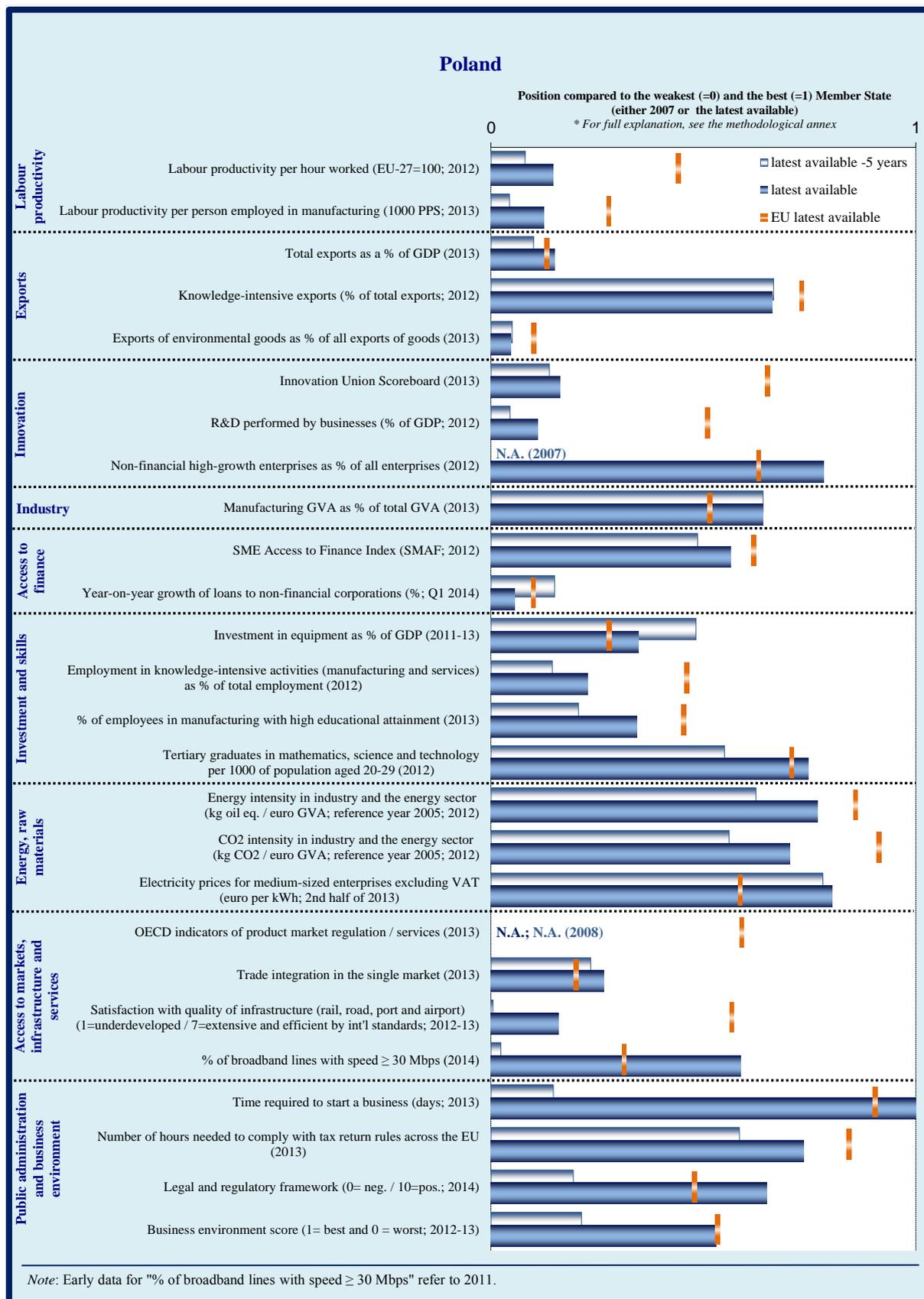
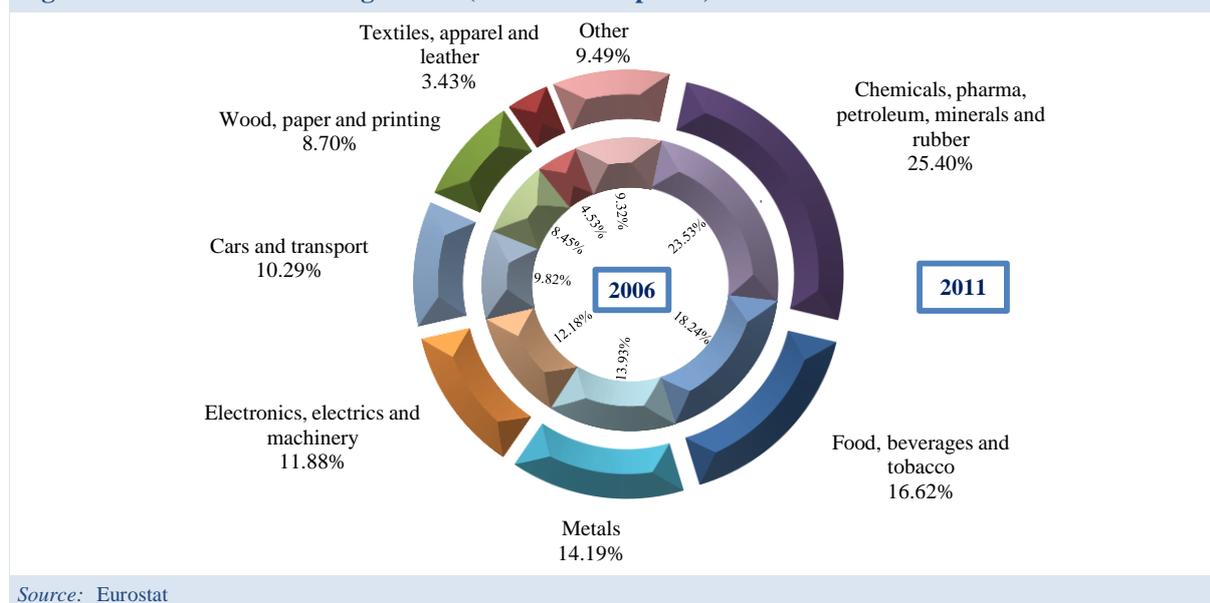


