

Ministry of Economic Development

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# **ENTREPRENEURSHIP IN POLAND**

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## INTRODUCTION

Entrepreneurship is one of the key concepts used to describe Polish economic reality, with the 99.8% share of small and medium-sized enterprises. The share of SMEs is thus identical to the EU average; however, a closer analysis of the structure reveals that the share of microenterprises is higher than the EU average. The majority of those microenterprises are individuals being business operators. They are an example of an approach based on readiness to take risk, self-realisation, creativity, flexibility, and often innovativeness, i.e. the properties fully describing the enterprising spirit. However, in this report we define entrepreneurship in a broader sense, covering the entire sector of Polish enterprises and conditions for its development.

This year's *Entrepreneurship in Poland* report is the 15<sup>th</sup> edition of the study constituting a comprehensive analysis of Polish enterprises and their environment. It depicts, in the context of the processes occurring in the global economy and the domestic macroeconomic conditions, the economic and financial situation of Polish enterprises and the institutional conditions of their operation. The presented information mainly relate to 2016 and to the developments that have occurred in the corporate environment since the presentation of the previous report.

In 2016, the economic growth in Poland reached 2.7%. Investment processes had a negative impact on growth, mainly in respect of public spending, although private investments also visibly dropped. Nevertheless, the passing year was marked by improvement in the majority of key economic and financial indicators. Revenues from overall activity, financial results and profitability ratios rose. Revenues from export sales were growing much faster than total revenues. The number of working persons and average employment also increased.

Although still few enterprises choose the path of innovative development, positive changes have been reported in this respect, measured e.g. by fast growth in the share of the private sector in the financing of R&D expenditure in the last few years. Innovative economic growth will be fostered by the implementation of the *Responsible Development Strategy* adopted by the government in February 2017. Strategic directions of the government policy are in line with consistent efforts to improve the legal conditions of conducting economic activity, such as the first package of 100 facilitations in pursuing business activity.

Information presented in the main part of the report (Chapters 1 to 6) is completed with the synthetic report on the Small Business Act implementation in Poland (Annex III). The SBA is an action plan for small and medium-sized enterprises, in the form of specific measures implemented at the level of both the European Union and the individual Member States. Moreover, the annexes present statistical data relating to enterprises (Annex I) and the ranking of voivodeships in terms of synthetic assessment of their level of enterprise development (Annex II).

## SYNTHESIS

Almost a decade after the last financial crisis, in 2016 global economy faced the low-growth trap again. According to estimates of the International Monetary Fund, in 2016 global economic growth amounted to 3.2%, which had been the lowest result since 2009. To a great extent, it was due to a considerable economic slowdown in developed countries, while developing and emerging markets reported the same growth as in 2015.

Among the key factors of the global economic slowdown were low demand and weaker trade in 2016, which affected the productivity. In 2016, liberalisation of trade slowed down noticeably. Moreover, respective countries more often reached for protectionist measures. According to World Bank data, in 2016 G20 states applied more trade restrictions than measures facilitating trade. Last year also saw low level of both public and private investments in the context of global economy. Apart from the gap between subsequent financial perspectives for the EU Member States, such drop in investments is most often explained by increased uncertainty in macroeconomic environment.

The continuing uncertainty regarding global developments was one of key factors determining the level of economic activity in Poland. After noticeable acceleration in 2014 and 2015, in 2016 economic growth reached 2.7%. However, compared to other countries, the situation of Poland remained positive. Only Romania, Bulgaria and Slovakia were developing at a higher pace than Poland among countries of the CEE region.

The slowdown was a result of a lower pace of investment processes, mainly connected with public spending. This was related to the completion of expenditure from the previous financial perspective, not yet offset with an appropriately high absorption of funds from the current perspective. At the same time, both consumption and exports grew faster than in 2015. Despite the faster rise in exports (in constant prices), contribution of net exports was lower than in the previous year and amounted to 0.3 pp, compared to 0.6 pp in 2015. This resulted from the strong increase in imports (growth by 8.9% compared to 6.6% in the previous year, in constant prices).

According to CSO (Central Statistical Office of Poland) data, Polish exports rose by 2.9% to EUR 184.8 billion, while imports increased by 2.1% to EUR 180.9 billion. Despite the fact that the growth rate of exports was much lower than the average growth rate reported in last 15 years, the trend where exports grew faster than GDP continued. Moreover, for the second year in a row, the value of exports exceeded imports, which allowed for a trade surplus exceeding EUR 3.9 billion, i.e. almost EUR 1.6 billion higher than in 2015. Lower growth of Polish trade compared to the previous years was in line with the global trade slump trend in 2016. In 2016, Polish trade was most affected by the situation on the key EU markets, in particular in Germany.

2016 was marked by a notable improvement of the situation on the labour market. Employment grew for the sixth year in a row, achieving 69.3%, i.e. merely 1.7 pp less than the target set for Poland until 2020 in the Europe 2020 strategy. Despite the positive trends in this respect, it is still one of the lowest levels in the EU.

As a result of a drop in the number of the unemployed by about a quarter million, LFS unemployment rate hit the record low of 6.1%. Registered unemployment rate was 8.3%, i.e. 1.4 pp lower than in the previous year.

According to OECD data, in 2016 the tax wedge for average remuneration in Poland was 35.8%, i.e. 1.1 pp higher than in the previous year. Thus it was slightly lower than the OECD average (36%).

The condition of the Polish economy in 2016 is further marked by the improving performance of enterprises. Total revenues of companies employing more than 9 persons amounted to almost PLN 3.2 trillion and their growth rate (3.4%) was higher than in 2015 (3.1%). Revenues from export sales grew by as much as 8.5% to reach PLN 683.8 billion, increasing their share in total revenues to 21.4%. The latter was growing faster than their deductible costs, which resulted in a dynamic improvement in financial results and profitability ratios. Gross and net financial results amounted to PLN 163.9 billion and to PLN 138.3 billion, respectively, recording an increase by nearly 15%. A rise was also reported with regard to profitability ratios.

The improving financial condition of enterprises was accompanied by a drop in investment activity. Investment expenditure decreased by 11.3% to PLN 145.6 billion. At the same time, as both the financial surplus and the disposable income of enterprises grew (by 3.1% and 8.2%, respectively), the potential for self-financing investments improved. Total debt (PLN 1,249.6 billion) increased by 8.4%, i.e. at a pace 2.5 times higher than the growth rate of revenues, affecting the potential to cover debt with generated revenues. 5,359 thousand persons were employed in the analysed enterprises (an increase by 3.2%), while average employment amounted to 5,092 thousand, i.e. grew by 2.9%.

At the end of 2016, the number of entities of the national economy registered in the REGON system was over 4.2 million (more by 1.3% than in the previous year). As usual, sole traders formed the largest group of registered entities (about 70.1%), with a notably larger share than commercial companies (about 11.8%) and private partnerships (about 6.8%). Nevertheless, last year saw a positive trend where the share of natural persons decreased and the share of companies increased. The number of newly registered enterprises amounted to 349.2 thousand.

In the group of active non-financial companies, in 2015 (the last available data) 1,914 thousand non-financial enterprises operated in Poland, i.e. 3.9% more than in the previous year. As it was the case in the previous years, microenterprises prevailed among all non-financial enterprises (96.0%). The share of small, medium-sized and large enterprises was 3.0%, 0.8% and 0.2%, respectively. Therefore, no positive developments were reported in the size structure of enterprises in the last few years. Such structure is characterised by a larger, compared to the EU average, share of microenterprises (employing 0-9 persons), and a lower share of small enterprises (employing 10-49 persons).

Poland ranks poorly in international innovation rankings. It was ranked 25<sup>th</sup> (along with Croatia) in the European Innovation Scoreboard 2017 and remained in the group of moderate innovators. In the last few years, Poland improved its results with regard to innovation-friendly environment or investments; however, it also reported worse results in terms of e.g. innovation activity of enterprises (SMEs), cooperation between different entities, and sales of innovations relating to high technology products.

Expenditure on research and development activity is among the most important measures of innovative economy and technological progress. 2015 was another year when such expenditure grew in current prices. They exceeded PLN 18 billion, reaching 1% of GDP, which is still below the EU-28 average (2.03%). Nevertheless, Poland reports a relatively high rate of increase in expenditure (11.2% in 2011-2015). The strong growth of the share of entities from the enterprise sector in internal R&D expenditure in the last years should be considered a positive development. Although in 2010 such share was 26.6%, in 2015 it was already 46.5%.

Since the last *Entrepreneurship in Poland* report was published, activities aimed at facilitating the pursuit of economic activity in Poland have continued. For example, at the beginning of 2017, the Act of 16 December 2016 amending certain acts in order to improve the legal environment of entrepreneurs entered into force. The objective of the Act is to reduce certain administrative obligations, to support enterprise development, and to streamline the investment process. Among others, new regulations provide for reduction of the inconvenience of control. A "certainty of the law clause" was included to offer protection against the adverse effects of a retroactive change to the interpretative practice of the authorities, including tax authorities.

International reports and rankings offer a broader context for the assessment of competitiveness of the Polish economy. Comparable assessment criteria applied in those studies present Poland's situation compared to other economies. For instance, in the latest edition of the World Bank report *Doing business 2017*, Poland ranked the 24<sup>th</sup> (among 190 countries) in the general ranking of the ease of doing business. Taking into account the annual change in methodology and data update, this means a growth by 1 place compared to the report for 2016.

Measures facilitating the pursuit of economic activity are continuous. At present, works are under way on the *Business Constitution* package which forms the second stage of the reform of Polish economic law. The package includes e.g. the draft *Entrepreneurs' Law*, which defines the conditions for economic activity in Poland and which would substitute the currently effective Act of 2 July 2004 on freedom of economic activity.



## STRATEGIC CONTEXT

Between 2004 and 2015, the distance between Poland and EU-28 measured by GDP per capita (in PPP) decreased by 20 pps. However, the convergence rate has been slowing down and the internal social, economic and territorial inequalities have been growing. As a result of adverse external factors and the exhaustion of simple growth reserves activated in Poland after the economic system transformation (e.g. cheap labour), combined with the lack of new drivers, the economic growth has slowed down in recent years. At the same time, similarly to the rest of Europe, Polish economy has been facing negative demographic trends. This has been accompanied by low labour productivity growth rate and one of the lowest investment rates in Central and Eastern Europe. Such adverse trends have been reinforced by various economic challenges, such as climate change, growing competition with regard to resources, or dynamic development of modern ICT technologies. A more detailed analysis of the abovementioned trends allowed for determination of development barriers (growth traps) that could persist and possibly hamper the shift from the dependent development model: (1) middle income trap; (2) lack of balance trap; (3) average product trap; (4) demographic trap; (5) weak institutions trap.

In order to avoid those traps, a new vision of development was defined in the ***Responsible Development Strategy by 2020 with a further perspective until 2030***, adopted by the Council of Ministers on 14 February 2017. The Strategy specifies the strategic vision, principles, targets and priorities of Poland's development in economic, social and spatial terms for 2020 and 2030. The concept of responsible development provided for in the Strategy applies to economic, social, environmental, territorial and institutional matters. It means social and economic development integrating political, economic and social measures while maintaining the natural balance. It also aims at offering benefits for all social groups from various parts of Poland without depreciating the opportunities of the future generations.

The main objective of the Responsible Development Strategy (RDS) is **to create conditions for increasing incomes of the Polish citizens along with an increase in the social, economic, environmental and territorial cohesion**. The main planned outcome of the Strategy would be to increase the average gross disposable income of households per capita in PPP to 76-80% compared to the EU average by 2020, and to bring gross disposable income per capita in PPP to the EU average by 2030, while reducing the disparities in gross disposable income across respective regions.

Three specific objectives have also been defined with attributed specific areas of intervention:

### **Specific objective I – Sustainable economic growth increasingly driven by knowledge, data and organisational excellence**

1. Reindustrialisation with the fullest possible use of Polish resources
2. Development of innovative companies, i.e. increasing the level of technological advancement of products, stimulating new technological and organisational solutions based on own resources of enterprises
3. Small and medium-sized enterprises, i.e. developing the economic potential of Polish companies so that they could become increasingly larger thanks to measures relating to e.g. legal business environment
4. Capital for development by mobilising funds, also from the private sector, in order to significantly increase the investment level in Poland

5. Foreign expansion of Polish enterprises resulting from multiplication of domestic capital by increasing the economies of scale, strengthening the position on the current markets and entering new, in particular fast developing, markets

#### **Specific objective II - Socially sensitive and territorially sustainable development**

1. Social cohesion as a precondition for the economy characterised by high employment rate, good quality jobs and large entrepreneurship scale
2. Territorially sustainable development – inclusion of problem areas, smaller towns and peripheral rural areas in development processes. Benefits from economic development of the country should be available to all citizens, regardless of their place of residence

#### **Specific objective III – Efficient state and economic institutions supporting growth and social and economic inclusion**

1. Law at the service of citizens and the economy – improvement of the quality of enacted law, including the reduction of regulatory burden, in order to offer better conditions for pursuing economic activity in Poland and to fulfil the needs of individual groups of citizens
2. Institutions promoting development and strategic development management – providing institutions that support the building of competitive advantages of the country and economic and social entities operating therein, as well as building a development management system that allows for effective coordination of the most important economic and social processes and strengthens the role of spatial planning
3. E-government – the use of opportunities provided by available digital technologies in the economy. Digitisation of services for citizens and entrepreneurs, also within the administration bodies
4. Public finance – accomplishment of the strategic objective of the state policy, i.e. creating conditions for the growth of income of Poles with an increase in social, economic, environmental and territorial cohesion, requires stable, effective and sustainable public finance
5. Efficient use of the EU funds – reorientation of the method of using the European funds in terms of scope, coordination and forms of support in order to provide co-financing to projects in the areas of intervention that are crucial for defined development objectives, projects characterised by high value added and durable effects

The main objectives and specific objectives of the Strategy will be achieved by implementing the activities in the areas related to (1) human capital (high competences and qualifications adjusted to challenges of the changing reality) and broadly understood (2) social capital (attitudes conducive to cooperation, creativity and communication, increase in social participation and influence of citizens on public life and cultural potential), as well as a set of policies including (3) transport, (4) energy and (5) natural environment. The necessary conditions for responsible development of the state also include (6) ensuring national security. At the time of rapidly changing security environment and new threats emerging, the state must have adequate potential and capacity to prevent internal and external threats.

The selectivity of approach is crucial for the implementation of the Strategy, i.e. focusing on products, technologies, industries or sectors of importance for accomplishing the Strategy objectives in the long term, that is those that have a measurable impact on increasing the productivity and income of the population, as well as improving the quality of life. Although in the shorter perspective the support will be addressed at sectors that are decisive for Poland's current competitiveness, or that are significant in terms of production, impact or correlation with other sectors, it is crucial to focus on technologies and sectors that will be vital for Poland's competitive advantage in the future. Sectors of the future would be selected on the basis of the internal potential of the Polish economy and on the analysis of megatrends in the global economy.

The previous system of support for entrepreneurship and innovation was horizontal. It was mainly based on deregulation activities and intensive foreign investment incentives. This allowed for using the competitive advantages based on the demographic dividend, i.e. mostly the low labour costs with a relatively well-qualified labour force. The new model, which combines horizontal and sectoral measures, **aims at constant growth of productivity by building framework conditions for a better self-organisation of technological and industrial ecosystems.** At the same time, it aims at maintaining the competitiveness of the Polish industry sectors which gained the status of key sectors as a result of the transformation while using the effects of scale, i.e. food, chemical, metal, automobile, or furniture industry.

The key part of the new approach is the support for the abovementioned sectoral technological and industrial ecosystems which meet specific criteria, such as high linkage/networking/cluster effect, high value added (in the links of the value chain located in Poland), high technological intensity with a relatively short innovation cycle, low resource intensity, or mitigation of the negative impact on the environment and on human beings. On the basis of the analysis conducted with the use of the abovementioned criteria and taking into account the potential of Polish companies, **several strategic sectors** were identified that might become future drivers of the Polish economy. They include:

1. manufacturing of means of transport (e.g. e-buses, rail vehicles, specialised vessels);
2. professional electronics (e.g. smart energy meters, inverters, car chargers, sensors);
3. specialised ICT technologies (e.g. fintech, machinery and building automation, cybersecurity, computer games, bio-IT);
4. aircraft and spacecraft (e.g. drones, satellite components);
5. manufacturing of drugs, medical devices and modern medical services (e.g. e-medicine, medical devices, therapies, biosimilars);
6. mining systems (e.g. smart mine);
7. raw materials recovery;
8. green construction (e.g. passive buildings, pico energy, wood construction);
9. high quality food;
10. military systems.

The list will be cyclically updated in the entrepreneurial discovery process, which would allow for the verification of the list in the context of the sectors of the future. Identification of strategic industries will allow **to reorientate the system of support from a dispersed one to an integrated and horizontal one.** Possible measures under public policies include regulatory measures, support under government programmes (e.g. to enhance human resources or improve innovativeness) support for internationalisation of Polish companies, fiscal advantages, or access to information and promotion.

Over time a new instrument, an industrial contract concluded between public entities and representatives of a given industry/sector, is to be introduced. It will be a form of a package of abovementioned activities adjusted to the needs of a given sector, aimed at extending the strategic perspective and boosting investments by ensuring stable environment.

Small and medium-sized enterprises are the key Strategy area for enterprise development. State intervention addressed to SMEs focuses on growth enterprises. The aim is to increase the economic potential of enterprises to achieve a higher share of medium-sized and large companies in the population of business operators. One of the proposed lines of action in this area is to improve the legal environment for conducting business. This will be particularly beneficial for the smallest operators which do not have sufficient resources to promptly react to new legal and administrative requirements.

Adoption of a more partner approach to external stakeholders by public administration in Poland is also advocated. The identified needs include e.g. reduction of the repressive nature of the entrepreneur control system. Broader use of ICT technologies will also contribute to the improvement of communications between the administration and entrepreneurs.

The identified gap in the meeting of the needs of entities from the SME sector (with respect to capital and debt financing) points to the necessary measures to ensure that the SME sector can acquire funds to finance and create the conditions for development. At the same time, due to limited resources, the support must be more selective (targeted at measures promoting development) and the instruments must be better adjusted to the needs of entrepreneurs (depending on scale and type of operations or stage of development of an enterprise). Important sources of capital for SMEs may include development of employee stock ownership plans, new public guarantee instruments, as well as opportunities created by the Polish capital market. The Polish Development Fund (PDF) Group will play an important role in achieving the abovementioned objectives.

Implementation of innovations is the key factor for the company's market position. As a result of high innovativeness, business operators would generate more revenues from the sales of products, which would translate into higher R&D expenditure and higher salaries. Improvement of innovativeness of Polish enterprises on the domestic and foreign markets is necessary to create new competitive advantages. Under the selective approach, support would focus on selected areas and technologies. Measures supporting innovative development of enterprises correspond to smart reindustrialisation consisting in the implementation of new digital technical, technological and organisational solutions, as well as in the development of new industries based on digital technologies, capable of creating cutting-edge products. Such measures would trigger the development of many other areas of the economy. At the same time, this would offer a development opportunity for traditional sectors which, by implementing the most advanced production and management technologies, could move up the value chain.

Apart from measures stimulating innovation and mobilising capital for development, growth entrepreneurship would also include foreign expansion. An important part of the export policy would be the focus of support on industries accounting for key export positions in Poland and on sectors that may be decisive for Poland's global competitive position in the future. Measures under an integrated and cohesive economy promotion system supporting Polish exports and investments would improve the recognition of Polish products and services abroad and enhance Poland's image as a desired partner for business cooperation. They would also open new expansion directions for Polish companies.

Polish social and economic strategy is in line with the Europe 2020 strategy, adopted by the European Council on 17 June 2010. For seven years, it has been the primary instrument for coordination of economic policy in the European Union. National Reform Programmes remain the basic instrument for the implementation of the strategy at the level of Member States. The *National Reform Programme for the implementation of the Europe 2020 strategy* (NRP) was adopted by the Council of Ministers on 26 April 2011. It assumes a correlation of Polish development goals with the priorities specified in the Europe 2020 strategy, i.e.:

1. development of knowledge and innovation-based economy (smart growth);
2. promotion of a sustainable economy with a smaller environmental footprint and greater resource efficiency, which remains highly competitive (sustainable growth);
3. strengthening of an economically, socially and territorially cohesive economy characterised by a high employment rate (inclusive growth).

In its NRP, Poland declared e.g. that by 2020 it would achieve an employment rate of 71% among people aged 20-64, 1.7% share of R&D expenditure in GDP, and 45% share of persons with higher education among persons aged 30-34.

Coordination of economic policy in the EU and implementation of the Europe 2020 strategy takes place within the European Semester, formally implemented at the beginning of 2011. The publication of the *Annual Growth Survey 2017* (AGS 2017) on 16 November 2016 by the European Commission formally initiated the implementation of another, seventh cycle of the European Semester. In AGS 2017, the European Commission presented the economic and social priorities on which the EU and the Member States should focus in the coming year to support economic recovery, which would offer benefits to all parties, in particular to the more vulnerable social groups, increase the social dimension of the single market, and render it more fair. The foundation of those priorities is the economic policy strategy based on three pillars: investments, structural reforms and responsible public finance, implemented by the Commission since the beginning of its term of office in 2014.

In accordance with the rhythm of the European Semester, on 25 April 2017 the Council of Ministers adopted a document entitled *The National Reform Programme for the implementation of the Europe 2020 strategy. Update 2016/2017 (NRP 2017/2018)*. It is the sixth annual update of the NRP adopted in 2011. Given the current macroeconomic situation, economic forecasts and priorities of the government defined in the Responsible Development Strategy, as well as the recommendations of the Council of the EU for Poland of 12 July 2016 and the assessments included in the *Country Report - Poland 2017* published by the European Commission on 22 February 2017, NRP 2017/2018 identifies the most important measures that translate into fulfilment of the national Europe 2020 strategy objectives with respect to employment, innovation, energy, education and counteracting poverty.

On 22 May 2017, the European Commission published its Communication entitled *2017 European Semester: Country-specific recommendations COM(2017) 500*, which was accompanied by draft country-specific opinions and recommendations of the Council on National Reform Programmes and Stability or Convergence Programmes submitted by the Member States in April 2017. The draft recommendations were then the subject of works of the Council of the EU (ECOFIN and EPSCO). Following the political approval by the European Council on 22 June 2017, the recommendations were formally adopted by the ECOFIN on 11 July 2017, pursuant to the Treaty on the Functioning of the European Union.

The evaluation of NRP 2017/2018 and the update of the Convergence Programme by the European Commission established that the macroeconomic scenario adopted in those documents was favourable. In particular, the Commission stated that there was a risk of a certain deviation in 2017 from the required annual fiscal adjustment of 0.5% of GDP formulated in Council Recommendation of 12 July 2016. Therefore, the Commission stated that in 2018 Poland should make further adjustments in order to achieve the medium-term budgetary objective, i.e. the structural deficit accounting for 1% of GDP. In the opinion of the European Commission, that adjustment translated into a requirement of a nominal growth rate of net primary government expenditure would not exceed 3.7% in 2018. The Commission stated that under unchanged policies there was a risk of a significant deviation from that requirement.

Therefore, the Commission was of the opinion that Poland needed to stand ready to take further measures in 2017 and that further measures would be needed in 2018 to comply with the provisions of the Stability and Growth Pact. According to the Commission, to this end Poland should take steps to improve the efficiency of public spending and limit the use of reduced VAT rates which, in the Commission's opinion, were not an effective social policy instrument. Implementation of mechanisms to

assess the efficiency and effectiveness of public spending was required in particular by expenditure pressure related to population ageing.

The European Commission noted the challenges faced by the Polish labour market due to a decrease in the working-age population and expressed concerns that certain adopted legal solutions (the new child benefit, removed obligation to attend pre-school for five-year-olds, lowering the statutory retirement age) could reduce labour force participation, especially that of women, low-skilled and older people. Labour market segmentation also continued to be high. The works on a new draft individual and collective labour codes should be used, in the Commission's opinion, to remove obstacles to wider use of permanent contracts. Measures in the education and higher education sector were also necessary to improve the sector's labour market relevance. Yet again, the Commission issued a negative opinion on the special social insurance system for farmers (KRUS), claiming it to be costly and leading to low labour mobility and hidden unemployment in agriculture.

In the area of infrastructure and investment activity, the European Commission again noted the weaknesses in spatial planning and low coverage of Poland with land-use plans, which increased the administrative burden and risk for investors related to the need for construction permits.

Despite the generally favourable business environment, the Commission stated that business confidence was affected by the increase in the number of regulatory changes and limited public consultations on a number of key laws. In this context, the Commission emphasised the importance of the rule of law and of an independent judiciary. Among matters of particular concern, the European Commission mentioned serious problems with project implementation in the railway sector, the electricity interconnection level being among the lowest in the EU, the need for a significant amount of capacities to be decommissioned due to the age of generators, and the risk for the achievement of the binding national 2020 target for renewable energy.

In the light of the abovementioned assessment, the Council recommended that Poland took measures in 2017 and 2018 in order to:

1. Pursue a substantial fiscal effort in 2018, in line with the requirements of the preventive arm of the Stability and Growth Pact, taking into account the need to strengthen the ongoing recovery and to ensure the sustainability of Poland's public finances. Take steps to improve the efficiency of public spending and limit the use of reduced VAT rates.
2. Take steps to increase labour market participation, in particular for women, low-qualified and older people, including by fostering adequate skills and removing obstacles to more permanent types of employment. Ensure the sustainability and adequacy of the pension system by taking measures to increase the effective retirement age and by starting to reform the preferential pension arrangements;
3. Take measures to remove barriers to investment, particularly in the transport sector.

The national economic strategy is also in line with the *2030 Agenda for Sustainable Development*, a United Nations resolution adopted in September 2015 by 193 member states. This is an action programme of unprecedented scope and significance, defining the sustainable development model at the global level. Its framework much exceeds the Millennium Development Goals adopted in 2000. In accordance with 2030 Agenda, contemporary modernisation efforts should focus on eradication of poverty in all its forms, while achieving a wide range of economic, social and environmental objectives.

Agenda 2030 is universal, horizontal and very ambitious. It includes 17 Sustainable Development Goals (SDGs) and the related 169 targets, which balance the three dimensions of sustainable development:

the economic, social and environmental. This offers an opportunity to connect strategic directions of development of various areas to build sustainable future. The business sector has particular potential and opportunities to change its operating model and to use new paths of development. However, the key task in the overall implementation of Agenda 2030 is the adequacy of the defined problems to the situation in respective countries. Therefore, implementation of Agenda 2030 requires adjustment of global targets to the national circumstances of respective countries and determination of national development priorities.

Polish perspective of measures towards sustainable and responsible economic development was formulated in the Responsible Development Strategy which, due to its role and tasks, constitutes an instrument of flexible management of the key development processes in Poland. It defines the objectives and necessary measures, implementation instruments and key projects ensuring its implementation. It also determines the coordination system attributing roles to respective public entities, and methods of cooperation with the world of business, science and the society. The Strategy is comprehensive and its assumptions and objectives are in line with the provisions of Agenda 2030.

The complexity and correlation of SDGs require broad involvement in the implementation and responsible cooperation between the entire public administration and all stakeholders. The Ministry of Economic Development, being the national coordinator for the implementation of Agenda 2030 and its SDGs, cooperates with partners representing different social groups. In June 2017, a Partnership for the implementation of Sustainable Development Goals was initiated, including the Ministry of Economic Development and 46 entities representing the key business groups, expressing willingness to actively cooperate towards SDGs in Poland. By signing the common vision of cooperation, signatories made individual commitments confirming their actual involvement and implementation of specific initiatives or projects contributing to the achievement of SDGs. Membership in the Partnership is voluntary and open to all stakeholders and the aim of the Partnership is to create synergies of measures taken in Poland with regard to the implementation of SDGs.

## **1. GLOBAL MACROECONOMIC CONDITIONS IN 2016**

2016 was marked, among others, by a slowdown in trade and investments. This was increased by the growing discontent with the advancing globalisation and global economic integration and by a drop in the confidence in governments and international cooperation. Protectionist tendencies intensified and trade liberalisation slowed down. Among developed countries, liberalisation was most hampered in the United States and in Japan. Asian countries to a greater extent focused on the regional production chains instead of on global chains.

The disappointing trade figures in 2016 mostly resulted from the prices of crude oil and metals, which translated into reduced demand for imports in the countries exporting those commodities. Moreover, despite an increase in trade in North America, this region was to a great extent responsible for hindering global imports in 2016. On the other hand, Asia and Europe contributed most to the growth of global imports in 2016.

The Commonwealth of Independent States (CIS) was the most affected by the slump in exports. For the seventh year in a row, China was in the lead of the ranking of global commodity exporters. As it had been the case in the previous years, top global commodity importers in 2016 were the United States, China and Germany. The United States remained the leader in global services, both exported and imported, with the share of 15.4% and 10.4%, respectively. A rise in exports of services elevated Poland to the 25<sup>th</sup> position compared to the 27<sup>th</sup> rank in the previous year.

According to the estimations of international and Polish analytical centres, 2017 will see a recovery in global trade. This will result from a general improvement in global economic conditions in particular in commodity exporters, as well as from acceleration in investments and a rise in demand. Higher growth rate of trade in 2017 should also be triggered by the expected increase in prices. This should boost imports and improve the economic conditions of commodity exporters.

Considering the global fiscal situation, it can be concluded that 2016 marked the end of the five years of gradual fiscal consolidation. Fiscal easing to a great extent depended on the conditions and specific nature of respective countries, although the general trend was driven by three key factors. Firstly, the aim of an expansive fiscal policy was to support reconstruction of economic growth (enhancing growth in the short term, creating conditions for employment growth) amid high uncertainty as to the further prospects. In developed economies, fiscal policy became much more countercyclical than in the last two decades. Secondly, many countries spent considerable amounts under public investments, which led to an increase in their share in GDP. Thirdly, social expenditure rose globally, including higher social benefits for elderly persons and support for refugees in response to the migration crisis.



## 1.1 General situation of the global economy

Almost a decade after the last financial crisis, in 2016 global economy faced the low-growth trap again. According to estimates of the International Monetary Fund (IMF), in 2016 global economic growth amounted to 3.2%, which was lower by 0.2 pp than in 2015 and which had been the lowest result since 2009. To a great extent, it was due to a considerable economic slowdown in developed countries (from 2.1% in 2015 to 1.6% in 2016), as developing and emerging markets reported the same growth as in 2015 (i.e. 4.1%).

**Table 1. Changes in forecasted GDP growth in the world and in selected markets for 2016 (presented in subsequent IMF outlooks, in %)**

Country / group	GDP growth							Change (July 2017 – January 2016)
	January 2016	April 2016	July 2016	October 2016	January 2017	April 2017	July 2017	
<b>World</b>	3.4	3.2	3.1	3.1	3.1	3.1	3.2	-0.2
<b>Advanced economies</b>	2.1	1.9	1.8	1.6	1.6	1.7	1.7	-0.4
United States	2.6	2.4	2.2	1.6	1.6	1.6	1.6	-1.0
Euro area	1.7	1.5	1.6	1.7	1.7	1.7	1.8	0.1
Germany	1.7	1.5	1.6	1.7	1.7	1.8	1.8	0.1
France	1.3	1.1	1.5	1.3	1.3	1.2	1.2	-0.1
Italy	1.3	1.0	0.9	0.8	0.9	0.9	0.9	-0.4
Spain	2.7	2.6	2.6	3.1	3.2	3.2	3.2	0.5
Japan	1.0	0.5	0.3	0.5	0.9	1.0	1.0	0.0
United Kingdom	2.2	1.9	1.7	1.8	2.0	1.8	1.8	-0.4
Canada	1.7	1.5	1.4	1.2	1.3	1.4	1.5	-0.2
<b>Emerging market and developing economies</b>	4.3	4.1	4.1	4.2	4.1	4.1	4.3	0.0
CIS	0.0	-1.1	-0.6	-0.3	-0.1	0.3	0.4	0.4
Russia	-1.0	-1.8	-1.2	-0.8	-0.6	-0.2	-0.2	0.8
Emerging and developing Asia	6.3	6.4	6.4	6.5	6.3	6.4	6.4	0.1
China	6.3	6.5	6.6	6.6	6.7	6.7	6.7	0.4
India	7.5	7.5	7.4	7.6	6.6	6.8	7.1	-0.4
<b>Global trade volume (goods and services)</b>	3.4	3.1	2.7	2.3	1.9	2.2	2.3	-1.1

Source: DDS of the Ministry of Economic Development<sup>1</sup>, on the basis of IMF data.

The key factors of the global economic slowdown and of downward adjustments of growth projections include:

### (a) Weak demand lingering in 2016 and slower trade affecting productivity

According to the European Commission report on the trade and investment barriers, although in 2016 as many as 20 various obstacles affecting EU exports were removed, a distinct rise in protectionism was also noted which had a negative impact on European enterprises and their employed persons. G-20 countries retained most trade and investment barriers. At the time of preparation of the report, the

<sup>1</sup> Department of Development Strategy of the Ministry of Economic Development.

total of 372 trade and investment obstacles were registered in the Market Access Database. Most restrictions were reported for Russia (33). Brazil, China and India ranked 2<sup>nd</sup>, with 23 obstacles each. The majority of new protectionist measures reported in 2016 applied to Russia and India, as well as to Switzerland, China, Algeria and Egypt. South Korea, China, Israel and Ukraine took the lead among countries where EU policies led to elimination of trade barriers in 2016.

#### **(b) Low level of public and private investment**

Apart from the gap between subsequent financial perspectives for EU Member States, the most quoted reason for a slowdown in investment activity was the increased uncertainty in the internal and external business environment, caused e.g. by the results of a referendum in the United Kingdom or the results of presidential election in the United States.

#### **(c) Lower GDP growth and trade in China**

Chinese economy had been facing an economic slowdown for a few years now. Lower GDP growth is in line with the processes announced by the Chinese authorities with regard to economic transformation, referred to as “the new normal”. This means that economic growth rate would slow down, as in the last decades it had been mainly driven by infrastructural investments, industrial production and exports growth, and that the economy would need to shift to new drivers of growth, such as development of services, consumption, innovation and private entrepreneurship. The last time when China reported a double-digit GDP growth (10.6%) was in 2010. From then on, growth rate had been slowing down with every year. In 2014, Chinese GDP rose by 7.3%; in 2015, it dropped to 6.9%; and in 2016, it reached 6.7%, which was the lowest rate in 26 years.

China is the largest exporter and the second largest importer in the world. The value of Chinese trade in 2016 amounted to USD 3,685 billion, of which exports amounted to USD 2,098 billion and imports amounted to USD 1,587 billion. Nevertheless, in 2016 the value of trade decreased compared to 2015, with exports down by 7.7% and imports down by 5.5%. In 2016, China reported a goods surplus amounting to USD 511.7 billion.

#### **(d) Lowering confidence in governments, national policies and international cooperation**

The United Kingdom, the second largest European economy, launched the procedure to exit the EU. The referendum held on 23 June 2016, with 72% turnout and almost 52% votes for Brexit, also affected the British political scene. In the wake of the referendum, British Prime Minister David Cameron handed his resignation. Financial markets reacted immediately, with the pound taking a downturn to reach the lowest level in 31 years against the US dollar in October 2016.

