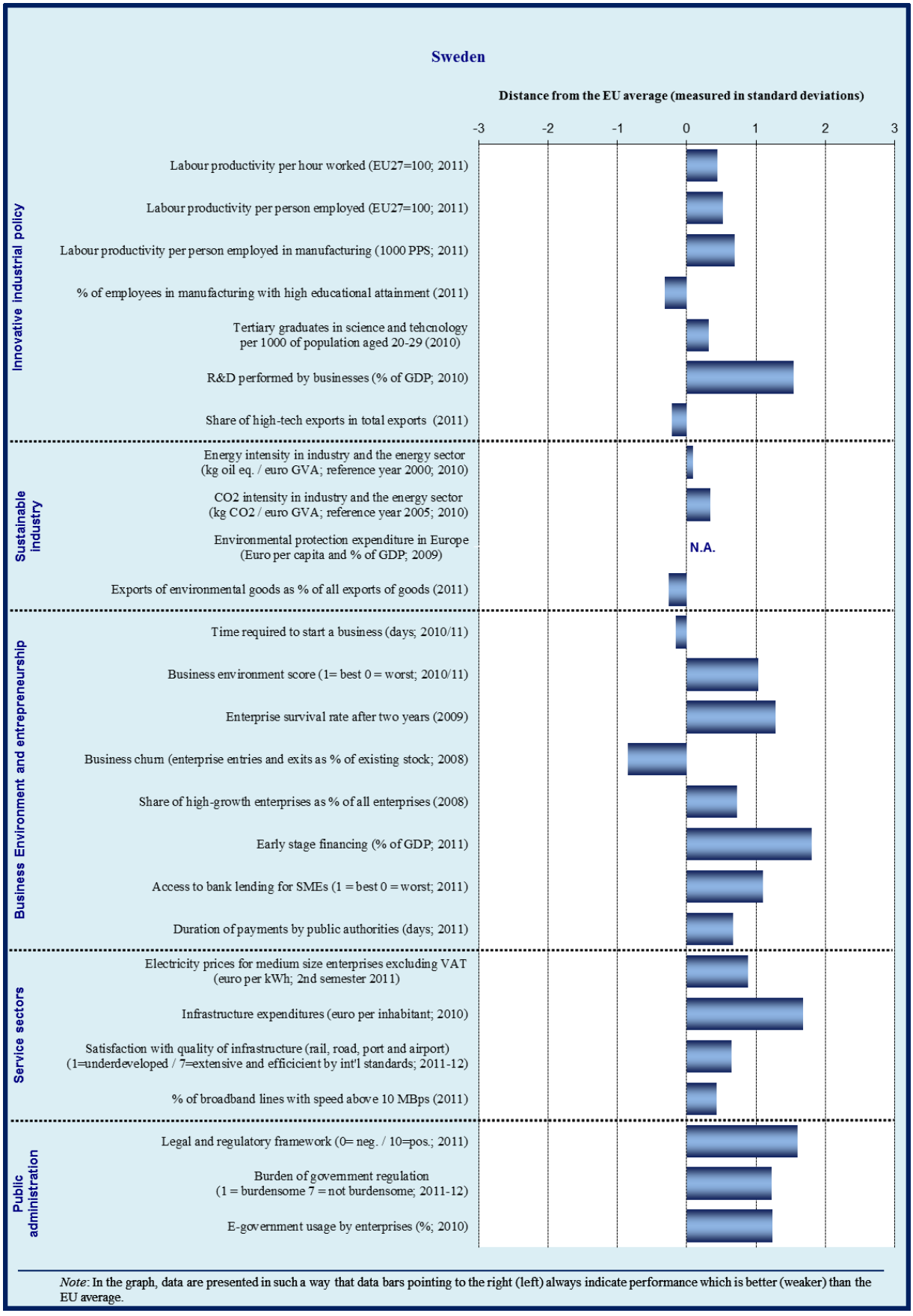
3.25.7. Conclusions

Finland remains one of the most competitive Member States in the EU and is identified as one of the innovation leaders. However the Finnish economy needs to become more diversified both in terms of companies and in terms of exports in order to develop multiple strong export-oriented firms in the future.

Notwithstanding the past strong Finnish R&D and innovation performance, without a significant increase in the number of innovative high-growth firms, Finland's ranking as an EU innovation leader risks declining. This requires facilitating

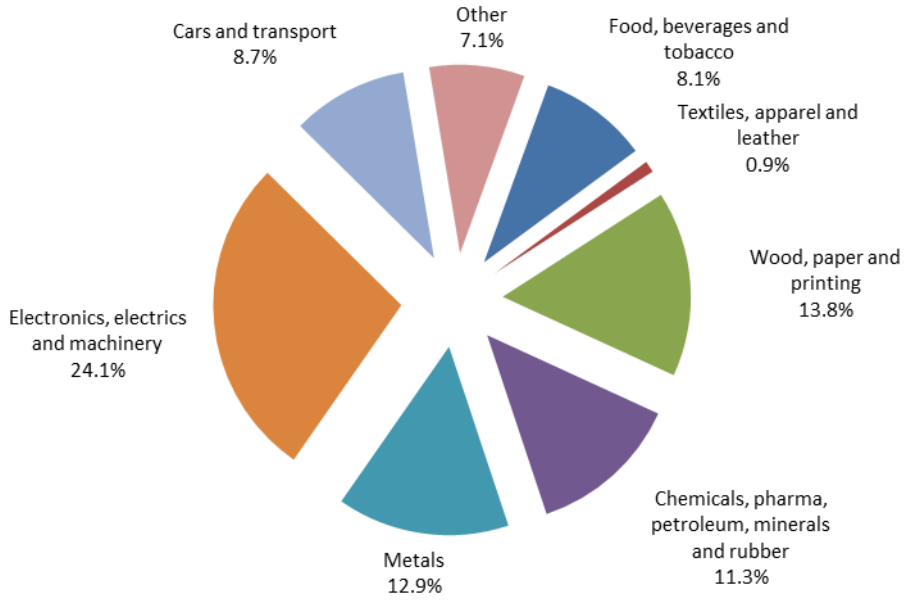
innovation, enabling the transformation from R&D into marketable products, and encouraging the penetration of fast growing export markets. In the short term, it will also be crucial to exploit and disseminate the extensive ICT know-how also in other industries in Finland, including the public sector. Finland should also continue enhancing competition in product and service markets, especially in the retail sector, and take further measures to achieve productivity gains and cost savings in public service provision in response to the challenges posed by the ageing population. The new Strategic Programme for Cleantech Business Development is a step in the right direction in terms of endowing Finland with an explicit strategy for greener business growth and for a strategic positioning in the emerging environmental technology sector.

