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Reindustrialising Europe

Member States' Competitiveness Report 2014

3.5 Germany

Cormony				
	Position compared to the weakest (=0) and the best (=1) Member State			
		(etther 2007 or the latest available) 0 * For full explanation, see the methodological annex 1		
our ictivity	Labour productivity per hour worked (EU-27=100; 2013)	□ latest available -5 years		
Lat	Labour productivity per person employed in manufacturing (1000 PPS; 2013)	= intest available		
	Total exports as a % of GDP (2013)			
Exports	Knowledge-intensive exports (% of total exports; 2012)			
	Exports of environmental goods as % of all exports of goods (2013)			
=	Innovation Union Scoreboard (2013)			
lovatio	R&D performed by businesses (% of GDP; 2012)			
In	Non-financial high-growth enterprises as % of all enterprises (2012)	N.A. (2007)		
Indust	ry Manufacturing GVA as % of total GVA (2013)			
ss to nce	SME Access to Finance Index (SMAF; 2012)			
Acce fina	Year-on-year growth of loans to non-financial corporations (%; Q1 2014)			
ills	Investment in equipment as % of GDP (2011-13)			
and sk	Employment in knowledge-intensive activities (manufacturing and services) as % of total employment (2012)			
stment	% of employees in manufacturing with high educational attainment (2013)			
Inve	Tertiary graduates in mathematics, science and technology per 1000 of population aged 20-29 (2012)			
M s	Energy intensity in industry and the energy sector (kg oil eq. / euro GVA; reference year 2005; 2012)			
ergy, ra aterial	CO2 intensity in industry and the energy sector (kg CO2 / euro GVA; reference year 2005; 2012)			
Ene	Electricity prices for medium-sized enterprises excluding VAT (euro per kWh; 2nd half of 2013)			
s p	OECD indicators of product market regulation / services (2013)			
market ture an ces	Trade integration in the single market (2013)			
cess to rastruc servi	Satisfaction with quality of infrastructure (rail, road, port and airport) (1=underdeveloped / 7=extensive and efficient by int'l standards; 2012-13)			
Acc infi	% of broadband lines with speed \geq 30 Mbps (2014)			
ation	Time required to start a business (days; 2013)			
ninistra usiness	Number of hours needed to comply with tax return rules across the EU (2013)			
olic adr and b enviro	Legal and regulatory framework (0= neg. / 10=pos.; 2014)			
Put	Business environment score (1= best and 0 = worst; 2012-13)			
Note:	Early data for "% of broadband lines with speed \geq 30 Mbps" refer to 2011	· · · · · · · · · · · · · · · · · · ·		
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3.5.1 Introduction and performance

According to the Industrial Performance Scoreboard, Germany is among the Member States with high and improving competitiveness. Manufacturing plays a key role in the German economy and is an important driver of value added and employment. It contributes 22 % to the total value added, significantly above the EU average of 15 %. Contrary to the situation in most other Member States, employment in manufacturing has further increased since 2007. Germany is particularly specialised in technology-driven and capital-intensive industries. Cost competitiveness has improved over the last decade. After a long period of wage moderation, real wages have grown more rapidly than in the euro area since 2010. Germany has the fifth highest labour costs in manufacturing among the EU Member States, but labour productivity per hour worked is about 27 percentage points above the EU average and about 13 percentage points above the euro-area average. (²¹⁶) The World Economic Forum's Global Competitiveness Report ranks the country in fourth place. Overall, industry is very competitive, but it faces major challenges in securing its competitive position in the future, particularly in view of the projected demographic trends.

3.5.2 Access to finance and investment

Access to finance

While German businesses traditionally relied mainly on bank financing, over the last two decades firms strengthened their balance sheets and reduced their dependence on external financing. (²¹⁷) At the moment, firms (including SMEs) benefit from favourable or satisfactory financing conditions. However, the risk capital market is still relatively under-developed. Risk capital and mezzanine capital are scarce for young technology companies and startups, hindering their growth. Publicly funded programmes offer new firms a range of financing options to start and develop their business. The main programmes include the 'High-Tech Gründerfonds', the 'ERP Startfonds' and the various programmes under the 'EXIST' initiative. In 2013, the new programme 'Investitions-zuschuss Wagniskapital' began providing private investors - particularly business angels - with financial incentives worth up to 20 % of their investment in young and innovative companies. The government intends to review the regulatory framework for venture capital, which could contribute to further stimulating private investment and entrepreneurship.

^{(&}lt;sup>216</sup>) Eurostat data for 2013

^{(&}lt;sup>217</sup>) <u>See also the In-Depth Review of Macroeconomic</u> <u>imbalances for Germany 2014</u>.

Investment

According to the European Commission Spring Economic Forecast, the investment outlook remains favourable, due to increasing domestic capital goods orders and a continued rise in firms' investment plans. The forecast for gross fixed capital formation for this year is +4.5 % (after two years of decline), thereof +4.2 % investments in equipment. According to the UNCTAD Wold Investment Report 2014, Germany saw a substantial recovery in their foreign direct investment inflows in 2013. Of all foreign direct investment, 57 % is from other EU countries and 9 % from other European non-EU countries. North America accounts for about 23 % and Asia 6 %. Investment from outside the EU, especially from Asian countries, continues to grow. The Germany Trade and Investment Agency (²¹⁸) provides international investors with a wide range of information and support services.

3.5.3 Innovation and skills

Innovation

The Innovation Union Scoreboard 2014 confirmed Germany's position among the 'innovation leaders' of the EU, together with Denmark, Finland and Sweden. While Germany is close to achieving its R&D expenditure target of 3 % of gross domestic product by 2020, other countries such as Finland, Sweden and South Korea are investing even more. Moreover, there are significant disparities in innovation performance and expenditure at regional level, especially regarding private investment in R&D. An expert commission recommended increasing the R&D expenditure target to 3.5 %. (²¹⁹)

The High-Tech Strategy 2020 (220) sets out the main goals of German research and innovation policy. It concentrates public R&D resources for scientific and technological research in areas that face particular global challenges, such as energy and climate protection, health and nutrition, mobility, security and communication. It also supports the development of key enabling technologies, which act as drivers of innovation and provide the basis for new products,

processes and services. The strategy is currently being reviewed and may be further extended.

One major focus of Germany's innovation strategy and digital agenda is 'Industry 4.0', linking production and products with modern information and communications technology. To speed up this process, the programme 'Autonomics for Industry 4.0' was launched. The government is also supporting collaborative projects between industry and science.

The Central Innovation Programme for SMEs (²²¹) has helped SMEs enhance their efforts to develop new products, processes and services through research and innovation. The programme is open to all branches and technological sectors. It provides funding not only for individual projects, but also for cooperation projects and networks. The planned annual budget is EUR 500 million, which is estimated to be enough to finance about 5 000 new applications.

Skills

Skill shortages are emerging in various sectors and regions; these may increasingly be an obstacle to future growth and innovation performance, in particular for SMEs. The strategy on skilled labour recognises that domestic labour potential will not be sufficient and that economic progress will also depend on attracting skilled workers from abroad. The government is investing in education at all levels to mobilise the full skills potential. This includes promoting studies in science, technology, engineering and mathematics as well as encouraging female participation. (²²²) Overall, there have been positive developments, for instance as regards initiatives to attract skilled workers from abroad or spending on education and childcare, but further progress is still needed, as highlighted also in the country-specific recommendations. (²²³) Implementation of the strategy is monitored in a yearly progress report. (²²⁴)

A competence centre helps SMEs to better attract and retain skilled employees. (²²⁵) Other recent measures include an information campaign (226) and a web

 $^(^{218})$ Germany Trade and Invest.

⁽²¹⁹⁾ Expertenkommission Forschung und Innovation (EFI). See also the Commission assessment of the 2014 national reform programme and stability programme for Germany. (220)

High-Tech Strategy 2020 for Germany.

 $^(^{221})$ 'Zentrales Innovationsprogramm Mittelstand'.

⁽²²²⁾ 'Aufstieg durch Bildung - Die Qualifizierungsinitiative in Deutschland, 2013' and 'Hochschulpakt 2020'.

 $[\]binom{223}{}$ See also the Commission assessment of the 2014 national reform programme and stability programme for Germany.

 $^(^{224})$ 'Fortschrittsbericht 2013 zum Fachkräftekonzept der Bundesregierung'.

 $^(^{225})$ 'Kompetenzzentrum Fachkräftesicherung, Unterstützung für kleine und mittlere Unternehmen'.