US presidential election also affected the financial markets. The direct effect was the depreciation of US currency. It should be noted that the economy announced by Donald Trump, referred to as “Trumponomics”, should focus on cutting income taxes (including corporate taxes) or on renegotiation of trade agreements e.g. with NAFTA, which would directly affect global economy in 2017.

#### **(e) Economic sanctions against Russia upheld**

In response to the illegal annexation of Crimea and intentional destabilisation of Ukraine, since March 2014 Western countries had been gradually introducing an embargo. Restrictions of economic relations included the ban on goods imported from Crimea and Sevastopol imposed in June 2014 and trade and investment restrictions enacted in July 2014 in certain economic sectors and infrastructural projects. Moreover, apart from the ban on tourist services, since December 2014 all investments in Crimea had been prohibited. The EU also prohibited exports of key goods in specific sectors, including equipment to seek, extract and produce crude oil, natural gas and mineral resources. The main problem of the

Russian economy as a result of the sanctions was inability to continue to use cheap long-term loans in the West, which used to boost the development of Russian companies, mainly from the energy and banking sectors.

#### **(f) Oil prices continue to drop**

Although at the end of 2016 crude oil prices were notably higher than in 2015, the average price throughout the year was lower than in the previous year. Average Brent crude prices for 2016 amounted to 44 USD/bbl, which was 15% lower than in 2015. This was due to the fact that despite the considerable demand for oil refining products, the relatively high production and historically high reserves resulted in a pressure on crude oil prices throughout 2016. This situation only changed in the last weeks of the year after OPEC and non-OPEC producers reached an agreement on output limitation in the first half of 2017. It should be noted that this had been the first time since 2008 when such decision had been made.

According to the data of the U.S. Energy Information Administration (EIA), in 2016 crude oil production in the US decreased by over 500,000 bbl/d. Nevertheless, EIA estimated that the output would reach 8.9 million bbl/d, which would be the second highest result since 1985.

According to EIA estimations, total production of crude oil and other liquid hydrocarbons by OPEC in 2016 amounted to 39.3 million bbl/d, which was higher by 3% than in the previous year. In the opinion of OPEC, the supply glut on global markets would linger until 2017. This would result from the resilience of US extraction industry to any drop in oil prices.

#### **(g) Geopolitical conflicts and terrorism on the rise in various regions of the world**

In the last few years, events around the world led to an emergence of geopolitical tensions in many areas, which directly affected global economic situation by hampering world trade, impeding the operation of financial markets, or reducing the inflow of tourists to certain regions.

According to the studies of the Heidelberg Institute for International Conflict Research (HIIC), 226 armed conflicts were happening worldwide, of which 18 were defined as full-scale wars (19 in 2015). Compared to 2015, Conflict Barometer reported three new wars: after the attempted coup in Turkey in July; fights among various opposition and Islamist militant groups in Syria; and government war with Islamist militant groups in Yemen.

## **1.2 Real global trade growth in 2016**

2016 was the year of the growing discontent with the advancing globalisation and economic integration. These processes were labelled as the main factors of low economic growth, unemployment, wage stagnation and social inequalities. As a result, liberalisation of trade slowed down noticeably. Moreover, respective countries more often reached for protectionist measures. According to World Bank data, in 2016 G20 states applied more trade restrictions than measures facilitating trade. Production fragmentation under global value chains also slowed down significantly. Among developed countries, liberalisation was most hampered in the United States and in Japan. Asian countries to a greater extent focused on the regional production chains instead of on global chains.

Many adverse developments that occurred in 2016 could be explained by the governments' failure to act, including abandonment of structural reforms. According to OECD, after the financial crisis implementation of economic reforms in many countries noticeably decelerated and social inequalities became more visible, which in turn triggered hostility against the establishment.

All this led to a slowdown in global trade. According to IMF, in 2016 global trade volume (goods and services) had been growing at the slowest pace since 2001, except for the crisis year 2009. In 2016, the situation was deteriorating so dynamically that projections relating to the growth of global trade were regularly downgraded, more dramatically and frequently than the adjustments of global GDP. According to the latest IMF data from July 2017, in 2016 world trade volume rose by 2.3%, i.e. slower by 0.3 pp than in the previous year and slower by 0.9 pp than global GDP.

The relatively low growth rate of trade was reported both in developed countries and in developing countries, although for the former it implied significant slowdown compared to 2015 (to 2.3% in 2016), whereas the latter saw a noticeable recovery (to 2.2%).

**Table 2. Changes in trade volume (goods and services) and GDP in 2015-2016 (y/y) in %**

	2015	2016
<b>Trade volume (goods and services)</b>		
<b>World (average exports and imports)</b>	2.6	2.3
Advanced economies	4.0	2.3
Emerging market and developing economies	0.3	2.2
<b>GDP</b>		
<b>World</b>	3.4	3.2
Advanced economies	2.1	1.7
Emerging market and developing economies	4.3	4.3

Source: DDS of the Ministry of Economic Development on the basis of IMF data from July 2017.

According to the data of the World Trade Organization (WTO), world merchandise trade volume increased by 1.3% in 2016, while the 2015 figure was twice as high. WTO analysts pointed out that weak trade growth resulted both from cyclical factors, as economic activity in most sectors slowed down, and from deeper structural developments in the relations between trade and production. Other factors of reduced demand for imports in 2016 included a drop in investment expenditure in the United States and economic reforms in China.

The disappointing trade figures for 2016 were also much affected by the prices of goods and by exchange rates. Since mid-2014, the prices of crude oil and metals had been falling, which translated into reduced demand for imports in the countries exporting those commodities. According to WTO analysts, stabilisation of the prices of goods and their return to the level from previous years would not be possible until crude oil reserves remained high and USD remained strong.

Real growth of merchandise trade in developed countries was twice as low as in the previous year (91.4% in 2016). Imports to those countries grew by 2%, i.e. at a pace slower by 2.7 pp than in the previous year. Developing and emerging economies reported growth in exports by 1.3% and a growth in imports by 0.2% in 2016, against 2% and 0.5% in 2015, respectively.

2016 saw distinct disparities in merchandise trade figures among respective regions of the world, in particular on the side of imports.

**Table 3. Changes in global trade volume for selected regions of the world in 2015-2016 (y/y) in %**

	Exports		Imports	
	2015	2016	2015	2016
North America	0.7	0.5	6.7	0.4
South and Central America	2.5	2.0	-5.8	-8.7
Europe	3.6	1.4	4.3	3.1
Asia	1.1	1.8	2.9	2.0
Other regions*	4.3	0.3	-5.1	-2.4

Source: DDS of the Ministry of Economic Development based on the WTO data from April 2017;\* Africa, Middle East, CIS.

Weaker imports in South America and in the markets referred to as “other regions” (Africa, Middle East and CIS) mainly resulted from the still low prices of commodities and the resulting recession in many countries in the region (such as Brazil and Russia).

Moreover, despite an increase in trade in North America, this region was to a great extent responsible for hindering global imports in 2016. Although in 2015 North American contribution in the global growth of imports (by 2.9%) was 1.2 pp, in 2016 it was merely 0.1 pp (with global growth reaching 1.2%). On the other hand, Asia (1.9 pp) and Europe (1.6 pp) contributed most to the growth of global imports in 2016.

### 1.3 Changes in trade on key markets

In 2016, for the second year in a row, global trade in USD decreased, by 3.3% on the side of exports (to USD 15.5 trillion) and by 3.2% on the side of imports (USD 15.8 trillion). Although global exports decreased in terms of value, in terms of volume there was a rise by 1.3% due to significant drop in commodity prices, in particular energy commodities. As a result, in 2016 global trade was characterised by declining exports in commodity-driven regions, mainly crude oil and other hydrocarbons. The value of exports in CIS, Africa, Middle East, South America and North America decreased by 16.2%, 11.5%, 9.5%, 5.6% and 3.2%, respectively. In the context of respective regions of the world, the majority of trade operations were carried out by Europe and Asia. In 2016, the share of European countries amounted to 38.4% for global exports and to 37.5% for imports, while Asian markets accounted for 34.0% and 30.2%, respectively.

The value of merchandise exports in Europe dropped by 0.3% to USD 5.94 trillion, while the value of imports rose by 0.2% to USD 5.92 trillion. Exports from the European Union analogically decreased, i.e. by 0.3%, to reach USD 5.37 trillion. Exports of the largest economy in the region, Germany, grew by 1% to USD 1.34 trillion. Among other key EU economies, only Italy reported a growth in exports (by 0.9% to USD 462 billion); exports in the Netherlands remained at the 2015 level (USD 570 billion); while France and the United Kingdom reported a drop by 0.9% (to USD 501 billion) and by as much as 11% (to USD 409 billion), respectively. Imports of the whole EU increased by 0.1% (to USD 5.33 trillion), of which imports to Germany rose by 0.3% (to USD 1.1 trillion) and to the United Kingdom by 1.5% (USD 636 billion). Imports to France (USD 573 billion), Italy (USD 404 billion) and the Netherlands (USD 503 billion) decreased by 0.1%, 1.6% and 1.9%, respectively.

**Table 4. Changes in global merchandise trade in 2010-2016 (in USD)**

	Exports					Imports				
	2016	2010-2016	2014	2015	2016	2016	2010-2016	2014	2015	2016
	USD billion	%				USD billion	%			
<b>World</b>	15,464	0.6	0.3	-13.5	-3.3	15,799	0.7	0.6	-12.5	-3.2
<b>North America</b>	2,219	2.1	3.1	-8.0	-3.2	3,067	2.3	3.4	-4.5	-2.9
United States	1,455	2.2	2.6	-7.3	-3.2	2,251	2.3	3.6	-4.0	2.8
Canada	390	0.1	3.9	-13.9	-4.8	417	0.6	0.9	-9.1	-4.5
Mexico	374	3.8	4.4	-4.1	-1.8	398	4.2	5.3	-1.5	-1.9
<b>South and Central America</b>	511	-2.4	-7.0	-21.1	-5.6	533	-1.5	-4.0	-16.4	-14.5
Brazil	185	-1.4	-7.0	-15.1	-3.1	143	-4.7	-4.5	-25.2	-19.8
Other	326	-2.9	-6.9	-24.1	-6.9	389	-0.2	-3.7	-12.3	-12.4
<b>Europe</b>	5,942	0.8	0.5	-12.5	-0.3	5,920	0.0	1.2	-13.2	0.2
<b>European Union</b>	5,373	0.6	1.3	-12.5	-0.3	5,330	-0.3	2.2	-13.4	0.1
Germany	1,340	1.0	3.4	-11.2	1.0	1,055	0.0	2.2	-12.9	0.3
France	501	-0.7	-0.1	-12.9	-0.9	573	-1.1	-0.7	-15.3	-0.1
Netherlands	570	-0.1	0.2	-15.3	0.0	503	-0.4	0.0	-12.9	-1.9
United Kingdom	409	-0.36	-6.6	-8.9	-11.0	636	1.2	4.6	-9.3	1.5
Italy	462	0.5	2.2	-13.7	0.9	404	-3.0	-1.1	-13.3	-1.6
<b>Commonwealth of Independent States</b>	419	5.5	-5.8	-31.9	-16.2	333	-3.6	-11.7	-32.4	-2.6
Russia	282	-5.7	-4.8	-31.3	-17.5	191	-4.3	-9.8	-37.3	-0.8
<b>Africa</b>	346	-6.6	-7.6	-29.6	-11.5	501	0.7	0.4	-13.8	-9.5
South Africa	75	-3.2	-4.1	-11.7	-7.8	92	-0.9	-3.5	-14.2	-12.5
Other African countries	271	-7.4	-8.25	-33.2	-12.5	409	1.1	1.3	13.8	-8.8
Crude oil exporters*	113	-14.4	13.6	-44.6	-27.6	143	-0.7	1.2	-19.1	-12.6
Other	158	1.7	1.6	-15.4	2.8	266	2.2	1.3	-10.4	-6.6
<b>Middle East</b>	766	-2.8	-4.3	-34.4	-9.5	665	2.3	2.1	-7.7	-7.2
<b>Asia**</b>	5,262	1.9	2.6	-7.9	-3.7	4,781	0.9	0.1	-14.5	-4.7
China	2,098	4.9	6.0	-2.9	-7.7	1,587	2.2	0.5	-14.3	-5.5
Japan	645	-2.9	-3.5	-9.5	3.2	607	-2.2	-2.5	-20.2	-6.3
India	264	2.6	2.5	-17.1	-1.3	359	0.4	-0.5	-15.1	-8.6
Newly industrialised Asian countries***	1,131	0.3	1.3	-11.1	-3.5	1,041	-0.9	1.1	-16.6	-5.8

\* Algeria, Angola, Cameroon, Chad, Congo, Equatorial Guinea, Gabon, Libya, Nigeria, Sudan; \*\* Asia includes Australia and Oceania; \*\*\* Hong Kong, South Korea, Singapore and Taiwan

Source: DDS of the Ministry of Economic Development on the basis of WTO data from April 2017.

For the seventh year in a row, China leads in the ranking of global commodity exporters. In 2016, its share was 13.2% compared to 13.8% in 2015 and 12.4% in 2014. As it had been the case in the previous year, China was followed by the United States and by Germany, whose share amounted to 9.1% and 8.4%, respectively, which meant that the US maintained its 2015 position, while the share of Germany rose by 0.3 pp. As a result of the abovementioned increase in exports by 3.2%, Japan's share in global exports grew to 4.0% compared to 3.8% in 2015, which gave it the 4<sup>th</sup> position in 2016. It should be noted that South Korea dropped to the 8<sup>th</sup> position (with 3.1%) from the 6<sup>th</sup> position in 2015, although its share remained unchanged compared to the previous year.

As it had been the case in the previous years, top global commodity importers in 2016 were the United States (13.9%), China (9.8%) and Germany (6.5%).

Poland moved up by two places in the ranking of global commodity exporters and with the share of 1.3% (USD 203 billion) gained the 22<sup>th</sup> position. Similarly, on the side of imports, Poland moved up by three places to the 21<sup>th</sup> position, with the share of 1.2% (USD 197 billion).

In 2016, the value of global exports of services amounted to almost USD 4.8 trillion, i.e. rose by 0.1% compared to the previous year. Services accounted for nearly 24% total global trade in goods and services. In terms of types of services, the highest growth rate (2.1%) was reported in exports of production services related to the processing of goods, and in exports of tourist services (1.8%). A drop was reported in the case of exports of transport services (4.7%).

Europe accounted for almost one half of global exports of services (47%) in 2016, with a slight decrease by 0.3% to USD 2.3 trillion. At the same time it accounted for 42% of the imports of services, with an increase by 1.1% (to USD 2.0 trillion). In the European Union, exports of services rose by 0.2% (to USD 2.0 trillion), while imports increased by 1.1% (to USD 1.8 trillion). Among the key European economies, the best results were reported in Germany (USD 267 billion), the United Kingdom (USD 329 billion), France (USD 235 billion), the Netherlands (USD 174 billion) and Ireland (USD 146 billion).

The United States remained the leader in global services, both exported and imported, with the share of 15.4% and 10.4%, respectively. As it had been the case in the previous years, on the side of exports of commercial services it was followed by the United Kingdom (6.9%) and Germany (5.6%). In the case of imports, China took the 2<sup>nd</sup> position (with the share of 9.7%), followed by Germany (6.5%).

In 2016, Poland was on the 25<sup>th</sup> position on the list of global exporters of services (compared to the 27<sup>th</sup> position in 2015), due to an increase in exports of services by 7.8% to USD 49 billion (1.0% share in global exports). In the case of imports, similarly to 2015, Poland was on the 30<sup>th</sup> position with the share of 0.7%, i.e. USD 34 billion.

**Table 5. World's largest exporters and importers of goods in 2016**

No.	Exporters	Value	Share	Change y/y	No.	Importers	Value	Share	Change y/y
		USD billion	%				USD billion	%	
1	China	2,098	13.2	-8	1	United States	2,251	13.9	-3
2	United States	1,455	9.1	-3	2	China	1,587	9.8	-5
3	Germany	1,340	8.4	1	3	Germany	1,055	6.5	0
4	Japan	645	4.0	3	4	United Kingdom	636	3.9	1
5	Netherlands	570	3.6	0	5	Japan	607	3.7	-6
6	Hong Kong	517	3.2	1	6	France	573	3.5	0
7	France	501	3.14	-1	7	Hong Kong	547	3.4	-2
8	South Korea	495	3.1	-6	8	Netherlands	503	3.1	-2
9	Italy	462	2.9	1	9	Canada	417	2.6	-5
10	United Kingdom	409	2.6	-11	10	South Korea	406	2.5	-7
11	Belgium	396	2.5	0	11	Italy	404	2.5	-2
12	Canada	390	2.4	-5	12	Mexico	398	2.5	-2
13	Mexico	374	2.3	-2	13	Belgium	367	2.3	-2
14	Singapore	330	2.1	-5	14	India	359	2.2	-9
15	Switzerland	303	1.9	5	15	Spain	309	1.9	-1
16	Spain	287	1.8	2	16	Singapore	283	1.7	-5
17	Russia	282	1.8	-17	17	Switzerland	269	1.7	6
18	Taiwan	280	1.8	-2	18	Taiwan	231	1.4	-3
19	United Arab Emirates	266	1.7	-2	19	United Arab Emirates	225	1.4	-2
20	India	264	1.7	-1	20	Turkey	199	1.2	-4
21	Thailand	215	1.3	0	21	Poland	197	1.2	0
22	Poland	203	1.3	2	22	Australia	196	1.2	-6
23	Australia	190	1.2	1	23	Thailand	195	1.2	-4
24	Malaysia	189	1.2	-5	24	Russia	191	1.2	-1
25	Brazil	185	1.2	-3	25	Vietnam	174	1.1	5
26	Vietnam	177	1.1	9	26	Malaysia	168	1.0	-4
27	Saudi Arabia	175	1.1	-14	27	Austria	157	1.0	1
28	Czech Republic	163	1.0	3	28	Brazil	143	0.9	-20
29	Austria	152	1.0	0	29	Czech Republic	142	0.9	1
30	Indonesia	144	0.9	-4	30	Sweden	140	0.9	1
<b>Total</b>		<b>13,458</b>	<b>84.3</b>	<b>-</b>	<b>Total</b>		<b>13,332</b>	<b>82.2</b>	<b>-</b>
<b>World*</b>		<b>15,955</b>	<b>100.0</b>	<b>-3</b>	<b>World*</b>		<b>16,225</b>	<b>100.0</b>	<b>-3</b>

\* data include the value of reexports and imports for reexports purposes

Source: DDS of the Ministry of Economic Development on the basis of WTO data from April 2017.

## 1.4 Prospects for the development of global trade in 2017

According to the estimations of international and Polish analytical centres, 2017 will see a recovery in global trade. This will result from a general improvement in global economic conditions in particular in commodity exporters, as well as from acceleration in investments and a rise in demand.

According to IMF, the volume of global trade in goods and services in 2017 will rise by 4.0%, i.e. faster by 1.7 pp than in 2016. IMF analysts expect trade to recover more dynamically in emerging economies and developing countries, which in 2017 should report an increase by 4.1%, than in developed countries (a rise by 3.9%).



Higher growth rate of trade in 2017 should also be triggered by the expected increase in prices. According to IMF estimations, crude oil prices will rise to USD 52 per barrel in 2017-2018, compared to the average of about USD 43 in 2016. This should boost imports and improve the economic conditions of commodity exporters.

The European Commission estimates that the global exports of goods and services in 2017 should grow by 3.4%, while imports should rise by 3.5%, compared to 2.1% and 1.9%, respectively, in 2016. One of the most favourable forecasts for global trade was presented by OECD analysts. According to them, in 2017 the volume of global trade (goods and services) will grow by 4.6%<sup>2</sup>, i.e. it will almost double up compared to 2016 (2.4%). OECD experts forecast that trade will recover in particular in China (by 8.2%), Brazil (by 4.9%) and Russia (by 4%).

**Table 6. Forecasted changes in the volume of global trade (goods and services) in selected OECD countries in 2016-2017 (y/y) in %**

	Exports		Imports	
	2016	2017*	2016	2017*
Germany	2.5	4.2	3.7	4.1
United Kingdom	1.8	1.9	2.8	3.8
Czech Republic	4.0	3.8	3.0	3.0
France	1.2	2.5	3.5	4.4
Poland	9.0	7.8	8.9	6.5
United States	0.4	2.9	1.1	4.7
Japan	1.2	6.4	-2.3	3.2

Source: DDS of the Ministry of Economic Development on the basis of OECD data from June 2017; \* forecast.

Improved situation of global trade is also forecasted by experts from the World Trade Organization although, unlike IMF, the European Commission or OECD, WTO presents estimates for merchandise trade (instead of goods and services). According to the WTO data, in 2016 the volume of global merchandise trade rose merely by 1.3%, and in 2017 it will increase by 2.4%. The forecast assumes that global GDP will grow by 2.7%, whereas developed economies will implement expansive monetary and fiscal policies, while emerging and developing economies will enter the path of growth. It is estimated that in 2017, for the first time in several years, trade will grow in all world economy regions. This should constitute an additional boost. At the same time, WTO analysts point out that due to considerable uncertainty regarding the developments in economic and political situation and lack of clarity as to the government activity with regard to monetary, fiscal and trade policies in the near term, the forecast is a high-risk one. Therefore, depending on the developments, global trade will rise by 1.8%-3.6%.

According to the estimations of WTO, similarly to the last two years, in 2017 developed markets will report higher merchandise trade (in real terms, exports should grow by 2.8%, while imports should rise by 3%) than emerging and developing countries (where both exports and imports should increase by 2.2%).

<sup>2</sup> OECD Economic Outlook, June 2017.

**Table 7. Changes in global merchandise trade and global GDP in 2015-2018 (y/y) in %**

	2015	2016	2017*	2018*
<b>Merchandise trade volume</b>				
<b>World (average exports and imports)</b>	<b>2.6</b>	<b>1.3</b>	<b>2.4 (1.8-3.6)</b>	<b>2.1-4.0</b>
<b>Exports</b>				
Advanced economies	2.7	1.4	2.8 (1.9-4.0)	2.1-4.2
Emerging market and developing economies	2.0	1.3	2.2 (1.8-3.4)	2.0-4.0
<b>Imports</b>				
Advanced economies	4.7	2.0	3.0 (2.2-4.4)	2.0-4.0
Emerging market and developing economies	0.5	0.2	2.2 (1.8-3.3)	2.5-4.3
<b>Real GDP</b>				
<b>World</b>	<b>2.6</b>	<b>2.3</b>	<b>2.7</b>	<b>2.8</b>
Advanced economies	2.2	1.6	2.0	2.0
Emerging market and developing economies	3.5	3.5	4.0	4.2

Source: DDS of the Ministry of Economic Development on the basis of WTO data from April 2017; \* forecast.

It should be noted that current forecasts are exposed to high risk. The factors that might affect trade in 2017 include progress in negotiations relating to the future relations between the United Kingdom and the EU; German election results; trade and economic policy in the United States; development of trade relations between the US and China; developments in the economic situation in China; Russian politics; and geopolitical tensions.

## 1.5 Global public finance

In 2016 developed economies eased their fiscal policies, increasing their fiscal expansion by 0.2% of GDP, thus ending the five-year trend of gradual fiscal consolidation. Italy, Spain and the United States had the largest share in that process, with Canada and Germany to a lesser extent. Fiscal easing to a great extent depended on the conditions and specific nature of respective countries, although the general trend was driven by three key factors. Firstly, the aim of an expansive fiscal policy was to support reconstruction of economic growth (enhancing growth in the short term, creating conditions for employment growth) amid high uncertainty as to the further prospects. In developed economies, fiscal policy became much more countercyclical than in the last two decades. Secondly, many countries spent considerable amounts under public investments. Thirdly, social expenditure rose globally, including higher social benefits for elderly persons and expenses related to the migration crisis.

In the case of developing and emerging economies, budget deficits grew for the fourth year in a row from the average level of 0.9% of GDP in 2012 to 4.8% of GDP, which was the highest level in 20 years. Budget situation in this group deteriorated due to economic slowdown, lower commodity prices, geopolitical factors, as well as, in the case of China, implementation of fiscal policy instruments to support growth. In the analysed group of countries, China, Brazil and crude oil exporters contributed the most to fiscal policy deterioration.

**Table 8. Public finance sector results in the EU, the US and Japan in 2011-2018**

Country / group	Group*	Excessive deficit procedure		General government result (surplus/deficit) as % of GDP							
		status**	adjustment date	2011	2012	2013	2014	2015	2016	2017^	2018^
Austria	EA			-2.6	-2.2	-1.4	-2.7	-1.1	-1.6	-1.3	-1.0
Belgium	EA			-4.1	-4.2	-3.1	-3.1	-2.5	-2.6	-1.9	-2.0
Bulgaria	D			-2.0	-0.3	-0.4	-5.5	-1.6	0.0	-0.5	-0.3
Croatia	D	EDP		-7.8	-5.3	-5.3	-5.4	-3.4	-0.8	-1.1	-0.9
Cyprus	EA			-5.7	-5.6	-5.1	-8.8	-1.2	0.4	0.2	0.7
Czech Republic	D			-2.7	-3.9	-1.2	-1.9	-0.6	0.6	0.3	0.1
Denmark	ERM II / O			-2.1	-3.5	-1.0	1.4	-1.3	-0.9	-1.3	-0.9
Estonia	EA			1.2	-0.3	-0.2	0.7	0.1	0.3	-0.3	-0.5
Finland	EA			-1.0	-2.2	-2.6	-3.2	-2.7	-1.9	-2.2	-1.8
France	EA	EDP		-5.1	-4.8	-4.0	-3.9	-3.6	-3.4	-3.0	-3.2
Greece	EA	EDP		-10.3	-8.9	-13.1	-3.7	-5.9	0.7	-1.2	0.6
Spain	EA	EDP		-9.6	-10.5	-7.0	-6.0	-5.1	-4.5	-3.2	-2.6
Ireland	EA			-12.6	-8.0	-5.7	-3.7	-2.0	-0.6	-0.5	-0.3
Lithuania	EA			-8.9	-3.1	-2.6	-0.7	-0.2	0.3	-0.4	-0.1
Luxembourg	EA			0.5	0.3	1.0	1.4	1.4	1.6	0.2	0.3
Latvia	EA			-3.3	-1.0	-1.0	-1.6	-1.3	0.0	-0.8	-1.8
Malta	EA			-2.5	-3.7	-2.6	-2.0	-1.3	1.0	0.5	0.8
Netherlands	EA			-4.3	-3.9	-2.4	-2.3	-2.1	0.4	0.5	0.8
Germany	EA			-1.0	0.0	-0.2	0.3	0.7	0.8	0.5	0.3
Poland	D			-4.8	-3.7	-4.1	-3.5	-2.6	-2.4	-2.9	-2.8
Portugal	EA	EDP		-7.4	-5.7	-4.8	-7.2	-4.4	-2.0	-1.8	-1.9
Romania	D			-5.4	-3.7	-2.1	-1.4	-0.8	-3.0	-3.5	-3.7
Slovakia	EA			-4.3	-4.3	-2.7	-2.7	-2.7	-1.7	-1.3	-0.6
Slovenia	EA			-6.7	-4.1	-15.1	-5.4	-2.9	-1.8	-1.4	-1.2
Hungary	D			-5.5	-2.3	-2.6	-2.1	-1.6	-1.8	-2.3	-2.4
Italy	D			-3.7	-2.9	-2.9	-3.0	-2.7	-2.4	-2.2	-2.3
Sweden	O	EDP		-0.2	-1.0	-1.4	-1.5	0.3	0.9	0.4	0.7
United Kingdom	EA			-7.5	-8.2	-5.6	-5.7	-4.3	-3.0	-2.9	-2.3
Euro area	n/a	n/a	n/a	-4.2	-3.6	-3.0	-2.6	-2.1	-1.5	-1.4	-1.3
EU	n/a	n/a	n/a	-4.6	-4.3	-3.3	-3.0	-2.4	-1.7	-1.6	-1.5
Japan	n/a	n/a	n/a	-9.1	-8.3	-7.6	-5.4	-3.5	-4.2	-4.0	-3.3
United States	n/a	n/a	n/a	-9.6	-7.9	-4.4	-4.0	-3.5	-4.4	-4.0	-4.5

Key: \*EA – Euro area; \*ERM II - ERM II member; \*D - Member State with derogation; \*O - Member State with an opt-out clause; \*\*EDP – ECOFIN Council recommendation on a deadline for correction of excessive deficit; ^- European Commission forecast, Economic Forecast - Spring 2017; for US and Japan – IMF

Source: DDS of the Ministry of Economic Development based on the Eurostat and IMF data, KE Economic Forecast - Spring 2017.

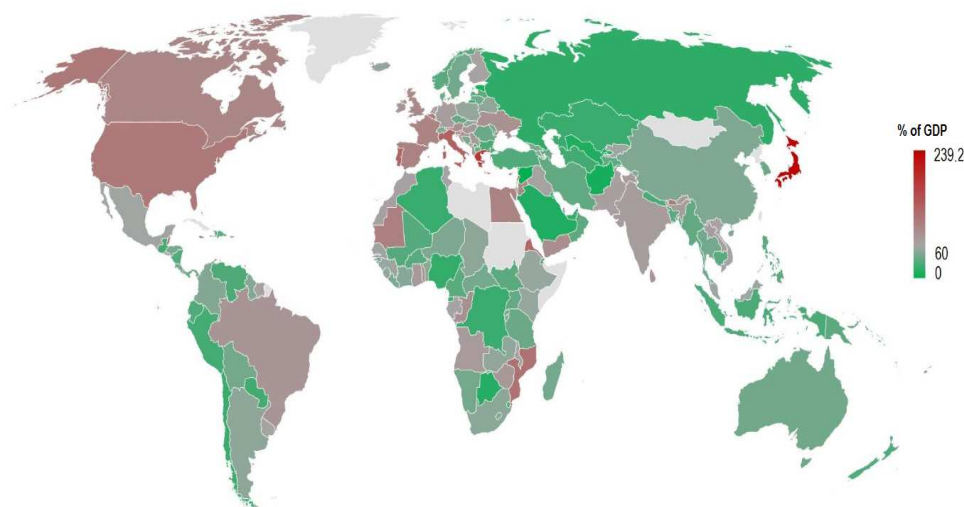
In 2016, economic situation in the European Union was ambiguous. On the one hand, economic prospects improved, output gap was closing, unemployment returned to the levels from years before the 2007-2008 crisis; on the other hand, the percentage of long-term unemployed persons remained high. Inflation was low and investment activity slowed down. Interest rates were at historic lows.

At the same time, most EU Member States tried to respond to the problems with debt. In 2016, general government deficit in EU-28 countries amounted to -1.7% of GDP against the previous year's -2.4% of GDP. 12 Member States did not report general government deficit, while certain Member States (Germany, Estonia, Luxembourg, Sweden, and even Greece) ended the year with a surplus. The improved fiscal situation in EU-28 is proved by the limited number of Member States subject to excessive deficit procedure (EDP). At the end of 2016 (as it was the case in June 2017), 6 Member States were covered by the procedure (Croatia, France, Greece, Portugal, Spain and the United Kingdom), with only 5 Member States keeping the deficit below 3% of GDP in 2010. In the Euro area, the deficit decreased by 0.6 pp to 1.5% of GDP.

In developed countries, debt-to-GDP ratio rose by 2 pp to 107.6% of GDP. According to IMF estimations, this ratio would remain on that level in the medium term. The debt of developing countries was growing even faster. In this group, debt-to-GDP ratio rose by 10 pp during the year to 47.4% of GDP.

In EU-28, public debt decreased as a result of the growing responsibility in public finance management in most Member States, both in relation to GDP (from 84.9% of GDP in 2015 to 83.5% of GDP in 2016) and in absolute terms (by over EUR 106 billion). Nevertheless, in many Member States public debt remains high. The highest levels of public debt-to-GDP ratio were reported in Greece (179.0%), Italy (132.6%) and Portugal (130.4%). Estonia (9.5%) and Bulgaria (29.5%) reported the lowest public debt in relation to GDP.

**Figure 1. General government debt**



Source: DDS of the Ministry of Economic Development on the basis of IMF data.

**Table 9. General government debt in the EU, the US and Japan in 2011-2018**

Country / group	General government debt as % of GDP							
	2011	2012	2013	2014	2015	2016	2017^	2018^
Austria	82.6	82.0	81.3	84.4	85.5	84.6	82.8	81.2
Belgium	102.6	104.3	105.6	106.7	106.0	105.9	105.6	105.1
Bulgaria	15.2	16.7	17.0	27.0	26.0	29.5	26.8	26.0
Croatia	65.2	70.7	82.2	86.6	86.7	84.2	81.9	79.4
Cyprus	65.2	79.3	102.2	107.1	107.5	107.8	103.4	99.8
Czech Republic	39.8	44.5	44.9	42.2	40.3	37.2	36.2	35.6
Denmark	46.1	44.9	44.0	44.0	39.6	37.8	36.7	36.0
Estonia	6.1	9.7	10.2	10.7	10.1	9.5	9.5	9.6
Finland	48.5	53.9	56.5	60.2	63.7	63.6	65.5	66.2
France	85.2	89.5	92.3	94.9	95.6	96.0	96.4	96.7
Greece	172.1	159.6	177.4	179.7	177.4	179.0	178.8	174.6
Spain	69.5	85.7	95.5	100.4	99.8	99.4	99.2	98.5
Ireland	109.6	119.5	119.5	105.3	78.7	75.4	73.5	72.7
Lithuania	37.2	39.8	38.7	40.5	42.7	40.2	42.4	38.9
Luxembourg	18.7	21.7	23.4	22.4	21.6	20.0	22.0	22.3
Latvia	42.7	41.2	39.0	40.9	36.5	40.1	38.5	36.0
Malta	70.4	68.1	68.7	64.3	60.6	58.3	55.8	52.5
Netherlands	61.6	66.4	67.7	67.9	65.2	62.3	59.8	57.2
Germany	78.7	79.9	77.5	74.9	71.2	68.3	65.8	63.3
Poland	54.1	53.7	55.7	50.2	51.1	54.4	54.6	55.4
Portugal	111.4	126.2	129.0	130.6	129.0	130.4	128.5	126.2
Romania	34.2	37.3	37.8	39.4	38.0	37.6	39.3	40.9
Slovakia	43.7	52.2	54.7	53.6	52.5	51.9	51.5	49.8
Slovenia	46.6	53.9	71.0	80.9	83.1	79.7	77.8	75.5
Sweden	37.5	37.8	40.4	45.2	43.9	41.6	39.1	37.0
Hungary	80.7	78.2	76.6	75.7	74.7	74.1	72.6	71.2
United Kingdom	81.6	85.1	86.2	88.1	89.0	89.3	88.6	87.9
Italy	116.5	123.4	129.0	131.8	132.1	132.6	133.1	132.5
Euro area	86.8	91.4	93.7	94.3	92.5	91.3	90.3	89.0
EU	81.6	85.3	87.4	88.4	86.5	85.1	84.8	83.6
Japan	230.6	236.6	240.5	242.1	238.0	239.2	239.2	239.4
United States	99.9	103.4	105.4	105.2	105.6	107.4	108.3	108.9

^ - European Commission forecast, *Economic Forecast - Spring 2017*, for the United States and Japan – IMF.

Source: DDS of the Ministry of Economic Development on the basis of Eurostat and IMF data.

While in response to the growing problem of debt at times of crisis many Member States implemented fiscal tightening programmes to guarantee fiscal stability amid uncertainty, and fiscal policy measures in 2014 and 2015 were rather neutral, in 2016 they became much more expansive.