### 3.21 Poland



**Figure 3.21.1: Manufacturing sectors (GVA at basic prices) - Poland**

### 3.21.1 Introduction and performance

Poland's economy is less developed than those of its western neighbours, especially considering innovation and sustainability. Although growth has been rapid, there was a slowdown in 2013, with growth of 1.6%.<sup>(1)</sup> Nevertheless, labour productivity continues to rise, achieving 73.6% of the EU average in 2013. In May 2014 industrial production has grown by 2.2% over the last year, after an increase of 5.6% in the previous month. The confidence index for Polish industry in June 2014 fell to 50.3. Manufacturing plays an important role in the Polish economy and contributes 17.7% of total value added, as compared with an average of 15.1% in the EU as a whole.

Manufacturing accounts for 30.2% of employment (EU average 22.7%). In 2013, the current account deficit continued to diminish to -1.3% of GDP, although high-tech exports were still very low at 5.9%. Innovation performance is weak, although some signs of improvement can be seen in private R&D expenditure. This has risen from 0.23% of GDP to 0.33% (EU average 1.31%) in 2012. The full implementation of the Enterprise Development Programme, aiming to increase the quality of research and commercialisation of Polish technologies, would

<sup>(1)</sup> Eurostat (Eurostat will be used throughout as the default source of data unless otherwise specified) <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>.

make an important contribution to improving Poland's competitiveness.

### 3.21.2 Access to finance and investment

Access to finance is relatively good and continues to improve. In this area, the World Bank Doing Business 2014 report ranks Poland second in the EU.<sup>(2)</sup> The banks provide some finance for SMEs and, in general, do not ask prohibitive interest rates on loans.<sup>(3)</sup> According to the EC/ECB access to finance survey, 10% of SME loan applications were rejected, compared to 13% in the EU as a whole.<sup>(4)</sup> On interest rates, 42% of Polish SMEs reported a fall and only 14% a rise, compared with 20% and 34% in the EU as a whole. On the other hand, equity finance remains underdeveloped, as total venture capital investment to GDP is 10 times lower than the EU average. The EC/ECB survey shows that only 2% of companies use equity financing.