 $^(^{226})$ 'Fachkräfteoffensive'

portal $(^{227})$ providing information on job opportunities and the conditions for taking up employment in Germany. Several cities have set up dedicated 'Welcome Centres'. In general, the nationwide standard system for assessing qualifications obtained in foreign countries (²²⁸) and the revised employment regulations make it easier for medium-skilled people to work in Germany, supplementing the 'blue card' for highly-qualified workers introduced in 2012.

Other initiatives aim to further improve the education and vocational training systems. The University Pact increases the available capacity, the 'Qualitätspakt Lehre' improves teaching and the 'Ausbildungspakt' has been extended to 2014 to ensure 60 000 new training places per year. The government has increased its expenditure on education in recent years and plans continued contributions to the financing of childcare facilities, schools, higher education and research. The target for public and private expenditure on education and research was increased to 10 % by 2015. Nevertheless, further efforts appear necessary to meet this target and to catch up with the most innovative economies.

3.5.4 Energy, raw materials and sustainability

Energy use and prices

Transforming the energy system offers new growth opportunities for German industry, but also involves considerable challenges: potentially high economic costs and a need not only for additional internal and cross-border infrastructure but also for better coordination with neighbouring countries. If the energy strategy is to succeed, overall economic costs need to be minimised, partly by increasing the costeffectiveness of renewable energy, stimulating competition, further enhancing energy efficiency and improving coordination of Germany's energy policy with those of neighbouring countries. (229) The required infrastructure must be provided on time to meet the strategy's objectives. In 2014, the government launched a reform of the Renewable Energy Act to slow down overall cost increases,

distribute the costs more evenly across consumers, control the expansion of renewables and promote market integration. It also revised the criteria for granting exemptions to energy-intensive industries.

Resource efficiency

Overall, industry's environmental performance is good, but further improvements should still be possible. Green technologies, products and services play an increasingly important role. Germany has one of the highest shares of environmental exports within the EU. According to a Eurobarometer survey, about 34 % of companies offer green products or services, compared to 26 % in the EU as a whole. In 2012, a resource efficiency programme (²³⁰) was adopted, aimed at further improving the environmental performance of industry, largely based on incentives and voluntary solutions. With many industry sectors dependant on high-quality raw materials, further price increases could weigh on Germany's future competitiveness.

Other sustainability issues

The scale of the public procurement system provides considerable potential to support the deployment of environmentally friendly products. Public procurement is increasingly taking innovation and sustainability aspects into account. (²³¹) For example, the current rules require high standards of energy efficiency performance. A competence centre helps federal, regional and local administrations to incorporate sustainability considerations into their processes. (²³²) procurement In addition, а competence centre for innovative public procurement was set up in 2013 to share experience and best practice. $(^{233})$

3.5.5 Access to markets, infrastructure and services

Internationalisation

Overall, Germany accounts for 23.5 % of EU exports. In 2013, motor vehicles and vehicle parts were the main export products (accounting for 17.4 % of German exports), followed by machinery (14.9%)

http://www.make-it-in-germany.com.

²²⁸ 'Perspektive 2025: Fachkräfte für Deutschland'.

See also the Commission assessment of the 2014 national reform programme and stability programme for Germany.

^{&#}x27;Deutsches Ressourceneffizienzprogramm (ProgRess)'.

⁽²³¹⁾ 'Allianz für nachhaltige Beschaffung'. (232)

http://www.nachhaltige-beschaffung.info

 $^(^{233})$ http://www.koinno-bmwi.de



and chemical products (9.6%). About 69% of exports went to European countries, including 57 % to other EU Member States. The second largest sales market was Asia (about 16%), followed by the Americas (about 12%) ('Statistisches Bundesamt'). Compared with the EU average, German SMEs tend to be more active internationally and their relatively strong presence in emerging markets indicates further growth potential. The government supports the internationalisation of businesses, especially SMEs, through a wide range of measures, including by providing information about key export markets and customs procedures, but also through trade fairs and export credit guarantees. Of particular importance is the support provided by chambers of commerce and other craft and business associations, both in Germany and abroad. The iXPOS internet portal (²³⁴) serves enterprises as a one-stop shop for information on how to expand their business abroad. In recent years, the initiative 'new target markets' has focused on increasing the presence of German businesses also in new emerging markets beyond the 'BRIC' countries (Brazil, Russia, India, China).

Business services and network industries

There is scope for further increasing competition in the services sector. $(^{235})$ While competition has increased markedly in telecommunications, it seems to be making less headway in other sectors, such as postal, railway or professional services. Market transparency agencies have been set up to better monitor competition and pricing in the fuel, gas and electricity sector. $(^{236})$

Infrastructure

Public sector investment has been falling for a long time in Germany. The low investment rate mainly reflects the gradual scaling back of public infrastructure investment, which has occurred almost entirely at municipal level. The federal government plans to invest more in infrastructure. An additional EUR 5 billion has been allocated for urgently needed investment in public transport infrastructure over the next four years. Over the next decade, further investment in maintenance and the removal of major

^{(&}lt;sup>234</sup>) <u>http://www.ixpos.de</u>.

^{(&}lt;sup>235</sup>) <u>See also the Commission assessment of the 2014 national</u> reform programme and stability programme for Germany.

^{(&}lt;sup>236</sup>) <u>www.bundeskartellamt.de</u>.

bottlenecks will be needed. (²³⁷) Moreover, while Germany is one of the leading countries in the EU for 4G mobile network availability, its share of fixed very fast broadband lines lags behind, particularly in rural areas.

3.5.6 Public administration and business environment

Public administration

Overall, Germany has an efficient and transparent public administration (²³⁸) and the perceived quality of public services is ranked above the EU average. Nevertheless, there is still scope for improvement in certain areas. The availability of online public services remains below the EU average. The government is currently drafting a new programme, "Digital Administration 2020". While the time required and the cost of starting a business and obtaining the necessary licences are broadly in line with the EU average, there may still be room for further simplification. Moreover, the 'single points of contact' differ across Länder in terms of functionality and information provided, as well as the possibility to complete procedures online. In general, public authorities pay their bills to businesses relatively promptly. Public procurement processes seem to be relatively efficient and transparent, though they often remain complex and the total value of the contracts published under EU procurement legislation is one of the lowest in the EU. $(^{239})$

Business environment

According to the World Bank's Doing Business 2014 report, Germany has a favourable business environment that encourages competitiveness, although there may still be scope for further improvement in some areas. It ranks 21st out of 189 for doing business. Federal and regional programmes are in place to support the development of SMEs with a broad range of services. However, low shortages unemployment, emerging skill and demographic trends mean number the of entrepreneurs is expected to decline further, which could hamper Germany's future growth and

innovation performance. Moreover, women still represent only one third of entrepreneurs, indicating further untapped potential.

Germany assesses the administrative burden of all newly proposed federal regulations and publishes an annual implementation report on its better regulation initiative. (240) An expert committee scrutinises new legislative proposals and publishes an index of estimated overall changes in compliance costs. (²⁴¹) Despite these efforts, estimated compliance costs increased in 2013. Not all the measures agreed in December 2011 have been implemented. Setting a target for new simplification measures could boost this process. Recently, there has been some progress in setting standards for e-government and electronic invoicing. In June 2014, the government adopted a new work programme for better regulation to further reduce the bureaucratic burden for enterprises and the public. A new type of survey will measure public and business perceptions of the administrative burden in selected policy fields.

Overall, the tax system is relatively complex. While Germany still scores slightly better than the EU average in terms of the tax compliance burden, SMEs in particular would benefit from a simpler tax system and reforms of tax administration. Despite its complexity, the administrative costs imposed by the tax system are lower than the EU average.

3.5.7 Conclusions

Overall, Germany ranks among the top performers in many of the competitiveness indicators in the Industrial Performance Scoreboard and the manufacturing sector remains a key driver of value added and employment. Firms benefit greatly from a favourable and stable business environment, a strong competitive position, and the global reach of Germany's external trade.

Despite the currently favourable conditions, industry faces serious challenges in securing its competitiveness in the medium and long term. In particular, demographic developments may act as a brake on growth and innovation in the future. Adapting the education and training system to

^{(&}lt;sup>237</sup>) <u>See also the Commission assessment of the 2014 national</u> reform programme and stability programme for Germany.

^{(&}lt;sup>238</sup>) Excellence in <u>public administration for competitiveness in</u> <u>EU Member States.</u>

^{(&}lt;sup>239</sup>) <u>See also the Commission assessment of the 2014 national</u> reform programme and stability programme for Germany.

²⁴⁰) <u>'Jahresbericht der Bundesregierung 2013'</u>.

⁽²⁴¹) <u>http://www.normenkontrollrat.bund.de</u>.

changing requirements, and raising labour supply, will be crucial to avoiding skills shortages, particularly in high-tech industries. In order to remain at the technological frontier and to secure its competitive position in the future, continued investments in education, R&D and innovation are essential.