3.26. Sweden



Note: In the graph, data are presented in such a way that data bars pointing to the right (left) always indicate performance which is better (weaker) than the EU average.

Sectoral specialisation of manufacturing – Sweden (2009)



Note : No data available for sectors C12 (tobacco products) and C21 (basic pharmaceutical products and pharmaceutical preparations)
Source: Eurostat

3.26.1. Introduction

While manufacturing remains important as a generator of process and product innovation, export income and prosperity in Sweden, the Swedish economy is gradually shifting away from manufacturing and towards a service economy, as it is in a number of other Member States. The contribution of manufacturing to total value added in Sweden was 16% in 2011, similar to the EU as a whole (15.5%). Swedish manufacturing specialises in capital-intensive industries such as processing of iron and steel, pulp and paper; in mainstream manufacturing such as isolated wire and cable, general and special-purpose machinery; and in technology-driven industries such as TV/radio transmitters and receivers. High relative export shares in computer and information services, research and development, and royalties and license fees, indicate that Swedish also has export specialisation in high-education sectors.

Apart from the gradual shift towards services, the last decade has also seen some important structural changes in Swedish manufacturing, notably away from motor vehicles, aerospace and other technology-driven industries. Sweden has increased its relative share of value added and exports from labour-intensive industries such as sawmilling and bodies for motor vehicles, and in high-education and high-innovation sectors such as computers, research and development, and information services.

In the first decade of the century, nominal unit labour costs rose by 16 % in Sweden, slightly more than in the EU as a whole (14 %) but less than in the euro area (20 %). Labour productivity in manufacturing is among the highest of all Member States. While Sweden continues to enjoy an enviable competitiveness position overall, there are fluctuations in the relative competitiveness position of the various sectors.

3.26.2. Innovative industrial policy

According to the Innovation Union Scoreboard 2011, Sweden remains one of four innovation leaders in the EU. Using a composite of 24 separate innovation indicators, it ranks Sweden as the best innovation performer in the EU, outperformed only by Switzerland. Sweden ranks particularly high on human resources, finance and support, firm investments and intellectual assets, but does less well on output-oriented indicators such as innovators, economic effects, linkages and entrepreneurship.

The Swedish national innovation system benefits from a stable macroeconomic environment, a well-educated workforce, appropriate infrastructures, ambitious R&D policies, venture capital, and state-of-the-art scientific performance. Until recently, Sweden also benefitted from the presence of a number of R&D-intensive multinational companies, but in recent years several of those have chosen, for various reasons, to relocate their R&D activities to other countries.

Partly because of this outflow, and partly due to the economic crisis, business expenditure on research and development (BERD) has fallen back to its lowest share of GDP in five years. Reinforced public spending on R&D has to some extent compensated for the drop, but the overall R&D intensity fell in 2010 to 3.4 % of GDP, its lowest share since 2007. Further, large investments in R&D have failed to lead to sustainably higher economic growth or levels of innovation.

Against this backdrop, the government has announced its intention to present a new innovation strategy in 2012, to coincide with the presentation of the next research and innovation bill. In parallel, the country-specific recommendations of the 2012 European Semester have urged Sweden to take further measures in the research and innovation bill to continue improving the excellence in research and to focus on improving the commercialisation of innovative products and the development of new technologies.

The new innovation strategy is expected to take a broad approach to innovation, going beyond technological development and academia-industry interaction. It will shift away from sectoral innovation policies in favour of an integrated, needs-driven and holistic policy.

3.26.3. Sustainable industry

Sweden continues to make good progress towards green growth. A comprehensive policy mix with a focus on sustainable growth, energy and transport, climate change, innovative environmental technologies, carbon taxation and other green taxes, has been gradually rolled out over several years and has proved fruitful.

Sweden has achieved one of the lowest carbon emissions per capita in the EU and is on track to meet its national target on emission reductions. Several measures have been adopted recently to further reduce emissions in the transport sector, second only to the agriculture sector in terms of emitting greenhouse gases. Sweden has set itself a target of at least 10 % renewable energy in the transport sector by 2020 and a vision of a fossil-free vehicle fleet by 2030.

Using a range of different instruments – legislative, voluntary, fiscal, financial, information – aimed at all sectors of the economy, Sweden has achieved high levels of energy efficiency and its target of a reduction in energy intensity by 20 % from 2008 to 2020 appears to be within reach.

Taxation is seen in Sweden as a powerful tool to incentivise consumers and enterprises to change their consumption and production patterns in the direction of a green economy, away from environmentally harmful alternatives. A case in point is the CO_2 tax, which Sweden was among the first to introduce and remains one of relatively few Member States to apply. Along with higher energy taxes, CO_2 taxes were adjusted up in 2011. Measures of a general scope – energy taxes, CO_2 taxes, emission trading – are widely regarded as drivers of sustainable development as well as important for the development of new environmental technologies.