In November 2016, the European Commission presented a communication entitled *Towards a Positive Euro Area Fiscal Stance*, where it emphasised the need to adopt a more positive fiscal policy and the circumstances which allowed it. Positive fiscal stance is understood as an expansionary policy, including the fiscal adjustment structure, with regard to the division of efforts among Member States and the types of the related expenses or taxes.

Positive fiscal stance can only be achieved by a collective approach taking the specific nature of respective Member States into account. In the case of Member States which exceed their budgetary

objectives, they need to use fiscal space to support internal demand and high quality investments. In the case of Member States which require further fiscal adjustments under the preventive arm of the Stability and Growth Pact, they need to ensure compliance with the requirements of the Pact. In the case of Member States subject to the corrective arm of the Stability and Growth Pact, they need to timely adjust their excessive deficits, including the provision of fiscal buffers in case of unforeseen circumstances.

The Commission recommends fiscal expansion up to 0.5% of GDP in 2017 for the whole Euro area. In the opinion of the Commission, this should lead to a balanced combination of fiscal and monetary policy in order to support reforms and economic recovery.

## **2. MACROECONOMIC SITUATION IN POLAND IN 2016**

The continuing uncertainty regarding global developments was one of key factors determining the level of economic activity in Poland in 2016. It was caused mainly by unpredictable political events, such as the UK decision to exit the European Union or the presidential election in the United States. Global economy was still growing at a relatively slow pace.

The domestic factor that determined Poland's economic situation in 2016 was a drop in investment activity. Although in general the condition of enterprises was good and it was improving during the year, both exporters and importers remained cautious in terms of making investment decisions. In 2016, investments of enterprises dropped by 11.5% (total aggregate decrease of 11.8%). The structure of expenditure significantly changed: the share of buildings and structures decreased from 39.3% in 2015 to 35.3% in 2016, while the share of machinery and equipment grew from 46.4% to 51.0%. The lowest activity was reported by construction enterprises which were most affected by the decline in investments.

At the same time, there was a rise in investment surplus which increased the potential for the self-financing of investments. In 2015, investment surplus could finance expenditure 58% higher than the actually incurred expenditure, whereas in 2016 this ratio rose to 86%. However, public enterprises financed from EU funds remained the key actors in that process. The changing financial perspective and delayed implementation of new programmes resulted in a significant decrease in investments in that sector.

Investment activity of enterprises lowered despite the sound financial condition in the sector. Smaller scale of investment led to an increase in both cash flows of enterprises (growth by 5.6% y/y) and debt due to long-term loans and credits (increase by 8.3%). The improving financial results of enterprises and the inflow of financing by loans will encourage enterprises to intensify investments in the coming year.

The growth rate of merchandise exports hit the lowest point since the financial crisis of 2009 and it was about four times lower than the annual average growth rate in the last 15 years. However, a positive development was the fact that in 2016 the trend where exports grew faster than GDP continued. It should be added that for the second year in a row the value of exports was higher than the value of imports, which allowed to generate a trade surplus and had a positive impact on GDP. As it had been the case in the previous year, in 2016 Polish exports was supported by the exchange rate, which led to competitive pricing of Polish goods.

From the beginning of 2016 employment had been on the rise; average employment in 2016 was 2.8% higher for the enterprise sector and 2.5% higher for the whole economy compared to 2015. Real annual wage growth rate remained over 4%.

Compared to 2015, the conditions prevailing in the economic environment of Poland in 2016 have slightly deteriorated. Weak demand and slower trade throughout 2016 affected productivity. As a result of the investment slowdown, the European economy reported lower activity and the low base effect in trade with Eastern partners allowed to increase exports to those markets.

Poland is among the countries which to a considerable extent take advantage of their economic attractiveness. The preliminary NBP data show that FDI inflow to Poland in 2016 amounted to approx. EUR 5.8 billion<sup>3</sup>.

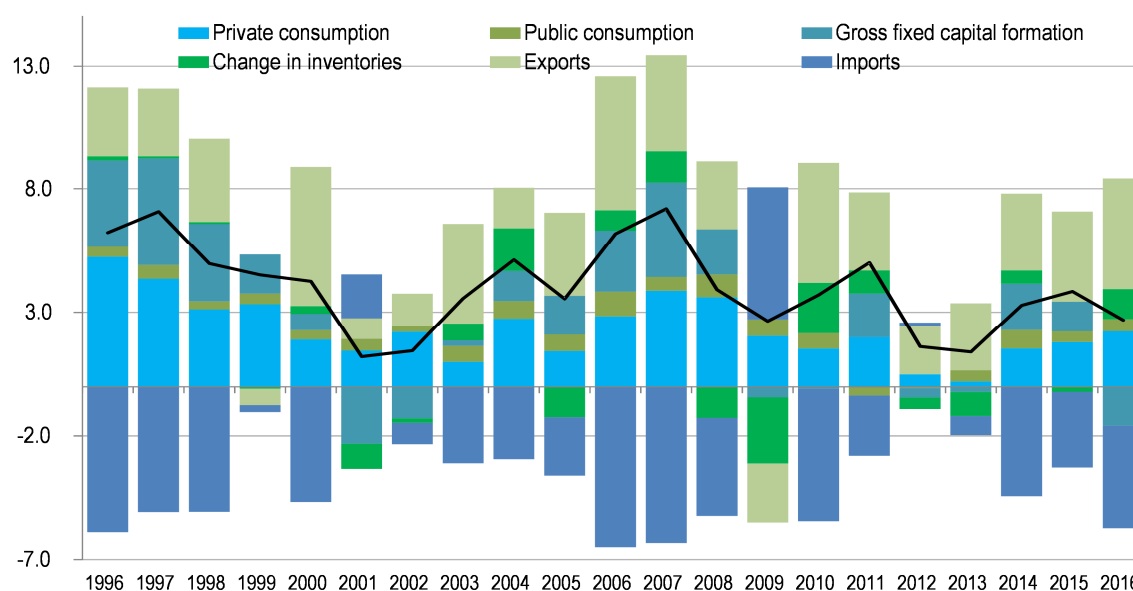
In 2016, the general government deficit amounted to minus 2.4% of GDP, while the general government debt represented 54.4% of GDP. The reduced deficit in the sector was due to the growing revenues from social insurance contributions and tax proceeds.

## 2.1 Economic growth and its drivers

After a significant slowdown observed in 2012 and 2013 (with economic growth of 1.6% and 1.4%, respectively) and a marked acceleration in 2014 and 2015 (growth of 3.3% and 3.8%), in 2016 economic growth dropped to 2.7%. The slowdown affected most EU Member States, which hampered growth both in the EU (increase by 1.9% compared to 2.2% in 2015) and in the Euro area (1.8% and 2%, respectively). Compared to other countries, Poland's position remained good, with only Romania, Bulgaria and Slovakia reporting better growth among CEE countries. Compared to 2008, i.e. the situation from the years before the financial crisis, in 2016 higher aggregate GDP growth was only reported by Ireland (after a significant revision of the 2015 data) and by Malta, which reported an average growth rate of 6.3% y/y in the last four years. Polish GDP was 26.9% higher than in 2008, compared to 4.2% in the EU as a whole.

Quarterly GDP growth rate in the first two quarters of 2016 dropped to 3%, which was particularly acute after the last two quarters of 2015 when the average rate amounted to 4.1%, with 4.6% in Q4 due to the completion of expenditure provided for under the previous financial perspective.

**Chart 1. GDP growth demand breakdown**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

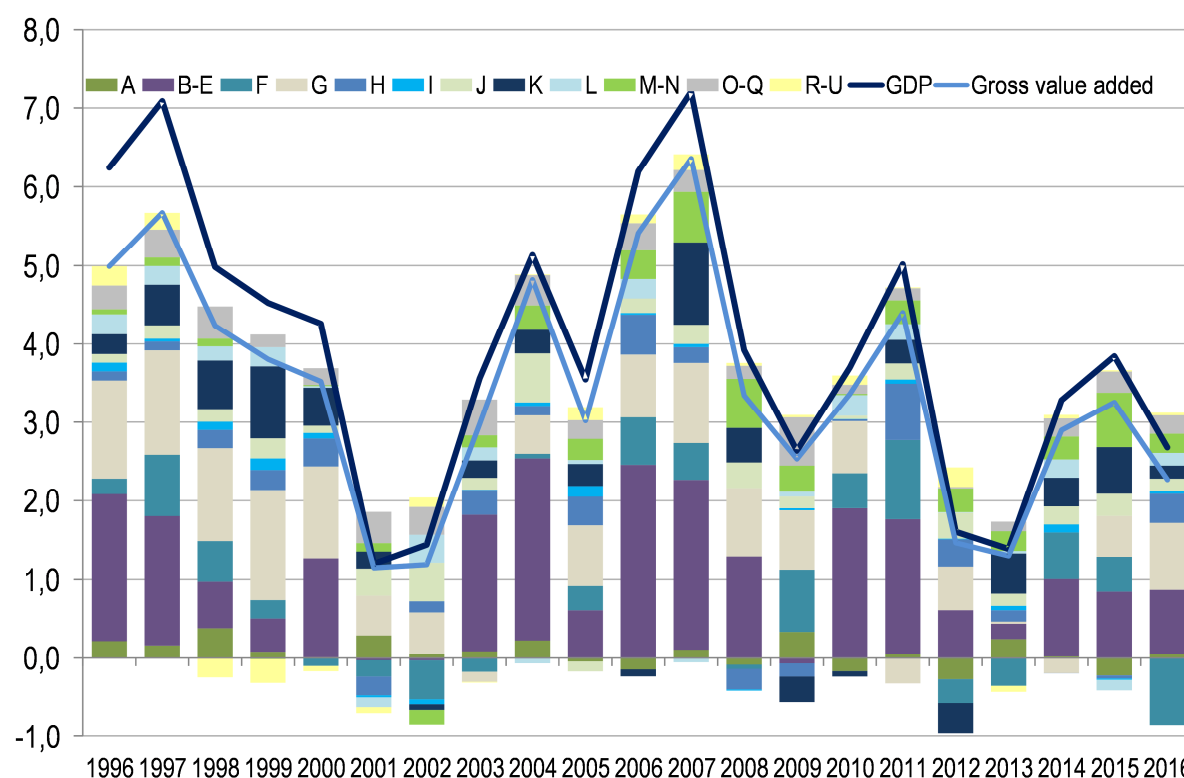
<sup>3</sup> According to the UNCTAD data, USD 6.4 billion, converted using the annual average rate EURUSD=1.1063



GDP growth of 2.7% in 2016 resulted from the decrease in investment activity and the increase in both consumption and exports, whose rate was higher than in 2015. Private consumption, which in 2015 was steadily growing at the rate of 3.1%, gradually accelerated, from 3.4% in H1 to 4.5% in Q4 2016. Public consumption was gradually slowing down. Despite the higher growth rate of exports (in terms of volume), which in 2016 rose by 9% against 7.7% in 2015, the share of net exports was lower than in the previous year with 0.3 pp compared to 0.6 pp in 2015. This resulted from a dynamic growth in imports (increase by 8.9% compared to 6.6% in 2015, in terms of volume).

The key drivers of consumer demand in respective quarters of 2015 were the gradual improvement of the situation on the labour market (growing employment and decreasing unemployment), as well as the fast, albeit slowing down, real wage growth. As a result of the steadily rising employment (by 2.3%), at the rate which had been close to 2% for three years now, as well as the steadily growing wages (real wage growth in 2015 and 2016 exceeded 4%), consumption was less driven by borrowing and household liabilities were growing slower than in the previous years.

**Chart 2. Sectoral breakdown of GDP in 1996-2015<sup>4</sup>**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

<sup>4</sup> Letters in the key refer to the following sectors (Polish Classification of Activities sections): A Agriculture; B-E Industry; F Construction; G Trade; repair of motor vehicles; H Transportation and storage; I Accommodation and food service activities; J Information and communication; K Financial and insurance activities; L Real estate activities; M-N Professional, scientific and technical activities; Administrative and support service activities; O-Q Public administration and defence; Compulsory social security; Education; Human health and social work activities; R-U Arts, entertainment and recreation; Other service activities; other activities.

Breakdown of GDP per capita allows for identification of growth drivers related to labour and its productivity. Steady growth of productivity per man-hour indicates that this factor is crucial for economic growth, in particular in the long term. However, other drivers should be noted as well, such as the growth rate of economic activity of the population, which has been steadily rising since 2008. In the last few years, unemployment reduction became more important, as well as the positive impact of a more intensive use of labour due to the increase in the number of man-hours. A negative factor which will remain important is the lower share of working-age persons in total population. Each of those processes requires structural policy measures.

## 2.2 Investments

The scale of a slump in investment expenditure can only be compared to the one of 2010, which suggests that it was caused by the same factor, i.e. completion of expenditure provided for under the previous financial perspective. Other CEE economies reported a similar, or even more acute, decline. The decrease in general government investment expenditures (by 1.1% of GDP) was similar to the one in 2012. However, private investments dropped by 1 pp in relation to GDP, which was much weaker than in 2010 (a decrease by 1.7 pp).

Total investment expenditure plunged to 11.8% in 2016 compared to an increase by 7.1% in 2015 and a rise by 9.5% in 2014<sup>5</sup>. The main reason was a slump in expenditure on non-residential buildings, as well as on machinery and equipment. Throughout 2016, investment expenditure on residential buildings was growing after the 2015 drops. Lower expenditure on machinery and equipment in H1 mainly related to other machinery, whereas in Q4 it mainly resulted from a drop in investment expenditure on vehicles.

**Table 10. Gross public investment expenditure as a percentage of GDP**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Poland</b>	4.5	4.8	5.0	5.6	5.8	4.7	4.1	4.5	4.4	3.3
<b>EU-28</b>	3.2	3.4	3.7	3.5	3.3	3.1	3.0	2.9	2.9	2.7

Source: DDS of the Ministry of Economic Development on the basis of AMECO data.

After the period of growth for gross public investment expenditure in relation to GDP, the trend changed in 2012. In the case of Poland and other CEE countries, public investment expenditure decreased due to gradual finalisation of the previous EU financial perspective. In Bulgaria, Hungary and Slovakia the share of public investment expenditure in GDP dropped by more than 3 pps. Romania, the Czech Republic and Slovenia also reported larger slumps than Poland.

The share of investment expenditure in the private sector became close to the one in 2010 when investment activity slowed down. This share is also over 1 pp lower than the multiannual average (since 2004, average share of investment expenditure had been 15.8).

However, in the near term, a significant recovery in investment activity is expected also in the private sector. Apart from the growing absorption of funds under the new financial perspective, the key indications include broad use of capacity, sound financial condition of enterprises, still low interest rates, as well as improved business sentiments. Measures under the Responsible Development Strategy will

<sup>5</sup> In constant prices.

also constitute an important trigger for investments in the long term through mobilisation of capital for development, increasing private savings, and boosting investments from domestic funds.

As in the previous years, in 2015 and 2016 FDI transactions around the world were effected in turbulent economic and geopolitical conditions. The stability of Poland in many aspects contributed to a good investment climate, which resulted in numerous investment projects implemented in Poland. 2015 and 2016 saw modern investments that were important and crucial for the Polish economy, such as investments in such industries as automobile, food, home appliances, IT, R&D, and service centres. UNCTAD estimates that in 2016 Poland saw an inflow of about EUR 5.8 billion<sup>6</sup>.

**Table 11. Gross private investment expenditure as a percentage of GDP**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Poland</b>	18.0	18.3	16.4	14.7	14.8	15.1	14.7	15.2	15.7	14.7
<b>EU-28</b>	19.3	19.1	16.8	16.6	16.9	16.7	16.3	16.4	16.6	17.0

Source: DDS of the Ministry of Economic Development on the basis of AMECO data.

It should be noted that direct investments are a sensitive category, closely related to external and internal conditions of the receiving economy. The Ministry of Economic Development aims at creating such conditions in the Polish economy that would attract investments contributing to the growth of the added value and boosting the development of Polish enterprises. Such investments, constituting important technology drivers, allow to develop a more knowledge and innovation-driven economy.

## 2.3 Foreign trade and exchange rate

In 2016, Polish exports rose by 2.9% to EUR 184.8 billion, while imports grew by 2.1% to EUR 180.9 billion. The growth rate of exports hit the lowest point since the financial crisis of 2009 and it was about four times lower than the annual average growth rate in the last 15 years. However, a positive development was the fact that in 2016 the trend where exports grew faster than GDP continued and that, for the second year in a row, the value of exports was higher than the value of imports, which allowed to generate a trade surplus of over EUR 3.9 billion, i.e. almost EUR 1.6 billion higher than in 2015.

Lower growth of Polish trade compared to the previous years was in line with the global trade slump trend in 2016. In 2016, Polish trade was most affected by the situation on the key EU markets, in particular in Germany. According to Eurostat data, in 2016 GDP of the EU grew by 1.9%, which was 0.3 pp lower than in the previous year. In the Euro area, economic growth slowed down to 1.8% against 2% in 2015. The key driver of growth in the EU was private consumption. Moreover, growth was stimulated by low prices of crude oil, weak EUR rate and improved situation on the labour market. On the other hand, similarly to the rest of the world, 2016 saw a clear slowdown in EU trade. After an increase in the volume of exports of goods and services from the EU in 2015 by about 6.5%, in 2016 it dropped to about 3.5%, with a slump to 3.3% in the Euro area. The volume of imports slowed down to 4.5% in the case of the EU and to 4.6% in the case of the Euro area, compared to increases of 6.5% and 6.8%, respectively, in 2015.

<sup>6</sup> According to the UNCTAD data, USD 6.4 billion, converted using the annual average rate EURUSD=1.1063

The economy of Germany, Poland's key trade partner, was growing at the rate of 1.9%<sup>7</sup>. This was 0.2 pp higher than in 2015 and higher than the average rate in the last decade. German economy was mainly driven by consumption. Economic growth in Germany was also supported by a growth in gross fixed capital formation, in particular in the construction sector. On the other hand, which is particularly important in the context of Polish trade, German trade saw certain unfavourable developments. In 2016, the volume of German exports of goods and services grew by mere 2.7% (compared to 5.2% in 2015), while imports rose by 3.8% (against 5.5% in 2015).

The results of Polish foreign trade in 2016 were also significantly affected by the economic situation in the Commonwealth of Independent States, in particular Russia and Ukraine. Russian economy remained in recession (0.2%), although it much improved compared to the previous year (2.8%). As it had been the case in 2015, this resulted from further slumps in crude oil prices. In 2016, the average price per barrel was USD 42.8<sup>8</sup>, i.e. it was 15% lower than in 2015. However, one of Russia's main successes in 2016 was the fact that inflation dropped to 7%, compared to over 15% in the previous year. After two years of recession, in 2016 Ukraine returned to the path of growth (GDP growth of 2.3%).

As it had been the case in 2015, in 2016 the exchange rate had a positive impact on the Polish exports. As a result of a stronger EURPLN (4.3% y/y) and USDPLN rate (4.6%), the nominal effective exchange rate (PLN exchange rate against the currency basket composed of 65% EUR, 25% USD, 10% PLN) strengthened by 4.2%. This means that in 2016 the prices of Polish goods became even more competitive.

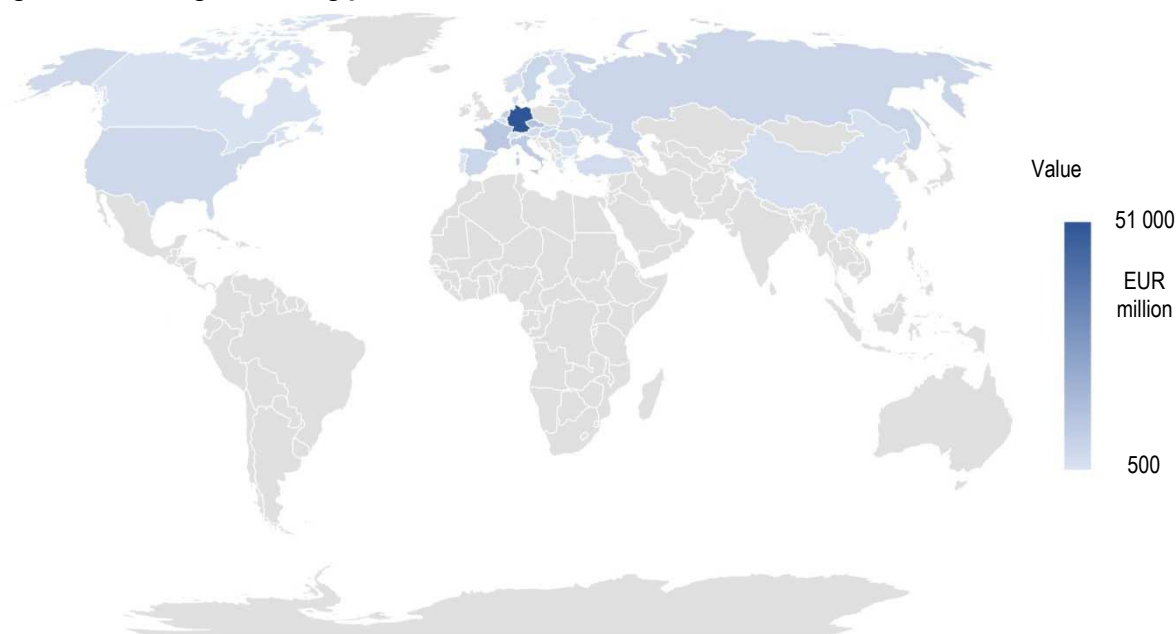
Exports to developed markets grew to 3.7% (to almost EUR 159.6 billion), while imports rose by 4.2% (to nearly EUR 123.5 billion), which was 2.8 times and 1.6 times lower than in 2015. The surplus of trade with this group reached EUR 36.1 billion, i.e. it was almost EUR 0.7 billion higher than in 2015.

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<sup>7</sup> Eurostat data.

<sup>8</sup> IMF data.

**Figure 2. The largest trading partners of Poland in 2016**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

Exports to the EU grew by 3.5% to almost EUR 147.6 billion. In 2016 Poland reported an increase in sales to 22 EU Member States, although in the case of 19 MS exports was growing slower than in the previous year. Among the key EU partners, Polish sales mostly slowed down in the case of Germany (to 4%), the United Kingdom (to 1.6%), the Czech Republic (to 2%), Italy (to 1.5%) and the Netherlands (to 4.2%). On the other hand, Polish sales improved e.g. in the case of Finland, with a rise in exports to about 11%.

Imports from the EU was growing faster than exports, i.e. by 4.2% (to about EUR 110.8 billion), which means that it slowed down by 2.8 pp compared to 2015. Goods surplus with EU Member States amounted to EUR 36.7 billion, which was almost EUR 0.6 billion higher than in 2015. Trade balance improved with regard to 16 Member States, with the highest growth reported for Sweden (by about EUR 545 million), Germany (by about EUR 355 million), Denmark (by about EUR 330 million), and the United Kingdom (by EUR 310 million).

Export to other (non-EU) developed countries was relatively good, with an increase by 5.4% in 2016 (to EUR 12 billion). This mainly resulted from fast increase in exports to the United States (by 7.6%), Canada (by about 12%), Switzerland (by 8.3%) and Israel (by 12%). On the other hand, exports to Norway dropped for the third year in a row (by almost 10% in 2016).

At the same time, in 2016 imports from non-EU developed countries slowed down to 4.2% (about EUR 12.6 billion), mainly due to lower imports from Norway (by 14%) and Switzerland (by about 3.2%). As a result, the deficit with regard to this group of markets decreased by about EUR 0.1 billion to EUR 0.62 billion in 2016.

2016 also saw a certain recovery of exports to CIS markets. After two years of deep slumps, in 2016 exports to those countries rose by 4.4% (to EUR 10.6 billion), of which by 1.8% to Russia, by about 16% to Ukraine, and by 2% to Belarus. However, it should be noted that such relatively good results are the

effect of a low reference base. In terms of value, exports to CIS countries remains low, in particular compared to 2013 (lower by over 30% for CIS countries and by about 35% for Russia). At the same time, the plunge of imports from CIS continued (by 15.5% to EUR 13.6 billion), of which by 19% in the case of Russia. As a result of changes in trade with CIS, the deficit was twice as low as in 2015 and amounted to EUR 3 billion in 2016, which had been the lowest level since 2004. The negative trade balance with Russia decreased by EUR 2.5 billion to EUR 5.2 billion, which had been the lowest level since 2005. At the same time, in 2016 Russia was again the leader among countries with which Poland's balance improved the most.

In terms of types of exported goods, most product groups saw lower growth than in the previous year. Sales of electric machinery products, which had the greatest share in our turnover, slowed down to 2.7% (compared to an increase by over 11% in 2015), exports of agri-food products slowed down to 1.9% (compared to an increase by 9%), and sales of metallurgical products dropped by 1.9% (compared to a slight growth in the previous year). Exports of light industry products, i.e. products whose exports were growing fast from the beginning of the year, increased by 10.7%. Although this result was very good compared to other groups of goods, it was lower than 6.7 pp than in 2015.

The trade balance most improved in the case of electric machinery products (by EUR 1.6 billion) and mineral products (by almost EUR 1 billion). The balance deteriorated the most in the case of agri-food products (by about EUR 0.8 billion) and metallurgical products (by EUR 0.75 billion).

## 2.4 Labour market

In 2016, the situation on the labour market improved considerably and the trends were positive. The number of employed persons aged 15 and over amounted to 16.2 million, while the number of employed persons aged 20-64 amounted to 15.8 million (which means that, in both groups, employment increased by 0.1 million compared to 2015). During the said period, the employment rate indicating the share of employed persons aged 20-64 in the overall population in this age group amounted to 69.3% (the target for Poland to be achieved by 2020 in accordance with the Europe 2020 strategy is 71%).

**Table 12. Situation in the Polish labour market in 2003-2016 in the 20-64 age group (annual average, %)**

Specification	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Activity rate	70.9	70.4	70.9	69.7	69.4	69.9	70.6	71.1	71.3	71.9	72.3	73.0	73.2	73.8
Employment rate	57.3	57.0	58.3	60.1	62.7	65.0	64.9	64.3	64.5	64.7	64.9	66.5	67.8	69.3
LFS unemployment rate	19.3	19.0	17.7	13.8	9.6	7.0	8.1	9.5	9.5	10.0	10.2	8.9	7.4	6.1
Registered unemployment rate at the end of the year*	20.0	19.0	17.6	14.8	11.2	9.5	12.1	12.4	12.5	13.4	13.4	11.4	9.7	8.3

Source: DDS of the Ministry of Economic Development on the basis of the following data: activity rate, employment rate and LFS unemployment rate – Labour Force Survey (LFS) - Eurostat; registered unemployment rate – Central Statistical Office.

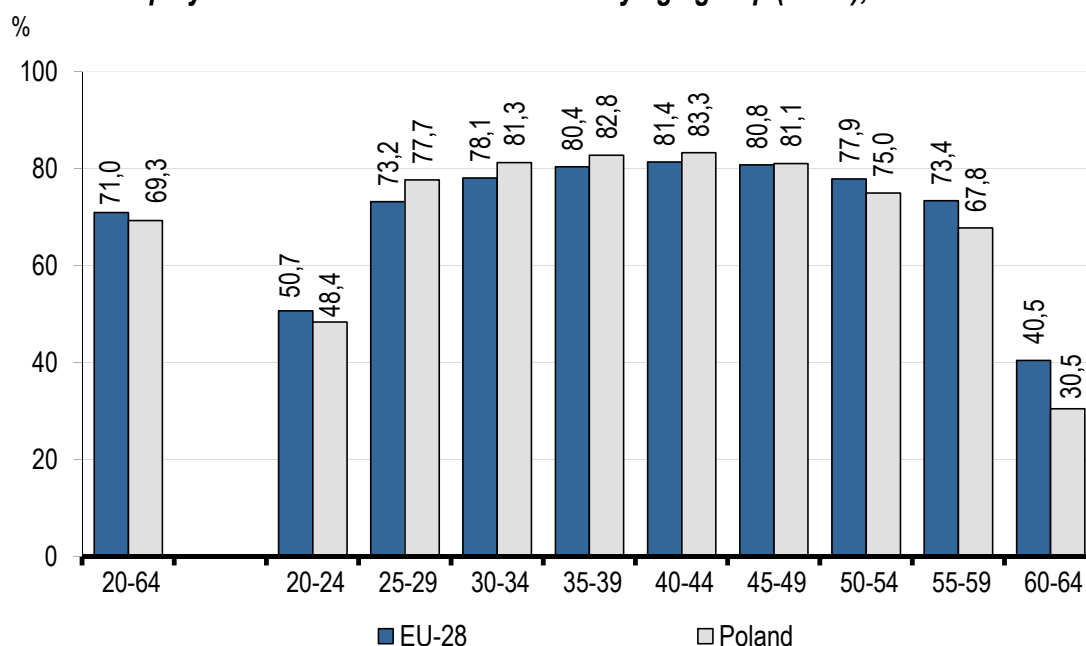
\* It applies to persons aged 18 and over who have not yet attained their retirement age.

Following the systematic increase in the employment rate for the EU-28 since 2002, the onset of the economic crisis in 2009 and 2010 reversed this trend, leading to a decrease in employment rate by 1.3 and 0.4 pp, respectively. In 2016, employment rate amounted to 71.1% (a rise by 1 pp). The employment rate in Poland (69.3%) is still one of the lowest in the European Union. An employment rate

lower than in Poland was recorded in Cyprus (68.8%), Bulgaria (67.7%), Belgium (67.7%), Romania (66.3%), Spain (63.9%), Italy (61.6%), Croatia (61.4%) and Greece (56.2%).<sup>9</sup>

In Poland, similar to most EU countries, the level of employment of young persons is a serious problem. Few countries may report high employment rates in this age group; the Netherlands and the United Kingdom are an exception in this respect with almost 70%. Along with deterioration of the economic situation in the wake of the global financial crisis in 2009, the upward trend for employment rates among the youngest groups of workers was reversed. In 2016, only about 24% of young Greeks and almost 30% of Italians, as well as more than 30% of persons aged 20-24 in Bulgaria or Spain were employed. With its employment rate of 48.4%, Poland also negatively deviates from the EU average (50.7%). A distinct disproportion (9.1 pp) between the figures for Poland and the EU is also noticeable in the older age groups (for persons aged 55-64).

**Chart 3. Employment rates in Poland and EU-28 by age group (20-64), 2016**



Source: DDS of the Ministry of Economic Development on the basis of Eurostat data.

In 2016, the average employment level<sup>10</sup> was 8,484 thousand (an increase by 2.3% compared to 2015). The average employment in the enterprise sector was at the level of 5,760 thousand, which is 2.8% more than in 2015 (when compared to the increase by 1.3% the year before). Growth was recorded, inter alia, in administrative and support service activities; information and communication; industrial processing; and accommodation and food service activities. The sharpest decline in employment was recorded in mining and quarrying; electricity, gas, steam and hot water supply; and real estate activities.

<sup>9</sup> LFS Eurostat data for the group of persons aged 20-64.

<sup>10</sup> Excluding business operators with up to 9 employed persons, individual farming, foundations, associations, political parties, trade unions, social organisations, employers' organisations, economic and professional self-government, and activity connected with national defence and public security.



**Table 13. Average employment in the enterprise sector in 2013-2016 (in thousands)**

	2013	2014	2015	2016	2016/2015
Total	5,494	5,529	5,602	5,760	102.8
Industry	2,446	2,473	2,511	2,567	102.2
Mining and quarrying	168	157	146	135	92.7
Manufacturing	2,029	2,071	2,124	2,194	103.2
Electricity, gas, steam and hot water supply	136	128	122	118	96.1
Water supply; sewerage, waste management and remediation activities	114	116	118	120	102.0
Construction	444	410	386	383	99.3
Trade; repair of motor vehicles	1,115	1,130	1,154	1,190	103.1
Transportation and storage	484	484	495	510	103.1
Accommodation and food service activities	110	108	103	106	103.2
Information and communication	175	180	194	203	104.7
Real estate activities	94	96	94	93	99.1
Administrative and support service activities	322	330	343	379	110.3

Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

In 2016, there were 1,020.6 thousand unemployed in Poland in the 20-64 age group. The number of the unemployed decreased by 242.4 thousand compared to 2015. The unemployment rate (LFS) amounted to 6.1%, in the case of women it amounted to 6.1% while in the case of men to 6%.<sup>11</sup>

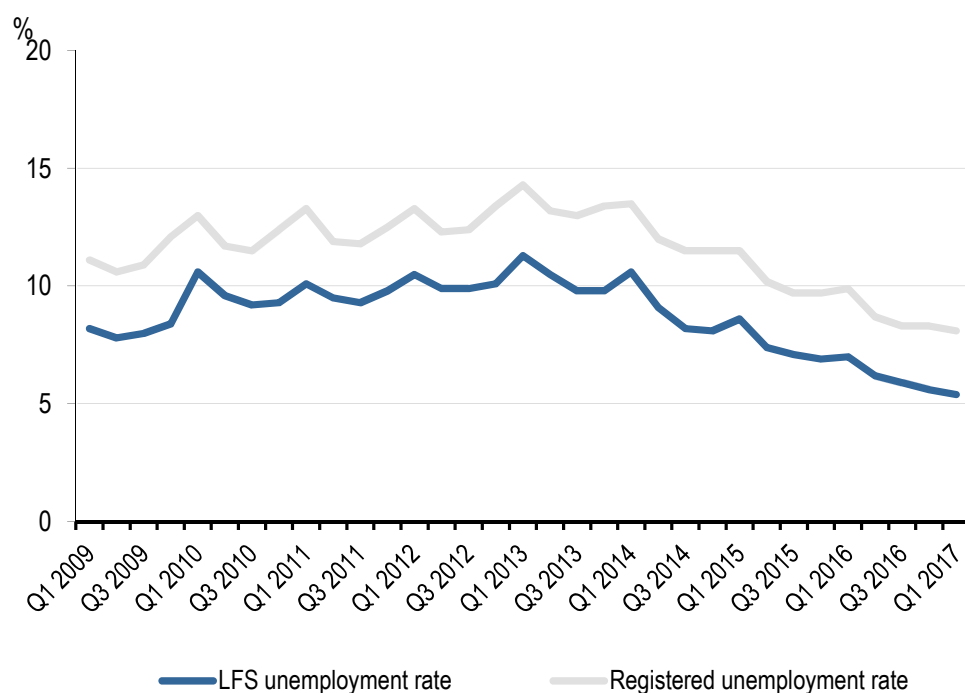
According to the registered unemployment statistics, 1,335.2 thousand people remained unemployed as at the end of 2016 (14.6% fewer than in 2015). The registered unemployment rate amounted to 8.3% and it was 1.4 pp lower than in the previous year.

Although at the end of 2016 registered unemployment rate decreased in all voivodeships compared to 2015, high territorial diversity of unemployment persisted. The highest unemployment rate was recorded in Warmińsko-Mazurskie (14.2%), Kujawsko-Pomorskie (12.1%), Podkarpackie (11.6%), Zachodniopomorskie (11.0%) and Świętokrzyskie (10.8%) Voivodeships. The unemployment rate was the lowest in Wielkopolskie (5.0%), Śląskie (6.2%), Małopolskie (6.7%), Mazowieckie (7.2%) and Dolnośląskie (7.3%) Voivodeships.

<sup>11</sup> LFS Eurostat data for the group of persons aged 20-64.