In general, firms benefit from favourable or satisfactory lending conditions, but risk capital remains scarce for young technology companies and start-ups, hindering their growth. Moreover, the new energy strategy is creating growth opportunities for many sectors, but also presents considerable challenges in terms of potentially high energy costs and timely deployment of the required infrastructure. While the regulatory environment is generally good, there is still room for improvement and SMEs in particular would benefit from further simplification and reduction of administrative burden.

3.6 Estonia

	Este		
	Estor	118	Position compared to the weakest (=0) and the best (=1) Member State
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Acce fina	Year-on-year growth of loans to non-financial corporations (%; Q1 2014)	N.	A. (2009)
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estmen	% of employees in manufacturing with high educational attainment (2013)		
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Pu	Business environment score (1= best and 0 = worst; 2012-13)		
Note	Early data for "% of broadband lines with speed \geq 30 Mbps" refer to 201	1.	



3.6.1 Introduction and performance

Estonia has a highly developed e-government and an SME-friendly business environment. Given that it has made progress in promoting entrepreneurship and providing support to fast-growing innovative firms, it has the potential to become a 'start-up hub'. Estonia is one of the countries that are catching up fast, yet it still has relatively lower income levels and a specialisation in labour-intensive predominant industries. Shares of capital-intensive products and research-intensive exports are expanding, while the share of labour-intensive exports is in decline. Using 'smart specialization', Estonia has identified the growth areas that could boost its competitiveness at global level.

Manufacturing continues to play a prominent role in the economy and high value-added sectors are increasing their share of total manufacturing output. Manufacturing production has regained all the ground lost during the crisis, exceeding its previous cyclical peak by 2.6 % in April 2011. Estonia has a small and open economy - exports (90 % of GDP) account for around 0.3 % of EU exports of goods and services. 18 % of total exports are to Sweden, 15 % to Finland, 12% to Russia and 11% to Latvia. Estonia specialises in capital-intensive and technology-driven industrial sectors such as electronics and machinery (14.56 %) and wood products (20.96 %). The highest productivity in Estonia is in the ICT sector - 2.5 times higher than other sectors. Knowledge-intensive exports as a percentage of GDP increased from

24.4 % in 2007 to 34.41 % in 2012, and the share of high-tech exports of total exports almost doubled from 7.8 % in 2007 to 14.1 % in 2012. The domestic value-added content of exports is higher in Estonia than in similar-sized economies in the EU, but below the EU average.

3.6.2 Access to finance and investment

Estonia has improved SMEs' access to finance, and has made the first steps towards moving from a financing model based on grants to one relying on financial instruments. Banks are willing to provide loans, except in cases where projects are considered too risky. Access to public financial support is readily available, including to the loan financing, guarantees and credit lines provided by KredEx, and EU funds can be used for credit enhancement. The Baltic Innovation Fund, a Baltic initiative based on fund-tofund investments, is encouraging cross-border investment, which is much needed given Estonia's geographical limitation. It already has three active funds that, with their multiplier effect, are ensuring better coverage of private equity and riskier projects, including start-ups, for which access to finance is more difficult. Moreover, the activities of the Finance Estonia Cluster and the Estonian Private Equity and Venture Capital Association contribute to the development of capital markets in Estonia. While these measures are expected to be effective, their results in terms of companies' investments will only become evident in the medium to long term.

3.6.3 Innovation and skills

Estonia has identified the knowledge-intensive sectors that could push the country up the value chain and has taken steps to become competitive at global level (according to the smart specialisation strategy). These sectors include: information and communications technology (via its use in industry); cyber security and software development; health technologies and services (including biotechnology and e-health and enhancement of materials); knowledge-based construction; the food industry; and the chemical industry (more efficient use of oil shale). However, effective implementation of both the RDI Strategy Knowledge-based Estonia 2014-2020 and the Estonian Entrepreneurship Growth Strategy is critical for boosting these sectors and thus triggering economic growth. The implementation plan for the Entrepreneurship Growth Strategy was adopted in March 2014, but cooperation between ministries has not been smooth and business stakeholders have not been systematically invited to take part in these deliberations.

In spite of some progress in recent years, Estonia is still below the EU average in innovation performance. The number of companies engaged in development and innovation activities is still relatively low: according to the Innovation Union Scoreboard 2014, Estonia is well below the EU average in terms of SMEs with marketing and/or organisational innovations, SMEs innovating inhouse and non-R&D innovation expenditures. Cooperation between business and academia is improving, but at a slow rate. Fragmented R&D measures, including the SPINNO programme, have been less effective in encouraging companies to use the research facilities of universities; some companies have cited the associated administrative burden as the main deterrent. The IP protection legal framework and the university financing system do not encourage enough universities to create spin-offs and increase the number of contracts with companies. The innovation vouchers programme is one successful measure that has increased the number of contracts between research providers and companies; but these contracts are small and represent only the first step towards fully-fledged R&D activities.

In spite of some progress, Estonia still faces significant challenges in terms of skills in the following areas: the supply of STEM graduates, retraining people in low-productive sectors, and

enhancing the supply of skills in some emerging sectors. According to business stakeholders, (²⁴²) in the ICT sector, the number of jobs is predicted to reach 34 000, which is double the number of current positions in the sector. Among the most recent measures, a coordinated system (OSKA) has been created for improving the quality and supply of the labour force, as well as collecting and forecasting data on companies' skills needs. This measure is ambitious but its effectiveness remains to be seen. An apprenticeship scheme has been offering 5000 placements per year, and the annual number of apprentices will be tripled by 2020. However, companies' interest in taking on apprentices is still low. The new financing model of universities provides financial incentives for attracting more students into the STEM areas of study, a measure that seems appropriate and which could prove effective. Similarly, the scholarships planned at tertiary level for the fields of study supporting the smart specialization growth areas could produce good results. Some progress has been made in the ICT sector with the first graduates of the IT Academy joining the labour market. The IT Academy involves the participation of the government, the Tallinn University of Technology and the University of Tartu, as well as some private foundations. It is active in providing additional funding to selected curricula, as well as scholarships, including compensations for some forms of tuition.

Estonia has continued to make progress in promoting entrepreneurship. Entrepreneurship education is available in all education levels and is popular, and science and IT popularisation is done in connection with entrepreneurship. Some private initiatives such as Garage 48 and Startupwiseguys have been running successful accelerator programs and the University of Tartu has opened a Centre for Entrepreneurship and Innovation that aims to support entrepreneurship education in all schools. If these measures continue to be systematically introduced and well supported, they have the potential of increasing the number of successful entrepreneurs and turning Estonia into a 'start-up hub'.

^{(&}lt;sup>242</sup>) Commission mission to Estonia, February 2014.

3.6.4 Energy, raw materials and sustainability

Energy and resource intensity in Estonia remains among the highest in the EU. This is particularly true in the transport sector, where the share of renewable energy in transport is still far below the 2020 target of 10 %. The average age of the car fleet in Estonia is almost double the EU average, new passenger cars are among the most energy-intensive in the EU, and fuel excise duties are below the EU average. Various alternatives have been considered for containing the increase in non-ETS greenhouse gas emissions. The government is currently considering the issue of VAT deductibility for corporate passenger cars is. The EU funds for 2014-2020 remain critical for improving the energy efficiency of residential and industrial buildings, but alternative funding should be considered. Despite a credible waste management policy aimed at avoiding landfilling, including through increasing the landfill tax, considerable measures are still needed in this area.

Estonia still has insufficient cross-border connections with the rest of the EU, which limits the diversity of supply and thus puts pressure on energy prices. Despite of the integration of the Estonian electricity market with Finland and the other Nordic countries via Estlink2, which became operational in early 2014, the interconnector with the Baltic countries is regularly congested. In terms of natural gas, progress has been made towards diversifying supply and thus ending Estonia's isolation from the EU market, by signing the Memoranda of Understanding for both a liquefied gas terminal and the Baltic Connector – a supply pipeline linking Finland and Estonia.

3.6.5 Access to markets, infrastructure and services

Estonia has made progress in terms of improving the effectiveness of its transport infrastructure, but public transport networks and intermodal connections, including logistics, need to be further developed. The interconnection of coach transport and passenger rail, in particular in rural areas, remains underdeveloped and thus problematic. To address this problem, Estonia intends to create Regional Transport Centres for coach transport that will improve the interconnection of rural areas. EU structural funding

for 2014-2020 remains critical in this respect, and alternative funding should be considered.