3.26.4. Business environment

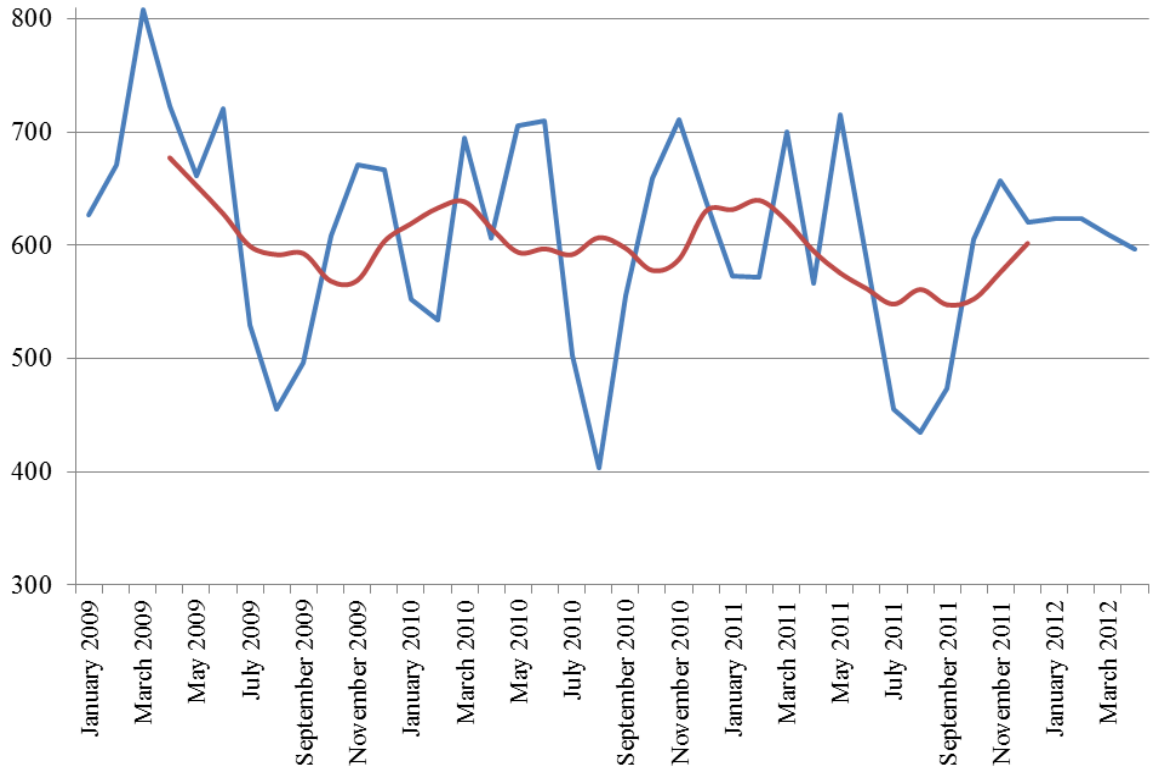
By international standards, Swedish businesses benefit from adequate access to private and public risk capital. The 2011 survey on access to finance showed that only 8 % of companies in Sweden report access to finance as being the most pressing problem. Their use of debt financing in the surveyed six-month period was close to the EU average, whereas 31 % of the Swedish companies surveyed used equity financing. This is a much higher proportion than in the EU as a whole. Furthermore, fewer Swedish companies applied for a bank loan, overdraft or trade credit than in the rest of the EU. At the same time, Swedish SMEs are more likely than elsewhere in the EU to receive the amount requested when applying for loans or bank overdrafts, and the willingness of banks to provide such loans was perceived more favourably by SMEs in 2011 than in the previous survey (2009).

Last year, the share of early-stage financing to GDP was higher in Sweden than in any other Member State, but slightly lower than in 2009. On the other hand, international comparisons suggest that early-stage financing makes up a smaller share of total risk capital in Sweden than in other countries. To address this problem, as well as some other shortcomings, the government intends to reform the public system for risk capital, including by merging Innovationsbron and Almi Företagspartner. The government also intends to streamline tasks, mandates and investment policies of existing agencies and instruments with a view to a comprehensive risk capital system with no overlapping elements.

In parallel with the reforms, the newly appointed Corporate Tax Committee will examine different alternatives for reducing the taxation of risk capital in the corporate sector and for neutralising differences between equity financing and loans. Its remit also includes the preparation of proposals to broaden the corporate tax base in order to finance a

lower corporate tax rate from January 2013. Moreover, the committee will consider the possibilities of introducing tax incentives for research and development, review the rules on group contributions and underpriced transfers, and analyse whether a withholding tax on interest payments should be introduced. In January 2012, the committee presented the first of two interim reports, concerning tax incentives for stimulating the supply of risk capital. In its interim report the committee presented two proposed models for tax deductibility of own capital additions.

Corporate bankruptcies in Sweden, 2009 to April 2012 (monthly number of bankruptcies and 7-month moving average; personal bankruptcies excluded)



Source: Statistics Sweden

Corporate bankruptcies have risen from their low level in 2010 and 2011: in the first four months of 2012 there were 2 453 registered corporate bankruptcies in Sweden, more than the same period 2010 (2 387 bankruptcies) and the first four months of 2011 (2 411 bankruptcies). At the same time, the two-year survival rate of firms started in 2007 was considerably higher in Sweden than in other Member States.

Sweden has not achieved the targets of the Small Business Act on the time and cost of setting up a business. It is in the bottom half of Member States in terms of the time needed to set up a business: 15 days is longer than the EU average and five times as long as the agreed target of 3 days by 2012. At EUR 186, the cost of setting up a company is lower in Sweden than the EU average but remains higher than the agreed target of EUR 100.

3.26.5. Services sector

Though manufacturing remains important as a generator of process and product innovation, export income and prosperity in Sweden, the economy has for some time been a service economy, both in terms of employment and value added. Services account for around 62 % of hours worked and 65 % of gross value added across all businesses. These shares are more or less similar to the shares in most OECD countries, but Sweden has a higher share of societal, personal and IT services than the OECD average, while services such as hotels, restaurants, communications, financial services and real estate services are underrepresented in Sweden.