**Chart 4. LFS unemployment rate and registered unemployment rate in Poland in 2009-2017**



Source: DDS of the Ministry of Economic Development on the basis of Eurostat and Central Statistical Office data.

The unemployment in Poland tends to be long-term in nature. Among the unemployed registered at labour offices, more than 40.7% are the long-term unemployed (more than 12 months).

## 2.5 Labour costs

Compared to 2015, in 2016 labour costs (expressed in EUR) rose in 24 EU Member States and decreased in three Member States. The average labour cost increase in the EU Member States amounted to 1.6%. The highest growth was reported in Romania (11.6%) and in Bulgaria (7.8%). At the same time, the largest drop in labour costs was reported in the United Kingdom (10.1%), in Italy (0.8%) and in Poland (0.2% y/y).

According to Eurostat data, total labour cost index for EU-28 (excluding agriculture and public administration) amounted to EUR 25.4 in 2016; the highest cost was reported in Denmark (EUR 42.0), and the lowest in Bulgaria (EUR 4.4). In the Euro area, labour costs amounted to EUR 29.8.

Despite the fact that in 2004-2016 labour costs in Poland rose by 83%, with its payroll cost at the level of EUR 8.6<sup>12</sup> Poland still belongs to the group of countries having one of the lowest labour costs in the European Union. Lower wages apply only to Bulgaria, Romania, Lithuania, Latvia and Hungary.

<sup>12</sup> Per 1 man-hour.

Labour costs comprise payroll costs and non-payroll costs. The latter cost category continues to play a vital role in countries such as France or Sweden, where in 2016 non-payroll costs accounted for approximately one third of total labour costs. The lowest non-payroll costs were reported in Malta, with 6.6% of total labour costs in 2016. In Poland, this rate stood at 18.4%.

For a long time, the relatively low labour costs prevailing in the cost structure of enterprises determined the competitiveness of the Polish economy and allowed to attract foreign investment. As the development processes proceeded in Poland and worldwide, Poland had become less attractive than Asian countries where investments based on low labour costs began to thrive. Therefore, labour costs were becoming less important as one of the main sources of Poland's competitive position, to the benefit of quality, including human capital quality. At present, it is the education of human resources that is one of the main factors attracting foreign capital to Poland. Modern business service centres offering a large number of jobs that often require specialist skills play an important role in this respect, making Poland one of the leaders in this field.

Most of companies, in particular Polish ones, continue to perceive labour costs as one of key determinants of their activity. The results of studies of economic condition in respective sectors of the economy prepared by the Central Statistical Office indicate, as of 2016<sup>13</sup>, that labour costs continue to form a significant barrier for 52.5% of industrial companies, 59.5% of construction companies, 54.9% of companies operating in the retail trade sector and 54.1% of companies operating in the transportation and storage sector. In all cases except for retail trade the figures are lower than at the end of 2015.

Labour costs are therefore an important factor which influences the prices in industries where they constitute a significant part of total costs, i.e. in construction, restaurant and hotel sectors. Labour costs represent a great burden in particular for small and medium-sized enterprises; at the same time, entrepreneurs also consider them to be a significant barrier to their development, as the gross wages payable to employed persons constitute only a fraction of all costs incurred by the company due to employment.

In 2016, the growth rate of nominal average monthly gross wages in the enterprise sector was higher than in 2015. Due to low growth rate of consumer prices compared to 2015, the average monthly wage in the economy<sup>14</sup> increased by 4.2% in real terms and amounted to PLN 4,047. The average monthly wage in the enterprise sector was 4.4% higher in real terms compared to 2015 and stood at PLN 4,277 (a growth by 3.8% in nominal terms).

In the enterprise sector, the highest wages applied to the following industries: information and communication (PLN 7,581), mining and quarrying (PLN 6,752) and electricity, gas, steam and water supply (PLN 6,858), and the lowest wages applied to accommodation and food service activities (PLN 3,095), retail trade (PLN 3,065) and administrative and support service activities (PLN 2,985).

In 2016, the fastest wage growth in the enterprise sector was reported in accommodation and food service activities (by 7.2% y/y) and in trade and repair of motor vehicles (by 5.3%), while wages in mining and quarrying decreased (by 2.5% y/y).

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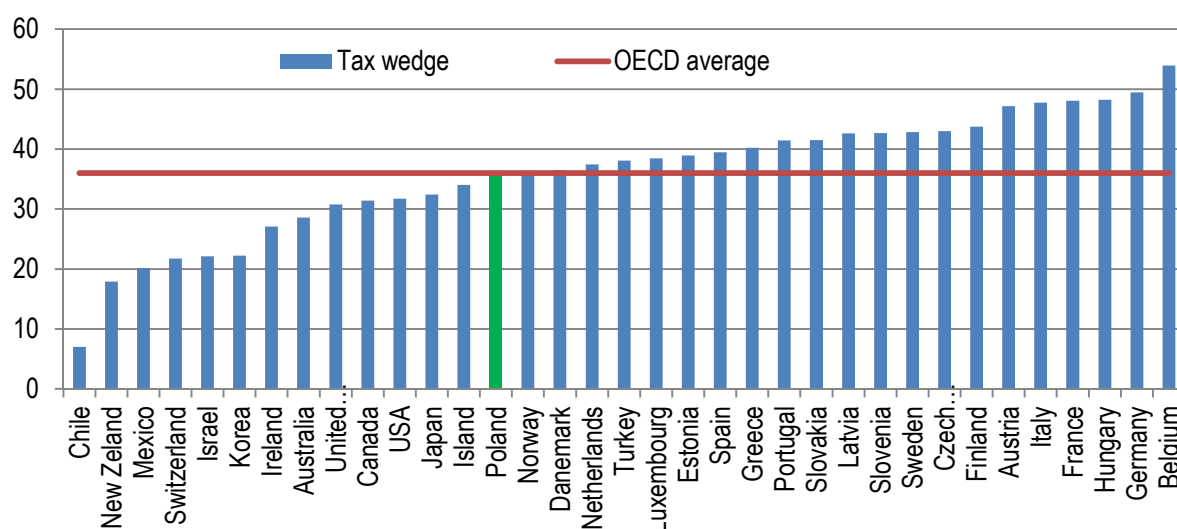
<sup>13</sup> *Economic situation in industry, construction, trade and services 2000-2016*, <http://stat.gov.pl/obszary-tematyczne/koniunktura/koniunktura/koniunktura-w-przemysle-budownictwie-handlu-i-uslugach-2000-2016,4,8.html> [24.06.2016], data for Q3 2016 in the case of industry, data for December 2016 in the case of construction, trade, transportation and storage.

<sup>14</sup> Data for the entire population.

Wage growth in nominal terms has been reported in Poland for many years, also broken down by voivodeship. However, wages exhibit significant territorial variation and uneven growth. The difference between the voivodeships with the highest and the lowest wages in 2016 amounted to approximately PLN 1,670.<sup>15</sup> Between 2006 and 2016, wage growth at the national level amounted to 62.4%. Eleven voivodeships reported wage growth that exceeded the average growth at the national level. The highest wage growth was reported in Łódzkie (74.5%), Lubelskie (72.1%) and Małopolskie (71.2%) Voivodeships, and the lowest in Śląskie, Mazowieckie and Świętokrzyskie (53.5%, 54.4% and 60.3%, respectively).

According to OECD data, the so-called tax wedge for average wage in Poland in 2016 was 35.8%, i.e. 1.1 pp more than in the previous year. It was slightly lower than the OECD average (36.0%), which gave Poland the 14<sup>th</sup> position out of 35 countries. The specific nature of tax wedge in Poland (less than proportionate growth along with the wage growth) points to a significant burden for people with the lowest wages<sup>16</sup>. The tax wedge in Poland has been growing since 2009. Although its annual changes are not significant, it increased by almost 3 pps between 2009 and 2016. Among OECD countries, the lowest wedge was reported in Chile (7%) and the highest in Belgium (54%).

**Chart 5. Tax wedge in Poland and other OECD countries in 2016<sup>17</sup>**



Source: *Taxing Wages 2017*, OECD 2017.

Compared to the other CEE countries, the tax wedge in Poland is significantly lower. In 2016, the tax wedge in Poland was 5.7 pp lower than in Slovakia, 7.2 pp lower than in the Czech Republic, and as much as 12.4 pp lower than in Hungary. Among the EU Member States, as in 2015, only the United Kingdom and Ireland imposed lesser burdens in this regard than Poland.

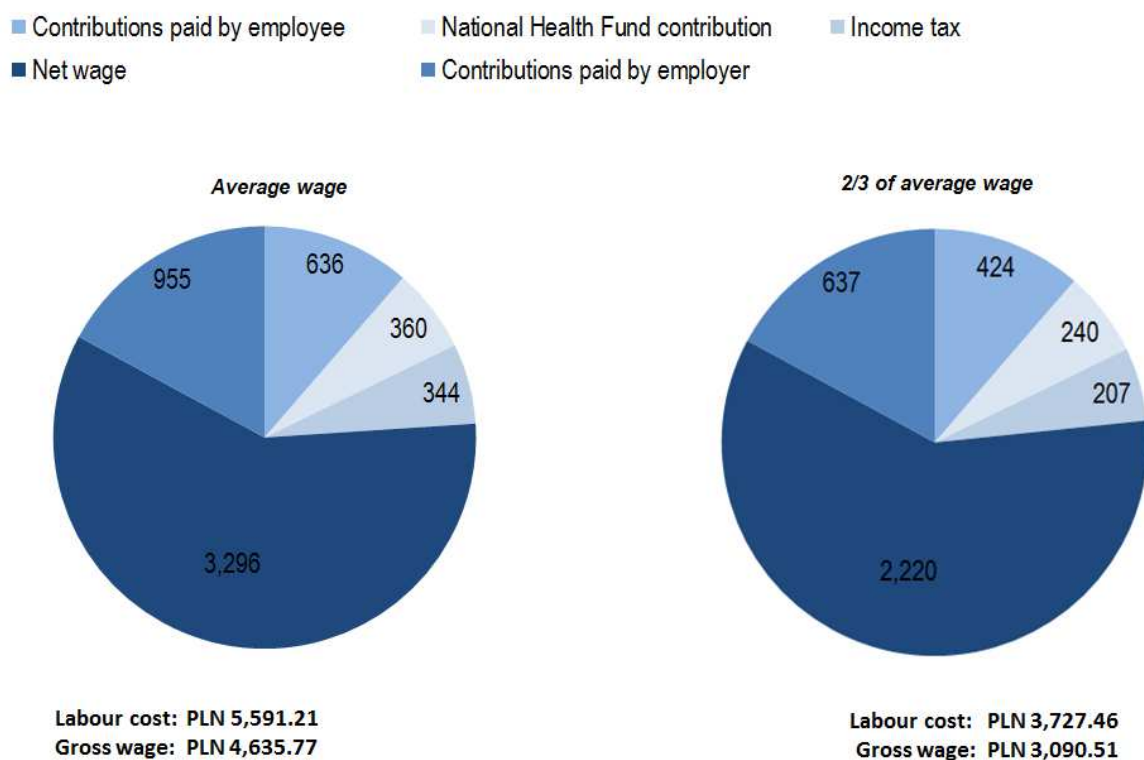
<sup>15</sup> Local Data Bank.

<sup>16</sup> Apart from the net wage, considerable part of labour costs is formed by social insurance contributions paid by the employer and the employee. The role of income tax in the lower rate bands is negligible.

<sup>17</sup> For a single person earning the average wage.

For a family with two children where only one parent worked and received average wage, the tax wedge in Poland amounted to 30.8% (21<sup>th</sup> position). Better results were reported in the Czech Republic (27.2%) and in Slovakia (28.9%).

**Chart 6. Structure of labour costs for the average wage and 2/3 (of the average wage) in the enterprise sector in 2016 (as of December 2016)**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

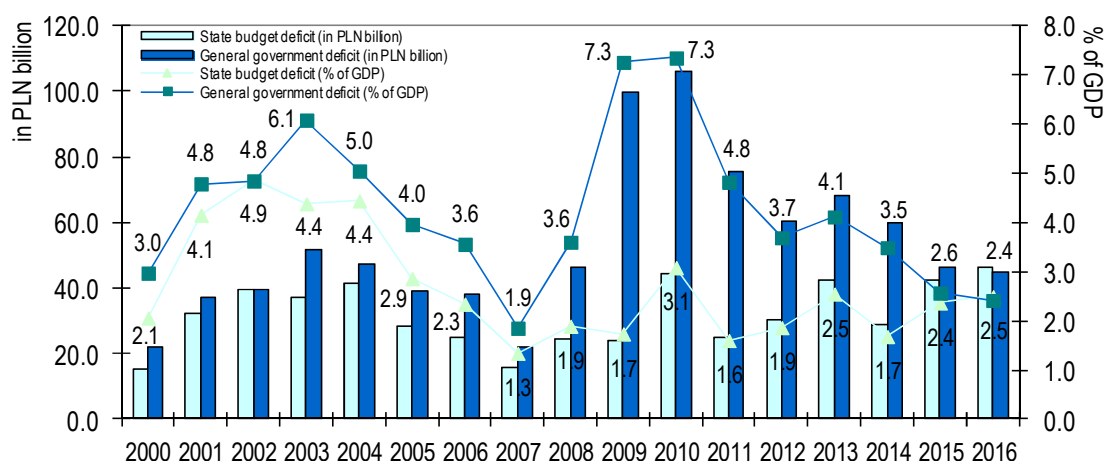
## 2.6 Public finance

The possibility to flexibly shape expenditure, increase the share of expenditure conducive to development while maintaining a stable budget income is one of the key challenges of the fiscal policy. The situation in this regard is important for the enterprise sector not only from the point of view of sustainable and permanent macroeconomic environment, but also from the perspective of borrowing needs of the country. The need to finance public debt is connected with the acquisition of funds from the financial sector by the government by selling the treasury bonds. It limits the ability of business operators to use these funds. Moreover, the introduction of tax advantages limiting inflows to the budget, which enterprises would find desirable, is difficult to implement in particular in the event of increased needs with respect to disbursement of financial resources from the state budget.

Despite the persisting negative balance in the public finance sector, the gradually improving economic conditions, stemming e.g. from Poland's accession to the EU and good economic conditions at the global level, allowed to significantly reduce the budget imbalance in the entire general government sector. In 2003–2007, the general government deficit to GDP ratio in Poland fell from 6.1% to 1.9%.

The positive trend was reversed in 2008 and such situation continued in subsequent years. The onset of the financial crisis, along with the still high structural deficit of the state budget, resulted in a considerable stratification between the level of expenditure and income of the state budget. Consequently, in 2009 the general government deficit more than doubled compared to the preceding year, amounting to PLN 99.5 billion, i.e. 7.3% of GDP. In 2010, negative trends in public finance continued. In 2010, as a result of a negative balance in each of the sub-sectors of the general government, the deficit of the latter reached the historic level of PLN 106.1 billion.

**Chart 7. State budget deficit<sup>18</sup> and general government deficit (PLN billion and % of GDP)**



Source: DDS of the Ministry of Economic Development on the basis of Eurostat data and Central Statistical Office preliminary data.

In 2016, the general government deficit amounted to PLN 44.7 billion (2.4% of GDP), and the debt of the sector represented 54.4% of GDP.

**Table 14. Public debt (PLN billion and % of GDP)**

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
State public debt	PLN billion	506.3	527.4	597.8	669.9	747.9	815.3	840.5	882.3	826.8	877.3	965.2
	% of GDP	47.3	44.4	46.5	48.8	51.7	52.0	51.6	53.3	48.1	48.8	52.1
General government debt	% of GDP	46.9	44.2	46.3	49.4	53.1	54.1	53.7	55.7	50.2	51.1	54.4

\* Estimates of the Ministry of Finance.

Source: Ministry of Finance.

<sup>18</sup> In 2004, the method of classification of transfers compensating for the contribution loss in FSI had changed. Until 2003, transfer from the state budget to compensate the FSI contribution loss as a result of the transfer of a part of the contributions of people covered with the pension reform to Open-ended Pension Funds (OPFs) was financed in the form of a state budget subsidy. Statutory regulations allow for the financing of the costs of the pension reform with privatisation proceeds, i.e. "from below the break-even point." Therefore, since 2004 the amount compensating for the contribution loss has been included among state budget expenditure, while in FSI, a new revenue item appeared, entitled "compensation due to the transfer of contributions to OPFs." The above change directly influenced the level of state budget expenditure and, as a consequence, the budget result itself. For this reason, data for 2004 are not fully comparable with the preceding years.

### **Box 1. Multiannual State Financial Plan for 2017-2020, Convergence Programme – 2017 Update and the budget act for 2018**

In April 2017, the Council of Ministers adopted the **Multiannual State Financial Plan for 2017-2020**. Pursuant to the Act on Public Finance amended in 2013, the document has been prepared in a new layout and is now composed of two parts: Convergence Programme - 2017 Update and the specification of principal functions of the state along with indicators of their implementation. One of the priorities of the government economic policy remains the creation of fast and sustainable growth conditions, while ensuring the best possible pace of public finance consolidation. The objectives and measures adopted in the document are consistent with the priorities defined in the Europe 2020 strategy, which are also reflected in this year's edition of the National Reform Programme.

Poland presented the Convergence Programme – 2017 Update with a three-year economic development perspective for the country, to the European Commission. Poland is not covered by the excessive deficit procedure which is initiated with respect to countries with the deficit exceeding 3% of GDP. In 2016, Poland reduced its deficit to 2.4% of GDP, which was below the required 3% of GDP (from 3.5% of GDP in 2014, after revision).

The estimated result of the general government sector in relation to GDP in 2017-2020 amounts to -2.9% of GDP; -2.5% of GDP; -2.0% of GDP and -1.2% of GDP, respectively. In 2017-2020, the general government debt, estimated according to the same methodology, should reach 55.3% of GDP; 54.8% of GDP; 54.0% of GDP and 52.1% of GDP, respectively.

**Pursuant to the “April 2017” fiscal notification**, in 2016 the deficit of the general government sector amounted to 2.4% of GDP, while the debt reached 54.4% of GDP.

**The draft budget act for 2018** assumes that **state revenues next year will amount to PLN 355.7 billion, expenditure to PLN 397.2 billion, while the deficit should not exceed PLN 41.5 billion**. According to the assumptions made by the government, GDP will grow by 3.8% next year, while **the public finance sector deficit will amount to 2.5% of GDP** and inflation to 2.3%. The draft also forecasts that the nominal growth of average wage in the national economy will amount to 4.7%, employment growth in the national economy will reach 0.8%, while private consumption will increase by 3.5% in nominal terms. The proceeds from the EU funds are estimated at PLN 64.8 billion, expenditure at PLN 80.2 billion, while the deficit of the EU funds budget to PLN 15.5 billion.

## **2.7 Inflation and monetary policy**

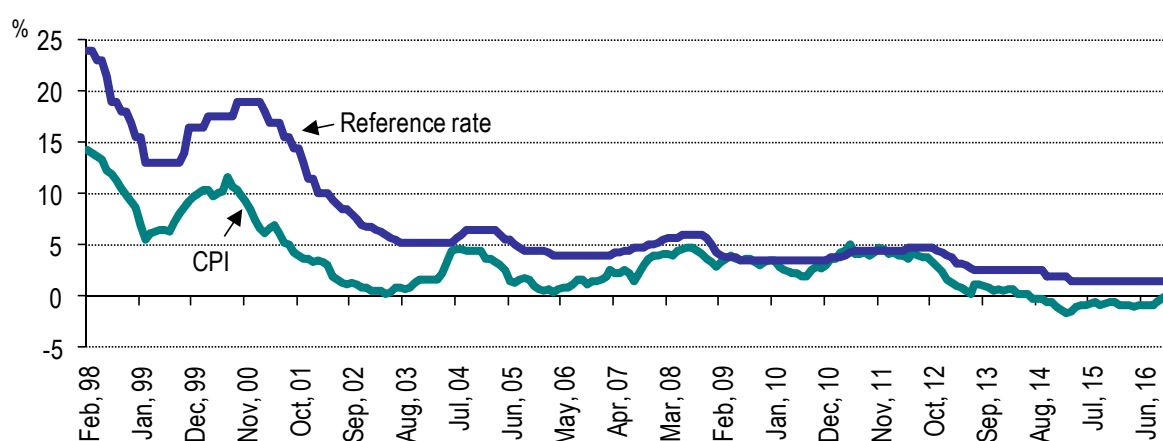
One of the most important factors that determine the environment in which enterprises operate is price stability and the cost of capital, the latter being a derivative of the former. They have an impact on the decisions of entrepreneurs relating to the size of production and thus employment and investment expenditure. Various internal and external factors affect the inflation processes. While the former are mostly controlled with the use of tools which typically form part of the monetary policy regulatory toolkit, influencing the course of the latter is possible only to a very limited degree. The identification of their nature and the intensity of their impact also poses a problem. In 2016, Polish consumer prices were influenced mostly by external factors in the form of higher prices of energy commodities and higher prices of food on global markets. Baseline inflation remained close to zero in 2016, which resulted from the low, albeit growing, demand pressure and the moderate growth rate of unit labour costs.

The price drops which started in H2 2014 continued throughout 2015 and most of 2016. The negative price growth rate was mainly the result of a slump in prices of energy commodities on global markets at the end of 2015 and at the beginning of 2016 with the limited domestic demand pressure. Lower prices of energy commodities had a positive impact on the economic situation of the majority of business operators, as a result of which deflation did not affect business conditions in Poland. Enterprises reported that the continued deflation had no material impact on their financial standing or investment plans. Business operators did not express any deflationary expectations.

Throughout the year, the average CPI remained well below the inflation target of the National Bank of Poland. CPI growth rate in 2016 dramatically deviated from the rate assumed in the budget act (1.7%), amounting on average to -0.6% (against -0.9% in 2015), whereas at the end of the year its value became positive.

The price changes in 2016 were determined mainly by the volatility of commodity prices on international markets. In H1 2016, commodity prices were notably lower than in the previous years, which led to negative annual growth rate. In H2 the prices increased, which was reflected in the gradually faster growth of energy prices, which nevertheless only reached positive values at the end of the year. At the same time, higher growth rate of the prices of goods was supported by the weaker Polish currency compared to the previous year and by the positive growth rate in the prices of food and services resulting from the rising prices of many agricultural products on global markets almost throughout the year and from the lower domestic supply of fruit and vegetables. The increase in prices of services was supported by the increasingly faster growth of consumer demand driven by higher employment and wages, payment of childcare benefits under the Family 500 plus programme, as well as very good consumer sentiments and stable growth of lending.

**Chart 8. NBP reference rate and inflation**

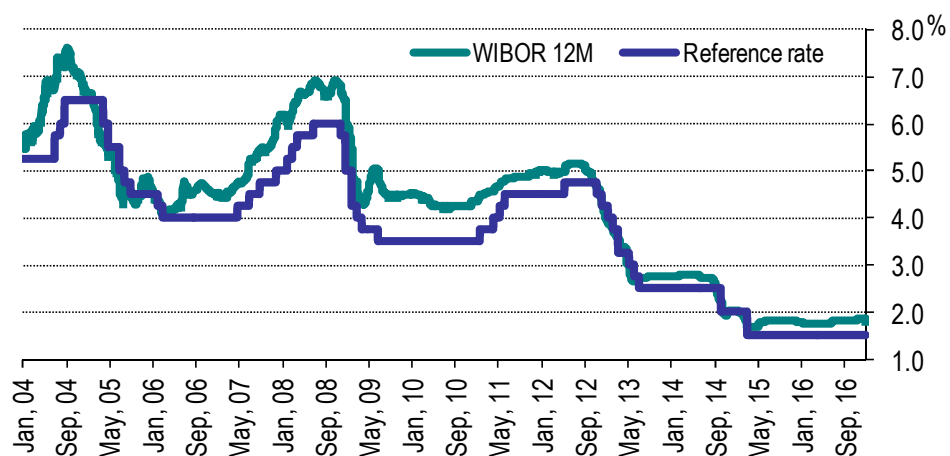


Source: NBP.

The main determining factor with respect to the situation on the money market in Poland in 2016 was the pace and prospects of increased economic activity in the economic environment of Poland. As announced, the Monetary Policy Council (MPC) maintained the interest rates at an unchanged level. MPC members upheld their opinion that stabilisation of nominal interest rates would keep the Polish economy on the sustainable growth path and that it would allow for maintaining macroeconomic balance.

The last change in interest rates occurred on 4 March 2015. Due to a significant deviation of inflation from the inflation target which could constitute a threat to the stability of prices in the medium term, the Council adjusted the monetary policy to the changing economic situation by cutting the interest rates to the lowest level in history. Interest rates were determined at the following levels: the reference rate – 1.5% (-0.5 pp), the deposit rate – 0.5% (-0.5 pp), the lombard rate – 2.5% (-0.5 pp), the bills of exchange rediscount rate – 1.75% (-0.5 pp).

**Chart 9. WIBOR 12M and reference rate**



Source: NBP.

By determining the interest rate, the central bank indirectly influences the interest rates on loans and deposits at commercial banks. The average interest rate on PLN corporate loans increased from 3.6% at the end of 2015 to 3.9% at the end of 2016, according to the new ECB methodology.



### 3. CHARACTERISTICS OF POLISH ENTERPRISES

Polish enterprises again proved their ability to operate in the dynamically changing international environment. Neither the closure of Eastern markets nor the growing competition on other international and prospective markets prevented the development of Polish businesses.

According to the data of the Central Statistical Office<sup>19</sup>, in 2016 about 350,000 new business operators entered in the REGON register (of which 250,000 are non-financial enterprises), with only 290,000 being de-registered (the positive balance amounted to about 60,000). As a result, as of the end of the year the number of operators in the register amounted to 4.2 million entries. It should be noted that according to the estimations of the Central Statistical Office, the number of business operators in Poland with active status in the REGON register is about 2.4 million<sup>20</sup>, of which about 1.9 million are non-financial enterprises<sup>21</sup>.

Apart from the rise in the general number of active operators, it should be noted that the basic economic and financial indicators characterising enterprises improved. In 2016 revenues from overall activity, financial results and profitability ratios increased. Moreover, revenues from export sales were growing much faster than total revenues. The number of working persons and average employment also increased. Nevertheless, the analysis also revealed negative circumstances: a drop in investments and considerable increase in debt, which grew much faster than revenues.

However, there are material differences between respective branches of the Polish economy and the results generated by public and private entities in terms of basic economic and financial indicators. The situation is particularly difficult in the construction sector and in the mining and quarrying sector. On the other hand, manufacturing and trade and repairs improved their results for another year in a row<sup>22</sup>.

Although the situation of Polish SMEs is improving (e.g. with higher survival rates), a number of parameters in this sector remains below the EU average. This applies both to the share of micro-(higher) and small (lower) non-financial enterprises in the whole population in this sector, as well as the lower share of value added generated by the Polish service sector. On the other hand, according to the European Commission data, Polish medium-sized non-financial enterprises and the broadly understood industrial sector is now generating notably better results than the EU average.

Economic results indicate the need to accelerate quantitative and qualitative transformation of Polish entrepreneurs. The first effects of the initiated measures in this respect are already visible, e.g. expansion of export destinations. Nevertheless, the enterprise sector still requires support from public authorities.

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<sup>19</sup> *Structural changes of groups of entities of the national economy entered into the REGON register, 2016*, Central Statistical Office, Warsaw 2017, p. 33.

<sup>20</sup> *Selected entrepreneurship indicators in 2011 – 2015*, Central Statistical Office, Warsaw 2017, p. 57.

<sup>21</sup> *Activity of non-financial enterprises in 2015*, Central Statistical Office, Warsaw 2016, p. 24.

<sup>22</sup> Full heading: wholesale and retail trade; repair of motor vehicles and motorcycles (section G of the Polish Classification of Activities).

## 3.1 Demography of Polish enterprises

### 3.1.1. Number of enterprises, ownership sectors

As of the end of 2016, about 4,237,700 entities of the national economy were listed in the REGON register<sup>23</sup> (1.3% more than in the previous year). At the same time, the number of entities with active status does not exceed about 2.4 million.

The majority of them were private entities (about 96.1%, over 4.1 million entities). As usual, sole traders formed the largest group of registered entities (about 70.1%), with a notably larger share than commercial companies (about 11.8%) and private partnerships (about 6.8%).

2016 saw a slight drop in the number of registered natural persons (0.1%). At the same time, the number of registered commercial companies and partnerships significantly rose (by 9.6%), with a very high increase in the number of limited partnerships (25.7%), high increase in the number of limited liability companies (10%) and a slight increase in the number of joint-stock companies (3.4%). Such a high increase in the number of limited partnerships may result from the reform of the fiscal law of 2014 (when partnerships limited by shares became income tax payers). At the same time, for another year in a row, the number of Polish active cooperatives grew (with over 17,000 as of the end of 2016).

In the last few years, the number of newly registered enterprises was higher than the number of de-registered enterprises.

In 2016, the number of newly registered enterprises amounted to about 349,200. The largest increase in per cent in the number of newly registered entities was reported in electricity, gas, steam and hot water supply (11.9%) and in information and communication (6.8%). The highest increase in per cent in the number of newly registered entities was reported in Świętokrzyskie (2.4%) and Podkarpackie (0.8%) Voivodeships.

The number of de-registered entities amounted to about 293,300. The highest increase in per cent in the number of de-registered entities was reported in information and communication (10.5%) and in administrative and support service activities (8.5%). The highest increase in per cent in the number of de-registered entities was reported in Mazowieckie (3.6%), Lubuskie (2.7%) and Śląskie (2.7%) Voivodeships.

Interesting data relate to the number of entities whose activity is suspended: between 2015 and 2016, the number of such entities remained virtually unchanged, but structural changes emerged. It can be noted that the number of entities with suspended activity is higher in the case of the so-called market services sector<sup>24</sup> (e.g. real estate activities – increase by 8.9%; professional, scientific and technical

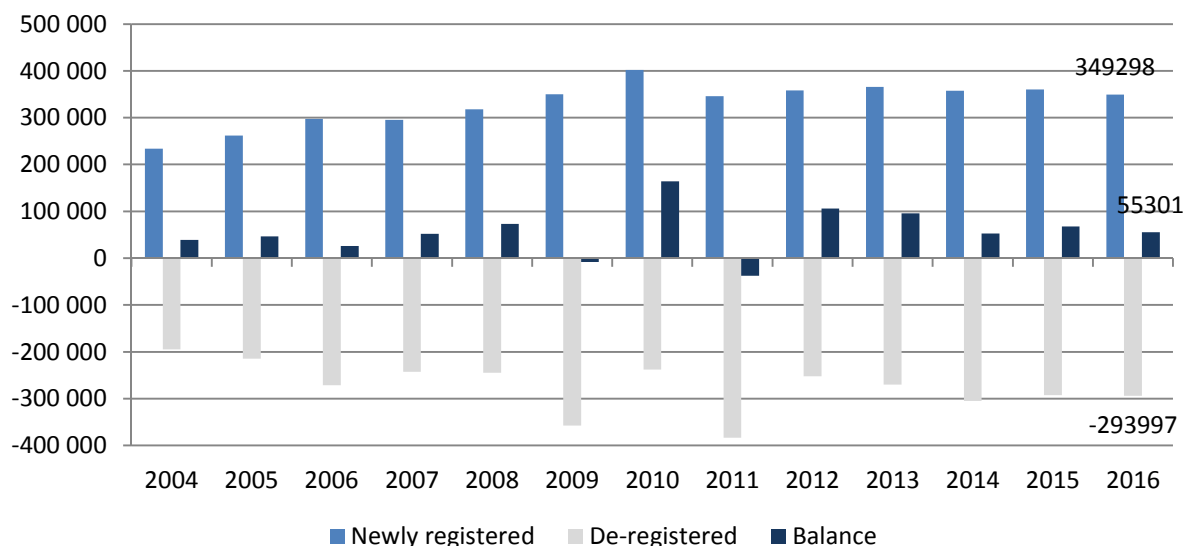
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<sup>23</sup> *Structural changes of groups of entities of the national economy entered into the REGON register, 2016*, Central Statistical Office, Warsaw 2017, p. 33.

<sup>24</sup> The market services sector should be understood as the following sections of PKD 2007: G (wholesale and retail trade, repair of motor vehicles, including motorcycles), H (transport and storage), I (accommodation and food service activities), J (information and communication), K (financial and insurance activities), L (real estate services), M (professional, scientific and technical activities) and N (administrative services and supporting activities), R (culture and entertainment activities) and recreation) and S (other service activities).

activities – 7.4%) than in the industrial sector<sup>25</sup> (with the exception of electricity, gas, steam and air conditioning supply – 23.9%). The results are also problematic in the case of non-market services<sup>26</sup> which, on the one hand, maintained their last year result; on the other hand, a dynamic growth was reported in selected categories (public administration and defence; compulsory social security – 100%).

**Chart 10. The balance of newly registered and de-registered entities**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

In regional terms, in the case of most voivodeships the increase in the number of entities did not exceed 1%. Higher increase in the number of entities entered in the REGON register was only reported in Mazowieckie (2.9%), Małopolskie (2.0%), Pomorskie (1.8%), Podkarpackie (1.6%), Wielkopolskie and Dolnośląskie (1.2%) Voivodeships. Opolskie Voivodeship was the only region which reported a decrease in the number of entities (by 0.1%).

### 3.1.2. Active enterprises, size structure, type of activity

According to the Central Statistical Office, in 2015 about 1,914,000 non-financial enterprises carried out economic activity in Poland<sup>27</sup>, which was 3.9% higher than in the previous year. As it was the case in the previous years, microenterprises prevailed among all non-financial enterprises (96.0%). The share of small, medium-sized and large enterprises was 3.0%, 0.8% and 0.2%, respectively.

The number of microenterprises visibly grew (by 4.2% y/y), with a lower increase in the number of medium-sized and large enterprises (1.0% and 2.3%, respectively). The number of active small enterprises dropped by 4.1% y/y.

<sup>25</sup> The production / industrial sector should be understood as the following sections of PKD 2007: B (mining and quarrying), C (industrial processing), D (production and supply of electricity, gas, steam, hot water and air for air conditioning systems) and E (water supply, sewerage and waste management and activities related to reclamation).

<sup>26</sup> The non-market services sector should be understood as the following sections of PKD 2007: O (public administration and national defense, compulsory social security), P (education) and Q (health care and social assistance).

<sup>27</sup> Excluding sections A (Agriculture, forestry and fishing), K (Financial and insurance activities), and O (Public administration and defence; Compulsory social security).

Since 2010, the number of microenterprises has been growing, except for 2013. In the analysed period, their share in total number of active entities was between 95.6% and 96%, without revealing any clear trends.

Medium-sized enterprises were the only category whose numbers decreased in 2010-2015. However, it seems that the local low was hit on 2013, as both in 2014 and in 2015 the number of medium-sized enterprises was growing. The number of large entities in absolute terms was steadily growing, from about 3,100 entities at the end of 2010 to about 3,400 entities at the end of 2015. Their share in total population of active enterprises remained unchanged at 0.18% throughout the analysed period.