There has been a recent rise in the usage of urban public transport, and new passenger trains (both electric and diesel) have led to an increase in passenger train usage. In terms of a modal shift from road to electrified rail in freight and passenger transport, Rail Baltic is a crucial project under the TEN-T policy that will connect the Baltic States to the trans-European rail network. The three Baltic States are in the process of setting up a joint venture, which will enable a common application for the Connected Europe Facility.

location. international Given Estonia's most passenger transport to and from the rest of Europe depends on air connectivity, hence the importance of improving the safety and mitigating the environmental impacts of Tallinn airport. Estonia is planning to extend the runway at Tallinn airport. This will enable the integration of CAT II navigation systems, thus allowing heavier aircrafts (cargo planes or airplanes with more than 250 passengers) to land in Tallinn in poor weather conditions.

3.6.6 Public administration and business environment

The business environment and in particular egovernment are well developed in Estonia, and progress has been made in providing support to fastgrowing innovative firms. E-services have helped citizens and companies save time and have made dealing with the government more accessible: the most time saved is in establishing a company, and submitting VAT or income and social tax returns to the Tax and Customs Board. E-services are ICT solutions that could easily be exported to other countries. The most notable e-services are i-voting, the ID card functionality and the X-road.

The most appropriate and effective measures offered by Enterprise Estonia to support entrepreneurship include measures supporting internationalization and offering entrepreneurs export advice, cooperation opportunities and training for entrepreneurs, as well as start-up support (from the conceptualization of ideas to finding appropriate financing on capital markets). In terms of sectors supported, the best results were achieved by computer, electronics and optical instruments producers, as well as



accommodation. furniture manufacturing and services; companies in these sectors have significantly increased their export revenues. Some existing clusters have had less success in encouraging cooperation between companies for marketing and export purposes. The Enterprise Development Programme is an initiative that seems ambitious and has the potential of being highly effective: it is designed to provide tailor-made support, based on diagnosed needs, thus homing in on the right development projects that can make companies grow fast. In terms of support for fast-growing innovative firms, the Estonian Entrepreneurship Growth Strategy 2014-2020 focuses, among others, on key clients (companies with high return on export sales or above average value added) and growth clients (with an export intensity of at least 25 % in the second year of operation), totalling approximately 3 700 companies. In spite of this support, the number of SMEs accessing e-commerce and foreign markets is not rising fast enough, possibly due to awareness-raising campaigns that put too much emphasis on risk.

In general, public administration is functioning well in Estonia. However, due to limited fiscal capacity, local public administrations are not always in a position to provide quality services to companies and citizens. This poses the risk of creating a two-speed Estonia, where the centre progresses by specializing in highly competitive sectors, but the peripheral areas lag behind in economic development. Mergers and cooperation between municipalities remain voluntary and incentives to provide common services are weak or non-existent. In terms of supporting enterprises, the county development centres, partly financed by Enterprise Estonia, have small teams of counsellors that offer advice on the possibilities for financing and training. Even though these advisory services include access to start-up grants, some county development centres lack ambition and sometimes fail to address the real needs of enterprises in rural areas. In order to motivate the development centres, Enterprise Estonia is planning to use the results of the biannual evaluations to influence the financing decisions for these centers. Among the positive examples, six industrial parks are being established in the Ida-Viru county, with accompanying investment agreements and loan guarantees. Moreover, a regional plan for Southern Estonia, involving the creation of jobs and enterprise support, is currently being drafted. In general, companies outside the capital consider the support offered by the government as rather inflexible and argue that one of the main hurdles for doing business in rural areas is a lack of infrastructure, especially transport. Measures providing incentives for local governments to attract enterprises to these

regions could further boost economic development and contribute to a more balanced regional development in Estonia.

3.6.7 Conclusions

Estonia has made some progress in identifying the knowledge-intensive sectors that could push the country up on the value chain and has taken steps to become competitive at global level. The current mix of measures represents the first step towards promoting a resource-efficient economy. Estonia should continue its efforts to improve its innovation performance, in particular cooperation between business and academia, and thus increase the number of companies engaged in development and innovation activities. In order to systematically address its challenges in terms of skills, Estonia should increase the supply of STEM graduates, re-train the work force in low-productive sectors, and enhance the supply of skills in emerging sectors such as ICT. Lastly, the capacity of the Estonian local governments should be improved in order to enable them to provide quality public services to companies and citizens.

3.7 Ireland

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	Irela	nd		
		Position compared to the weakest (=0) and the best (=1) Member State (either 2007 or the latest available)		
r vity	Labour productivity per hour worked (ELL-27=100, 2013)	0 * For full explanation, see the methodological annex 1		
Labou roductiv	Labour productivity per person employed in manufacturing (1000 PPS: 2013)	EU latest available		
đ	Total Exports as a % of GDP (2012)			
orts	Knowledge-intensive exports (% of total exports: 2012)			
ExI	Exports of environmental goods as % of all exports of goods (2013)	- !		
	Innovation Union Scoreboard (2013)			
vation	R&D performed by businesses (% of GDP; 2012)	;		
Inne	Non-financial high-growth enterprises as % of all enterprises (2012)	N.A.; N.A. (2007)		
Industi	y Manufacturing GVA as % of total GVA (2013)			
ss to nce	SME Access to Finance Index (SMAF; 2012)			
Acce fina	Year-on-year growth of loans to non-financial corporations (%; Q1 2014)			
kills	Investment in equipment as % of GDP (2011-13)			
it and s	Employment in knowledge-intensive activities (manufacturing and services) as % of total employment (2012)			
estmen	% of employees in manufacturing with high educational attainment (2013)			
Į	Tertiary graduates in mathematics, science and technology per 1000 of population aged 20-29 (2012)			
raw Us	Energy intensity in industry and the energy sector (kg oil eq. / euro GVA; reference year 2005; 2012)			
nergy, 1 materia	CO2 intensity in industry and the energy sector (kg CO2 / euro GVA; reference year 2005; 2012)			
2 -	Electricity prices for medium-sized enterprises excluding VAT (euro per kWh; 2nd half of 2013)			
ets, and	OECD indicators of product market regulation / services (2013)			
o mark icture : vices	Trade integration in the single market (2013)			
Access t afrastru ser	Satisfaction with quality of infrastructure (rail, road, port and airport) (1=underdeveloped / 7=extensive and efficient by int'l standards; 2012-13)			
< .⊒	% of broadband lines with speed \ge 30 Mbps (2014)			
ration ss nt	Time required to start a business (days; 2013)			
dminist busine ironmer	Number of hours needed to comply with tax return rules across the EU (2013)			
ublic a and env	Legal and regulatory framework (0= neg. / 10=pos.; 2014)			
2	Business environment score (1= best and 0 = worst; 2012-13)			
Note:	Note: Early data for "% of broadband lines with speed \geq 30 Mbps" refer to 2011.			

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3.7.1 Introduction and performance

Ireland became the first country to successfully exit its EU/IMF programme of economic and financial assistance in December 2013. It met all its targets under the programme and has returned to the international credit markets. Headline GDP growth of -0.3 % in 2013 masks an underlying recovery in the domestic economy. When the volatile effects of the foreign-owned and especially pharmaceutical sector are stripped out, GNP growth - which reflects the relative health of the domestic economy - was a robust 3.4 %. Trade in services and investment grew strongly while significant improvements in the labour market are sustaining the nascent recovery. Employment grew by 60,000 in 2013 and unemployment is down to a sub euro-area average of 11.7 % from a high of 15 % two years ago including reductions in youth and long-term unemployment.

But further progress is required in several areas including fiscal consolidation, debt deleveraging, financial sector repair and structural reforms. In particular, with public debt at 123.7 % of GDP at end 2013, and a 2013 budget deficit of 7.2 %, significant challenges remain to consolidate and sustain growth. $(^{243})$

Ireland has important comparative advantages in sectors such as pharmaceuticals and chemicals that account for around 50 % of manufacturing output. The other main sectors are food, beverages and tobacco at 21 %, and electronics, electrics and machinery sector at 11 %. Services account for more than two thirds of gross value added and services' exports grew by EUR 3.3 billion in 2013 with particularly strong performances by the computer and business services sector. Another key feature of the Irish economy is its extreme openness with the value of internationally traded goods and services equivalent to 191 % of GDP. (²⁴⁴)

3.7.2 Access to finance and investment

Access to finance, particularly for SMEs, remains a challenge but it is critical to Ireland's growth outlook. SMEs account for over 70 % of private sector employment and lending to SMEs represents approximately 19 % of the domestic banks' aggregate loan book. (²⁴⁵) Lending to SMEs remains weak, with constraints existing on both the demand and supply sides. SMEs are also carrying a large legacy debt burden that makes it difficult for them to borrow and invest. Initiatives such as the Irish Banking Federation Protocol (²⁴⁶) on Multi-banked debt are therefore welcome and encouraged.