In March 2013, Poland started a programme of *de minimis* guarantees for loans on working capital as a counter-crisis measure, replacing an earlier ineffective system. The scheme was very well

<sup>(2)</sup> World Bank Doing Business 2014, <http://www.doingbusiness.org/reports/global-reports/doing-business-2014>.

<sup>(3)</sup> SBA Performance Review 2013, DG ENTR, [http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/index\\_en.htm](http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/index_en.htm).

<sup>(4)</sup> ECB Access to finance survey 2013, [http://ec.europa.eu/enterprise/policies/finance/files/2013-safe-analytical-report\\_en.pdf](http://ec.europa.eu/enterprise/policies/finance/files/2013-safe-analytical-report_en.pdf).

received and in November was extended to cover investment loans. The scheme provided EUR 7 billion of guarantees for almost 39 000 SMEs, covering EUR 12 billion of credit over 2013. The programme is expected to continue until the end of 2015.

Actions were also taken to support equity financing. The Polish Growth Fund of Funds, established to stimulate equity investment in venture capital, private equity and mezzanine funds with a target size of EUR 180 million, came into operation, signing transactions with two private funds. The National Capital Fund is being refocused on venture capital funds supporting the start-up phase of innovative SMEs. By the end of 2013, it had provided co-financing to 16 funds (total capitalisation PLN 933 million) and has shares in 54 companies. The Polish growth stock market NewConnect is expanding 445 companies were listed as of 2013.

The state development bank of Poland <sup>(5)</sup> is planning to increase the effectiveness of regional and local guarantee and loan funds by standardising their procedures and products.

### Investment

At 18.4 % (2013), gross fixed capital formation was higher than the EU average of 17.3 %, but has been on a downward trend since 2008. A major state investment fund focusing mostly on large-scale energy infrastructure has come into operation. <sup>(6)</sup> The fund is in the process of selecting its first projects — so far, 1 000 projects have been submitted, out of which 50 went through to the second selection stage. Three or four are expected to be selected in 2014. The fund offers very long term financing (25 years) and is independent of the treasury.

### 3.21.3 Innovation and skills

#### Innovation

The low level of innovation is one of the most problematic aspects of Polish competitiveness. R&D expenditure is less than half of EU average (0.9 % of GDP, EU average 2.06 %), and comes mostly from the public sector, with only 37.2 % of research performed by the business sector (EU average

63 %)(2012). In the 2014 Innovation Union Scoreboard, Poland's ranking has not changed. However, due mostly to rising private R&D expenditure, Poland was classified as a moderate innovator. <sup>(7)</sup> The Regional Innovation Scoreboard shows improvement for four southern regions. <sup>(8)</sup>

The main weaknesses of the Polish research and innovation system continue to be: a low degree of commercialisation of research, weak links between academia and business, and low levels of genuine innovation by enterprises — the tax system favours technology transfer and absorption. The high-tech sector of the Polish economy employs 2.9 % of workers (2013), <sup>(9)</sup> compared with 3.8 % in the EU.

The National Centre for R&D operates a number of programmes motivating companies to invest in scientific projects and to commercialise research. These include programmes for the medical sector and aeronautics, the development of shale gas technology solutions and ecological technologies.

The National Smart Specialisation Strategy was approved by the government in April 2014. The Enterprise Development Programme (EDP) adopted in 2014 is intended to make the business environment more innovation-friendly through a holistic approach, encouraging commercialisation of new technologies.

Plans for strengthening innovation performance rely on the use of European funds. The EDP forms a coherent framework with the 2014-2020 smart growth operational programme for European structural funds. It aligns public support to the level of risk, providing grants for more risky early stages of innovation and using financial instruments for later stages, commercialisation and internationalisation. The innovative economy programme will be more cohesive, with half the number of instruments and more focus on results.

Amendments have been proposed to the act on higher education, covering the system of intellectual property rights, in particular strengthening the position of researchers.

<sup>(5)</sup> Bank Gospodarstwa Krajowego.

<sup>(6)</sup> Polskie Inwestycje Rozwojowe.