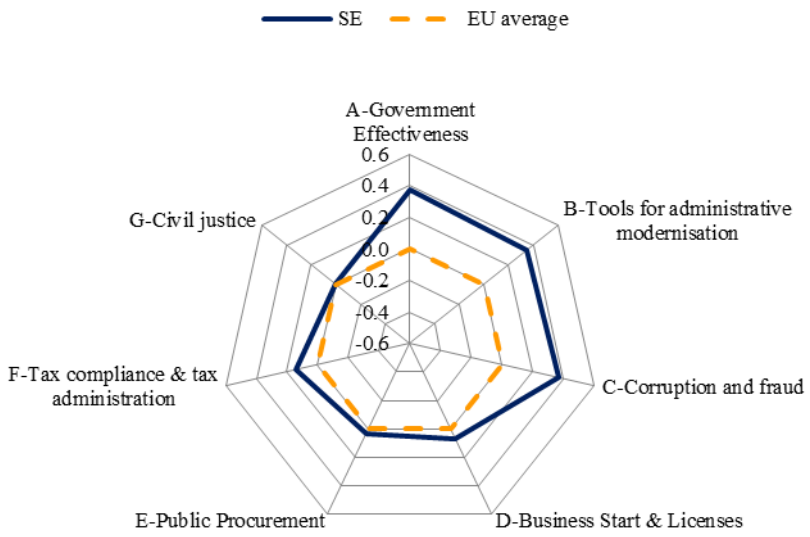
In the services sector, business services have seen the most rapid growth in recent years, followed by education, healthcare, and societal and personal services. As in other countries, the knowledge and

technology content of services has risen dramatically and is set to continue to rise in parallel with further technology developments and IT investments in the sector. As a consequence, employment in knowledge-intensive service sectors has more than doubled in the last 20 years and its share is above the median share in the EU and the OECD. These developments go hand in hand with the gradual integration of manufacturing and certain services, rendering the distinction between services and manufacturing less clear as producers offer packages of goods and services to their customers.

3.26.6. Public administration

As illustrated by the figure, Sweden's public administration is better than in most Member States, scoring higher than the EU average in six categories and around average in the seventh. According to a recent study, particularly good results were obtained for Sweden in government effectiveness, tools for administrative modernisation, corruption and fraud, and tax compliance and tax administration.

Overall profile of public administration



Source: WIFO

According to the *government effectiveness* index of the World Bank, the Swedish public administration provides better services and scores higher in user satisfaction surveys than in most other Member States.

As in neighbouring Member States, the use of *tools for public administration modernisation* (e-government, impact assessments, performance and service orientation, accountability) is widespread. In addition to a full online availability of business-related services, the use of regulatory impact assessments is sophisticated, and instruments targeting the strategic management of public administration staff are used intensely.

Also in terms of *corruption and fraud*, Sweden outperforms most other Member States. Irregular payments, bribes and misuse of public funds are perceived to be significantly less common in Sweden than on average in the EU.

Sweden has one of the most efficient *tax administrations* in the world, with high tax compliance rates and low tax collection costs. The average time needed to prepare and file tax returns and pay taxes is 122 hours per year, much less than the EU average of 208 hours. Furthermore, the cost of the tax administration is only 0.4 % of tax revenues, whereas the EU average is 1.3 % of revenues. The VAT system could be made more efficient though, notably by streamlining the VAT structure away from the current regime of reduced rates. Even where the current reduced rates (12 %, 6 % or 0 %) were originally introduced to address specific policy concerns, a reduced VAT rate is typically not the most effective or efficient policy measure to take in order to achieve a certain objective.

The only category in which the performance of the public administration is average in an EU context is the *efficiency of civil justice* in Sweden. The time to resolve insolvency cases (two years) and to enforce

contracts (508 days) are around or only slightly better than the average across Member States. The cost of enforcing contracts is considerably higher in Sweden (31.2 % of the claim) than on average in the EU (20.6 % of the claim).

The overall goal of Swedish administrative policy, as formulated by the government, is '*an innovative and collaborative public administration that adheres to the rule of law and is efficient, has well developed quality, service and accessibility and that consequently contributes to the development of Sweden and to efficient EU activity*'. To that end, the government has proposed a comprehensive use by government agencies of e-procurement by 2013; simplified contacts with public administration through better coordination at national and regional level; possible outsourcing of certain public administration support functions in order to improve efficiency and reduce administrative costs; and scaling back the provision by public entities of goods and services on markets in order to keep market distortions to a minimum and grant private sector providers a level playing field.

In order to make it 'as simple as possible for as many as possible', work is going on to step up and expand e-government. A new strategy is currently being formulated, setting out egovernment targets to be reached by 2015 and a long-term vision for 2020. To that end, the Delegation for e-government will report by March 2014 with proposals for the longer-term development of e-government. The Delegation will first analyse the implementation of e-government in other countries, such as in the 2012 study of e-government in Denmark, Finland and Norway. In parallel, the Delegation is working on a study to identify regulatory obstacles to information sharing.

The Swedish government undertook in 2006 to reduce the administrative burden for businesses by 25 % by 2010 (subsequently pushed back to 2012). The reduction achieved by 2010 was just over 7 % (approximately EUR 800 million). Recognising the need to step up its efforts, the government has taken a series of initiatives recently, notably a simplification programme for 2011-2014, the scope of which has been extended to local and regional authorities. The main focus of the programme is to intensify the work on rules perceived by companies as particularly burdensome and important. Moreover, the government has commissioned an inquiry into the scope for reducing reporting requirements for companies by more extensive cooperation between authorities, exchange of information, and shared databases. The purpose of the inquiry is to reduce the total number of information requirements from their current level (around 4 600). Ideally, companies should need to submit their information only once, possibly through a single point of entry. However, the inquiry will also look into the potentially negative consequences of such a reduction.