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http://ec.europa.eu/economy_finance/publications/occas ional_paper/2014/op181_en.htm

^{(&}lt;sup>244</sup>) <u>http://www.esri.ie/irish_economy/</u>

^{(&}lt;sup>245</sup>) <u>http://www.centralbank.ie/publications/Documents/Macro-Financial%20Review%202013.2.pdf</u>

^{(246) &}lt;u>http://www.ibf.ie/gns/customer-information/businessbanking/IBF_Protocol_on_Multi-banked_SME_Debt.aspx</u>

On the supply side, banks are very and some would say excessively cautious about lending to business. SME associations allege that more than one third of SMEs are seeking new credit with more than half of the requests being rejected. (247) Banks' balance sheets remain depressed and 46 % of domestically-owned banks' aggregate credit portfolio was non-performing or distressed (at the end of the third quarter of 2013). (248) To address this, the two largest domestically-owned banks that dominate SME lending have been assigned debt restructuring targets. (249)

Supply constraints to new lending are compounded by the partial loss of the skill sets needed to properly assess the potential viability and merits of loan applications. Steps are however now being taken to improve the capacities of both borrowers and lenders to prepare and assess robust funding requests based on well-developed business plans.

Dedicated funds have been put in place to improve access to finance for SMEs. The Credit Guarantee Scheme (250) provides a government guarantee to the lender of 75 % on individual loans to viable businesses. The Microenterprise Loan Fund Scheme (251) provides loans of up to EUR 25 000 to businesses and sole traders employing up to ten people who have been refused credit by banks. In addition, three SME funds (252) were put in place with funds from the National Pension Reserve Fund. Meanwhile, the Credit Review Office (CRO) (253) mediates disputes between lenders and prospective SME borrowers who have been refused credit. Up to the first quarter of 2014, 55 % of appeals have been found in favour of borrowers.

The take-up for SME support funds has however been very low so far and external reviews of the schemes

and funds are proceeding with the view to identifying factors that hamper their take-up and putting in place corrective measures if needed.

New legislation is also due to be enacted later in 2014 to establish an Ireland Strategic Investment Fund (²⁵⁴) (ISIF). Furthermore, over EUR 500 million in additional credit will be made available to Irish SMEs through the establishment of the Strategic Banking Corporation of Ireland that will be financed by the German Promotional Bank, KfW and the European Investment Bank (EIB) along with the ISIF.

Investment

Ireland relies heavily on investment by multi-national companies to generate growth, exports and jobs. This makes it more vulnerable to shifting patterns of global production and losses in competitiveness. Foreign direct investment inflows represented a massive 18.2 % of Irish GDP in 2012 compared to an OECD average of 1.3%. (²⁵⁵) FDI currently supports more than 1150 companies employing more than 166 000 people directly and a further 116 000 indirectly. In 2013, these companies spent €21bn in the Irish economy and exported goods and services to the value of $\in 121$ bn. (²⁵⁶) FDI is relatively concentrated both in terms of investor base and in terms of sectoral orientation. This implies that decisions by individual firms and developments in specific sectors can have an unusually large impact on the economy as a whole as has been seen recently with the "patent cliff" in the pharmaceutical sector. These and other issues are addressed in European Commission's Staff Working Document accompanying the 2014 Country Specific Recommendations. (257)

^{(&}lt;sup>247</sup>) <u>http://isme.ie/wp-</u> <u>content/files_mf/139444541814069BankSurvey.pdf</u>

^{(&}lt;sup>248</sup>) The average NPL ratio for the main three domestic banks is almost 27% of total loans as of June 2013, and about half of the NPLs relate to residential mortgages while 25% is SMErelated

⁽²⁴⁹⁾ For more details on banking sector developments and challenges, see the 2014 in-depth review report on Ireland published by the European Commission in March <u>http://ec.europa.eu/economy_finance/publications/occasiona</u> <u>l_paper/2014/op181_en.htm</u>

^{(&}lt;sup>250</sup>) <u>http://www.djei.ie/enterprise/smes/creditguarantee.htm</u>

^{(&}lt;sup>251</sup>) <u>http://microfinanceireland.ie/</u>

^{(&}lt;sup>252</sup>) BlueBay Ireland Corporate Credit I Ltd (EUR 450 million); Carlyle Cardinal Ireland SME Equity Fund (EUR 300-350 million); Better Capital Ireland SME Turnaround Fund (EUR 100 million)

^{(&}lt;sup>253</sup>) <u>http://www.creditreview.ie/</u>

 $^(^{254})$

http://www.finance.gov.ie/sites/default/files/NTMA%2 0Bill%20EXP%20MEMO.pdf

^{(&}lt;sup>255</sup>) <u>http://www.oecd.org/investment/investment-policy/FDI-in-</u> Figures-Feb-2014.pdf

^{(&}lt;sup>256</sup>) <u>http://www.idaireland.com/invest-in-ireland/impact-of-fdi-</u> in-ireland/index.xml

^{(257) &}lt;u>http://ec.europa.eu/europe2020/europe-2020-in-yourcountry/ireland/country-specificrecommendations/index_en.htm</u>

3.7.3 Innovation and skills

Innovation

According to the 2014 Innovation Union Scoreboard, $(^{258})$ Ireland is an innovation follower, with an improved 2014 EU ranking of 9th.

Ireland has a national R&D intensity target for 2020 of 2.5 % of GNP (2.0% of GDP). In 2012, Ireland had an R&D intensity of 1.7 %. Over the period 2007-2012, R&D intensity in Ireland grew at an average annual growth rate of 6.1 %. Ireland has a relatively low level of direct government support for R&D, while the share financed from abroad at 20.4 % is more than double the EU average and reflects the policy of attracting foreign direct investment with a large R&D component.

The key areas of focus include the food sector, agriculture and fisheries, ICT, medical technologies and nano and bio-technologies. Structural Funds are an important source of funding for research and innovation activities. Fiscal measures and especially tax credits also play an important role. In excess of 1400 companies are benefiting from the tax credit scheme which has supported a EUR 1 962 billion business spend on research and innovation. Policy emphasis is being placed on accelerating the economic impacts from public investment in science, technology and innovation. This includes increasing the innovation potential of indigenous firms and improving links between industry and higher education institutions. Ireland is the third best performer in the EU in terms of the innovation output indicator (²⁵⁹) and is ranked second in the EU in terms of both share of total employment in knowledgeintensive activities (20.6 %) and share of knowledgeintensive services exports in total exports (71.4 %). Ireland also has a number of challenges in research and innovation, in particular the relatively low number of patent applications as well as a decline in the number of innovative SMEs. However, the level of patent applications should be seen in the context of the weight of ICT in the Irish economy and the fact that software is not patentable.

Skills

One of Ireland's strengths has always been its welleducated, productive and flexible workforce. It has the highest percentage of employees in the manufacturing sector with high education attainment levels and it has the highest tertiary education attainment rate in the EU at 51.1%. On the other hand, Ireland still has a significant cohort of early school leavers and low-skilled workers. Re-skilling and up-skilling of job seekers is consequently one of the main challenges for education and training in Ireland. There is evidence of rising skills mismatches, with skills shortages likely to become more apparent as the labour market continues to recover.

In this context, the Irish government has introduced initiatives such as the ICT skills conversion programme (260) and Springboard (261) to ensure that the curricula and offer of higher education institutions are better geared towards the evolving needs of industry and jobseekers. Furthermore, the Momentum (262) programme is providing training for up to 6500 long-term unemployed on topics where job vacancies/skills shortages have been identified, including ICT.

Ireland's slack ratio (263) is around 30 % for low education levels but it is only 8 % for higher education levels. It is also noteworthy that Ireland has the highest proportion of people living in households with low work intensity in the EU. (264) This surged from 14.3 % in 2007 to 24.2 % in 2011 - almost 9 % higher than the country with the next highest rate.