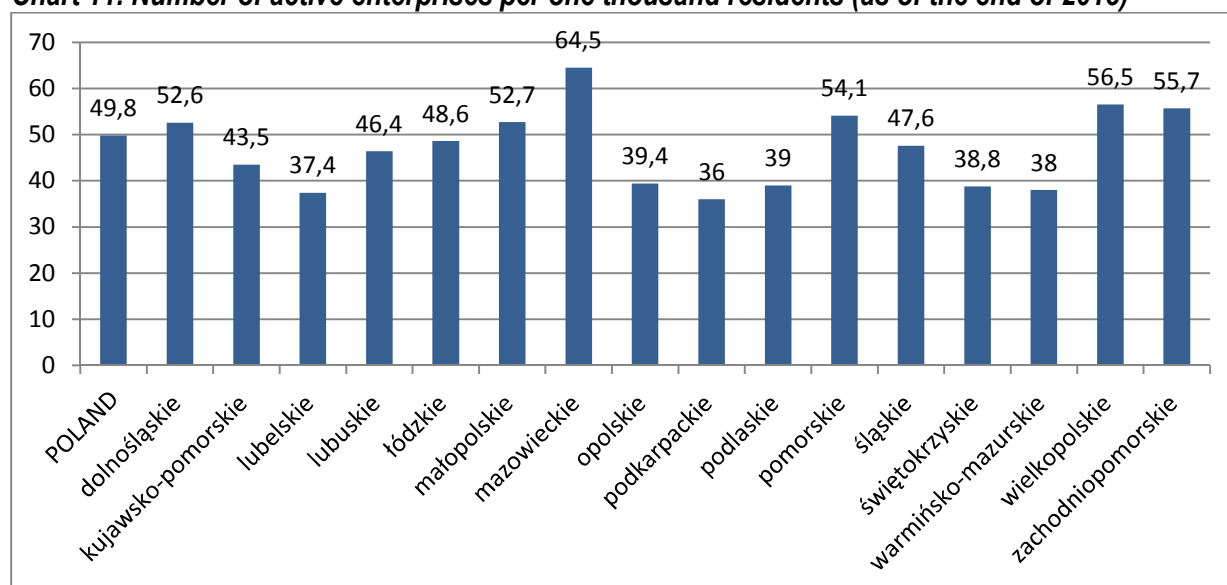
**Table 15. Number of active non-financial enterprises (in thousands) in Poland by size**

	total	0-9 employed persons	10-49 employed persons	50-249 employed persons	250 and more employed persons
2010	1,726.7	1,655.1	52.6	15.8	3.2
2011	1,784.6	1,710.6	55.0	15.8	3.2
2012	1,794.9	1,719.2	57.1	15.5	3.2
2013	1,771.5	1,693.8	59.1	15.3	3.2
2014	1,842.6	1,764.6	59.2	15.5	3.4
2015	1,914.1	1,838.4	56.7	15.6	3.4

Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

As it had been the case in the previous years, in regional terms the majority of active enterprises were reported in Mazowieckie (17.9% of all entities), Śląskie (11.1%), Wielkopolskie (10.3%) and Małopolskie (9.3%) Voivodeships. The analysis of the number of enterprises per one thousand residents indicates that similarly to the previous years Podkarpackie, Lubelskie, Warmińsko-Mazurskie, Świętokrzyskie, Podlaskie, Opolskie, Kujawsko-Pomorskie, Lubuskie, Śląskie and Łódzkie Voivodeships report worse results than the national average.

**Chart 11. Number of active enterprises per one thousand residents (as of the end of 2015)**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

According to the data of the Central Statistical Office regarding active non-financial enterprises, the majority of entities operate in the trade sector (26.0% of all active enterprises). Other types of activity most often chosen by active entities include construction (12.8%), professional, scientific and technical activities (12.7%), and industrial activity (10.4%). The structure remains unchanged after separation of the SME sector.

Similarly to the previous years, enterprises most often choose (in quantitative terms) the revenue and expense ledger as the bookkeeping method (this applies in particular to micro- and small enterprises). Ledger is on the third position after revenue registry.

**Table 16. Bookkeeping methods in non-financial enterprises in 2015**

	total	0-9 employed persons	10-49 employed persons	50-249 employed persons	250 and more employed persons
ledger	221,182	164,631	37,783	15,336	3,432
Of which: natural persons	27,359	17,381	7,972	1,887	119
Of which: legal persons	193,823	147,250	29,811	13,449	3,313
revenue and expense ledger	1,279,341	1,260,192	18,854	295	0
revenue registry	332,153	332,083	70	0	,0
fixed amount tax	81,465	81,459	6	0	,0

Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

### 3.1.3. Survival rate, age structure, development potential

According to the data of the Central Statistical Office<sup>28</sup>, 175,400 out of 254,600 enterprises established in 2015 remained active after one year (survival rate of 68.9%). As expected, the survival rate increased along with the increase in the size of the enterprise: for micro- and small enterprises registered in 2015 the survival rate for a one-year period amounted to about 69%, compared to over 80% in the case of medium-sized and large enterprises.

Moreover, the Central Statistical Office prepares studies on the development potential of enterprises (based on the common methodology of OECD and Eurostat - entrepreneurship indicator programme). On the basis of the annual average increase (or decrease) in the net revenues from sales of products, goods and materials, five types of enterprises were identified<sup>29</sup>. The abovementioned analysis only applies to entities employing more than 9 persons and keeping accounts.

<sup>28</sup> *Activity of non-financial enterprises in 2011-2015*, Central Statistical Office, Warsaw 2017, p. 31-32, 57.

<sup>29</sup> The following types were identified:

1. high-growth enterprises – entities reporting an annual average increase in revenues by 20% or more in the three-year period;
2. growth enterprises – entities reporting an increase in revenues by 10%-20%;
3. stable enterprises – entities reporting similar revenues in the analysed three-year periods (i.e. in the last year their value accounted for 90%-110% of the originally generated revenues);
4. declining enterprises – entities reporting a decrease in revenues by 10%-20%;
5. rapidly declining enterprises – entities reporting an annual average decrease in revenues by 20% or more in the three-year period.

Out of the group of high-growth enterprises a group of so-called gazelles was distinguished, consisting of high-growth enterprises operating on the market for no longer than 5 years.

**Table 17. Enterprises by development potential (according to the methodology of the Central Statistical Office)**

Year	total	high-growth	gazelles	growth	stable	declining	rapidly declining
	number	%					
2011	37,356	10.0	0.8	37.7	23.3	23.9	5.1
2012	38,611	13.7	1.0	39.0	22.8	20.1	4.4
2013	38,194	10.5	0.7	36.9	25.6	22.3	4.7
2014	38,745	8.6	0.6	34.6	27.5	24.6	4.7
2015	39,051	9.6	0.8	35.8	26.8	23.6	4.2

Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

The analysis of changes in the structure of this group of enterprises in 2011-2015 does not allow for drawing clear conclusions. However, in particular since 2012, a decrease in the share of growing enterprises (high-growth, gazelles and growth) and of rapidly declining enterprises, as well as an increase in the share of stable enterprises has been noticeable.

In regional terms, the highest number of high-growth enterprises were reported in Mazowieckie (727), Śląskie (490), Wielkopolskie (385), Małopolskie (358) and Dolnośląskie (331) Voivodeships, while the lowest number was reported in Opolskie (72) and Świętokrzyskie (75) Voivodeships.

### 3.1.4. Family businesses

Determination of the exact number of Polish family businesses faces is a challenging task. To a great extent, this results from the methodological diversity among authors of studies on the subject.

According to the studies by the Polish Agency for Enterprise Development (PARP)<sup>30</sup>, the Institute of Family Businesses<sup>31</sup> or the Polish Confederation Lewiatan<sup>32</sup>, in Poland enterprises declaring to be family businesses account for about 36-42% of all active enterprises. However, in the case of a broader definition of family businesses, their share may account for as much as about 78% of enterprises. For comparison, in Europe this share is between 55% (Sweden) and over 90% (Cyprus)<sup>33</sup>, and in the United States it reaches 90%.

According to the estimations of the Polish Agency for Enterprise Development (data as of 2015), approximately 30% of family businesses are microenterprises, about 38% are small enterprises, about 15% are medium-sized enterprises, while about 7% are large enterprises. A report by the Polish Confederation Lewiatan confirms those data.

Family businesses most often operate in the trade and service sectors (G - trade, H – transportation, M+N – professional and administrative service activities). Industry and manufacturing are also broadly represented, unlike education or finance.

<sup>30</sup> *Family Businesses in Poland '2014*, Polish Agency for Enterprise Development, Warsaw 2015.

<sup>31</sup> *Family Business is a Brand*, Institute of Family Businesses, Łódź 2016.

<sup>32</sup> M. Starczewska-Krzysztozek, *CV of Family Businesses*, Polish Confederation Lewiatan, Warsaw 2015.

<sup>33</sup> <http://www.europeanfamilybusinesses.eu/family-businesses/facts-figures>

### 3.2 Polish enterprises in the context of the Small Business Act

As it had been the case in the previous reports<sup>34</sup>, Polish SME sector still shows a negative deviation from the European average, mainly with respect to the size structure of enterprises and the performance of micro- and small enterprises.

The share of microenterprises is higher than the EU average by about 2 pps, while the number of persons employed by those entities in Poland is higher than the EU average by about 6 pps. At the same time, Polish microenterprises produce over 3 pps less than the EU average.

Lower share of small enterprises in the total population of non-financial enterprises is also notable. In addition, the situation of those enterprises is also worse than that of their EU counterparts both in terms of employment and in terms of value added (about 4 to 5 pps lower than the EU average).

It should be noted that Polish medium-sized enterprises report relatively better ratios (in terms of employment and in terms of value added) than the EU average.

**Table 18. Polish SME sector compared to the EU SME sector (in the context of SME Performance Review 2016)**

Size class	Number of enterprises			Number of employed persons			Value added		
	Poland		EU-28	Poland		EU-28	Poland		EU-28
	Number (thousands)	Share (%)	Share (%)	Number (thousands)	Share (%)	Share	EUR billion	Share (%)	Share (%)
Micro	1,466.1	95.0	92.8	3,074.9	36.3	29.5	33.9	17.9	21.2
Small	58.9	3.8	6.0	1,226.6	14.5	20.2	26.8	14.2	18.0
Medium	14.7	1.0	1.0	1,543.3	18.2	17.0	38.2	20.2	18.2
<b>SME sector</b>	<b>1,539.7</b>	<b>99.8</b>	<b>99.8</b>	<b>5,844.9</b>	<b>68.9</b>	<b>66.8</b>	<b>98.9</b>	<b>52.3</b>	<b>57.4</b>
Large	3.0	0.2	0.2	2,635.3	31.1	33.2	90.1	47.7	42.6
Total	<b>1,542.8</b>	<b>100.0</b>	<b>100.0</b>	<b>8,480.2</b>	<b>100.0</b>	<b>100.0</b>	<b>189.0</b>	<b>100.0</b>	<b>100.0</b>

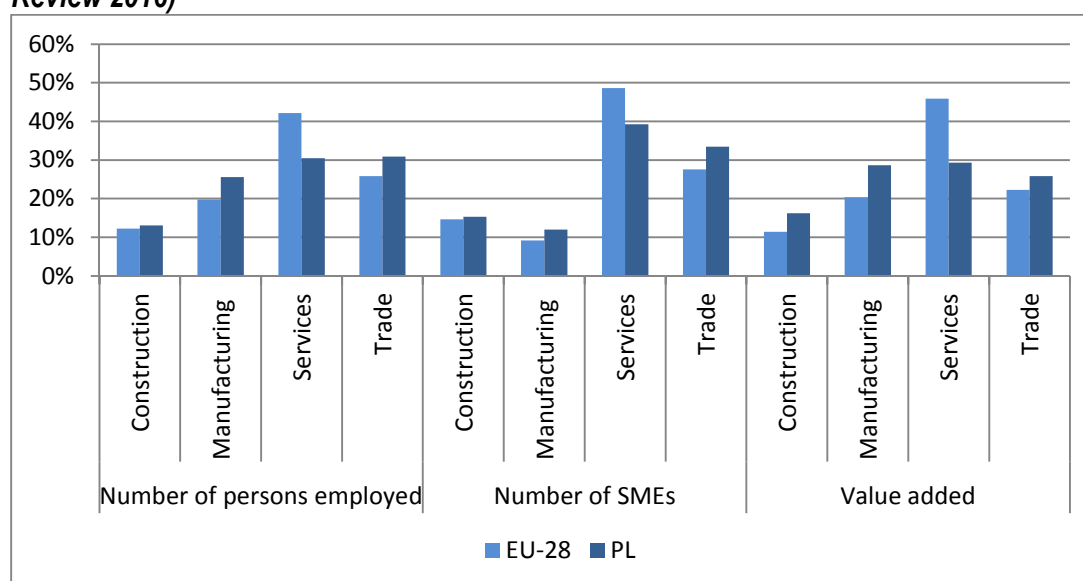
Source: DDS of the Ministry of Economic Development on the basis of European Commission data.

The analysis of the Polish SME sector in the context of the EU average broken down by respective sectors of the economy is also interesting.

Poland has a higher share of the industrial sector in the number of active enterprises, in the size of employment, and in the value added than the EU average (by 2.8 to 7.8 pp). However, the results of the mining and quarrying sector with regard to value added are about 0.1% lower than the EU average.

<sup>34</sup> As data for the report were prepared by DIW Econ, they are not fully comparable with Central Statistical Office data. Population of non-financial enterprises was partly limited (applicable to entities from NACE Rev. 2 sections B – J, L, M and N.).

**Chart 12. Polish SME sector compared to the EU SME sector (in the context of SME Performance Review 2016)**



Source: DDS of the Ministry of Economic Development on the basis of European Commission data.

**Table 19. Polish SME sector compared to the EU SME sector (in the context of SME Performance Review 2016)**

Area Activity sector	Number of enterprises		Employment		Value added	
	PL	EU-28	PL	EU-28	PL	EU-28
Non-financial enterprises	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Mining and quarrying	0.11%	0.08%	0.36%	0.20%	0.48%	0.59%
Manufacturing	11.91%	9.11%	24.98%	19.53%	27.50%	19.70%
Electricity, gas, etc. supply	0.15%	0.36%	0.50%	0.30%	1.31%	1.53%
Water supply; sewerage, waste management etc.	0.43%	0.33%	1.59%	0.88%	2.15%	1.20%
Construction	15.18%	14.52%	12.73%	12.08%	15.59%	11.03%
Wholesale and retail trade	33.22%	27.36%	30.15%	25.49%	24.82%	21.56%
Transportation and storage	9.05%	5.06%	7.35%	6.18%	6.20%	6.31%
Accommodation and food service activities	3.22%	8.15%	3.55%	9.81%	1.64%	4.55%
Information and communication	5.01%	4.63%	3.50%	4.09%	4.06%	6.27%
Real estate activities	3.02%	5.82%	3.08%	2.72%	3.80%	6.02%
Professional, scientific and technical activities	14.88%	18.53%	8.56%	11.10%	8.70%	13.82%
Administrative and support service activities	3.82%	6.06%	3.67%	7.63%	3.75%	7.42%

Source: DDS of the Ministry of Economic Development on the basis of European Commission data.

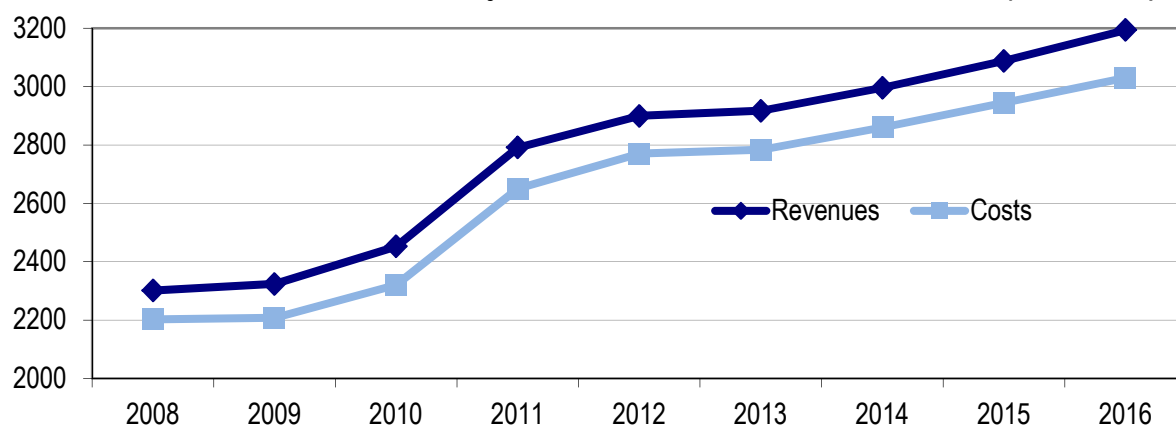


### 3.3 Economic and financial situation of enterprises in 2016 <sup>35</sup>

In general, the economic and financial situation of enterprises in 2016 was good. General revenues from overall activity, financial results and profitability ratios rose. Revenues from export sales were growing much faster than total revenues. The number of employed persons and average employment increased. Liquidity ratios remained at the level from the previous year, which was higher than the reference level. However, certain negative circumstances also occurred, i.e. a decrease in investments and a surge in debt. The improvement of financial results which was accompanied by the drop in investment expenditure increased the potential for the self-financing of investments. Debt was growing faster than revenues, thus extending the hypothetical period of its repayment with the generated revenues.

**In the whole analysed population**, the study covered 52,310 entities in 2015 and 52,618 in 2016 (0.6% more). Revenues from overall activity in 2016 amounted to PLN 3,194.1 billion, which was 3.4% higher than in the previous year. Revenues from export sales amounted to PLN 683.8 billion and rose by 8.5%, i.e. faster than total revenues. The share of exports in revenues increased from 20.4% to 21.4%. This ratio has been gradually growing for many years (it was 16.5% in 2008). Revenues from overall activity were growing faster than their deductible costs, which resulted in a dynamic improvement in financial results and profitability ratios.

**Chart 13. Revenues from overall activity and their deductible costs in 2008-2016 (PLN billion)**



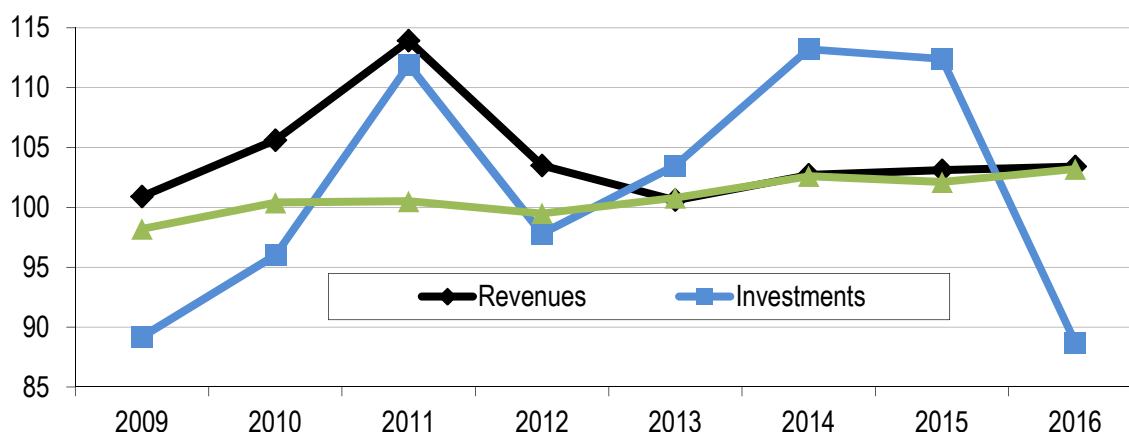
Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data, F-01 report.

Gross and net financial results amounted to PLN 163.9 billion and to PLN 138.3 billion, respectively, recording an increase by nearly 15%. Gross profitability increased from 4.6% to 5.1%, while net profitability grew from 3.9% to 4.3%. All three liquidity ratios remained at the level from 2015 and were higher than reference ratios. Negative aspects included the surge in debt and the slump in investment expenditure. Total debt (PLN 1,249.6 billion) grew by 8.4%, which was 2.5 times faster than the revenue growth rate, affecting the potential to cover debt with generated revenues. Investment expenditure (PLN 145.6 billion) dropped by 11.3% which, considering the simultaneous increase in both financial surplus (by 3.1%) and disposable income of enterprises (by 8.2%) increased the potential for the self-financing

<sup>35</sup> Applicable to business operators where the number of the employed persons exceeds 9.

of investments. The analysed enterprises employed 5,359,000 persons (increase by 3.2%), with average employment amounting to 5,092,000 persons (a rise by 2.9%).

**Chart 14. Dynamics of total revenues, investments and the number of employed persons in 2009-2016 (%)**

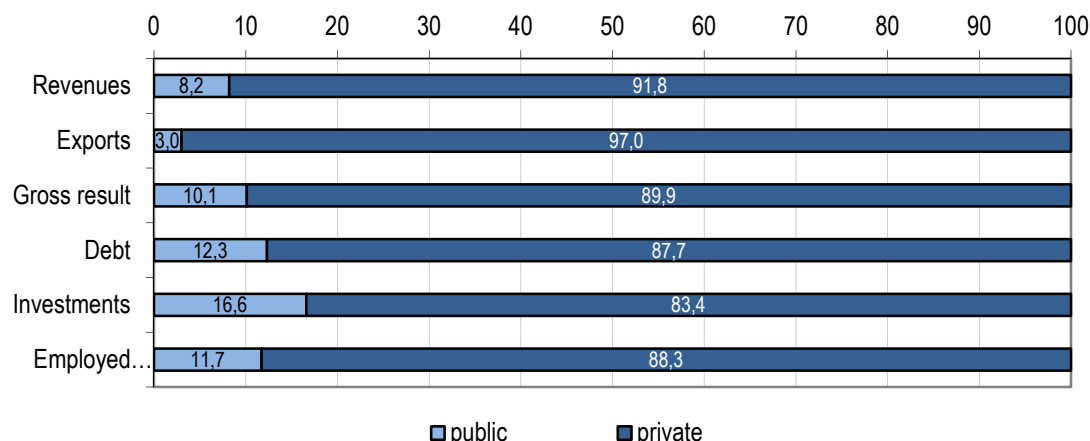


Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data, F-01 report.

**In terms of ownership structure**, the situation was diverse. Revenues from overall activity dropped by 6.6% in the public sector and rose by 4.4% in the private sector. The share of the private sector in revenues increased from 90.9% to 91.8%. Revenues from exports in the public sector decreased at the same rate as total revenues, while in the private sector exports grew by 9.1%, i.e. over twice as fast as total revenues. As a result, the share of exports in revenues from overall activity in the public sector remained at the previous year's level, while in the private sector it increased from 21.7% to 22.6%. Both sectors saw an improvement of financial results and profitability ratios. Despite the decline in revenues, total liabilities in the public sector remained basically unchanged, while in the private sector they grew by almost 10%, which means that in both cases the growth rate of liabilities was higher than the growth rate of revenues, resulting in lower potential to cover liabilities with generated revenues. Investment expenditure dropped in both sectors, with a plunge in the public sector (by 42.4%) and a dip in the private sector (by 0.7%), whereas enterprises with majority share of foreign capital reported an increase in investment expenditure by 6.9%.

The share of the private sector in investment expenditure grew from 74.4% to 83.4%, while the share of enterprises with majority share of foreign capital rose from 33.3% to 40.2%. Both sectors reported an increase in the potential for the self-financing of investments, in particular in the public sector where a slump in investments was accompanied by an increased in both investment surplus and disposable income of enterprises. It should be noted that despite the plunge in investments in the public sector, the share of this sector in domestic investments remained relatively high (16.6% compared e.g. to the share in revenues amounting to 8.2%) due to high capital intensity of the fuel and energy industry, which forms part of the public sector. In the analysed enterprises, the number of persons employed in the public sector dropped to 629,000 (by 5.1%), while in the private sector this number increased to 4,730,000 (by 4.4%).

**Chart 15. Structure of selected economic categories in 2016 by ownership sectors (%)**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data, F-01 report.

**In respective sections of the economy**, the financial situation was diverse<sup>36</sup>. In all those sections, revenues were growing faster than their deductible costs, which resulted in a significant increase in financial results and profitability ratios. In the three remaining sections revenues dropped. In construction, revenues decreased by about 10%, with a slump in the financial results (by over 30%) and profitability ratios. In mining and quarrying and in electricity, gas, steam and hot water supply, in spite of lower revenues, the financial results and profitability ratios improved. Manufacturing and trade and repairs have traditionally reported highest revenues. The share of the former in total revenues in 2016 was 36.7%, while the share of the latter was 33.5%. Combined share of those sections in total revenues in 2016 exceeded 70%.

Manufacturing determines the level and growth rate of domestic exports. In 2016, exports in manufacturing section amounted to PLN 513.8 billion, which was higher by 7.9% than in the previous year. The share of manufacturing in domestic exports was 75.1%, while the share of exports in total revenues in manufacturing was 43.8% against 42.4% in 2015.

Improved ratio of the growth rate of revenues to the growth rate of debt was reported only in two sections: water supply; sewerage, waste management and remediation activities, and in transportation and storage.

The only section reporting an increase in investments was manufacturing (by 1.8%). In trade and repairs, investments slightly dropped (by 1.6%). Other sections reported a slump in investment expenditure. Despite the highly diverse growth rate of investment expenditure in respective sections, for all of them the potential for the self-financing of investments improved.

The number of employed persons and average employment increased in the four sections where revenues from overall activity improved. In manufacturing, trade and repairs, transportation and storage and communication, the growth rate of the number of employed persons was at least 3%. Those indicators were growing slightly slower for water supply; sewerage, waste management and remediation

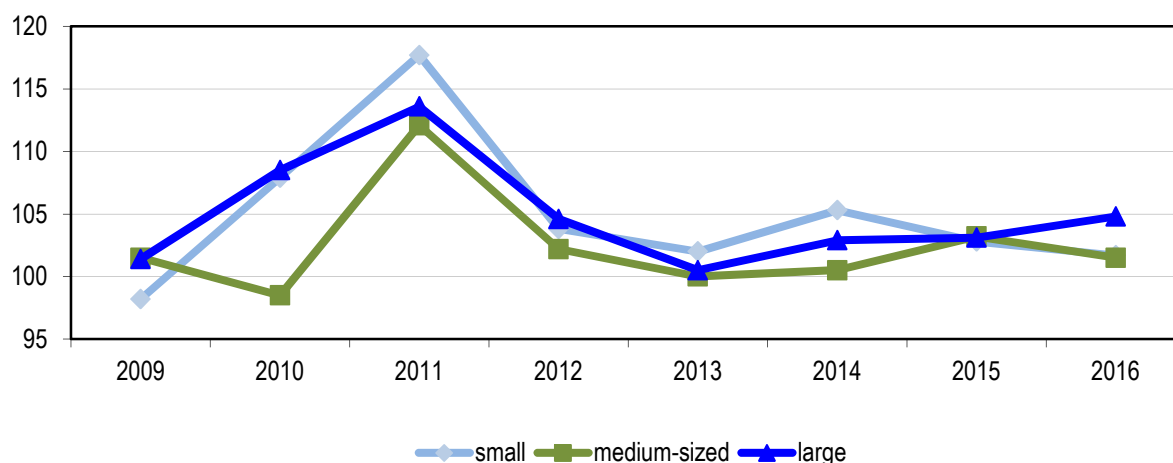
<sup>36</sup> The analysis covered seven sections of the economy: four industrial sections (mining and quarrying, manufacturing, electricity, gas, steam and hot water supply, water supply; sewerage, waste management and remediation activities), as well as construction, trade and repairs, and transportation and storage. The share of those sections in revenues from overall activity in the analysed period amounted to 88%, and in financial results and investment expenditure well exceeded 80%.

activities. The largest plunge in the number of employed persons and employment applied to mining and quarrying (about 7%). In construction and in electricity, gas, steam and hot water supply, those indicators dropped by 3-4%.

**In terms of size<sup>37</sup>**, the financial situation was much more stable than in terms of ownership sectors and sections of the economy.

The last few years saw a diverse growth rate of revenues in respective groups of enterprises. In 2016, revenues increased by 46.3% in the case of large enterprises, by 45.1% in the case of small enterprises, and by 20.6% in the case of medium-sized enterprises compared to 2008. As a result, the share of medium-sized enterprises in revenues notably decreased from 28.4% in 2008 to 24.6% in 2016. In terms of revenues and results, large enterprises with a share of up to 60% prevail, followed by medium-sized enterprises with a share of about 25%. A similar share applies to debt which in all groups of enterprises grew much faster than revenues, affecting the potential to cover debt with generated revenues.

**Chart 16. Dynamics of revenues in 2009-2016 (%) by size of enterprises (%)**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data, F-01 report.

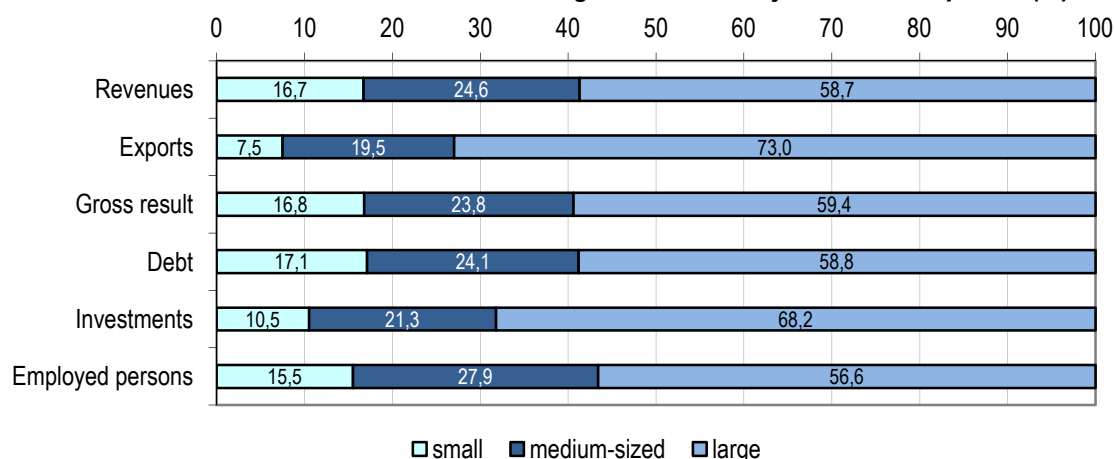
All groups of enterprises reported higher exports and higher share of exports in revenues from overall activity. This ratio increases along with the size of enterprises (from 9.6% for small enterprises to 26.6% for large enterprises). In the structure of revenues from exports, large enterprises have the largest share (about 73%), followed by medium-sized enterprises (about 20%).

In all groups, investment expenditure decreased by slightly more than 10%. The structure of investment expenditure is similar to the structure of revenues from exports and notably deviates from the structure of revenues from overall activity, results, and debt. It is also dominated by large enterprises with a share of 70%, followed by medium-sized enterprises with a share of about 20%. Much higher share of large enterprises in investment expenditure than in other abovementioned economic categories (about 70% against about 60%) results from the fact that the group of large enterprises includes the fuel and energy industry, which is characterised by high capital intensity. The improvement of financial results with a

<sup>37</sup> Enterprises were divided into three groups. The division criterion was the number of the employed persons. Small enterprises had 10-49 persons; medium-sized enterprises had 50-249 persons; and large enterprises had more than 249 persons.

drop in investments in all groups of enterprises increased the potential for the self-financing of investments. Both average employment and the number of employed persons rose in all groups of enterprises. Small enterprises employed 829,000 persons (a rise by 1.1%), compared to 1,495,000 in medium-sized enterprises (increased by 1.8%) and 3,035,000 in large enterprises (up by 4.6%). In 2016, the share of respective groups of enterprises in the total number of employed persons amounted to 15.5%, 27.9% and 56.6%, respectively. In 2016, no material changes in the share of respective groups of enterprises in revenues, results, debt, investment expenditure or the number of employed persons were reported compared to the previous year.

**Chart 17. Structure of selected economic categories in 2016 by size of enterprises (%)**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data, F-01 report.

**In territorial terms**, the largest number of analysed enterprises was reported in Mazowieckie (9,390; 17.9% of total enterprises), Śląskie (6,943; 13.2%), Wielkopolskie (5,632; 10.7%) and Małopolskie (4,612; 8.8%) Voivodeships. Świętokrzyskie, Lubuskie, Opolskie and Podlaskie Voivodeships reported the lowest number of enterprises. The highest increase in the number of enterprises was reported in Wielkopolskie and Podkarpackie Voivodeships, while Opolskie, Świętokrzyskie, Lubelskie and Warmińsko-Mazurskie Voivodeships reported the largest decrease.

Considering the scale of economic activity in respective regions, the analysis of the size of parts of financial categories in this structure is quite obvious. The highest revenues from overall activity were reported by enterprises located in Mazowieckie (31.8% of total revenues), Wielkopolskie (12.9%), Śląskie (11.7%) and Małopolskie (7.3%) Voivodeships. The revenues generated in those voivodeships accounted for 63.7% of total revenues. Podlaskie, Świętokrzyskie, Opolskie and Warmińsko-Mazurskie Voivodeships are on the other side of the spectrum. The ranking of voivodeships is different in terms of the growth rate of revenues. Revenues grew the most in Lubuskie (10.5%), Wielkopolskie (8.9%) and Podkarpackie (7.7%) Voivodeships. In all voivodeships, revenues from exports rose. Enterprises from Mazowieckie (22.0% of total domestic exports), Śląskie (16.2%), and Wielkopolskie (12.6%)(11.0%) Voivodeships generated the highest revenues. Those four voivodeships generated 61.8% of the domestic exports.

The highest amount of funds was invested in Mazowieckie (PLN 45.1 billion; 31.0% of total expenditure), Śląskie (PLN 17.0 billion; 11.7%), Dolnośląskie (PLN 15.5 billion; 10.7%) and Wielkopolskie (PLN 14.6 billion; 10.0%) Voivodeships. Total amount of investments in those four voivodeships accounted for 63.4% of total funds. Świętokrzyskie, Opolskie, Podlaskie and Warmińsko-Mazurskie Voivodeships report the lowest investments, from PLN 1.6 billion to PLN 2.0 billion. Total

amount of investments in those four voivodeships accounted for 5.1% of total funds. In all voivodeships, the level of investments was lower than in 2015. The lowest drop was reported in Dolnośląskie (0.5%), Śląskie and Lubuskie (2.5% each), and Warmińsko-Mazurskie (6.0%) Voivodeships.

Zachodniopomorskie (29,9%), Kujawsko-Pomorskie (28,4%) and Świętokrzyskie (20,8%) Voivodeships reported the deepest slump. The highest number of employed persons was reported in Mazowieckie (1,402,000; 26.2% of total employed persons), Śląskie (687,000; 12.8%) and Wielkopolskie (623,000; 11.6%) Voivodeships, with Opolskie (87,000), Podlaskie (88,000) and Świętokrzyskie (95,000) Voivodeships reporting the lowest numbers. Total share of those three voivodeships in the total number of employed persons was 5.0%.

### **Trends observed after 2008**

The growth rate of revenues from exports is higher than the growth rate of revenues from overall activity. The share of exports in revenues is gradually growing, from 16.5% in 2008 to 21.4% in 2016.

The role of the private sector is becoming more important. The number of employed persons in the public sector has been decreasing y/y, from 891,000 in 2008 to 629,000 in 2016 (by 29.4%). At the same time, the number of employed persons in the private sector has grown from 4,094,000 to 4,730,000 (by 15.5%). The share of private sector employed persons in the total number of employed persons increased from 82.1% in 2008 to 88.3% in 2016. In 2016, revenues from overall activity were higher by 47.2% in the private sector and lower by 15.5% in the public sector. The share of the private sector revenues in total revenues increased in the analysed period from 86.6% to 91.8%.