<sup>(7)</sup> 2014 Innovation Union Scoreboard, [http://ec.europa.eu/enterprise/policies/innovation/files/iuis/iuis-2014\\_en.pdf](http://ec.europa.eu/enterprise/policies/innovation/files/iuis/iuis-2014_en.pdf).

<sup>(8)</sup> 2014 Regional Innovation Scoreboard, <http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/>.

<sup>(9)</sup> GUS, Main Statistical Office of Poland, <http://www.stat.gov.pl/gus>.

### Skills

The level of tertiary education attainment in Poland is higher than in the EU on average, but there is a problem of skills mismatch, with insufficient ICT and soft skills. Because of the mismatch between the outcome of education and the needs of the labour market, the number of vacancies is high, even though unemployment is still above two million.

Recent reforms have focused on introducing pro-qualitative incentives for the education system and increasing the number of university students in science, technology, engineering and mathematics. An evaluation of the science and higher education reform of 2010/11 is underway, indicating positive results. Proposed amendments to the act on higher education seek to foster closer cooperation with industrial partners through incentives in funding allocation. There are still shortcomings in provision of dual studies linking academic with practical training in companies.

#### 3.21.4 Energy, raw materials and sustainability

Poland performs poorly on sustainability aspects. Resource productivity is very low at EUR 0.4 per kg (EU average 1.59) (2011).<sup>(10)</sup> Greenhouse gas emissions per capita are slightly higher than in the EU on average, 10.37 tonnes of CO<sub>2</sub> equivalent (EU average 9.03 in 2011). A national emissions auction platform was planned to come into operation by the end of 2013, but is still in early development. The share of renewable energy in energy consumption is still below the EU average (11 % vs. 14.1 % in 2012) as Poland continues to rely on domestic coal and imported oil and gas; however, domestic gas production accounts for almost 27 % of total national gas consumption. Electricity prices for medium enterprises are EUR 0.0963 per kWh, in line with EU levels on average, but have been rising at a faster rate. Gas prices are below the EU average.

A new regulation on waste systems and a new action plan for water management were adopted in July 2013. Further amendments to the waste regulation entered into force in January 2014, improving the implementation of extended producers'

responsibility, providing incentives for recycling, and raising fees for landfilling.

A three-pack of energy reforms was adopted in July 2013, belatedly transposing the gas and electricity directives. In the area of renewables, a support programme was started for small and micro installations and a system of guarantees of origin was introduced, together with a requirement for large industrial users to source a proportion of their energy from renewable sources. Other planned elements concerning renewable energy were not included, and the relevant regulation is still under consultation in government. Infringement procedures concerning the directive on renewables are still a possibility, as the draft regulation does not go far enough in streamlining administrative procedures for new renewable energy source investments and non-discrimination and transparency in grid connection for prosumers.

The National Energy Efficiency Action Plan 2014 is being finalised, to complement the National Programme for Development of a Low Emission Economy adopted in 2013, aiming to improve coordination in raw material policies.