The further education and training system is being reformed with e.g. the creation of 16 Education and Training Boards and the new further education and training authority SOLAS. (265) Ireland is investing more than €800 million in further education and training in 2014 and the first ever strategy for the further education and training sector in Ireland was launched in May 2014. (266)

⁽²⁵⁸⁾

http://ec.europa.eu/enterprise/policies/innovation/files/i us/ius-2014_en.pdf

http://ec.europa.eu/research/press/2013/pdf/indicator_of_ _innovation_output.pdf

⁽²⁶⁰⁾ http://www.hea.ie/en/policy/engagement/ict-skills

^{(&}lt;sup>261</sup>) <u>http://www.springboardcourses.ie/</u>

²⁶²) <u>http://www.momentumskills.ie/</u>

 ⁽²⁶³⁾ Number of Jobseekers divided by the number of employed people at a given level of skills

⁽²⁶⁴⁾ Ratio of actual v potential months worked. A household is in low work intensity when the ratio is below 0.20

²⁶⁵) <u>http://www.solas.ie/</u>

^{(266) &}lt;u>http://www.education.ie/en/Publications/Policy-</u> <u>Reports/Further-Education-and-Training-Strategy-2014-</u> 2019.pdf

Better bridging the gap between training and employment in Ireland is also being addressed in the government's "Action Plan for Jobs". (267) This is a joined-up "whole of government" multi-annual initiative to support job creation. The 2014 iteration contains 385 actions to be implemented by all 16 46 government departments and Agencies. Furthermore the "Pathways to Work" (268) initiative is putting in place a modern activation system through the establishment of *Intreo* $(^{269})$ "one stop shops" to offer practical, tailored employment services and supports to both jobseekers and employers. Ireland has also undertaken the first steps to implement the Youth Guarantee (YG) and plans to roll it out by 2015. A wide-ranging review of apprenticeships $(^{270})$ in Ireland has also been carried out. Progressing and delivering on these initiatives will be critical to maintain the positive momentum on job creation and to improve competitiveness.

3.7.4 Energy, raw materials and sustainability

Ireland is the best performer in the EU for both energy intensity and CO2 intensity thanks largely to the importance of services and high value-added manufacturing. An energy inefficient building stock, fossil fuel-based electricity generation, greenhouse gas emissions and a culture of car dependency remain the principle challenges facing Ireland. (²⁷¹) The government policy document "*Delivering Our Green Potential*" provides the framework for developing the green economy and a progress report on its implementation was issued in December 2013. (²⁷²) Nearly 20 000 people are estimated to be employed in six key sub-sectors of the green economy and the value of sales of low-carbon environmental goods and services is estimated at approximately 4 % of GDP. A number of targeted initiatives in the fields of waste management, resource exchange e.g. SMILE (273) are helping to turn environmental challenges into business opportunities and promote industrial symbiosis while public support measures for resource efficiency run by the Environment Protection Agency (274) are extensive and varied.

Significant work is also ongoing in the field of sustainable construction and buildings and 23 % of the housing stock is now covered by the Building Energy Rating (BER) System.

Raw materials policies are particularly important for Ireland not only from the security of supply perspective but also because Ireland has significant mineral resources including two of the richest zinc mines in the world (in terms of ore grade), which account for 32% of EU Zinc concentrate production. The largest Bauxite processing plant (Alumina) in the EU is also located in Ireland.

The Sustainable Energy Authority of Ireland (275) is working to exploit the country's significant advantages in sustainable (particularly wind) energy. The Authority estimates that sustainable energy could support at least 30 000 Irish jobs by 2020 and reduce Ireland's energy costs by over EUR 2 billion per annum and it is delivering bespoke energy solutions to many of the larger Irish companies. Detailed measures to improve energy efficiency are outlined in the National Energy Efficiency Action Plan 2014. (276)

Ireland's binding renewable energy target is to reach a 16% share of renewable energy in total gross energy consumption in 2020 and the policy, market and budgetary framework to facilitate this requires ongoing attention. Ireland is not on track to reach its greenhouse gas emissions target for 2020 with particular challenges in the non-ETS sectors given the size of the Irish agriculture sector, as well as issues in the transport sector that need to be addressed.

^{(&}lt;sup>267</sup>) <u>http://www.djei.ie/publications/2014APJ.pdf</u>

^{(268) &}lt;u>http://www.welfare.ie/en/downloads/Pathways-to-Work-2013.pdf</u>

⁽²⁶⁹⁾ <u>http://www.welfare.ie/en/Pages/Intreo.aspx</u>

 ^{(&}lt;sup>270</sup>) <u>http://www.education.ie/en/Publications/Policy-</u> <u>Reports/Review-of-Apprenticeship-Training-in-Ireland.pdf</u>
 (²⁷¹) <u>http://www.eco-</u>

innovation.eu/index.php?option=com_content&view=article &id=474&Itemid=62

http://www.djei.ie/publications/enterprise/2013/Green_ Economy_Progress_Report_2013.pdf

⁽²⁷³) <u>http://www.smileexchange.ie/</u>

 $[\]binom{274}{275}$ <u>http://</u>www.BeGreen.ie

^{(2/5}) <u>http://www.seai.ie/</u>

http://ec.europa.eu/energy/efficiency/eed/doc/neep/2014 _neeap_ireland_en.pdf



3.7.5 Access to markets, infrastructure and services

Ireland is now the most globalised economy in the western world. (277) Market access and appropriate infrastructure for export-oriented and technologydriven sectors are consequently vital to Ireland's economic success. Ireland has made great improvements to its transport infrastructure in recent years but significant challenges remain not least with regard to broadband penetration that is only half the EU average. In this context, the recent update to the National Broadband Plan (278) and allocation of up to EUR 500 million for a fibre powered network is welcome; as is the 2013 National Ports Policy (²⁷⁹) that addresses issues concerning port infrastructure and competition. Needed infrastructure investments and access improvements are e.g. foreseen for Dublin port (EUR 150 million) and Rosslare and Waterford harbours; while issues with regard to leasing and

licensing arrangements for some terminal operators and stevedoring services (²⁸⁰) need to be addressed.

High-technology services, such as computer services, and knowledge-intensive services, such as financial services, insurance and other business services are an increasingly important part of the economy.

3.7.6 Public administration and business environment

Ireland is ranked 15th overall in the World Bank's Doing Business Report, has one of the most favourable business and entrepreneurial environments in Europe. (²⁸¹)

Public administration has a crucial impact on the business environment and while Ireland scores well on most indicators it has some important issues to address. A new Public Service Reform plan for the period 2014-2016 was published in January. (²⁸²) A

(²⁸¹) <u>http://doingbusiness.org/</u>

^{(&}lt;sup>277</sup>) <u>http://www.ey.com/IE/en/Newsroom/News-releases/Press-release-2013---Globalisation-report</u>

http://www.dcenr.gov.ie/Communications/Communicati

 ons+Development/Next+Generation+Broadband/

 (279)
 http://www.dttas.ie/sites/default/files/node/add/content

publication/National%20Ports%20Policy%202013.PDF

 $^(^{280})$

http://www.tca.ie/images/uploaded/documents/Ports%2 0Study%202013.pdf

http://reformplan.per.gov.ie/exec_summary/exec_summ ary.html

total of 220 actions are contained in the new plan including for instance, increasing recourse to shared services and centralised public procurement. Actions are being taken forward to improve e-government delivery and cloud computing services with new technologies facilitating more and better online services.

The Regulatory Impact Assessment process in Ireland includes competitiveness proofing and respects the 2009 guidelines but there is scope for enhancing this process and applying guidelines more systematically. In comparison to other EU Member States, Ireland is above average in the level of consultation of SME stakeholders on regulatory and policy matters. Business stakeholders and two consultative groups are regularly consulted on SME matters, but this is not a systematic process. Ireland should take steps towards putting in place a fully-fledged SME test.

There are concerns that the more widespread use of centralized public procurement is adversely affecting SME participation. With a view to making tendering easier for SMEs, the government introduced new guidelines for purchasing authorities in April 2014, covering matters such as division of contracts into lots and the possibility allow consortia of SMEs to submit tenders.

Ireland ranks best in the EU and 6th in the world for ease of paying taxes. (²⁸³) Improvements continue to be made to the system with increased provision of eservices and on-line service platforms. Micro and small enterprises will be allowed to make only one VAT return per year and tax return forms will be significantly simplified and increasingly prepopulated. E-filing and payment by direct debit will be increasingly the rule. While for income tax, tax return forms will be reduced from 26 to 6 pages for microenterprises. 91 % of income tax declarations are currently filed online.

Enforcing contracts in Ireland remains relatively lengthy and expensive (²⁸⁴) and Ireland has a very poor world ranking of 63rd on this issue. These high legal costs have an impact on the economy as a whole and they affect the cost structure of all businesses, particularly SMEs.

To address the high cost of civil litigation, the Legal Services Regulation Bill was published in October 2011. It completed Committee Stage in the Parliament in April and is due to be enacted later in 2014. It will establish independent regulation of the legal professions, improve access and competition, and bring greater transparency to legal costs and reduce their burden on consumers and enterprises. The Bill also provides for the establishment of multidisciplinary practices bringing together barristers, solicitors and accountants.

Additional provisions are currently being worked on for incorporation in the Bill which would provide for the prescribing of pre-action protocols and facilitate electronic filing of civil cases with a view to expediating the process.