The growth rate of revenues and the growth rate of the number of employed persons in medium-sized enterprises lag behind the growth rates in two other groups of enterprises. As a result, the share of medium-sized enterprises in the revenues and the number of employed persons is decreasing (from 28.4% in 2008 to 24.6% in 2016 for revenues, and from 30.2% to 27.9% for the number of employed persons).

The share of revenues and the number of employed persons in total revenues and total number of employed persons in five voivodeships of the so-called Eastern Wall has been gradually decreasing (from 10.7% in 2008 to 10.1% in 2016 in the case of revenues, and from 13.5% to 12.5% in the case of the number of employed persons). At the same time, those rates have notably improved in Wielkopolskie Voivodeship, with an increase from 10.0% to 12.9% for revenues and from 9.9 % to 11.6% for the number of employed persons.

## **3.4 Analysis of the sector of microenterprises in 2015**

In 2015, the number of microenterprises was growing much faster than in other categories of enterprises. Also the number of the employed persons and employees in microenterprises was rising more dynamically than in the economy as a whole. As a result, the share of microenterprises in total number of business operators and the share of the employed persons and employees in microenterprises in the total number of the employed persons and employees increased. The growth rate of average wages in microenterprises was higher than the growth rate of average wages in the economy, which improved the wage ratio. Revenues and gross profits of microenterprises also grew faster than in the case of the economy as a whole. The share of microenterprises in revenues and gross profit increased. No progress was reported only in investment activity of the smallest enterprises.

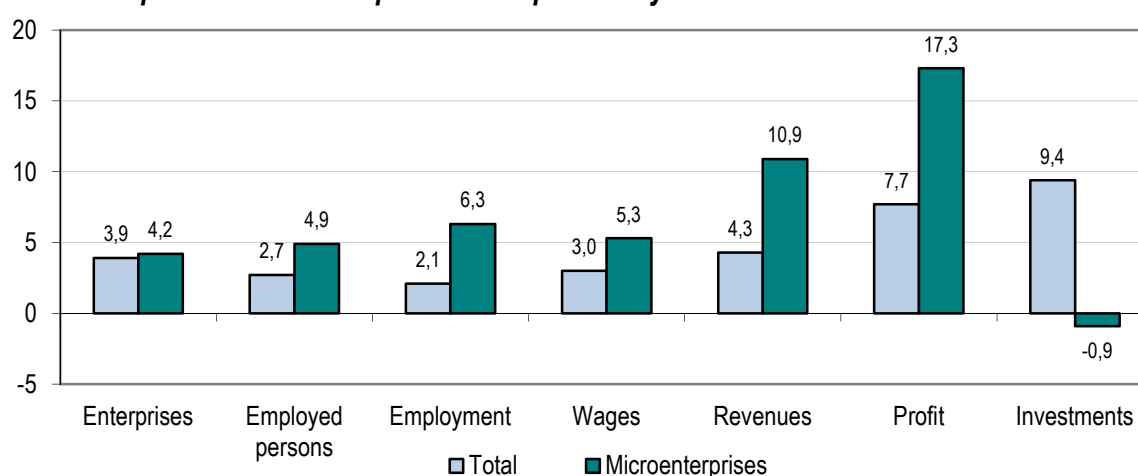
Investment expenditure slightly dropped compared to the notable surge in investments in the economy. As a result, the share of microenterprises in investments decreased.

479,000 of microenterprises operated in trade and repairs (26.1%); 240,000 in professional, scientific and technical activities (13.1%); 236,000 in construction (12.8%); and 165,000 in manufacturing (9.0%).

In territorial terms, most enterprises operated in Mazowieckie (333,000; 18.1%), Śląskie (207,000; 11.3%) and Wielkopolskie (188,000; 10.2%) Voivodeships, while Opolskie (37,000; 2.0%) and Lubuskie and Podlaskie (45,000; 2.5% each) Voivodeships reported the lowest number of enterprises.

At the national level, 47.8 microenterprises operated per 1,000 residents. This ratio was the highest in Mazowieckie (62.2), Wielkopolskie (54.2) and Zachodniopomorskie (54.0) Voivodeships. Podkarpackie (34.3), Lubelskie (36.0) and Warmińsko-Mazurskie (36.5) Voivodeships had the lowest ratios.

**Chart 18. Changes in the size of selected economic categories in the economy and in microenterprises in 2015 compared to the previous year in %**



Source: DDS of the Ministry of Economic Development on the basis of Activity of non-financial enterprises in 2015, Central Statistical Office 2016.

**The number of the employed persons** in total enterprises as of the end of 2015 amounted to 9,396,000, which was 2.7% higher than in the previous year. 3,668,000 persons were employed in microenterprises, which was 4.9% more than in the previous year. Their share in the total number of the employed persons increased from 38.2% to 39.0%.

Microenterprises operating in trade and repairs reported 1,108,000 employed persons (30.2% of persons employed in the smallest enterprises), compared to 487,000 persons in construction (13.3%), 420,000 persons in professional, scientific and technical activities (11.5%), and 399,000 persons in manufacturing (10.9%).

In territorial terms, the largest number of persons employed in microenterprises was reported in Mazowieckie 643,000 (17.5% of total persons employed in microenterprises), Śląskie 436,000 (11.9%) and Wielkopolskie 389,000 (10.6%) Voivodeships. Opolskie (79,000; 2.2%), Podlaskie (83,000; 2.3%) and Lubuskie (93,000; 2.5%) Voivodeships are on the other side of the spectrum.

At the national level, 95.4 person were employed in microenterprises per 1,000 residents. This ratio was the highest in Mazowieckie (120.3), Wielkopolskie (112.0) and Pomorskie (102.0) Voivodeships. Podkarpackie (69.5), Podlaskie (69.6) and Warmińsko-Mazurskie (70.7) Voivodeships reported the lowest ratios.



**Average monthly wage** in enterprises rose to PLN 4,017 (by 3.0%). In microenterprises, wages rose to PLN 2,437 (by 5.3%). The ratio of wages in microenterprises to wages in total enterprises improved from 0.59 to 0.61.

The highest monthly wages were earned by persons employed in microenterprises in information and communication (PLN 3,869); real estate activities (PLN 3,123); professional, scientific and technical activities (PLN 2,882); and administrative and support service activities (PLN 2,704). The lowest wages were earned in accommodation and food service activities (PLN 1,999); other service activities (PLN 2,082); construction (PLN 2,200); and transportation and storage (PLN 2,215).

In terms of voivodeships, the highest wages were earned in Mazowieckie (PLN 2,969); Dolnośląskie (PLN 2,531); and Pomorskie (PLN 2,510) Voivodeships, while the lowest wages were reported in Podkarpackie and Świętokrzyskie (PLN 2,127 each); and Warmińsko-Mazurskie (PLN 2,165).

**Total revenues of enterprises** amounted to PLN 4,076.5 billion, of which in microenterprises amounted to 895.5 billion. In total statistical population, revenues rose by 4.3%, compared to 10.9% in microenterprises. The share of microenterprises in revenues increased from 20.7% to 22.0%.

The highest revenues were generated by microenterprises operating in trade and repairs (PLN 422.7 billion; 47.2% of revenue of the smallest enterprises); construction (PLN 100.7 billion; 11.3%); manufacturing (PLN 79.7 billion; 8.9%); and transportation and storage (PLN 65.0 billion; 7.3%).

In territorial terms, the highest revenues were generated by microenterprises from Mazowieckie (PLN 218.3 billion; 24.4% of total revenues of microenterprises); Śląskie (PLN 96.3 billion; 10.8%) and Wielkopolskie (PLN 91.6 billion; 10.2%) Voivodeships, while Opolskie (PLN 15.6 billion; 1.7%), Świętokrzyskie (PLN 19.7 billion; 2.2%) and Podlaskie (PLN 20.6 billion; 2.3%) Voivodeships reported the lowest revenues.

**Cost level indicator** of total business operators amounted to 93.7%. It was much lower in microenterprises (86.6%). In other groups of enterprises broken down by size (small, medium-sized, large), cost level indicator exceeded 93%.

**Gross profit** of total enterprises amounted to PLN 334.9 billion (up by 7.7%). The profit of microenterprises amounted to PLN 141.6 billion (a rise by 17.3%). The share of microenterprises in gross profit increased from 38.8% to 42.3%.

**Investment expenditure**<sup>38</sup> of total enterprises amounted to PLN 200.6 billion (an increase by 9.4%). Expenditure in microenterprises amounted to PLN 29.7 billion, with a drop by 0.9%. The share of microenterprises in expenditure decreased from 16.4% to 14.8%.

The highest investment expenditure was incurred by microenterprises operating in real estate activities (PLN 6.5 billion; 21.9% of total expenditure of enterprises); construction (PLN 4.4 billion; 14.8%); trade and repairs (PLN 4.3 billion; 14.5%); and transportation and storage (PLN 2.3 billion; 7.7%).

In territorial terms, the highest investment expenditure were incurred by microenterprises from Mazowieckie (PLN 8.8 billion; 29.6% of total expenditure of enterprises), Wielkopolskie (PLN 3.4 billion; 11.5%) and Śląskie (PLN 2.4 billion; 8.1%) Voivodeships, while Świętokrzyskie (PLN 0.4 billion; 1.4%) and Lubuskie and Warmińsko-Mazurskie (PLN 0.6 billion; 1.9% each) Voivodeships reported the lowest expenditure. The share of expenditure of microenterprises in total expenditure incurred in a given

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<sup>38</sup> Investment expenditure including expenses for the purchase of used fixed assets. In total statistical population, the share of expenses for the purchase of the used fixed assets in total amount of investment expenditure and expenses for the purchase of the used fixed assets was 9.4%, compared to 16.1% for microenterprises.



voivodeship is quite different. The highest share was in Zachodniopomorskie (26.3%), Opolskie (21.0%) and Lubelskie and Podlaskie (20.5% each), while the lowest share was reported in Dolnośląskie (10.0%), Śląskie (11.1%) and Łódzkie (12.1%).

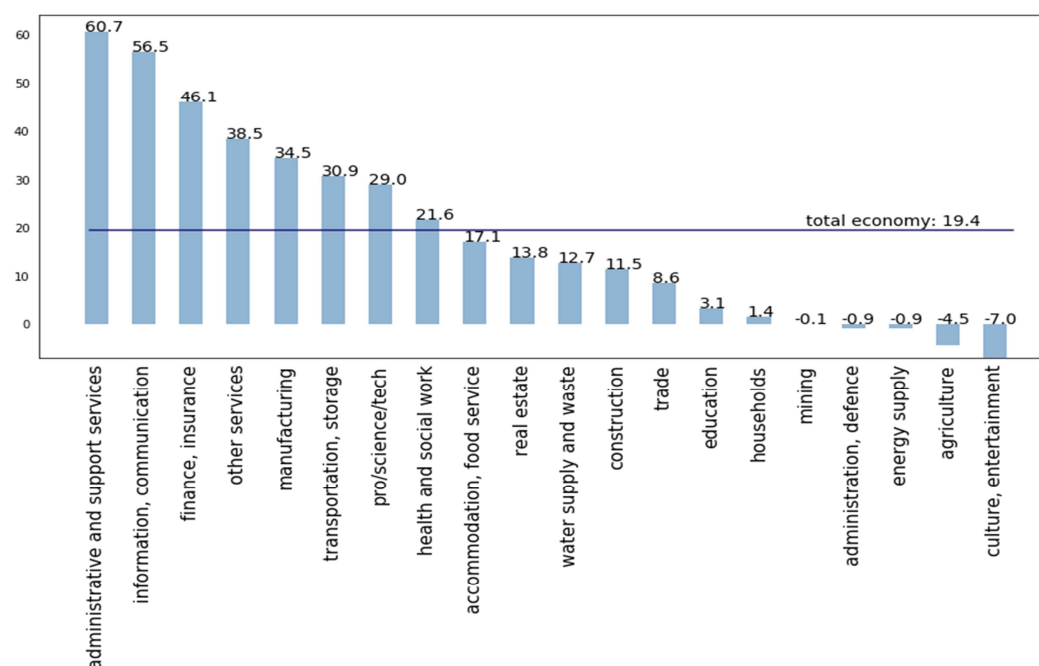
The potential for the self-financing of investments with investment surplus improved for microenterprises<sup>39</sup>. An increase in gross profit by several per cent was accompanied by a drop in investment expenditure.

### 3.5 Structural change – a sectoral approach

#### 3.5.1 Value added by section of the Polish Classification of Activities

Observation of changes in the structure of economic activity is important as not all industries (defined at different levels of the Polish Classification of Activities<sup>40</sup>) identically contribute to general welfare. They differ in terms of e.g. development prospects, labour intensity, capital intensity, labour productivity, profitability, level of innovation or level of prices of products sold, both on the domestic and on the international market. Changes in the share of respective industries in total output, employment or investments may reveal the qualitative aspect of economic growth, in particular the extent to which the growth rate can be maintained in the future by shifting labour and capital resources to more effective industries so as to transform those resources into value added.

**Chart 19. Real growth of gross value added in the economy in 2010-2016 (%)**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

<sup>39</sup> The information provided by the Central Statistical Office does not allow for the quantification of the potential for the self-financing (no data available for net profit and depreciation, or disposable income of enterprises).

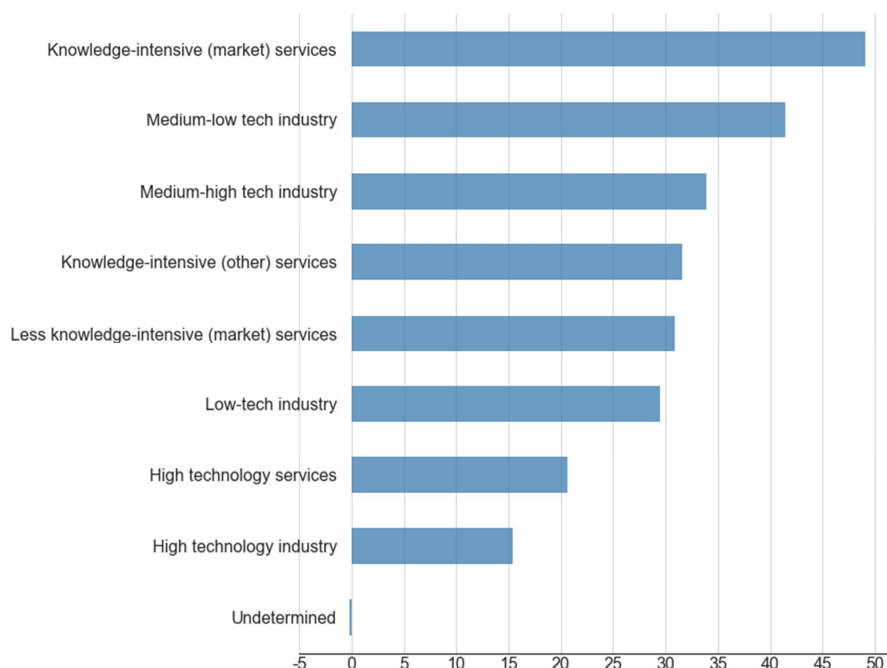
<sup>40</sup> From the most general category: section, division, group, class, subclass.

The fact that the economy as a whole is growing does not mean that its all sectors are growing as well. In recent years, the section of the Polish Classification of Activities with the highest relative growth of value added has been the one entitled *Administrative and support service activities*. This section includes such divisions as office administration services and other activities supporting carrying out economic activity, services relating to order and cleanliness, labour market intermediation services, or renting and leasing. The value of financial and insurance activities, information and communication, transportation and storage, as well as professional, scientific and technical activities has been also dynamically growing.

Two largest sections of the economy are still the broadly understood manufacturing and trade (including repair of motor vehicles), which in 2016 generated over 38% of gross value added combined. With its above-average growth rate, since 2014 the largest section has been manufacturing, which in 2016 generated 20.4% of total gross value added. In the case of trade, the lower growth rate than in the economy as a whole resulted in a decrease in the share of this section in total gross value added from 19.3% in 2010 to 18% in 2016.

### 3.5.2 Value added by R&D intensity

**Chart 20. Growth of value added in 2010-2016 in respective sectors by R&D intensity (%)**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data (F-01 report, Insigos system).<sup>41</sup>

<sup>41</sup> For statistical secrecy reasons, 72 out of 97 applicable categories of the Polish Classification of Activities were included. In particular, financial services were excluded. Prices were adjusted in real terms on the basis of the Central Statistical Office data relating to GVA growth in current prices and in constant prices ([http://stat.gov.pl/download/gfx/portalinformacyjny/pl/defaultstronaopisowa/1772/1/5/roczne\\_wskazniki\\_makroekonomiczne\\_cz\\_iii.xlsx](http://stat.gov.pl/download/gfx/portalinformacyjny/pl/defaultstronaopisowa/1772/1/5/roczne_wskazniki_makroekonomiczne_cz_iii.xlsx)) in the following manner:

1. total GVA in the economy was calculated in real prices (previous year = 100) by multiplying the nominal GVA for the previous year by GVA in constant prices for the previous year;
2. GVA deflators were calculated for 1 year by dividing nominal GVA by the real GVA for each year;

The analysis taking into account R&D intensity levels attributed to the types of economic activity at the level of divisions and groups of the Polish Classification of Activities, treated as an approximated measure of technological advancement of a given area of industry or services, completes the picture of the Polish enterprise sector. The results showed that the value added was growing the fastest in the last few years in areas with medium R&D intensity level (this also confirmed the average product trap identified in the Responsible Development Strategy).

In the Knowledge-intensive service category, the main drivers of growth included employment placement activities, activities of head offices (including management of other enterprises and advisory and support services in this respect), as well as legal and accounting, bookkeeping and auditing activities, including tax consultancy.

In the case of the group of industries where the level of R&D intensity was not attributed, there was a slight real decrease in the value added by 0.2% due to decline in the mining and quarrying and development of building projects sectors.

### **3.5.3 Employment by R&D intensity**

Employment was growing the fastest in services, in particular in high technology services and Knowledge-intensive services. In the context of the digitisation of the economy, the fact that in the former category computer programming and computer consultancy services, where the number of employees more than doubled (from 38,000 to 90,000 persons), contributed most to growth is a positive development.

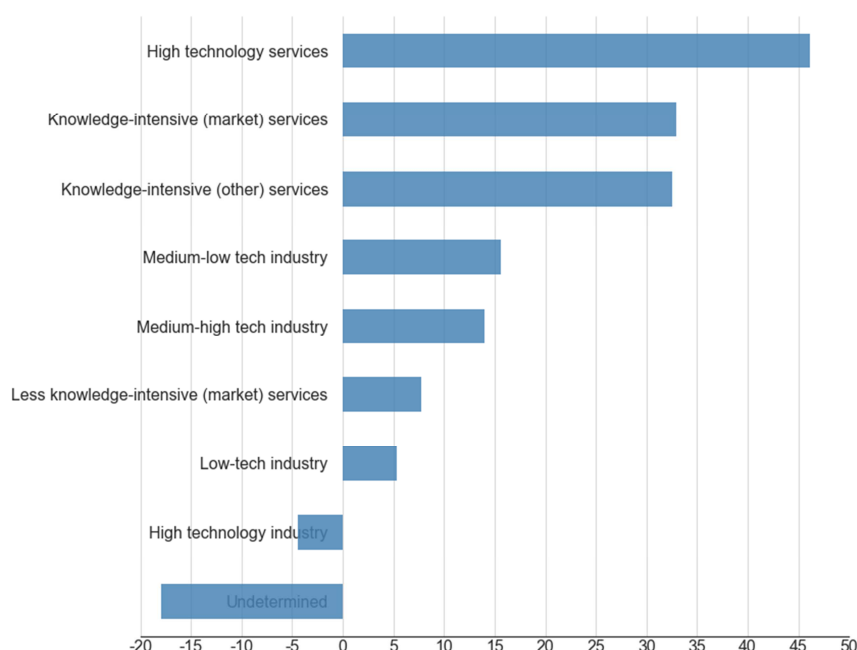
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3. deflators for x years were calculated by multiplying x consecutive 1-year deflators;

4. real change in % was calculated by dividing the nominal value by the deflator for x years, then by GVA for the baseline year, deducting 1 and multiplying by 100.

Thus calculated measure of the situation in real economy should be considered an approximation, not only due to the characteristics and scope of the Insigos database, but also due to: 1. different algorithm for the calculation of value added at the micro level (F-01 reports) and gross value added at the macro level (national accounts); 2. application of the same deflator to various sectors of the economy; 3. Impact of the selection of the year of the analysis and the baseline year on the results of the analysis.

**Chart 21. Employment growth in 2010-2016 in respective sectors by R&D intensity (%)**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data (F-01 report, Insigos system).

In the case of high technology industries<sup>42</sup>, lower employment combined with slightly lower growth of value added than in the economy as a whole (15%) may imply that the economic importance of this category is decreasing.

In the group of industries where the level of R&D intensity was not attributed, mining and quarrying, construction and energy sections reported the largest drop in employment.

### 3.5.4 Financial results

Financial results of enterprises may be assessed on the basis of many ratios. From the macroeconomic analysis point of view, at the aggregate value level, the most interesting ratios seem to be return on sales (ROS), return on assets (ROA) and labour productivity<sup>43</sup>.

<sup>42</sup> The analysis covered two high technology industries: manufacture of computers, electronics and optical products, and manufacture of air and spacecraft and related machinery. The third industry of this type, manufacture of pharmaceutical preparations, was excluded for statistical secrecy reasons.

<sup>43</sup> Return on sales (ROS), in this case defined as the difference between revenues from sales and operating costs in relation to total revenues from sales, allows for the assessment of the effectiveness of an enterprise in generating profit from its primary source of income.

Return on assets (ROA) is the ratio of the company's financial result to the value of its assets. This ratio informs about the number of profit units generated by a given sector per unit of capital employed (equity and third party capital combined). It thus allows for the assessment of the effectiveness of property use in a company or sector.

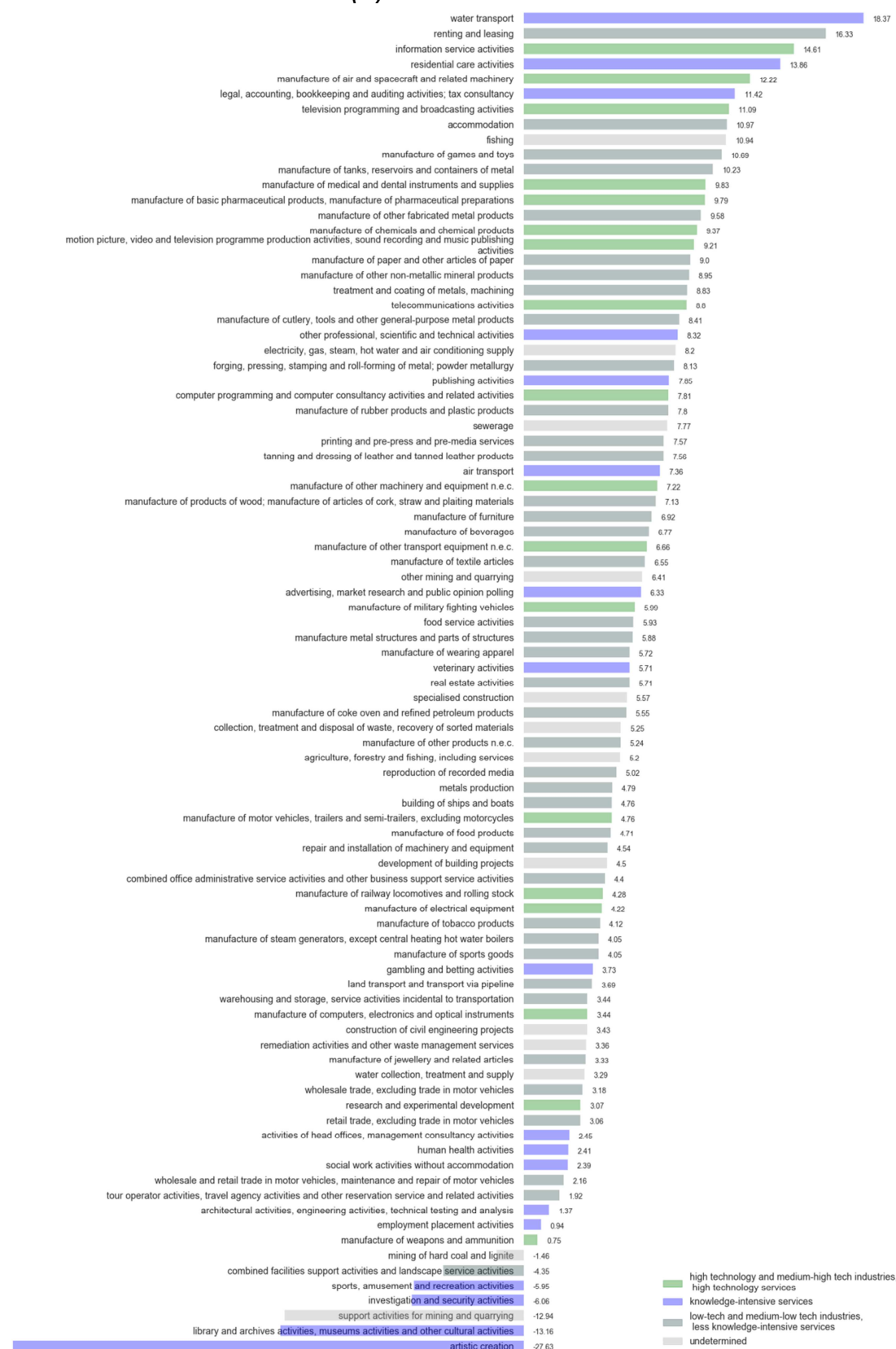
Labour productivity was calculated as a ratio of the value added and average employment (FTEs). This ratio allows for the assessment of the value added generated on average by a full-time employee in a given company or industry. Value added is distributed between the company (profit), employees (wages) and the state (taxes), it is thus in the best interest of everyone to maximise it e.g. by shifting labour and capital resources to industries with high labour productivity.

In 2016, certain correlations were observed between the abovementioned ratios, but they were not very strong. The relatively strongest relationship can be noted with regard to ROS and ROA, where the Pearson correlation coefficient (after exclusion of extreme outliers: ROA 41% for *Social work activities without accommodation for the elderly and disabled* and ROS -27% for *Arts, entertainment and recreation*) was 0.5.

High- and medium high technology industries and Knowledge-intensive services more often rank higher than below the labour productivity median for the analysed industries. It can be noted that high productivity may result not only from innovation, but also from other factors, such as the relatively low labour intensity specific for a given industry (e.g. manufacture of coke oven and refined petroleum products, renting and leasing), or high scalability (music and video production, telecommunications).

When interpreting the value of those ratios, we should keep in mind the specific nature of respective industries, e.g. specific labour intensity or capital intensity. Therefore, we must not draw any far-reaching conclusions from the relative differences (e.g. in return on assets or labour productivity) between respective sectors (e.g. industry and services).

**Chart 22. Return on sales in 2016 (%)**



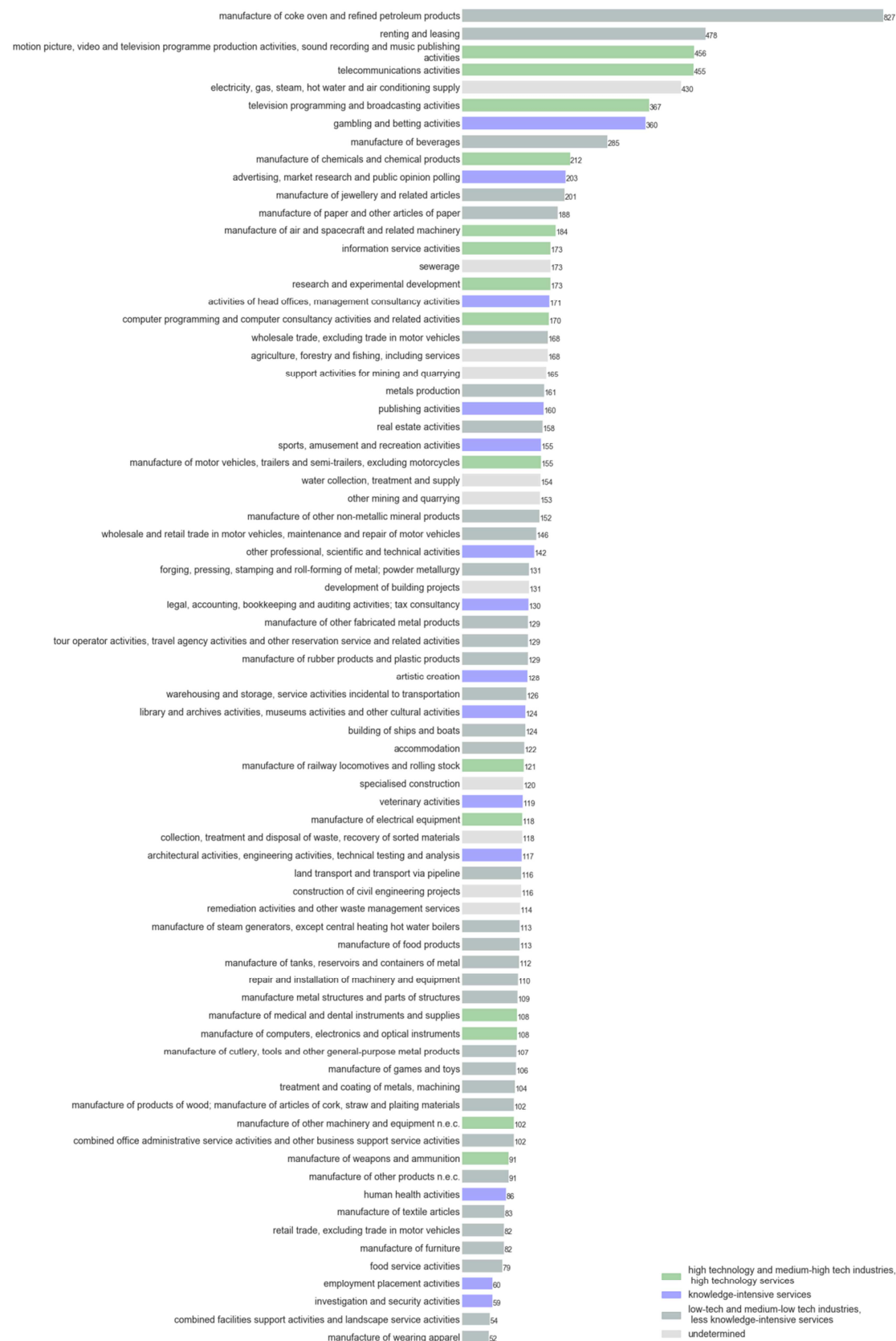
Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data (F-01 report, Insigios system).

**Chart 23. Return on assets in 2016 (%)**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data (F-01 report, Insigos system).

**Chart 24. Labour productivity in 2016 (PLN thousand per person employed)**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data (F-01 report, InsigOS system).



## 4. DEVELOPMENT PROCESSES IN ENTERPRISES

The dynamically changing external and internal environment has an impact on enterprises in Poland, on one hand, in the manner typical of other developed economies; on the other hand, in a special way resulting from distinctive features of the Polish economy.

Enterprises in Poland are becoming more modern and open: expenditure on innovations systematically grows, and the impact of the foreign trade on the economy, measured by the ratio of the exports of goods and services to GDP, is higher than the EU average. However, in spite of achieving a 1% share of R&D expenditure in GDP, Poland remains at the far end among EU-28 countries. Moreover, low share of innovative enterprises affects Poland's progress. However, the share of the industry in GDP, which is higher than the EU average and characteristic for the Polish economy in the context of changes in the industrial structure towards technologically advanced products, offers an opportunity to achieve strategic positions in the global supply chains. Polish economy is still facing such challenges as lack of large innovative companies with a global reach, or a low number of patent applications.

The growing employment in the ICT sector and the rise in exports in that sector confirm the significant development potential and high expertise of Polish employees. Robotisation, albeit still at a relatively early stage, can offer a real opportunity for Polish enterprises also in terms of eliminating the effects of mismatched competences and supply on the labour market. As entrepreneurs more often experience the problem of the lack of appropriately qualified employees, measures aimed at the development of qualifications of employees and increasing their mobility have become so important. The staffing problems submitted by entrepreneurs are intensified by unfavourable demographic trends.

Cooperation of enterprises within more or less formalised structures, including other actors of the economic life (such as universities or local authorities), is becoming a critical factor for innovative development. Clusters are an example of such cooperation, which on the basis of a naturally initiated cooperation between enterprises, research institutions, business environment institutions, non-governmental organizations and local authorities, are referred to as the catalyst of innovative processes. Cluster structures to a great extent support the growth of innovation and improvement of the potential knowledge transfer capacity. Small and medium-sized enterprises operating in clusters are of particular importance, as without institutional support and the value chain generated in the cluster very often they would not be able to cope with the challenges on the market.

Barriers hampering business activity also affect the development processes in enterprises. Major obstacles mentioned by entrepreneurs include the amounts of taxes and charges; the lack of stable law; and the inconveniences related to the system of control.

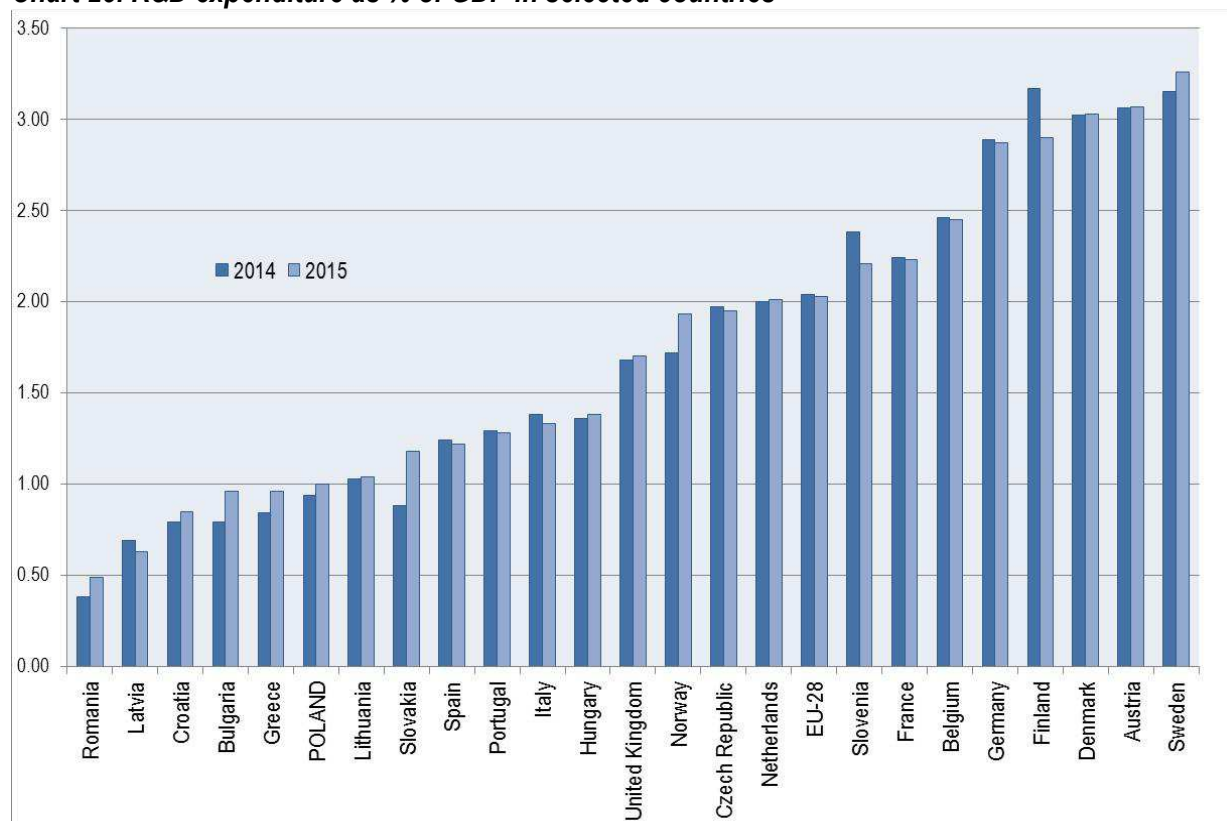
## 4.1 Innovation and technological development

### 4.1.1. Innovativeness of the Polish economy

Innovation transforms the whole economies, generating new quality of products and services and determining structural changes. Although Polish enterprises are becoming more associated with new trends, further development of innovation depends on the number of challenges, such as closer cooperation between business and science or the readiness to take risks related to the implementation of new products and services.