#### 3.21.5 Access to markets, infrastructure and services

##### *Internal market and internationalization*

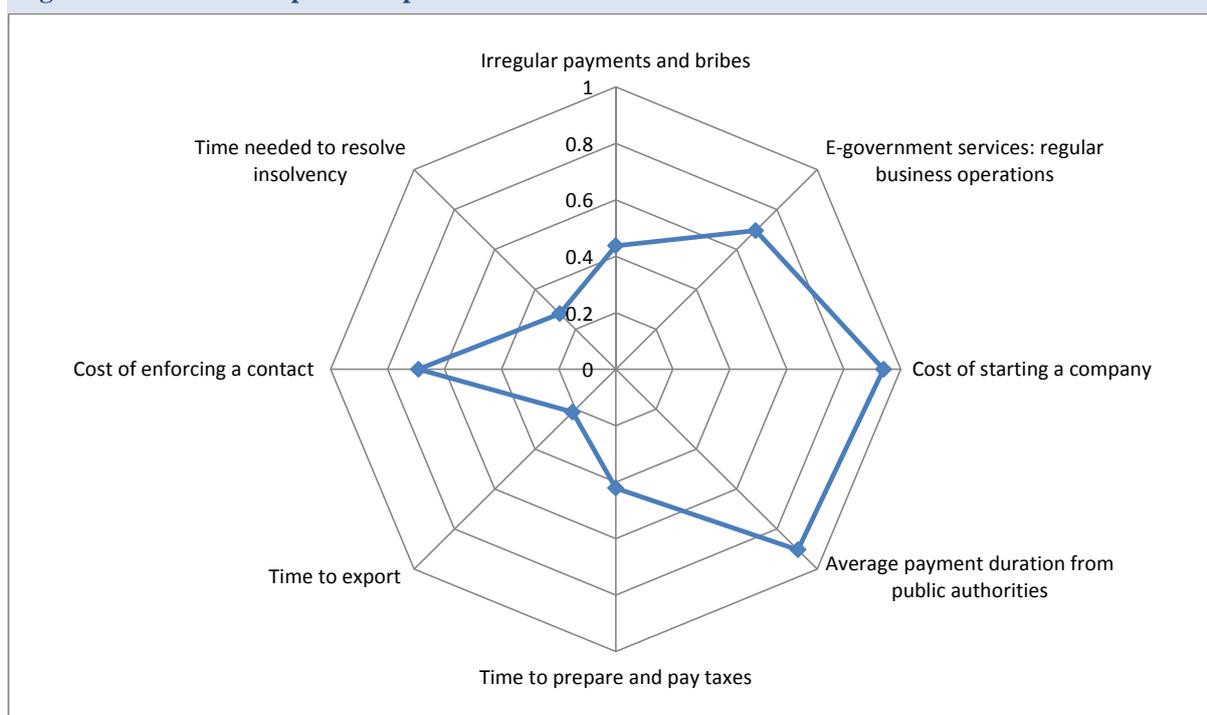
Poland is a net importer, but the current account deficit improved from 5 % in 2011 to 3.7 % in 2012 and to 1.3 % in 2013. Exports consist mainly of electromechanical products, chemicals, furniture and foodstuffs, with only 5.9 % high-tech exports (EU average 15.6 %). Exports to the EU account for 75.7 %, although exports to non-EU countries, especially China, Brazil, Russia and Ukraine, are increasing.

##### *Business services and network industries*

Market concentration is low for electricity, with a 17.8 % market share for the largest company, but it is high for the gas market, with the largest company holding a 94.42 % market share.<sup>(11)</sup> ICT infrastructure is underdeveloped, with the lowest

<sup>(10)</sup> Eurostat, Resource Efficiency Scoreboard, [http://epp.eurostat.ec.europa.eu/portal/page/portal/europe\\_2020\\_indicators/ree\\_scoreboard](http://epp.eurostat.ec.europa.eu/portal/page/portal/europe_2020_indicators/ree_scoreboard).

<sup>(11)</sup> President of Energy Regulatory Office Activity Report 2013, <http://www.ure.gov.pl/en/about-us/reports/67.Reports.html>

**Figure 3.21.2: Overall profile of public administration - Poland**

*Note:* Values have been scaled so that the best observation (Member State) gets 1 and the worst gets 0.

*Source:* World Bank Doing business; Intrum Justitia; OECD; World Economic Forum; European Commission

broadband coverage in the EU (71 % vs 96 %) (2013), and a concentrated market of Internet Service Providers.

In 2013, measures were implemented to increase competitiveness in the gas sector, including gradual phasing out of regulated prices. It is now obligatory to trade an increasing proportion of gas on an exchange opened in 2012 (2GW were traded in 2013). Market entry was facilitated by an amendment to the act on reserves, and in December 2012 and February 2013, wholesale and gas exchange trades were exempted from tariff approval.

A national broadband plan was adopted in 2013, launching four projects in the regions, with the objective of developing 16 000 km of broadband cable and reaching eight million people by 2016. A digital skills workshop for people over 50 was organised, attracting 150 000 participants. Telecommunication connections were made obligatory in new buildings.

### *Infrastructure*

Transport infrastructure is a problem. There is significant investment from European structural funds, though this is mostly in the road network.

More investment is needed for infrastructure maintenance, for which European funds are not available.