Judicial and court administrative resources to implement active pre-trial case management are however very limited and this may be contributing to delays. (²⁸⁵)

3.7.7 Conclusions

Ireland's domestic economy is growing and creating jobs again. (²⁸⁶) Business – crucially including SMEs - and consumer confidence is returning. Ireland is successfully competing internationally and it has an excellent business environment.

However, the very large public and private sector debt burden remains a severe drag on growth and key challenges remain in areas such as restoring credit channels for SMEs; strengthening activation mechanisms; tackling skills mismatches; reducing business (including legal) costs and increasing competition.

^{(&}lt;sup>283</sup>) <u>http://doingbusiness.org/data/exploreeconomies/ireland/</u> <u>#paying-taxes</u>

^{(&}lt;sup>284</sup>) at 650 days with 21 procedures at a cost of 26.9% of the claim according to the WB Doing Business Report 2013

 ^{(&}lt;sup>285</sup>) Ireland has the lowest number of professional judges and support staff in relation to population in the EU, with 3.2 judges and 22.4 support staff per 100,000 inhabitants, compared with an EU average of 21.5 and 68 respectively

^{(&}lt;sup>286</sup>) <u>http://www.cso.ie/indicators/Maintable.aspx</u>

3.8 Greece

	Gree	26		
	Gitt	Position compared to the weakest (=0) and the best (=1) Member State		
		0 * For full explanation, see the methodological annex 1		
our ctivity	Labour productivity per hour worked (EU-27=100; 2013)	□ latest available -5 years		
Lab produ	Labour productivity per person employed in manufacturing (1000 PPS; 2013)	= EU latest available		
	Total exports as a % of GDP (2013)			
xports	Knowledge-intensive exports (% of total exports; 2012)			
E	Exports of environmental goods as % of all exports of goods (2013)			
-	Innovation Union Scoreboard (2013)			
lovatio	R&D performed by businesses (% of GDP; 2012)			
Ē	Non-financial high-growth enterprises as % of all enterprises (2012)	N.A.; N.A. (2007)		
Indust	y Manufacturing GVA as % of total GVA (2013)			
ss to nce	SME Access to Finance Index (SMAF; 2012)			
Acce fina	Year-on-year growth of loans to non-financial corporations (%; Q1 2014)			
slib	Investment in equipment as % of GDP (2011-13)			
t and sk	Employment in knowledge-intensive activities (manufacturing and services) as % of total employment (2012)			
estmen	% of employees in manufacturing with high educational attainment (2013)			
Inv	Tertiary graduates in mathematics, science and technology per 1000 of population aged 20-29 (2012)			
aw	Energy intensity in industry and the energy sector (kg oil eq. / euro GVA; reference year 2005; 2012)			
ergy, r naterial	CO2 intensity in industry and the energy sector (kg CO2 / euro GVA; reference year 2005; 2012)			
En	Electricity prices for medium-sized enterprises excluding VAT (euro per kWh; 2nd half of 2013)			
nd nd	OECD indicators of product market regulation / services (2013)			
marke cture a ices	Trade integration in the single market (2013)			
ccess to frastru serv	Satisfaction with quality of infrastructure (rail, road, port and airport) (1=underdeveloped / 7=extensive and efficient by int'l standards; 2012-13)			
Ē. Ā	% of broadband lines with speed \geq 30 Mbps (2014)			
ation	Time required to start a business (days; 2013)			
ministr pusines: onmen	Number of hours needed to comply with tax return rules across the EU (2013)			
blic ad and l envir	Legal and regulatory framework (0= neg. / 10=pos.; 2014)			
Pu	Business environment score (1= best and 0 = worst; 2012-13)			
<i>Note</i> : Early data for "% of broadband lines with speed \geq 30 Mbps" refer to 2011.				



3.8.1 Introduction and performance

Services are the mainstay of the Greek economy. Manufacturing contributes 9.9 % of the total value added (EU average 15.5 % in 2011), specialising mainly in food processing (the manufacture of vegetable oils, and the processing and preservation of fruit and vegetables). Other important sectors are metal, chemicals, cement and textile.

The prolonged recession has severely affected the Greek economy. Statistical data show that Greece is returning to growth in 2014. Confidence indicators continue to improve and structural reforms have competitiveness. The improved Economic Adjustment Programme has reduced macroeconomic and fiscal imbalances. The recovery is forecast to gain strength in 2015, but full implementation of the adjustment programme continues to be crucial to consolidate recent progress. The robust improvement of the tourism sector has helped the economy. The repayment of government arrears and substantial absorption of EU funds, through major EU-funded construction projects, have had a positive impact on investments. For example, work has started on four large motorways with a combined value of over EUR 7 billion.

Greece's unemployment and social situation is still challenging, but ambitious labour market reforms implemented under the adjustment programme have markedly improved cost competitiveness, which, together with employment-support measures financed with EU structural funds and the pick-up in investment, should lead to a fall in unemployment to 26 % in 2014 and 24 % in 2015.

Corruption in Greece's public and private sectors continue to be of concern. According to the Greek branch of Transparency International, state hospitals, tax offices and urban planning departments are the main sites of public corruption. In the private sector the health industry, banks, lawyers, the car and construction sectors are the most corrupt. Some steps have been taken to confront corruption as part of a national anti-corruption action plan. An anticorruption coordinator has been appointed to carry out the plan and an accreditation system has been introduced to ensure sound and efficient management of EU structural funds by public authorities.

3.8.2 Access to finance and investment

Access to finance

The banking sector is being capitalised to ensure that it is in a better position to support the growth of the economy. However, the sector is still reluctant to provide finance to small and medium-sized enterprises (SMEs). Only 33 % of Greek SMEs obtained the financing they sought in 2013 (EU: 65 %). Access to finance is the most pressing problem for 32 % of SMEs (EU: 15 %). (²⁸⁷) Bank lending to the corporate sector is still constrained, making it difficult to finance production and investment. One of the most important financial issues for SMEs is the refinancing of existing exposure.

The government's efforts to ease financing conditions have focused on the lending of the European Investment Bank (EIB) to Greek commercial banks so that they in turn can lend to SMEs, and on providing banks with risk-sharing. In 2013, four finance contracts worth EUR 300 million were signed via the Guarantee Fund for SMEs.

A number of initiatives have been promoted jointly, with the EIB targeting different financial needs:

- an initiative supporting SMEs through risk sharing and risk capital;
- an initiative investing in regional urban projects;
- the State Guarantee Facility, supporting investment for SMEs and mid-caps in manufacturing, tourism and services;
- the Trade Finance instrument, supporting international trade.

The Institution for Growth (IfG) is an initiative of the Greek Ministry of Development & Competitiveness in cooperation with the German government (GKfW), the EU Task Force for Greece, the EIB, the EIF, the European Commission, bpi France and the French government. With a planned initial capital of more than EUR 500 million, the IfG will finance SMEs and infrastructure projects through equity and loans, contributing to the easing of financing constraints.

The Hellenic Fund for Entrepreneurship and Development (ETEAN) was set up as a state-owned corporation in February 2011, with a start-up capital of EUR 1.7 billion. EU structural funds provide substantial funding. ETEAN provides guarantees for loans to SMEs by banks and other financial institutions. The fund also co-invests in other funds and instruments and three funds have been set up: for *energy conservation* (EUR 200 million from EU structural funds), for *fisheries promotion* (EUR 35 million from EU structural funds) and for *entrepreneurship* (EUR 540 million from EU structural funds).

(²⁸⁷) 2013 SMEs' Access to Finance Survey, Analytical Report,

In 2013, a new fund to support island entrepreneurship was set up with a budget of EUR 80 million. The fund provides loans to SMEs up to a maximum of EUR 30.000, at low or zero interest rates and without collateral.

Investment

The Economic Adjustment Programme for Greece covers a wide range of ambitious growth-enhancing structural reforms to modernise product markets and improve the business environment, with a view to creating new opportunities for investment, innovation and employment. The "Fast- Track" procedure for licensing and the Law on Investment Incentives are two main pillars of investment support:

A) Fast Track

Time-consuming and costly procedures and the uncertainty about the legal framework for licensing and permit systems (²⁸⁸) have hampered investments particularly large-scale investments.

The law on acceleration and transparency of implementation of strategic investments provides for faster and more transparent procedures for large-scale investments (fast track). With the new law, factors that have in the past deterred investors, such as bureaucracy, a lack of transparency and the complexity of the legislation, have been improved. The aim of the law is to provide licenses quickly, giving priority to strategic investments, i.e. investments that could have a significant impact and create long-term results to hasten a return to growth.