Research and development expenditure is one of the key measures of innovativeness of the economy and of technological progress. 2015 was another year where such expenditure grew in current prices. It amounted to PLN 18.06 billion and accounted for 1% of GDP, but Poland is far below the EU-28 average (2.03%). Nevertheless, Poland has a relatively high growth rate of expenditure (11.2% in 2011-2015), although it is lower than in such countries as Slovakia or Bulgaria (18.2%). The share of enterprises in domestic R&D expenditure is systematically growing. In 2010, it amounted to 26.6% (BERD=PLN 2.77 billion); in 2012 it was 37.2 % (BERD=PLN 5.3 billion); and in 2015 it reached 46.5%, i.e. in nominal terms tripled the rate from five years ago (BERD=PLN 8.41 billion).

**Chart 25. R&D expenditure as % of GDP in selected countries**



Source: DDS of the Ministry of Economic Development, on the basis of Eurostat data.

Poland ranks poorly in international innovation rankings. It was ranked 25<sup>th</sup> (along with Croatia) in the *European Innovation Scoreboard 2017*<sup>44</sup> and remained in the group of moderate innovators. In the last

<sup>44</sup> EIS 2017 was prepared on the basis of a new methodology.

few years, Poland improved its results with regard to innovation-friendly environment or investments; however, it also reported worse results in terms of e.g. innovation activity of enterprises (SMEs), cooperation between different entities, and sales of innovations relating to hi-tech products. On the other hand, in the *Global Innovation Index 2017* (GII) Poland ranked 37<sup>th</sup> (among 127 countries), after Bulgaria, Slovakia and Latvia. The leader is Switzerland, followed by Sweden and the Netherlands.

R&D enterprises operate in Poland on a relatively small scale. As it had been the case in 2015, among 2,500 companies which were leaders in terms of R&D investment in 2016 (according to *The 2015 EU Industrial R&D Investment Scoreboard*) there were no Polish enterprises, while in the 2014 ranking only one Polish company was recognised. The ranking lists companies with R&D expenditure amounting to at least EUR 21 million. In a similar list of 1,000 companies from EU Member States, only one Polish enterprise (two in the previous edition and four 2 years ago) were listed in the second 500 of the ranking, which means that they had invested at least EUR 6 million in R&D during the year. Three enterprises from the Czech Republic and one from Romania and Hungary each were included in the ranking.

Since 2012, the share of innovative enterprises<sup>45</sup> in the industrial sector has been growing, while decreasing in services. The current data on innovation activities of enterprises in 2013-2015 indicate that the share of innovative companies amounted to 17.6% in industry (an increase by 0.1 pp y/y) and 9.8% in services (a decrease by 1.6 pp y/y)<sup>46</sup>. The data regarding innovation-active firms are slightly better, but also reveal the same difference between sectors. In 2013-2015, innovation-active firms<sup>47</sup> in the industry and services accounted for 18.9% and 10.6% of the total number of those enterprises, respectively (compared to 18.6% and 12.3% in 2012-2014) whereas, similarly to the previous analysing period, the largest percentage of innovation-active firms was reported among enterprises with at least 250 persons employed.

Both sectors reported better results in the most innovative group of enterprises, i.e. large enterprises employing 250 persons or more. Between 2013 and 2015, 60.6% of large industrial enterprises and 42.8% of enterprises from the service sector introduced at least one innovation to the market (compared to 57.8% and 42.7% in 2012-2014, respectively). Small enterprises (10-49 employees) were least innovative, with only one out of ten introducing innovations to the market in recent years.

The most innovation-active sections of industry and services include insurance, reinsurance and pension funding; scientific research and experimental development; manufacture of coke and refined petroleum products; manufacture of basic pharmaceutical products and manufacture of pharmaceutical preparations; as well as manufacture of chemicals and chemical products. At the same time, low innovativeness was reported for enterprises operating in such sections as land and pipeline transport, manufacture of wearing apparel, and manufacture of leather.

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<sup>45</sup> For statistical purposes (comparability with international data), an innovative enterprise is an enterprise which during the analysed period introduced at least one product or process innovation on the market. A product or process innovation is understood as a new or significantly improved product or service, respectively, as well as methods of production, distribution and support of the activity. The novelty criterion may apply to the whole market or to the enterprise alone.

<sup>46</sup> *Innovation activity of enterprises 2012-2014*, Central Statistical Office.

<sup>47</sup> An innovation-active enterprise is an enterprise which placed at least one product or process innovation on the market in the analysed period or which implemented at least one innovative project that was interrupted or abandoned in that period (was not successfully completed), or that had not been completed by the end of that period (i.e. it continues).

Polish enterprises tend to get involved in process innovation more often than in product innovation. In 2013-2015, 13.0% of industrial companies and 7.4% of service companies introduced process innovation, while 11.8% and 4.8%, respectively, introduced product innovations. Both types of innovations were introduced by 7.2% of industrial companies and only 2.4% of service companies.

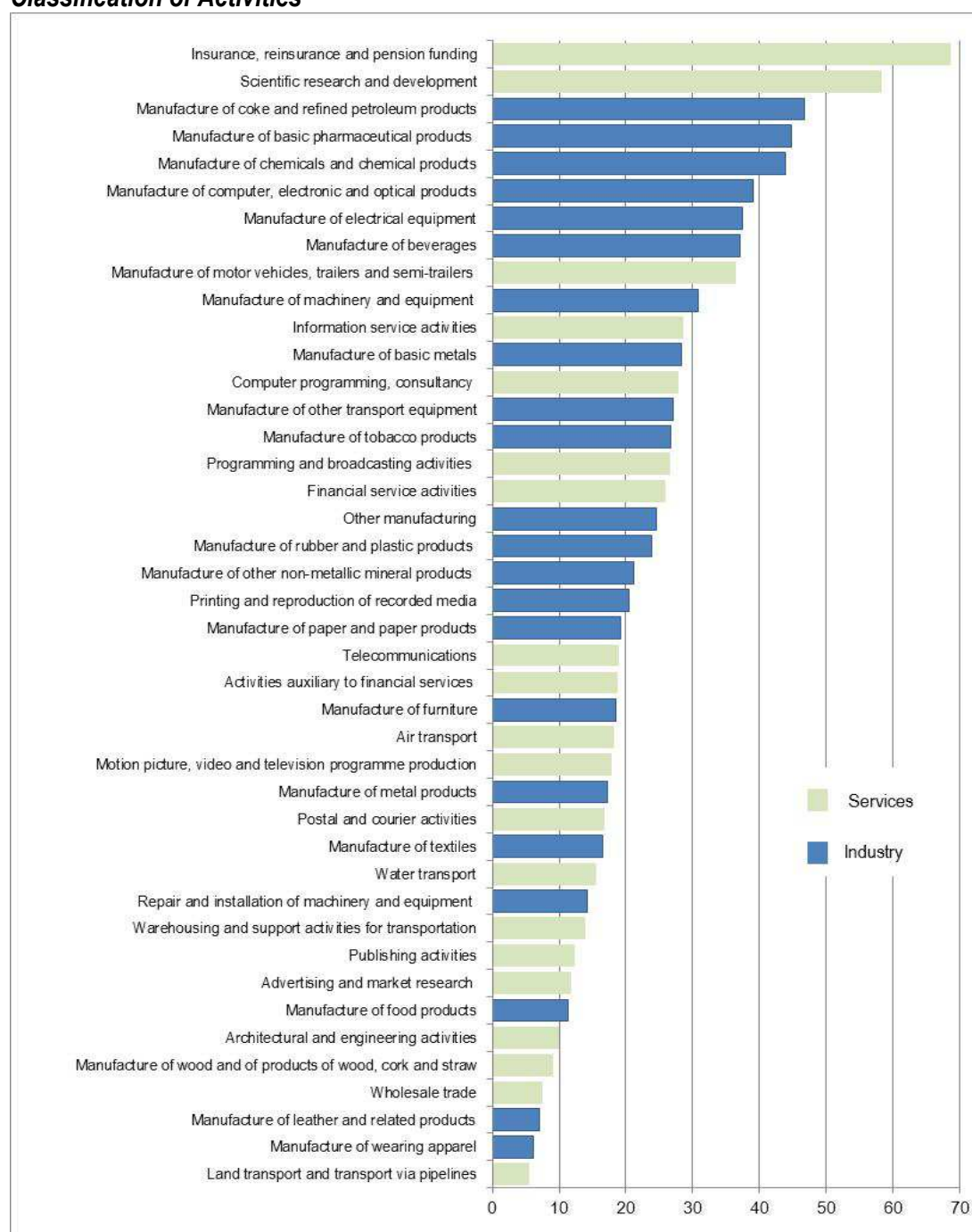
Much fewer enterprises, both from the industry and from the service sector, implemented innovations related to organisation and marketing than in the previous years. In 2013-2015, 8.1% of industrial and service enterprises introduced organisational innovations. In the same period, 7.1% of industrial companies and 6.6% of service companies introduced marketing innovations.

However, the ratios relating to the effectiveness of innovations in industry improved. In 2015, 9.5% of total net revenues from sales of Polish industrial companies, i.e. 0.7 pp more than in 2014, originated from sales of new or significantly improved products. For service companies, this ratio amounted to 3.0%, which was lower by 0.3 pp than in 2014. Exceptionally high importance of new or significantly improved products in terms of generating revenues from sales was notable, as in the previous year, in industrial enterprises from Pomorskie Voivodeship (18.3% in 2015), and in service enterprises from Mazowieckie Voivodeship (5.1%) (similarly to 2014). Most revenues from new or improved services are generated in the following industrial sectors: manufacture of motor vehicles, trailers and semi-trailers; manufacture of other transport equipment and manufacture of electrical equipment; while in services, in transport, television programming and broadcasting activities, telecommunications, and scientific research, which should be considered a positive development.

Modern solutions in industry are most often implemented through purchases of machinery and equipment (51.2%), while 16.5% of innovation expenditure was allocated to R&D activities in 2015. In the service sector, investments in machinery represented 31.6%, while investments in R&D represented 32.7%. R&D expenditure among industrial and service enterprises much increased (by 23.3%) to the amount of PLN 9.3 billion; for comparison, in 2014 it rose by 10.6% (from PLN 6.8 billion to PLN 7.5 billion). Compared to industrial companies, service companies allocate a much larger part of expenditure related to innovation activity to purchasing software (10.7% against 1.3%) and to marketing of innovative products and services (7.8% compared to 1.4%). On the other hand, industrial companies spend more than service companies on investment in buildings, structures and land (26.1% compared to 6.9%).

Large companies, both in the industrial and service sectors, choose to cooperate more often with regard to innovation activity. In 2013-2015, 29.1% of innovation-active industrial companies (against 30.1% in 2012-2014) and 24.4% of service companies (24.6%, respectively) cooperated under innovation activity.

**Chart 26. Share of innovation-active enterprises in 2013-2015 by section of the Polish Classification of Activities**



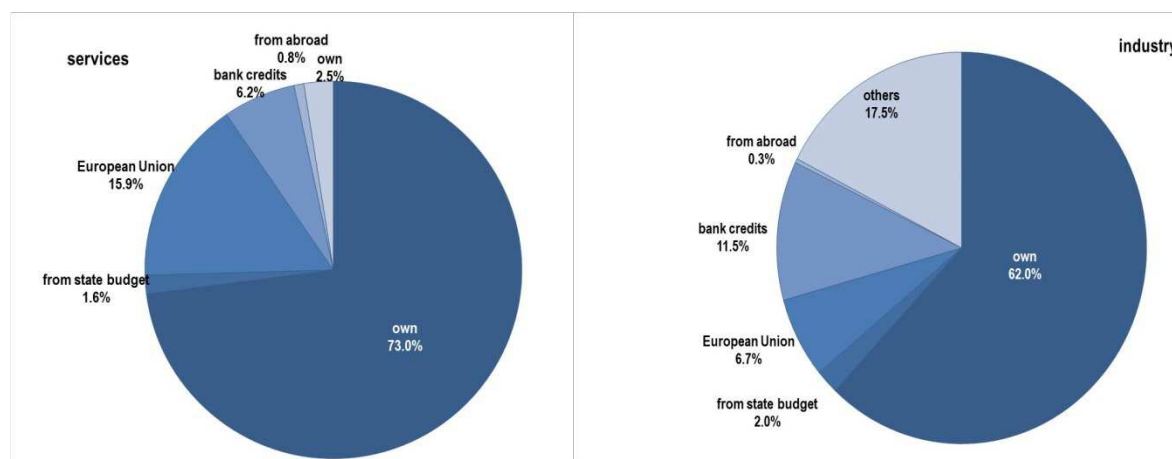
Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

In the last few years, innovation expenditure has been growing. In 2015, innovation expenditure of Polish industrial and service enterprises amounted to PLN 43.7 billion, compared to PLN 37.6 billion in the previous year. Industrial companies had the largest share in this expenditure (71.1%, i.e. PLN 31.1 billion), while the share of service companies was 28.9% (PLN 12.6 billion). In 2015, the average expenditure per 1 enterprise increased from PLN 5.8 million to PLN 6.9 million for industrial companies, and from PLN 5 million to PLN 6.5 million in the case of service companies.

In the industrial sector, almost 1/3 of innovation expenditure related to 3 voivodeships: Śląskie, Dolnośląskie and Wielkopolskie (excluding Mazowieckie Voivodeship). The service sector was even more concentrated: 68.7% of innovation expenditure was attributed to Mazowieckie Voivodeship.

In 2015, as in the previous years, own funds of enterprises prevailed as a source of financing. EU funds and bank loans were important sources of financing innovation expenditure for industrial companies. In 2013-2015, 27.9% of innovation-active industrial companies (against 29.4% in 2012-2014) and 19.8% of service companies (21.2%, respectively) received public financial support for innovation activity.

**Chart 27. Sources of financing innovation expenditure by sector in 2015**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

#### 4.1.2 Technology readiness level of enterprises

Higher than the EU average share of industry in GDP with high annual average growth rate is a strength of the Polish economy. Due to exhaustion of the current sources of competitive advantages, in particular low labour costs, it is crucial to seek new advantages based on generating high value for the client. Application of modern mechanisms for generating technologies and knowledge will transform the structure of the industry so that higher value added could be generated.

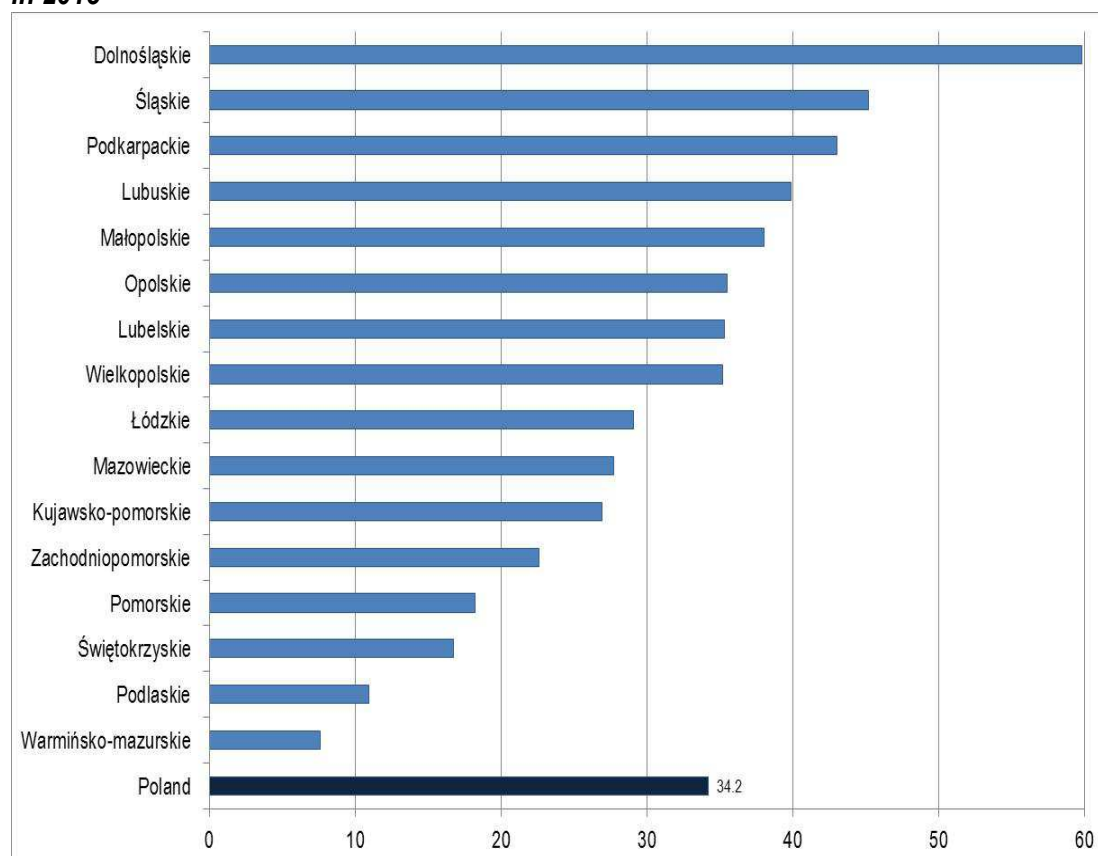
In 2015, high technology enterprises represented 2.4%, and medium-high technology enterprises accounted for 13.9% of active manufacturing enterprises<sup>48</sup>. More than 3.1 million out of 16 million persons employed in the Polish economy in 2015 worked in the manufacturing industry, whereas the share of persons employed in high and medium-high technologies and in knowledge-intensive services amounted to 36.6%, which was lower than the EU average (45.6% in 2015). The largest share of this group of persons employed was reported in Sweden (57.2%). High technology enterprises are more innovative (in 2015, 37.7% of high technology enterprises were innovative) and more active in R&D (24.4% carried out their own R&D works). Medium-high technology enterprises showed similarly high innovation activity ratios: 33.1% were innovative, and 15.5% incurred internal expenditure for R&D works.<sup>49</sup>

<sup>48</sup> With more than 9 persons employed.

<sup>49</sup> Science and technology in Poland in 2015, Central Statistical Office.

In 2015, the share of net revenues from sales of products of high and medium-high technology enterprises increased by 1.5 pp to 34.2%. At the same time, considerable regional disparities occur in the advancement of the sold products, resulting e.g. from industry concentration or natural conditions of respective regions.

**Chart 28. Share of net revenues from sales of products of high and medium-high technology enterprises in net revenues from sales of products of manufacturing enterprises by voivodeship in 2015**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

The increase in innovation of Polish SMEs and their transformation to the level of Industry 4.0 much depend on the level of knowledge diffusion with regard to the opportunities brought by solutions from the area of Industry 4.0. It will also depend on the level of cooperation not only among entrepreneurs, but also between the private sector and research centres (at present, this indicator is relatively low). Thus the measures of the public sector, apart from designing appropriate mechanisms that support the financing of purchases and implementations, should also focus on educational and integrating projects. When introducing innovations, entrepreneurs expect financial subsidies and limited formalities.

According to the Smart Industry 2017 report, SMEs carrying out manufacturing activity are mainly companies with a range of operations limited to the domestic and regional market. The level of technological advancement in the sector is even, although there is a tendency to assess one's own level as lower with regard to the actually implemented solutions. The majority of enterprises from the SME sector introduce innovations, although they are diverse, with the largest implementations relating to product and process innovations. Innovations represent an important development direction for SMEs from the manufacturing sector. The least such activities are reported in small enterprises, in enterprises

which do not compete on international markets, and in enterprises which focus on activity at the regional level, excluding start-ups and small enterprises operating for less than 3.5 year. Few companies perceive innovations as a means to eliminate the competitive threat. Moreover, when introducing innovations enterprises focus mainly on internal works, and such innovations are triggered by the competences of employees. Less often, innovations are the result of the purchase of fixed assets or the cooperation with contractors. Opening to the potential resulting from the relations with partners both on the side of suppliers and on the side of clients may become an impulse for new implementations. Entrepreneurs consider clients' expectations to be the main reason to implement innovations, in particular to incur the costs of production automation as the most universal technological solution implemented or planned for implementation in the near term.

Automation with the use of single machines was the most commonly applied solution according to entrepreneurs taking part in the survey, with 48.6% of companies having implemented this solution. ERP solutions were used in 39.8% of enterprises, Lean Manufacturing was applied in 37.5%, Just-in-Time strategy in 35.9%, Total Quality Management in 27.5%, and automated production with the use of combined machinery in 27.1%. Robotisation of the whole production line was implemented in 14.3% of enterprises.

Robotisation is one of the most important technological trends in manufacturing companies in the world. However, its application in Polish enterprises is marginal with regard to the scale and types of works performed on production lines. Robots are mostly used for repeatable works, less often for precision works, and seldom for hazardous works. Implementation of the abovementioned solutions is taken into account in the implementation plans of SMEs in the near term. The level of technological advancement perceived by the companies is higher than it would result from the level of actually applied technologies.

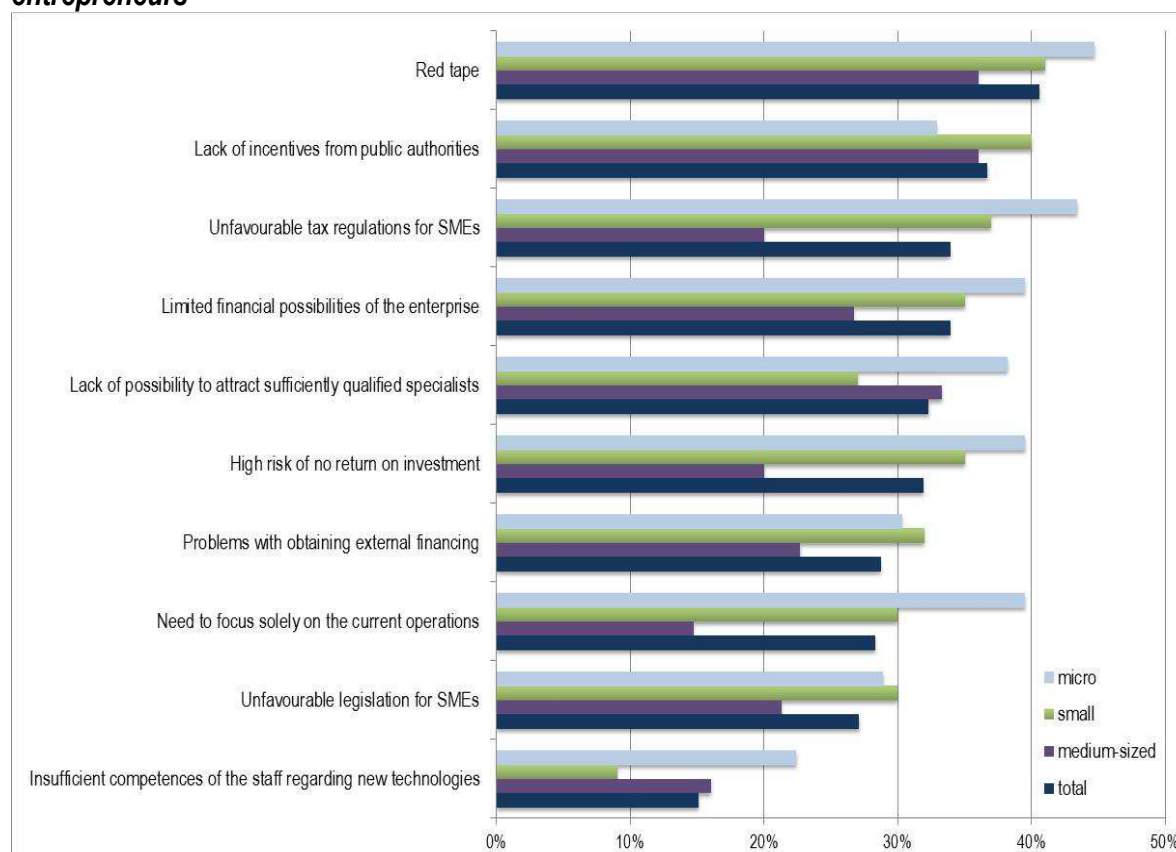
Mobile technologies are ones of the most often implemented innovations in enterprises - 30.7% of SMEs indicated so in the survey, and they are the only ones applied on the wider scale compared to such solutions as cloud computing (11.2%), advanced analytics (Big Data, 11.6%), the Internet of Things (13.1%) or 3D printing (8.4%). Considering the marginal application of the abovementioned solutions we may conclude that the assessment of one's own level of technological advancement and the resulting company innovation is higher than the actual use of the available technologies.<sup>50</sup>

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<sup>50</sup> On the basis of the Smart Industry 2017 report.



**Chart 29. Barriers to implementation of new technologies in enterprises according to entrepreneurs**



Source: DDS of the Ministry of Economic Development on the basis of European Commission data.

Turbulent times: this is how today's reality on the telecommunications market is described in *Innovation Quest for Telecom Operators*, a report by Arthur D. Little. The progress of digitisation of the world economy requires not only a high quality ICT infrastructure, but also implementation of innovations, the importance of which has been confirmed by 67% of telecommunications companies taking part in the survey who listed innovation as one of the key strategic goals. In the case of the Industry 4.0 survey, respondents demonstrated certain operational divergence: despite public declarations about focusing on this area, 64% of respondents stated that they did not consider 4.0 Industry a priority in the context of current operations.

In a report by the Office of Electronic Communications (UKE), the value of Polish telecommunications market in 2016 was estimated at PLN 39.5 billion, which means a slight decrease. The revenues of mobile operators dropped. Although the decrease had already been observed before, in 2016 it intensified due to the obligation to register pre-paid cards. The revenues of operators amounted to PLN 16.7 billion, which was higher by 2.7% than in 2015. Landline telecom also reported lower revenues (by 21%) to PLN 2.6 billion and, for yet another year, a drop in the number of clients (by 8.2%); at present, their number amounts to 5.2 billion, which is 1 billion fewer than in 2014.

According to the Computerworld report, in 2016 the value of the domestic telecommunications market decreased by 3.4% y/y to PLN 101.75 billion. ICT companies reported a steeper slump (by 5.2%) than telecommunications enterprises (by 0.7%), mainly due to lower investment expenditure. ICT companies generated 58.7% revenues, while telecommunications enterprises generated 41.3%. According to the

report, the largest drop in revenues broken down by client industry occurred in health care and public administration, while in IT and in the media the revenues increased.

According to the Central Statistical Office data, in 2015 the number of enterprises operating in the ICT sector decreased by 4.7% and amounted to 2,045, of which 89% were service enterprises (mainly IT services) and the remaining ones were manufacturing enterprises. However, for another year in a row, the number of employees grew (by 9.1% in 2015) to 214.2 thous. , which confirms the considerable needs of this sector. The number of the employed persons grew the most in IT services (by about 18%).

In 2015, the revenues of enterprises from the IT sector accounted for 5.1% of revenues generated by all manufacturing and service companies in Poland. Net revenues from sales in the whole telecommunications sector increased by 5.1% to PLN 138.8 billion in 2015. Service enterprises reported an increase (by 7.6%), while manufacturing enterprises saw a drop (by 2.3%). More than ¾ of revenues are generated by IT services, and the share of IT services and wholesale trade in their structure has been growing with every year at the expense of telecom services.<sup>51</sup>

The exports in the telecommunications sector are dynamically growing. In 2015, net revenues from export sales increased by 23.2%, whereas IT product manufacturers reported an increase by 16.7%, while service enterprises saw a rise by as much as 31.8%. This means that the previous trends have changed, as in 2012-2015 manufacturing enterprises generated higher revenues than service enterprises. In 2015, the revenues in the IT sector accounted for 7.0% of total Polish exports.<sup>52</sup>

In the era of the Internet of Things, Big Data, advanced multimedia, such as videoconferences, data transmission and the related broadband connection speed is becoming more important, as the higher the speed, the fewer problems with large data transfer. 65% of enterprises use connections with bandwidth from 2 to 30 Mbit/s, 16.4% use bandwidth from 30 to 100 Mbit/s, while 10.6% boast over 100 Mbit/s – the latter was the speed used in every fourth large enterprise in 2016. In 2016, 28% of Polish citizens used online voice calls or video calls, compared to 32% in EU-28; in this respect, Poland is still far behind Denmark (58%) or Bulgaria (48%)<sup>53</sup>.

Cloud computing services are becoming more important. Although the current penetration is still one-digit (8.2% in 2016), given the market trends and the implemented EU projects we may expect a fast growth in this area. The main reasons for not using cloud computing services include insufficient level of knowledge (39.7%), a sense of security threat (35.9%), and uncertainty regarding the data storage location (35.6%).

The Internet of Things is becoming common in Polish enterprises. According to the analyses of the Ministry of Economic Development<sup>54</sup>, in H1 2016 35% of enterprises taking part in the survey declared to use devices that communicated with each other via Internet, of which 32% were microenterprises, 42% were small enterprises and 53% were medium-sized enterprises. Respondents most often used the Internet of Things in marketing and sales, followed by the management of buildings.

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<sup>51</sup> Central Statistical Office.

<sup>52</sup> Central Statistical Office.

<sup>53</sup> Eurostat.

<sup>54</sup> *Development trends for micro-, small and medium-sized enterprises in H1 2016*, Ministry of Development, DDS.

#### 4.1.3 Instruments supporting innovation/R&D sector

Entrepreneurs may use many instruments for the financing of innovative projects, and the Responsible Development Strategy extended this spectrum even more (Development of innovative companies pillar). Cohesive system of those instruments should encourage and award entrepreneurs taking up innovation activity. Support for such projects may be obtained from national, regional or EU programmes.

##### Support under Operational Programmes

EU funds are an important source of support for innovation of the Polish economy. The key national operational programme focusing on R&D is the **Smart Growth Operational Programme 2014-2020 (SG OP)**, adopted by the Council of Ministers on 8 January 2014 (allocation EUR 8.6 billion). The main objective of SG OP is to stimulate innovation and competitiveness of Polish economy, with increased R&D expenditure (in particular private). SG OP offers support for projects “from concept to market”, i.e. for the entire innovation process, from the stage of developing concepts for innovative products, services or technologies, through research, prototyping and pilot lines, up to commercialisation - investments related to offering of new products and services.

The programme is addressed to enterprises (SMEs in particular, scientific units and consortia of companies and scientific units).

SG OP focuses on four priority axes:

##### **1. Axis I. Support for R&D activity of enterprises**

The funding is granted for projects consisting in research and development activities undertaken by enterprises. Support is also provided to sectoral R&D programmes, i.e. research agendas proposed by a given sector (e.g. entities concentrated around a technology platform or in a cluster). Furthermore, there are plans to implement support instruments with venture capital funds, which shall engage funds in financing of research and commercialisation of results, together with public entities. Calls for proposals are organised by National Centre for Research and Development.

##### **2. Axis II. Support for the environment and capacity of enterprises for R&D&I activity**

Support is provided for creation or development of R&D infrastructure in enterprises, which is necessary to equip a research and development centre. Thanks to establishing of an innovation platform and brokerage services provided under such platform, it shall be possible to match companies supplying technologies with SMEs interested in implementation of new solutions. Furthermore, entities from the SME sector may receive co-financing of the cost of services facilitating innovation, provided by business environment institutions or scientific entities. The costs related to protection of industrial property in enterprises are also financed. Clusters with the highest innovation and competitiveness potential on a national scale, i.e. so called Key National Clusters may pursue co-financing of services related to internationalisation and promotion of technologically advanced products in international markets. Calls for proposals are organised by the Ministry of Economic Development and PARP.

##### **3. Axis III. Support for innovation in enterprises**

Support is provided to increased activity of private investors (seed funds, venture capital funds, business angels) in R&D&I. Financing is also granted for services related to drafting documentation necessary to enter the Warsaw Stock Exchange (including New Connect, Catalyst etc.). The support for projects consisting in implementation of R&D results is provided solely to

SMEs and is implemented with the use of subsidies and financial instruments (guarantees). Moreover, activities are undertaken in support of internationalisation of innovative enterprises (provision of access to consultancy and implementation of comprehensive promotion programmes for leading sectors of Polish economy and priority international markets). Calls for proposals are organised by PARP and BGK.

#### 4. **Axis IV. Increasing the research potential**

Financing is provided for scientific research and development efforts implemented by scientific and scientific-industrial consortia under strategic research programmes (combination of public and private funding under the so-called joint ventures), for regional research and development agendas (in line with regional smart specialisations) and for applied projects. Support in the area of modern research infrastructure of the science sector is limited to projects selected in a call for proposal and listed in the Polish Research Infrastructure Roadmap. Moreover, support is provided to International Research Agendas, i.e. new scientific entities established for implementation of high quality scientific research and development efforts by teams of recognised scientists from Poland and abroad. Programme funds allocated to increasing the potential of human resources shall be available to young scientists and research teams led by recognised scientists. Calls for proposals are organised by NCRD and National Information Processing Institute.

Examples of activities under OP SG have been presented below.

Sub-measure 1.1.1 **Industrial research and development work implemented by enterprises** (NCRD) - the measure is aimed at supporting R&D projects (covering industrial research and R&D works, or solely R&D works) implemented by enterprises (both SMEs and large enterprises). By the end of Q1 2017, 7 calls for proposals were announced and 5 were completed under Sub-measure 1.1.1. 4 new calls are planned for the remaining part of 2017. The total of 315 agreements out of 419 recommended ones were signed. The value of co-financing provided for in those agreements was PLN 1.5 billion. Small and medium-sized enterprises concluded 289 agreements for the value of almost PLN 1.2 billion.

Measure 2.1 **Support for investments in R&D infrastructure of enterprises** – the purpose of the measure is to support creation and development of R&D infrastructure of enterprises via investments in devices, equipment, technologies and other necessary infrastructure that serves research and development activity for devising innovative products and services. The support will be conducive to establishing and developing R&D centres in enterprises.

The allocation for the co-financing of projects submitted under 3 calls for proposals amounted to PLN 1.92 billion. 174 projects were selected for co-financing for the total amount of PLN 885.6 million.

Sub-measure 2.3.2 **Innovation vouchers for SMEs** (PARP) - the objective is to stimulate cooperation between the science sector and the economy. The support under the Sub-measure is provided for implementation of projects including a purchase of a service from a scientific entity, consisting in development of a new or significantly improved product, service, manufacturing technology or a new design. Under the call for proposal, microenterprises, small and medium-sized enterprises may apply for co-financing. Support under the call is granted under *de minimis* aid. In 2016, the amount for the co-financing of the submitted projects is PLN 62.5 million. Under the four stages of the call for proposal, 204 projects were selected for the amount of almost PLN 44.3 million. On 8 May 2017, a new call for proposals was announced, to be completed by 8 February 2018.