There are substantial delays with timely implementation of railway infrastructure projects. In November 2013, a multiannual railway programme for 2013-2015 was adopted, implementing investment monitoring across all projects, new procedures for tenders and pre-assessment of project quality. The budget of the railway market regulator has been increased and the number of safety system inspections has since gone up by 20 %. A new contract for railway infrastructure maintenance was signed in January 2014, detailing specific rules and standards for the state railway operator and broadening possible state funding resources. Following a ruling of the European Court of Justice of May 2013, track access charges to rail infrastructure were reduced by 20 %, on average. This still needs to be fully transposed in the relevant legal acts so that the system of track access charges can provide a stable, competitive basis for the rail sector, looking ahead to the mid- and long-term.

### 3.21.6 Public administration and business environment

There is a scope to improve the business environment in Poland. In particular, a burdensome public administration and a complex, inefficient tax system continue to be the main shortcomings, though there has recently been substantial progress in reducing administrative barriers in some areas. In the 2013 SBA Performance Review indicators for entrepreneurship intention in Poland are the highest in the EU, with 49 % of adults polled believing self-employment was feasible (EU average 30 %), and 22 % intending to start a business within three years (EU average 13 %).<sup>(12)</sup>

Poland has made progress in reducing the cost and time to start up a business now that it has introduced streamlined online procedures. Although recent government initiatives envisage much greater use of e-administration and e-taxation, in other areas, digitalisation has been slow and fragmented. In 2013, the 'Better Regulation Programme 2015' was adopted, to improve transparent law-making, the regulatory environment, and communication with stakeholders. The better regulation programme has introduced an SME test (though this is still a pilot) and more formalised regulatory impact assessments. New guidelines for impact assessment are to be published in 2014. Plans for longer-term reform are unclear, as there is still no implementing document for the efficient state strategy 2020 adopted in early 2013. A national digitalisation integrated programme was adopted in January 2014, including measures for digitalisation, interoperability and data exchanges of public registers.

The government is committed to extensive deregulation reforms. For construction permits, the length of procedures was shortened to 161 days (EU average 179). Amendments to construction law, including the introduction of a 14-day limit on procedures dealing with public authorities are planned in 2014. A codification committee for construction law is scheduled to present its findings in November 2014 on a broad legislative reform.

On contract enforcement, electronic procedures have been introduced and the complaints procedure has been speeded up. Amendments to the code of civil

procedure are expected in 2014. Substantial progress has been achieved in the deregulation of access to professional services (about 240 professions to be deregulated). The first reforms are now fully in effect, the second round was adopted in May 2014 and a third is planned in 2015. A fourth round of reforms has also been announced, with 40 possible further professions proposed through an open consultation. On bankruptcy, two laws are planned for 2014, reducing the time of proceedings and increasing the use of restructuring. The fourth law on reduction of administrative barriers is being adopted, focusing on reduction of information obligations for businesses, standardisation of 71 forms, and simplification of export and import procedures in sea ports. A law on sub-contracting, improving SME access to public procurement, came into force in December 2013.

Tax compliance imposes a significant administrative cost on businesses, due to low thresholds applied for compulsory VAT registration, inefficient and bureaucratic authorities and complex laws. There are plans to increase the use of electronic procedures, introducing further e-filing procedures in 2014 and, in 2015, automatic pre-filling of tax forms.

### 3.21.7 Conclusions

Manufacturing accounts for a large proportion of the Polish economy, but the country has a lower level of technology specialisation than the EU on average. Poland continues to rely on technology transfer and absorption, but plans to strengthen innovation, commercialisation and internationalisation of domestically-developed technologies. Further reforms are desirable in the area of sustainability, especially in terms of improving energy efficiency.

Concerning investment in infrastructure, innovation and sustainability, there is a large potential in EU structural funds. Businesses have good access to debt finance, but equity finance needs to be developed to support the growth of innovative SMEs. Poland has the fourth highest proportion of high-growth companies in the EU at 4%. Despite an ongoing deregulation reform programme, there is scope to increase the efficiency of the public administration

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<sup>(12)</sup> SBA Performance Review 2013, DG ENTR, [http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/index\\_en.htm](http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/index_en.htm).

and improve the business environment especially as regards the complex tax system.