The Swedish Better Regulation Council, set up in 2009 with a mandate to ensure the quality of impact assessments and promote administrative burden reduction, has had its mandate extended to 2014. In addition, last year the government widened the scope of the mandate, empowering the Council to intervene at an earlier stage in the legislative process and assist in the scrutiny of impact assessments produced by the Commission. Moreover, since 2008 administrative government agencies must consult the Better Regulation Council before adopting regulations with a potential impact on the business environment or the competitiveness of companies.

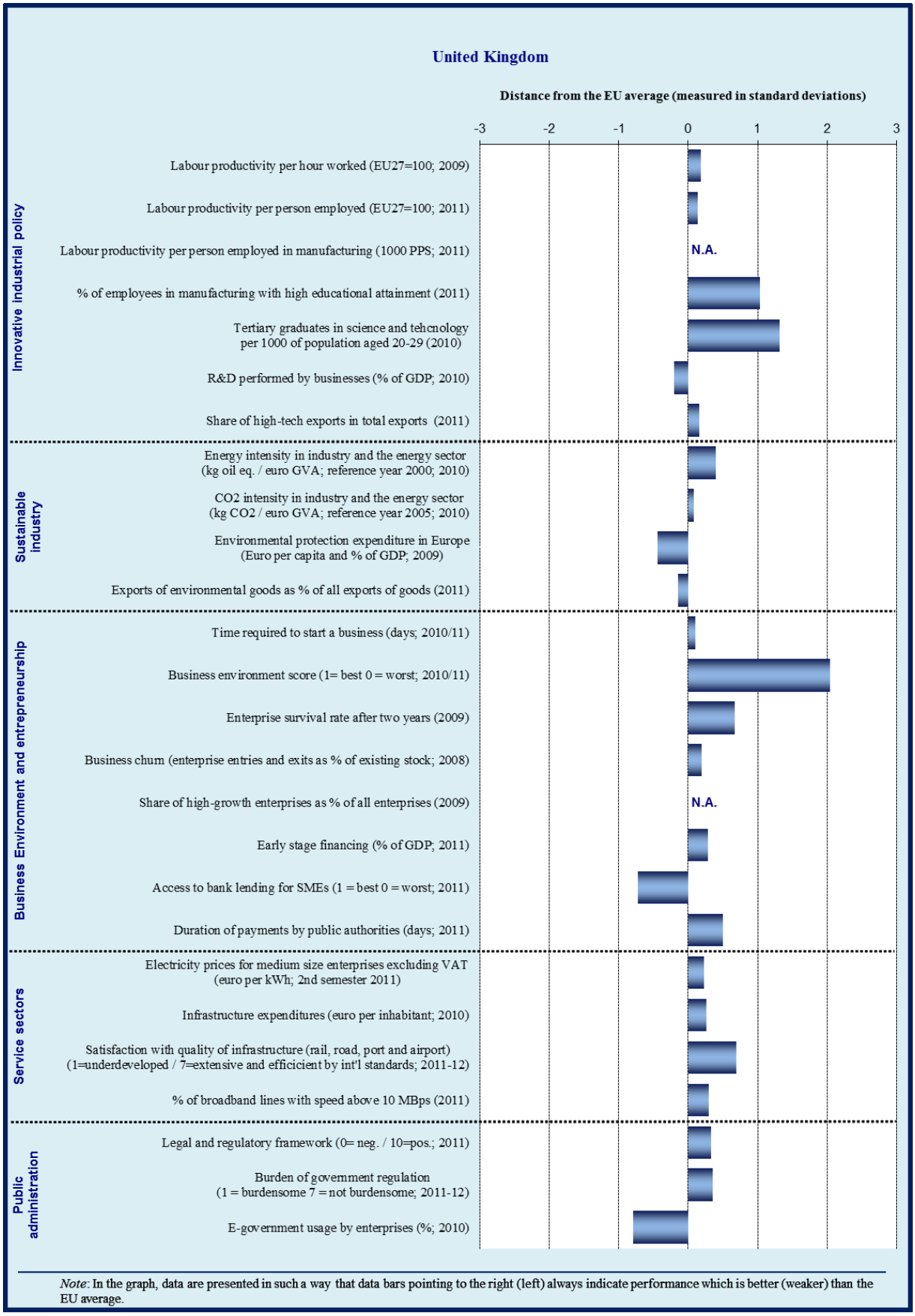
As far as taxation is concerned, efforts have been made to simplify tax procedures for businesses and individuals. There have also been changes recently to simplify the taxation of foreign experts.

In order to ease the administrative burden this year, the Swedish government has decided to cancel until 2013 the annual assessment of administrative costs and in the meantime look for alternative, less burdensome ways of measuring administrative costs.