To be considered strategic investment, the total cost must exceed EUR 100 million, irrespective of the sector, or lower amounts depending on the sector or number of new jobs created. So far, most approved strategic investments are in the field of energy and tourism.

The fast-track procedure provides for an investment license to be granted or refused within 45 days. The law gives tacit approval if the deadline is not met.

B) Investment incentives

The law on Investment Incentives provides for different types of aid, e.g. tax relief comprising

European Commission, 14 November 2013.

^{(&}lt;sup>288</sup>) TFGR sixth activity report, March 2014.

exemption from payment of income tax on pre-tax profits, subsidy payment by the state of a sum to cover part of the investment, a leasing subsidy which includes payment by the state of a portion of the instalments paid under the leasing agreement to acquire new machinery and equipment.

3.8.3 Innovation

Innovation

 $(^{289})$

According to the Innovation Union Scoreboard 2014, $(^{289})$ Greece's performance is below the EU average. The country is considered a moderate innovator. Over the analysed period of eight years, growth performance at 1.2 % is below that of the EU and the performance gap with the EU has increased. The relative performance to the EU fell from 74 % in 2008 to 69 % in 2013. Greece performs below the EU average in particular for venture capital investment and R&D expenditure in the business sector.

Greece has a weak articulation of research and innovation policy with other policies, with particular feeble links within the knowledge triangle sectors. Moreover, exploitation of research results by the business sector is very limited, with low patenting activity.

One of the EU's main tools to support structural reforms is cohesion policy. EU structural funds have invested more and more in competitiveness, research and innovation and provided substantial resources for investment in Greece. Greek innovation policy is based on the use of EU structural funds and research funding, with limited resources available for a strategic vision. However, a public consultation has been carried out with the aim of establishing more favourable conditions for increasing R&D and innovation. To support R&D investments, a new law (Law 4172/2013) provides for deduction of R&D expenses at a higher rate of 30% from the gross income of firms.

3.8.4 Energy and sustainability

Energy

Since the onset of the financial crisis, energy consumption has decreased markedly as the economic recession has affected demand.

Reducing dependence on imported energy, exploiting indigenous on-shore and offshore natural resources, maximising the penetration of renewables and achieving a significant reduction in emissions of carbon dioxide are the main pillars of the national energy plan.

Photovoltaic installations have seen a sharp increase over the past few years as a result of generous support schemes and falling development costs.

Greece has published a timeline and a list of actions to be taken to facilitate the transition to a more mature and competitive gas market model. Greece is also focusing on hydrocarbon exploration and production. In May 2014, it signed lease agreements for three on-shore and offshore fields, while a new licensing round will be announced for areas of Western Greece and the South of Crete.

The reform of the Greek energy market seeks to boost competition and to make the sector financially sustainable. The removal of remaining distortions in the electricity market and greater competition in supply are necessary measures to improve the competitiveness of the sector. The privatisation of the public power corporation has been launched and the sale of the network operator is progressing.

Sustainability

Waste management is considered a critical environmental problem in Greece and a pressing issue. Greece depends heavily on landfills waste disposal. Around 80 % of waste is still landfilled and the EU target of cutting biodegradable municipal waste by 75 % by 2010 was not met despite a four-year derogation period. (290)

Recycling of glass, paper and plastics has increased in recent years but there are still not enough facilities for a more efficient recycling of waste. Recycling of municipal waste has increased by more than 10 %

http://ec.europa.eu/enterprise/policies/innovation/files/i us/ius-2014_en.pdf

²²⁰) Municipal waste management in Greece. European Environmental Agency. February 2013.



over the last 10 years but significant efforts are still needed to comply with EU targets by 2020. (²⁹¹)

3.8.5 Public administration and business environment

Public administration

The authorities are advancing, with some delays, on public administration reform, delivering on the 2013 quantitative targets and increasingly focusing on qualitative aspects. The Greek government, with the support of the Taskforce for Greece and French experts, aims at improving quality and efficiency through, inter alia, a new system of appointments for managers, a performance evaluation framework, the reorganisation of Ministries, new staffing plans with clearly designated responsibilities, a new internal job market to promote transparent mobility across the administration, better financial management, measures to reduce corruption, and a new egovernment strategy. The framework for an interministerial coordination General Secretariat under the Prime Minister's authority has also been set up.

The government is on track to deliver the decrease in general government employment by 150,000, ahead of the deadline set at the end of 2015. The rule one hiring per five retirements will remain through 2014. The government intends to assess services that can be provided more efficiently through outsourcing. An effort has also been made to address disciplinary cases. Courts have sped up procedures and sanctions start to be applied.

Business environment

Structural reforms are being implemented to improve the business environment, which has been hampered by a high level of regulation and bureaucracy.

Changes have been made to the General Commercial Registry (GEMI), which is a state- owned electronic database hosted by the Chambers of Commerce. Data stored in the registry now includes companies' representatives. annual the accounts. tax identification number, statutes, the company company's GEMI number and court decisions. The database has been connected to other registers for electronic processing and for e-procurement the public sector can access the database to obtain the required information. In addition, companies can now use a website to file the company seat and

^{(&}lt;sup>291</sup>) Municipal waste management in Greece. European Environmental Agency. February 2013.

statutory amendments, as well as for annual financial accounts.

The cost of starting up a company has fallen. The requirement to publish a notice in the Official Gazette has been removed (with total savings for businesses estimated at around EUR 46 million/year) and the requirement to register with a chamber of commerce will be removed on 1 January 2015. In addition, notaries are no longer required for all types of companies and it is no longer compulsory to submit original or certified copies for all transactions with the government.

The IKE, a form of private limited liability company, was introduced in Greek law in July 2012. The high number of newly established IKEs is a sign of its success. It is a more flexible corporate form, which does not require either a notary or publication in the Official Gazette. The biggest difference with other limited companies, when the new type of company was introduced, was that IKEs had no minimum capital requirement. The minimum capital for other limited companies, which was EUR 4.500, was removed in 2013. In total, 2821 companies registered as IKEs in 2013.

Greece's improved ranking in the World Bank Doing Business Report can be partly attributed to the new private limited liability company form. However, its ranking is still low compared with other EU Member States, mainly because of the high level of regulation. Greece is among the weakest performers in the OECD. Under the Economic Adjustment Programme, restrictions on competition are being removed in many parts of the economy. Implementation has started on most of the recommendations of an OECD study on legislation and practices in four key sectors of the economy, e.g. tourism, retail trade, food processing and construction materials. The removal of poorly designed regulations, which benefit few, is expected to have positive effects worth EUR 5.2 billion for the economy.

The retail sector has seen a sharp downturn because of the economic crisis. Liquidity is a major problem for the sector. According to the National Confederation of Hellenic Commerce (ESEE), since 2008, 120.000 retail and wholesale stores have closed down. Of the 40.000 newly opened stores, almost 80 % are coffee shops and fast food restaurants. Licensing procedures are changing to make them simpler by using electronic applications and outsourcing audit mechanisms. An online submission system has been developed and should be implemented by the end of October 2014. The integrated IT system aims to develop e-services for licensing, which should save businesses time, expense as well as administrative work and, equally important, increase transparency.

Internationalisation

Internationalisation is a key pillar of Greece's economic strategy. Implementing an export strategy helped improve Greece's ranking in the World Bank Doing Business report on Trading Across Borders from 84th place in 2012 to 52nd in 2013.

Enterprise Greece is the official state agency to promote investment, exports and make Greece more attractive as an international business partner. A key benefit of the new, integrated body is closer coordination among ministries and public- and private- sector bodies.

3.8.6 Conclusions

Statistics show that Greece is returning to growth after a long and severe recession. Structural reforms have improved competitiveness and the Economic Adjustment Programme has reduced macroeconomic and fiscal imbalances. Absorption of substantial EU funds, through major EU-funded construction projects, will have a positive impact on investments.

Access to finance is still tight for SMEs. Only 33 % of Greek SMEs obtained the financing they sought in 2013 (EU: 65 %). The Institution for Growth, which is being set up, should ease the financing constraints. It will finance SMEs and infrastructure projects. In addition, EU structural funds offer significant amounts for access to finance through the Hellenic Fund for Entrepreneurship and Development.

Greece's innovation performance is below the EU average and the country is considered a moderate innovator. Its performance relative to the EU fell from 74 % in 2008 to 69 % in 2013. The Greek innovation system is being supported by EU structural funds and research funding, but with limited resources invested for a strategic vision.

Greece's improved ranking in the World Bank Doing Business Report can be attributed to recently adopted legislation in a number of areas. However, its ranking is still low as compared with other EU Member States, mainly due to a high level of regulation. Under the Economic Adjustment Programme, restrictions on competition are being removed in many parts of the economy.