3.26.7. Conclusions

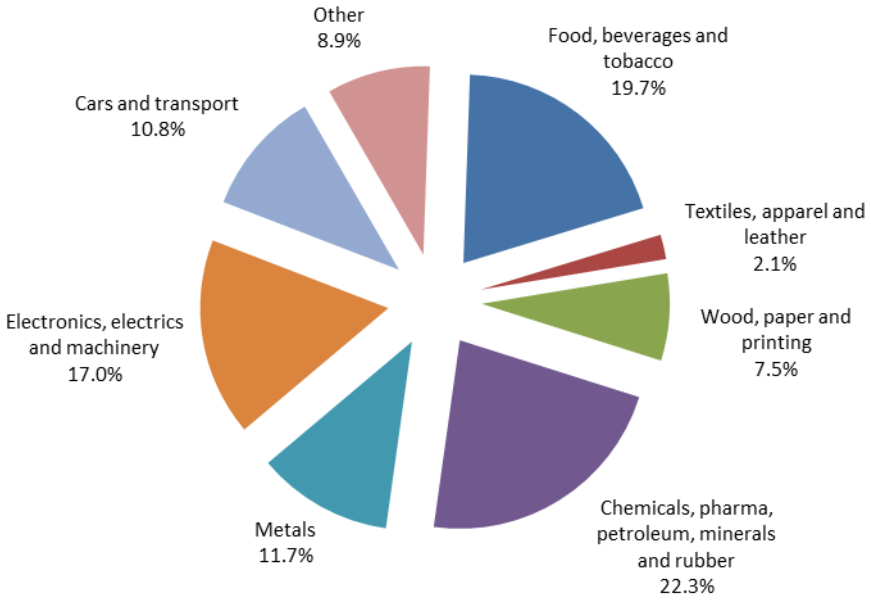
Sweden has consolidated its position as one of the most competitive economies in the world and remains an innovation leader in the EU. In the short term no particular threats to its competitive edge can be identified, but in the medium to long term it needs to consider how to address its skills needs, in particular in science, technology, engineering and mathematics (STEM) and how to avoid shortages while at the same time addressing gender imbalances among STEM graduates. Secondly, while corporate R&D investments (BERD) are still high by international standards, in recent years they have fallen as a result of the relocation of multinational corporations. Moreover, the poor take-up and commercialisation of research results remains a weakness of the Swedish R&D system. As recommended under the 2012 European Semester, the forthcoming research and innovation bill needs to address these shortcomings.

3.27. United Kingdom



Note: In the graph, data are presented in such a way that data bars pointing to the right (left) always indicate performance which is better (weaker) than the EU average.

Sectoral specialisation of manufacturing – United Kingdom (2009)



Note : No data available for sectors C11 (beverages) and C12 (tobacco products)
Source: Eurostat

3.27.1. Introduction

The manufacturing sector in the United Kingdom contributes 10.8 % of the value added, compared to the EU average of 15.5 % in 2011. The UK is specialised in high-technology manufacturing industries such as aerospace, pharmaceuticals and electronics.

The crisis has posed challenges to the growth and competitiveness of the UK economy, made more acute by the need for a simultaneous budget consolidation. However, the Government is implementing policies aiming at delivering long-term growth and increasing competitiveness.

The UK has one of the best-rated business environments in Europe, which contributes to its competitiveness. The UK service exports have continued to perform well, although a negative net export position in trade in goods continues, despite a significant fall in the pound in 2008. Currently UK firms do not export enough to the fastest-growing markets for goods. There is potential to address these challenges through policies focusing on innovation, access to finance, infrastructure, skills and planning reform that would address many of the competitiveness bottlenecks in the UK economy.

3.27.2. Innovative industrial policy

Based on the Innovation Union Scoreboard 2011, the UK is classified as the best of the innovation followers. It is ranked sixth, which places it well above the EU average performance. The indicators show that UK's strengths in the research and innovation system are in human resources, in its open, excellent and attractive research system; in finance and support; and in innovative SMEs collaborating with others. On the other hand, its position is weaker in R&D expenditure by businesses; patent and trademark applications; and the extent of innovations in SMEs.

Spending on public sector science and innovation has remained a top priority despite the Government's commitment to pursue fiscal consolidation. Consequently, public sector research expenditure has not been strongly affected by the expenditure cuts. Whilst defence R&D has fallen, the main science budget and R&D in the health services have been maintained. Moreover, private sector R&D has been maintained even in the face of slower economic growth. The Government has also increased R&D tax incentives for small firms.

The Government published its new Innovation and Research Strategy in December 2011. Key aspects of the strategy are the development of seven new technology and innovation centres – so-called

'Catapults'[27] – and a focus on developing pilot and demonstration projects. Catapult centres will be set up to create a network of world-leading technology and innovation centres and to act as a bridge between academia and businesses. Thus they should help to improve the commercialisation of the strong science base. Through the creation of these centres the Technology Strategy Board (TSB) aims at transforming the UK's capability for innovation in specific technology areas and to spur future economic growth. Several of these centres are in sectors that support the green economy, for example the High Value Manufacturing Catapult, opened in October 2011, and an Offshore Renewable Energy Catapult, due to open by summer 2012. The first Catapult centre focuses on High Value Manufacturing and it will attract investment from the TSB for GBP 140 million over a six years period.

The Small Business Research Initiative for pre-commercial public procurement is now in its third year and is considered to have been very successful. The programme is designed to bring innovative solutions to specific needs of the public sector by engaging SMEs in an open competition for funds to bring new ideas and undertake innovation projects.

Despite its good ranking, the UK has scope to improve its innovation performance. It should be acknowledged that the Government policies are targeting the identified deficiencies in business research and innovation, and in SMEs' ability to introduce new and innovative products to the markets.

3.27.3. Sustainable industry

Structural reforms that seek to make the economy greener are necessary to improve the sustainability of the UK economy, but they also provide important growth opportunities. The UK is well-placed to further benefit from this. Its energy intensity fell slightly between 2000 and 2010, and its energy consumption is relatively low when compared to many other Member States, which is reflected also in the slightly lower than average CO_2 emissions. This partly reflects the low share of manufacturing, and any increase in manufacturing and exports could put upward pressure on carbon emissions.

Although the UK scores well overall in the indicators related to sustainable industry, the relative performance of exports of environmental goods[28] could be examined as in 2011 their share of total exports was 0.63 % for the UK against an EU average of 0.71 %. In addition, investments in environmental protection are relatively low, though this may reflect the low share of manufacturing industry in GDP and hence be a consequence of the UK's industrial composition.

The UK Government is committed to moving the economy onto a greener footing. It has taken a range of actions to achieve this, underlining the growth opportunities available. In the publication 'Enabling the transition to a green economy'[29] the Government sets out its initiatives and emphasising the necessary dialogue with businesses to draw the benefits from the new opportunities that greening will open up.

The Green Investment Bank[30], which will have borrowing powers from 2015-16, is one of these initiatives. The overall operational remit of the Bank will be to focus on green infrastructure, including energy efficiency and subject to State Aid approval at least 80 % of the funds committed by the Bank over the next Spending Review period will be invested in the following priority sectors:

- Offshore wind power generation;
- Commercial and industrial waste processing and recycling;
- Energy from waste;
- Non-domestic energy efficiency including on-site renewables;
- Support for the Green Deal[31].

The Government emphasises that the transition to a green economy must involve the heavy industries. In order to do so, the Energy Intensive Industries package, worth GBP 250 million, will offer support to a wide range of energy intensive industries to help them to remain competitive in the UK and to reduce emissions where possible, while waiting for innovations that will significantly contribute to decarbonising the sectors.

Last year the Government published a white paper on Electricity Market Reform[32] outlining its intentions in energy policy, in particular proposing a set of policy measures to ensure an energy mix

[27] http://www.innovateuk.org/deliveringinnovation/catapults.ashx.

[28] According to the Eurostat definition, Eco-industries are: 'activities which produce goods and services to measure, prevent, limit, minimise or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco-systems'.

[29] http://www.businesslink.gov.uk/bdotg/action/detail?itemId=1096705244&type=ONEOFFPAGE.

[30] http://www.bis.gov.uk/greeninvestmentbank.

[31] The Green Deal is a government initiative that is designed to get business and home owners to employ more green measures in their buildings.

[32] http://www.decc.gov.uk/en/content/cms/legislation/white_papers/emr_wp_2011/emr_wp_2011.aspx .

that enables the UK to achieve its 15 % renewables target, at the same time attracting investment, and limiting its impact on consumers. A large part of the existing electricity generation capacity is nearing the end of its life, or needs upgrading over the next ten years. The challenge is to install adequate new generation capacity, to meet climate change obligations, and to avoid excessive rises in energy costs for industry and consumers.

3.27.4. Business environment

The UK is rated as the most attractive country in the EU to do business in, and the World Bank 'Doing Business' report ranks it high in almost all the areas of the business environment (including insolvency procedures, legal framework for finance, investor protection). However, a widely recognised weakness is access to finance as the crisis-stricken banks have restricted access to credit, especially for SMEs. Improving the availability of bank and non-bank financing to the private sector is therefore a priority, and it has been included in the country-specific recommendations of the European Semester 2012 for the UK[33]. At the same time, the UK's export position has remained persistently negative, reflecting the problems of external competitiveness to which the relatively low skills base, lack of investment, and problems in the planning system have contributed.

Further, a general improvement for the business environment could be also achieved enhancing the quality and the capacity of UK's network infrastructure[34], in particular in transport and energy. To this end the Government published a National Infrastructure Plan in November 2011, which establishes a new strategy for meeting the infrastructure needs of the UK economy and sets out a pipeline of over 500 public and private infrastructure projects worth in excess of GBP 250 billion.

The Government is aiming to boost private infrastructure investment, in part to offset a sharp fall in the public sector net investment caused by the fiscal consolidation efforts. The plan aims to develop appropriate financing mechanisms, improve investment confidence and to enable increased efficiencies from complementary investments. This included a Memorandum of Understanding with the National Association of Pension Funds to develop a pension investment platform and the establishment of an Insurers' Infrastructure Investment Forum. The Government is also targeting institutional investors, including Sovereign Wealth Funds and overseas pensions funds, to draw investment for major UK projects. The effectiveness of this approach in attracting private investment remains to be seen.

It is widely recognised that problems in the spatial planning system have been a barrier to investment. The long delays and suboptimal investment decisions raise both the costs for new construction and the prices of existing property. Simplifying and streamlining the planning system could make capital allocation more efficient and provide a boost for growth and competitiveness.

Access to finance

Access to finance is an area of major concern in the UK, especially with regard to SMEs. The difficult situation in the financial markets has contributed to a striking deterioration of SMEs' access to bank lending.

The Government has adopted a series of measures to tackle the problem. In November 2011 it introduced an initiative to provide up to GBP 21 billion for businesses that have no access to credit. In March 2012, it launched the National Loan Guarantee Scheme (NLGS) in order to provide cheaper bank financing to small and medium enterprises.

Furthermore, the Government is looking at restructuring the banking sector based on the recommendations of the Independent Commission on Banking (ICB). In particular, the proposals include a structural separation between retail banking and wholesale/investment banking.

In June 2012, the Bank of England and the Government announced a 'funding for lending' scheme that would provide funding to banks for an extended period of several years, at rates below current market rates and linked to the performance of banks in sustaining or expanding their lending to the UK non-financial sector during the period of heightened uncertainty.

On the equity investment side, the Government is building on the UK's pre-eminent position in the European venture capital markets by using public funds for venture capital investments, and through the Enterprise Capital Funds for capital requirements under GBP 2 million. The private sector Business Growth Fund makes investments between GBP 2 million and GBP 10 million.

Regulatory and support environment

The Government has sought to improve the regulatory environment, in particular by giving

[33] http://ec.europa.eu/europe2020/pdf/nd/csr2012_uk_en.pdf .

[34] As also included in the country-specific recommendations of the 2012 European Semester for the UK.

derogations for micro-enterprises and introducing the 'one in, one out' principle whereby the introduction of new regulatory burdens on business means the removal of regulations currently on the statute books which have equivalent costs to business. The Government has also launched the 'Red Tape Challenge' website, which aims to tackle the current stock of regulation by inviting the public, business and the voluntary and community sector to comment on which regulations should stay, be improved, or be scrapped altogether. Around 1 500 regulations have been examined through the Red Tape Challenge, over half of which will be scrapped or improved.

For micro-enterprises, the most important outcome could be that Government departments pay appropriate attention to the needs of micro-enterprises when designing legislation. Moreover, the 'one in, one out' policy was seen as being useful in getting ministries to seriously examine the burden of existing legislation whenever they were considering new measures.

Further, the new 'Growth Accelerator' programme (BCG), aims to support the most promising high-growth SMEs and boost their growth. It is designed to increase the number of businesses that achieve genuine high growth; the Government aims to invest around GBP 200 million in the programme to achieve these objectives. The programme is to be coordinated nationally but be delivered at a local level, aiming to provide high-quality coaching and support for up to 10 000 SMEs a year. The coaching is aimed, in particular, for senior management teams to help them to develop and implement their strategies. Overall, this should help SMEs with high growth potential to overcome the challenges of growth in areas like sales, finance or exploiting innovation.

3.27.5. Services sector

The UK level of market regulation in professional services is not an obstacle to entry[35]. It should be noted that the UK practice is to regulate professional titles rather than access to the professions themselves.

A Services Policy Unit has been established in the Business, Innovation and Skills Department (BIS) to work with professional and business services in order to guide government actions over the next decade. The interim report 'Professional and Business Services: a 2020 Vision for Growth' was published in March 2012, and highlights the impact and opportunities created by the changes in the global markets, climate change and sustainability, and improvements in information and communication technologies. A broad-based programme to improve the business environment for business services was set out.

[35] Product Market Regulation Database, OECD (2011), using data from 2008.

3.27.6. Public administration

The UK public administration scores well above the EU average according to the World Bank's 'Government Effectiveness Indicator'. The perceived quality of the public services including the quality of the civil service and of policy implementation is also well above the EU average.

The indicator on the use of regulatory impact assessments is high above the average. In addition, all the eight main business-related services included in the index are available online. Thus, the public administration can be classified as a 'modern' public administration.

Corruption and fraud are not perceived to be major problems and individual experiences of bureaucratic corruption related to the use of public services are limited to 2 % of cases, compared to an average of 10 % across the EU.

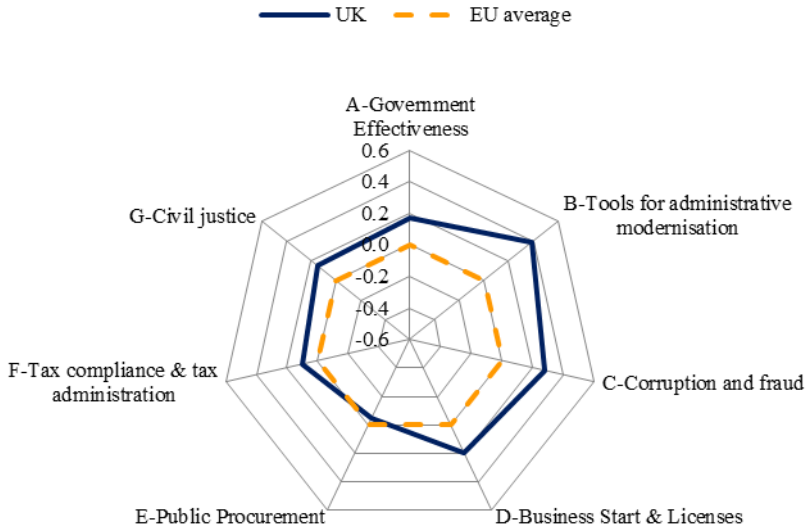
To start a business and obtain licenses is also easier, slightly faster and far less expensive in the UK than in the Member States on average. The average cost of starting a business is a bit more than 5 % of per capita income in the Member States on average; in the UK it is only 0.7 %.

The composite public procurement index is slightly below average, signalling some scope for improvement. The sub-indices show that especially the firms' cost to take part in government procurements are higher than average.

The time required to prepare tax returns is substantially lower than the EU average. It amounts to only 110 hours per year for the model companies, as compared to the EU average of 208 hours per year. Further, the Government seeks to make taxes even simpler and easier to pay. The remit of the Office of Tax Simplification (OTS), set up in July 2010, is to address specifically these issues, particularly from the viewpoint of smaller firms. They have published a report called 'The Small Business Tax Review', providing advice on how to simplify the tax system.

The score measuring the efficiency of the civil justice system is also above the EU average. However, although the time to enforce contracts is far shorter than the EU average (399 days vs. 556 days), the typical costs are higher requiring 24.8 % of the claim value, compared to the average of 20.6 %. Insolvency procedures are substantially faster than the EU average and the perceived independence of the judiciary is very high.

Overall profile of public administration



Source: WIFO

The Government's efforts to consolidate its budget have led to actions to reduce expenditure in the public administration and at the same to time streamline management. Public sector employment numbers have been reduced and the Regional Development Agencies have been abolished, which led to the closing of regional 'Business Link', a valuable source of information for small businesses. The replacement, the national 'Business Link' website has been launched towards the end of 2011, providing on-line support, guidance and advice for businesses; it also allows companies to register a legal status online for just GBP 18.

3.27.7. Conclusions

Overall, the UK has an excellent business environment that is strengthened by the quality of its public administration. However, the crisis that hit the UK banking sector hard has created a major challenge in access to finance, in particular for SMEs. To improve the situation, the Government has adopted a series of policy initiatives seeking to get the banks to lend again, but only time and the start of the upturn will tell how successful these efforts have been in facilitating the financing of SMEs.

The productivity is lower compared to main competitors, which is reflected in the persistently negative net export position. This reflects underlying weaknesses in skills, investment and the planning system. UK businesses could also benefit from improvement in energy and infrastructure networks. However, given the difficult macroeconomic context and the commitment to fiscal consolidation, a further decrease in public sector investment in infrastructure is expected for 2014-2015. The cumulative effects of low investment in the quality and capacity of the infrastructure have the potential to increasingly hamper the ability of businesses to rely on it in their operations and planning. To enable private infrastructure investment, as foreseen by the National Infrastructure Plan is therefore essential.