Sub-measure 3.2.1 **Research for the market** (PARP) - its objective is to increase innovativeness and competitiveness of small and medium-sized enterprises through provision of funds for implementation of research projects. The instrument is in line with the primary objective of OP SG and its motto: "from concept to market". Projects co-financed under this measure should have a nature of an investment, consisting in implementation of R&D results, ending with introduction of new or substantially improved products and services to the market. Experimental development works as well as consultancy may also be objectives of projects. The measure is targeted at micro, small and medium enterprises, the co-financing of the research part may amount to a maximum of PLN 450,000 in the case of experimental development and PLN 500,000 for consultancy. The minimum eligible costs of the project amount to PLN 10 million and the maximum eligible costs amount to EUR 50 million.

As of 31 May 2017, 130 agreements were concluded for the amount of PLN 3.6 billion.

Sub-measure 2.3.3 **Internationalisation of Key National Clusters** (PARP). The objective of the Sub-measure is to increase internationalisation of enterprises operating within the Key National Clusters. Co-financing covers comprehensive services, including consultancy, to support placing the offer of a cluster on the international markets, with a particular focus on technologically advanced products. Since the opening of the call for proposals, i.e. 4 November 2016, until its completion on 30 December 2016, 13 KNC Coordinators submitted applications for project co-financing. As a result of the assessment, the Project Assessment Committee selected 10 projects for the co-financing amounting to PLN 29 million. In May 2016, 6 agreements on co-financing were concluded. On 15 May 2017 a new call for proposals was announced, to start on 16 June 2017. The planned call completion date is January 2018.

Sub-measure 2.3.1 **Pro-innovation services for enterprises** - the purpose of the sub-measure is to support SMEs in the process of developing and implementing product or process technology innovations in areas of National Smart Specialisations (NSS) by co-financing proinnovative services provided by accredited business environment institutions (BEI). Under the call for proposal, microenterprises, small and medium-sized enterprises may apply for co-financing. In 2016, the amount for the co-financing of the projects submitted under the call for proposals is PLN 36 million. Under the two stages of the call for proposal, 54 projects were selected for the amount of almost PLN 11.85 million. A new call for proposals is planned for 2017. Total amount for the co-financing of the submitted projects is PLN 45 million.

Under **Measure 1.2 Sectoral R&D programmes** (NCRD), entities associating enterprises, scientific units etc. in a given industry (e.g. chambers of commerce, industry-related associations, technological platforms) may submit proposals to the Centre with regard to development of Programmes dedicated to the needs of specific sectors of the economy.

Beneficiaries of sectoral programmes may be enterprises or consortia of entrepreneurs. Sectoral programmes apply a bottom-up approach, and thus they pass the initiative to entities operating on a given market, in particular SMEs. To date, NCRD has announced 11 calls for proposals under Measure 1.2:

- INNOLOT – aircraft sector – with a budget of PLN 400 million;
- INNOMED – medical sector - with a budget of PLN 95 million;
- INNOCHEM – chemical sector - with a budget of PLN 120 million;
- INNOTEXTILE – textile sector - with a budget of PLN 60 million;
- INNOSBZ – unmanned systems sector - with a budget of PLN 50 million;
- INNOSTAL – steel sector - with a budget of PLN 120 million;
- GameINN – video game sector - with a budget of PLN 80 million;

- INNOTABOR – rolling stock sector - with a budget of PLN 196 million;
- INNOMOTO – automotive sector - with a budget of PLN 250 million;
- PBSE – electrical power engineering sector - with a budget of PLN 150 million;
- IUSER – distributed generation sector - with a budget of PLN 125 million.

In 2017, NCRD plans to announce new calls for proposals under the new Sectoral Programmes INNONERUOPHARM (pharmaceutical sector), Innowacyjny Recykling (mineral resources and wood recycling sector) and WoodINN (forestry, wood and furniture sector), as well as second calls for proposals under the Sectoral Programmes INNOCHEM, GameINN, PBSE, IUSER, INNOSTAL and INNOSBZ.

Small and medium-sized enterprises concluded 53 out of 90 agreements. Co-financing for SMEs amounted to PLN 232 million, while total value of the projects amounted to PLN 259 million.

In the light of expedience and necessity to support young innovative enterprises, in June 2016 the **Start In Poland programme** was launched, which includes a number of initiatives of the Polish government addressed to start-ups locating their business in Poland. The programme's objective is to favourable conditions for operation of start-ups at each stage of their development, beginning with the phase of incubation and acceleration, through development and international expansion. It is also strictly in line with other measures, mainly legislative ones, aimed at improving the conditions of operation for innovative companies or their international expansion.

In this largest programme for start-ups in Central and Eastern Europe, financial instruments for start-up support have been consolidated. Budget of the programme amounts to nearly PLN 3 billion. As a result of the programme, in 7 years 1.500 companies offering high quality innovative technologies may be established in Poland. The programme will accelerate the comprehensive development of the ecosystem fostering not only start-up development, but also sharing knowledge and intellectual property, establishing long-term cooperation between companies of various sizes, as well as attracting talents from abroad.

Respective components are at different stages of implementation. The acceleration component **Scale-up**, announced the earliest and managed by PARP, is being implemented. As a result of the call for proposals, 61 applications were submitted for the total amount of PLN 344.6 million. Average value of the applied co-financing is PLN 5.65 million. 10 accelerators were selected and concluded agreements for the total amount of PLN 57,799,124.20.

Under the acceleration process, the selected accelerators cooperate with 32 large companies from different industries (e.g. energy, fintech, food, healthcare, automotive, machine, or transportation). Young companies participate in a dedicated programme developed under the partnership between corporations and experienced accelerators, under which they gain not only access to high-class mentors or infrastructure, but also to customers and markets of large corporations. As a result, they have an opportunity to gain experience in networking and cooperation with large companies, as well as to attract business partners and potential investors. The outcome of the programme would be commercialisation of innovative solutions suggested by start-ups, including products and services responding to the identified needs of large enterprises. *Scale UP* is implemented under Sub-measure 2.4.1. of SG OP **Centre for analysis and pilot implementation of new instruments inno\_LAB**.

Financial Instruments for start-up support were consolidated under the Polish Development Fund. On 15 May 2017, the first call for proposals was launched for capital funds (management groups) which will be implementing the **Starter** component with PFR Ventures. Under this component, capital investments in start-ups are focused on the early development stage of enterprises (pre-seed, seed). They will identify the ideas based on innovative solutions and they will verify the market potential of the presented concepts.

Moreover, a consultation process was initiated with Business Angels as part of preparations for the launch of the **Biznest** component. Further investment components are in preparation for the already operating young companies which need capital for expansion. Works on further components are already under way (**Poland Prize** - encouraging foreign start-ups to take up business activity in Poland; **Industry acceleration** – cooperation between start-ups and medium-sized and large enterprises using the experiences from the Scale Up pilot project; **Legal assistance for start-ups** - support in concluding investment agreements).

In response to the need for managing innovative ideas of individual inventors (to date unable to use the financial support), in 2016 a **pilot Good Idea Programme** was developed to be implemented as part of Sub-measure 2.4.1 Centre for analysis and pilot implementation of new instruments inno\_LAB of the Smart Growth Operational Programme 2014-2020. The programme is aimed at providing support for authors of innovative solutions applying as natural persons who made the invention in conditions or in the scope not covered by the employment contract, or who were not bound by other legal relationships requiring that the intellectual property rights to their work belong to other entities. Inventors will gain access to services necessary for the verification of the commercial usefulness of the idea and the possibility to prepare a comprehensive commercial offer for investors concerning the implementation of the innovative solution. Programme implementation was divided into stages. The first stage was the selection of the Grantee in whom the Task of implementation of the objectives of the pilot Good Idea Programme was vested. The call for proposal was announced in March 2017 and applications were submitted until 25 April 2017. As a result of the call, the role of the Good Idea Programme operator will be performed by a consortium of Polski Fundusz Rozwoju SA, Foundation Innovation Centre FIRE, INVESTIN SA, Foundation for Advanced Technology.

#### Support from the national budget

A tool supporting innovation are tax instruments included in the **Act on certain forms of support for innovation activity**. The objective of the Act is to increase competitiveness and innovativeness of the Polish economy through increased private sector expenditure for research and development and to improve management of public funds allocated to R&D. The Act has introduced the **status of the Research and Development Centre**, granted to entrepreneurs with at least EUR 1.2 million annual revenues from sales of goods, products and financial operations, of which at least 20% must originate from sales of research and development services or industrial property rights generated by such entrepreneur. Such entrepreneur shall be exempt from taxes on real estate (including agricultural and forest tax) used for research and development work and shall be entitled to establish an innovation fund from a monthly deduction in the amount not exceeding 20% of revenue. The Minister of Economic Development has granted the RDC status to 39 enterprises (as of 19 June 2017).

The second instrument supporting innovation and introduced by the Act on certain forms of innovation activity had been a **personal income and corporate income tax relief for purchase of new technologies**. It had been in place until the end of 2015. The tax relief could be used by any entrepreneur on condition that the new technology was useful for statutory activities of the taxpayer and that a scientific entity (university, association, research and development unit) issued an opinion confirming that the technology was new. A new technology was defined as technological knowledge in the form of intangible and legal assets or purchased on the basis of a contract, which has not been used in the world for more than 5 years. In such case, 50% of the price of the new technology could be deducted from the tax base. At the same time the value of the new technology was subject to depreciation in full. However, the data of the Ministry of Finance show that the demand for the relief was low. When settling CIT for 2015, 79 taxpayers used the relief, while the average value of the deduction

amounted to PLN 4,933,000. The relief was also used by 472 PIT payers, with average deduction amounting to PLN 1,650.

**Table 20. Settlement of the tax relief for purchase of new technology in 2007-2015**

Year	Personal income tax (PIT)		Corporate income tax (CIT)	
	Number of taxpayers	Average deduction (PLN)	Number of taxpayers	Average deduction (PLN thousand)
2007	117	564	19	233
2008	11	4,636	26	302
2009	15	1,667	25	802
2010	398	648	33	948
2011	250	1,048	97	2,793
2012	42	3,333	94	4,674
2013	31	28,540	75	4,090
2014	37	20,378	80	3,548
2015	472	1,650	79	4,933

Source: Ministry of Finance.

The personal income and corporate income tax relief for purchase of new technologies was discontinued with the **Act of 25 September 2015 on amendment of certain Acts in connection with support for innovation** (Dz. U. 2015, item 1767). The Act has introduced a number of changes in Acts related to innovation activity of enterprises and commercialisation of research and development activities. In terms of taxation, while repealing the abovementioned tax relief for the purchase of new technologies, it has introduced a new relief for carrying out of research and development activities. It consists in deduction of the costs of research and development activities, referred to as "eligible costs", from the tax base. The catalogue of eligible costs has been defined, which includes R&D staff costs, materials and raw materials directly related to R&D activities, services, analyses, opinions, purchase of research results on the basis of contracts, using research equipment used for R&D activities, and depreciation write-offs of tangible and intangible assets. The Act has also introduced a possibility to deduct the costs of research and development activities in three consecutive tax years. The level of the relief (in the form of the definition of the level of eligible costs vis-a-vis total costs) amounted to 20% for SMEs and 10% for other enterprises, with 30% for labour costs for all taxpayers. The Act entered into force on 1 January 2016.

Moreover, the Act has exempted from the income tax on sales of shares (stock) of joint stock companies or partnerships limited by shares (under certain conditions) purchased only in 2016 and 2017. The intention was for this move to be temporary, to be in place until the problem of taxation on joint stock companies or partnerships limited by shares is finally regulated.

Another key legal act is the **Act of 4 November 2016 amending certain acts determining the conditions for carrying out innovation activity** (Dz.U. 2016, item 1933), developed on the basis of the White Paper on Innovation (which forms the starting point for the future package of innovation acts). The Act has introduced a cohesive system of different instruments awarding and encouraging entities to take up innovation activity (tax reliefs, stable system of financing of the commercialisation of the results of research and R&D works, and a package of procedural advantages. Tax provisions of the abovementioned Act have been in force since 1 January 2017.

The Act introduced the following amendments with regard to taxation:

- from 1 January 2017, the income tax on contribution of intellectual and industrial property has been permanently abolished (before that date, the Act included provisional solutions for 2016-2017);



- the list of deductible costs for small and medium-sized enterprises has been extended by the costs of obtaining a patent;
- the maximum amount of deduction of eligible costs for R&D has been increased. For microenterprises and small and medium-sized enterprises, the deduction would now be up to 50%, while for other enterprises (large enterprises) it would be up to 50% for the incurred personal expenses and 30% for other expenditure related to R&D activity;
- the period during which the entrepreneur may deduct the costs incurred for R&D activity has been extended from 3 to 6 years;
- a cash refund for new enterprises (start-ups) carrying out R&D activity has been provided for. The relief may be used in the year in which the start-up was founded and in the following year if the enterprise keeps its SME status and if the given person did not carry out business activity in the last two years.

### Support under international programmes

PARP coordinates activities of Polish centres within the **Enterprise Europe Network (EEN)**. The Europe Enterprise Network had been operating since 2008 and until the end of 2014 it was financed in 60% from the funds of the Competitiveness and Innovation Framework Programme – CIP, and in 40% from the state budget under multi-annual programme *Participation of Poland in the Competitiveness and Innovation Framework Programme in years 2008-2014*. Since 2015 financing for EEN has been ensured under the EU Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (COSME), as well as pursuant to the Resolution of the Council Of Ministers no 17/2015 of 3 February 2015 under the multi-annual programme “Participation of Poland in the Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (COSME) and financial instruments of EU programmes supporting competitiveness of enterprises, in 2015-2021”, aiming at increasing competitiveness and viability of enterprises, small and medium in particular.

The activity of Polish centres of Enterprise Europe Network<sup>55</sup> is an important component of support for competitiveness, aiming at increasing the level of innovativeness and internationalisation of Polish small and medium-sized enterprises (SMEs) and contributes to improvement of conditions for economic activities and promotes entrepreneurial culture. At present,, in more than 60 countries across the world, around 600 centres of the network operate with 3,000 experts. In Poland there are 30 EEN centres. The network offers comprehensive services to small and medium entrepreneurs, which are to assist them in full development of their potential and capacity for innovation. Enterprise Europe Network also acts as an intermediary, helping European Union institutions to better understand the needs of SMEs.

The exceptional value and potential of Enterprise Europe Network results from close cooperation between centres. All offices can communicate with each other and use common databases containing profiles of businesses seeking foreign partners. Network centres operate on the basis of the open door policy, which practically means that no applicant is dismissed. All SMEs receive information and access to customised services tailored to their needs. The network is also much appreciated by its clients<sup>56</sup>. All types of services provided by the network received over 80% of good and very good reviews.

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<sup>55</sup> Contact details of Polish centres of Enterprise Europe Network are available at [www.een.org.pl](http://www.een.org.pl).

<sup>56</sup> *Client Satisfaction Survey. Report 2013* prepared by the European Commission.

Polish centres were even better perceived with 90% good and very good reviews for five categories of services. About 85,000 clients of the network (of which about 3,300 clients of Polish centres) participated in the survey.

It is also worth to mention the **Cities for Business** project launched by EEN under *Local Visibility Action* of the European Commission. The project is implemented by an Enterprise Europe Network centre at the Polish Agency for Enterprise Development. This online application in two language versions initially functioned under the name „**Warszawa dla Biznesu**”/”**Warsaw for Business**” with the objective to facilitate entrepreneurs’ access to information about current support services offered by business environment institutions in Warsaw. From 2016, based on cooperation of 30 Enterprise Europe Network centres in Poland, the project has been implemented nationwide.

Under the current multi-annual Programme *Participation of Poland in the Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (COSME) and financial instruments of EU programmes supporting competitiveness of enterprises, in 2015-2021*, in 2015 and 2016 Polish centres of Enterprise Europe Network:

- provided support to more than 24,000 small and medium-sized enterprises under network services, excluding services provided online;
- organised more than 4,300 meetings with the participation of Polish enterprises during brokerage events and international missions, in which almost 1,000 small and medium-sized enterprises took part;
- concluded 448 partner business and technology agreements;
- organised a number of local and regional events for more than 16,000 participants;
- provided support to over 1 million users under network services provided online, including website users.

EEN services provide SMEs with an opportunity to adjust their products and services to the requirements of the Common Market. They also facilitate initiating cooperation with enterprises from the EU and from outside of the Common Market. Furthermore, the network supports participation of SMEs in framework programmes and consultations at the European Commission level.

Enterprise Europe Network centres also participate in the provision of services financed under the Horizon 2020 programme in the area of:

- consultancy support in the course of project implementation for companies which received co-financing under the SME Instrument;
- consultancy services aimed at increasing the capacity to manage innovations in SMEs.

EEN services provide SMEs with an opportunity to adjust their products and services to the requirements of the Common Market. They also facilitate initiating cooperation with enterprises from the EU and from outside of the Common Market. Furthermore, the network supports participation of SMEs in framework programmes and consultations at the European Commission level.

On 19 November 2012 Poland joined the **European Space Agency** (ESA), an international agency with the objective to expand and integrate European high technology and innovation industry. As a result, for 4 years now Polish companies have been becoming increasingly important and recognised partners in European space programmes.

Poland participates in obligatory and optional programmes of the Agency. Until the end of 2019, Polish entities will be covered by a special ESA support programme (the so-called Polish Industry Incentive Scheme - PLIIS), with the objective to adjust their potential to participate in the Agency’s programmes

and projects. Duration of PLIIS has been extended by 2 years as a result of successful negotiations of the Polish Delegation to ESA with the European Space Agency. The extension of that period means that 45% of the contribution paid by Poland for obligatory programmes will be allocated solely to contracts awarded to Polish companies and scientific and research institutes. There is a continuous call for proposals open under PLIIS (with assessments every three months), where companies have an opportunity to submit their proprietary ideas which are in line with ESA's activities. By the end of June 2017, 125 projects received co-financing under PLIIS amounting to over EUR 21 million in total.

Enterprises may apply for the remaining part of the Polish contribution in accordance with the general tender rules and procedures of ESA. The fundamental principle of the industrial policy of the European Space Agency is to commission tasks, to the extent possible, to European industry, and to award contracts in a manner which would ensure that companies from a given country get orders in proportion to that country's contribution to ESA budget (it is called the principle of geographical return). Polish entrepreneurs participate in ten optional programmes, where they compete with all potential competitors in line with principles applicable to all countries, irrespective of their ESA tenure and the amount of contribution. In 2016, Polish companies have been awarded financial support in open ESA tenders amounting to nearly EUR 10 million, which gives over EUR 24.5 million in total and indicates that the level of absorption of funds is growing fast (compared to the previous years).

ESA membership and the related participation of Polish entrepreneurs and scientists in projects financed by the Agency increase their involvement in the development of breakthrough technologies. The space industry is the source of many innovations, also in other sectors of industry and services, and its impact on global economy and society continues to grow. Technologies generated by the space industry can be applied in everyday life, e.g. in telecommunications, meteorology, satellite navigation, crisis management, precision agriculture etc.

## **4.2 Internationalisation of operations**

Increasing the degree of internationalisation of Polish enterprises is one of the main priorities of the Responsible Development Strategy adopted by the government in February 2017. The increase in the number of companies participating in international operations and the development of more advanced forms of cooperation will ultimately have a positive impact on Poland's economic development. From the beginning of the transformation, Poland has been a net recipient of capital; however, Polish companies are beginning to invest abroad. Capital flows are driven by a number of factors (e.g. economic, legal, geopolitical), therefore fluctuations in the size of the streams often reflect the factors external to the enterprise.

### **4.2.1. Exports**

Poland is an open economy, strongly connected to foreign markets. One of the important measures of the degree of Poland's openness and internationalisation is the share of trade in GDP, which has improved significantly in recent years.

The trade<sup>57</sup> in goods to GDP in Poland in 2006-2016 increased from 65.5% to 82.8%, which is significantly higher than the EU average (in the analysed years, the ratio increased by 4.6 pp. to 61.5%).

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<sup>57</sup> Total exports and imports of goods. Eurostat data.

Taking also services into account, in 2016 this ratio reached 100.7% against 77.8% in 2006 and at the same time it was about 16 pp. higher than the EU average. On the other hand, the ratio of exports of goods and services to GDP increased in 2006-2016 by 14.4 pp to 52.3%.

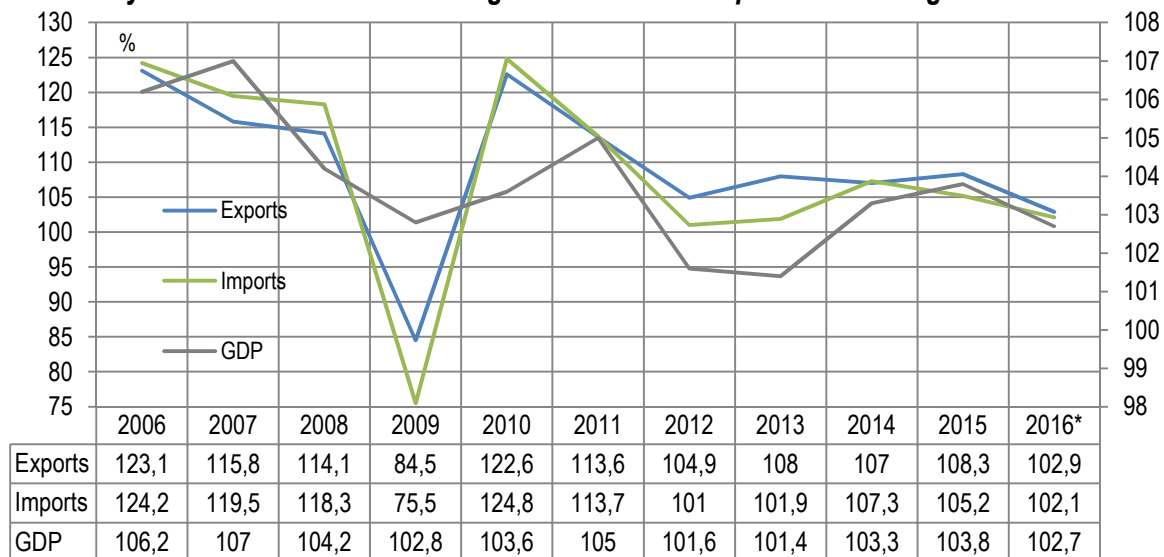
**Table 21. Exports of goods and services to GDP in selected EU Member States in 2006-2016**

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>EU</b>	37.3	38.0	39.0	34.8	38.6	41.4	42.6	42.9	43.1	44.0	44.2
<b>Euro area</b>	38.3	39.6	39.9	35.0	39.0	41.9	43.7	44.0	44.7	46.3	46.0
<b>Czech Republic</b>	65.8	67.1	63.9	59.3	66.8	72.1	76.9	77.7	83.4	82.0	80.5
<b>Germany</b>	41.2	43.0	43.5	37.8	42.3	44.8	46.0	45.5	45.7	46.8	46.0
<b>Spain</b>	24.9	25.7	25.3	22.7	25.5	28.9	30.7	32.2	32.7	33.2	33.1
<b>France</b>	27.2	27.1	27.4	24.1	26.0	27.8	28.5	28.6	28.9	29.7	29.3
<b>Italy</b>	26.2	27.4	27.0	22.5	25.2	27.0	28.6	28.9	29.3	30.0	30.0
<b>Hungary</b>	74.3	78.3	79.6	74.8	82.2	87.2	86.8	86.0	88.7	90.7	92.5
<b>Netherlands</b>	69.3	70.3	71.6	63.2	72.0	77.4	81.9	82.0	82.6	83.4	82.4
<b>Poland</b>	<b>37.9</b>	<b>38.6</b>	<b>37.9</b>	<b>37.2</b>	<b>40.1</b>	<b>42.6</b>	<b>44.4</b>	<b>46.3</b>	<b>47.6</b>	<b>49.5</b>	<b>52.3</b>
<b>Slovakia</b>	81.0	83.3	80.0	67.6	76.3	85.0	91.4	93.8	91.8	93.5	93.8
<b>United Kingdom</b>	26.8	24.9	26.9	26.2	28.3	30.5	29.8	29.8	28.1	27.6	28.2

Source: DDS of the Ministry of Economic Development on the basis of Eurostat data.

Increasing the share of trade in GDP strengthens its impact on the state of the Polish economy. As a result, fluctuations in the growth rate of foreign trade translate into GDP. This could be best observed in the crisis of 2009, when the decline in exports and imports translated into a slowdown in GDP growth rate and in 2016, when the slowdown in trade was accompanied by slower economic growth.

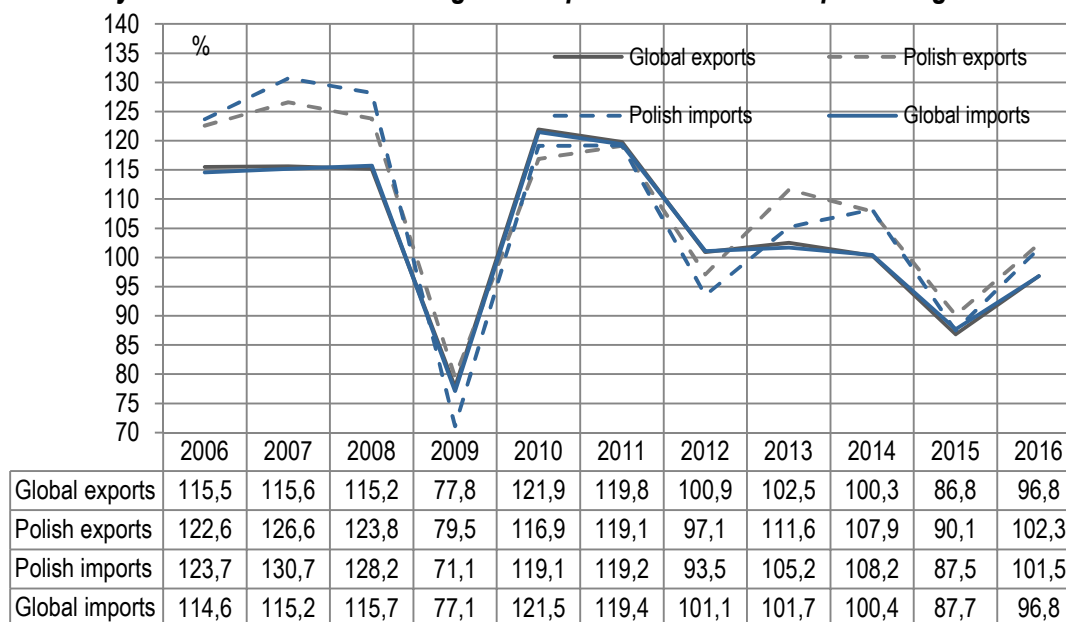
**Chart 30. Dynamics of Polish trade of goods in EUR compared to GDP growth in 2006-2016**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data; \*GDP – preliminary data.

For years, the growth rate of Polish trade has been considerably higher than global growth. In 2006-2016, the average annual growth rate of Polish exports of goods (in USD) amounted to 8.9%, while imports amounted to 8%, compared to 4.8% and 4.7% in the world, respectively. This strengthened the role of Poland's trade on the global market.

**Chart 31. Dynamics of Polish trade of goods expressed in USD compared to global trade**



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office and UNCTAD data.

In 2016, the share of Polish exports of goods in global exports amounted to 1.27%. Although this was a weaker result than the developed countries of the old EU, such as Germany or the United Kingdom, Poland was characterised by systematic growth of this indicator. In 2006-2016 it increased by 0.36 pp, while in Germany it decreased by 0.74 pp (to 8.4%), in France by 0.95 pp to 3.14%, and in the UK by 1.13 pp, to 2.57%. This moved Poland on the list of the world's major exporters from the 29<sup>th</sup> position in 2006 to the 22<sup>nd</sup> position in 2016. Polish economy also ranked higher in global imports. While in 2006 it reached the 26<sup>th</sup> position (with 1.03% share), in 2016 it was already the 21<sup>th</sup> (1.22% share).

**Table 22. Share of exports of selected EU Member States in global exports in 2006-2016**

	2006	2008	2009	2010	2011	2012	2013	2014	2015	2016
Germany	9.14	8.96	8.92	8.23	8.04	7.57	7.62	7.86	8.05	8.40
France	4.09	3.82	3.86	3.42	3.25	3.07	3.07	3.05	3.07	3.14
Italy	3.44	3.36	3.24	2.92	2.85	2.71	2.73	2.79	2.77	2.89
United Kingdom	3.70	2.85	2.83	2.72	2.76	2.56	2.85	2.66	2.79	2.57
Spain	1.76	1.74	1.81	1.66	1.67	1.60	1.68	1.71	1.71	1.80
<b>Poland</b>	<b>0.91</b>	<b>1.06</b>	<b>1.09</b>	<b>1.04</b>	<b>1.03</b>	<b>1.00</b>	<b>1.08</b>	<b>1.16</b>	<b>1.21</b>	<b>1.27</b>
Czech Republic	0.78	0.91	0.90	0.87	0.89	0.85	0.86	0.92	0.96	1.02
Hungary	0.62	0.67	0.66	0.62	0.61	0.56	0.57	0.58	0.60	0.64
Slovakia	0.35	0.44	0.45	0.42	0.44	0.44	0.45	0.45	0.46	0.49

Source: DDS of the Ministry of Economic Development on the basis of UNCTAD data.

Among EU economies, Poland stands out as a country with a relatively low level of internationalisation of enterprises. According to the PARP study, only one in five Polish companies is connected in any way with international markets. A small percentage of companies operating in Poland export products and

services. In addition, the simplest forms of foreign presence are usually used (nine out of ten entities conduct strictly commercial activity)<sup>58</sup>.

The weakness of Polish exports is also the low innovation of domestic goods. At present, the share of high technology goods in total exports is about 8.5%, which is a worse result not only for the EU-15, but also for other members of the Visegrad Group. Increasing the innovativeness of the offer is particularly important in the context of the recent fragmentation of production within the Global Value Chain (GVC). In the long term, participation in the GVC is not enough; the position in that chain would be important.

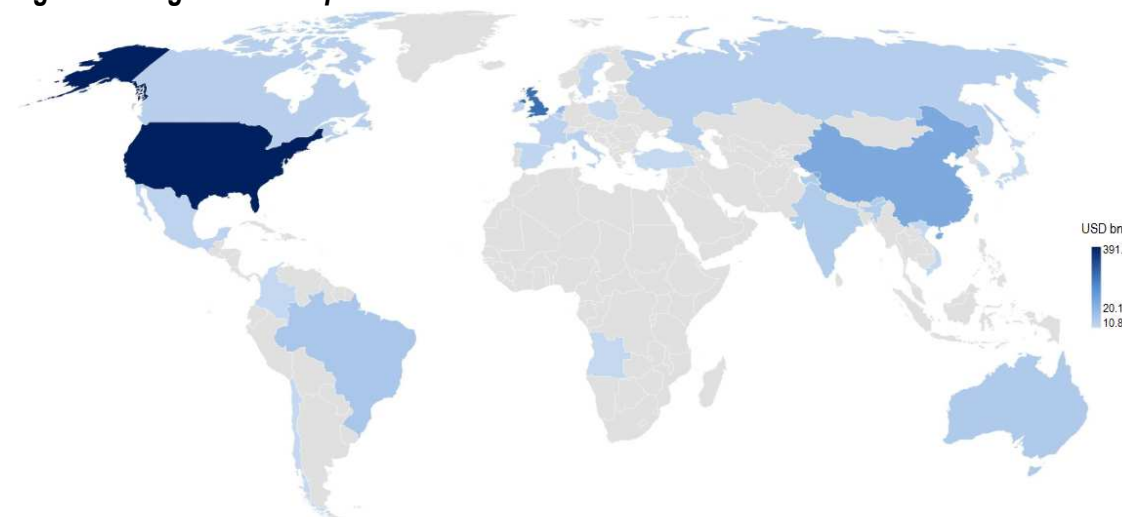
#### 4.2.2. Foreign direct investments in Poland

Global FDI transactions between 2015 and 2016 were strongly influenced by economic and geopolitical turmoil (uncertainty in the euro area, political instability in the East, slowdown in emerging economies, events in the wake of Brexit, political situation in the United States).

According to UNCTAD data, global FDI dropped by 2% in 2016 to USD 1.75 trillion. The largest decline - by 14% - was reported in developing countries. FDI in developed countries grew by 5%, despite a 6% decline in European countries. Among the 32 European countries, 19 reported a drop in FDI. Poland followed that trend. However, global situation is expected to improve in the coming years. According to UNCTAD estimates, global FDI are expected to grow to USD 1.8 trillion in 2017 and to USD 1.85 trillion in 2018. Geopolitical risk may, however, have a negative impact on the prospects of reconstruction of FDI flows to pre-crisis levels.

In a dynamically changing external environment, the stability of the Polish economy was its asset. Good economic prospects built a positive image of Poland in the world, which encouraged investment activity in our country. 2015-2016 brought modern investments in the automotive, food, household appliances, IT, R&D and service centres sectors. In particular in the latter category Poland is building a strong position in the region and is a significant player in the world.

**Figure 3. Largest FDI recipients in 2016**



Source: DDS of the Ministry of Economic Development on the basis of UNCTAD data; World Investment Report 2017.

<sup>58</sup> Evaluation of the exporting potential of Polish enterprises, PARP, Warsaw 2014.

The value of FDI<sup>59</sup> in Poland amounted to EUR 12.1 billion in 2015, compared with EUR 10.7 billion in 2014<sup>60</sup>. The largest amount of capital was invested by entities from EU Member States (EUR 11.8 billion). The biggest investors in Poland were companies from the Netherlands (EUR 2.8 billion), the United Kingdom (EUR 2.5 billion), Germany (EUR 2.3 billion) and Spain (EUR 0.9 billion).

Most funds under FDI flowed to the service sector (EUR 8.8 billion), of which EUR 2.4 billion to professional, scientific and technical activities, and EUR 2.3 billion to wholesale and retail trade and repair of motor vehicles and motorcycles. A total of EUR 2.8 billion flowed to manufacturing. Manufacture of motor vehicles, trailers, semitrailers and other transport equipment was the most attractive for foreign capital (nearly EUR 1.2 billion).

In aggregate terms, out of the total amount of EUR 167.1 billion invested in Poland by the end of 2015, the largest share of the capital came from the European Union (91.9%). The highest liabilities are towards investors from the Netherlands (EUR 30.3 billion), Germany (EUR 27.4 billion), Luxembourg (EUR 19.3 billion) and France (EUR 17.9 billion).

By the end of 2015, foreign companies invested most funds in services (EUR 98.1 billion) - including financial and insurance activities (EUR 31.4 billion); wholesale and retail trade; vehicle repair (EUR 25.5 billion), as well as real estate activities (EUR 13.1 billion). Investments in services are characterised by a more dynamic aggregate increase than in the case of other sectors. This is proved e.g. by a systematic increase in the number of service centres in Poland and the related employment (by about 15% between Q1 2016 and Q1 2017). Up to 75% of new jobs were generated by foreign centres.

According to UNCTAD estimates, USD 11.4 billion flowed to Poland in the form of FDI in 2016. This was 15% lower than the year before. This decline was a consequence of fluctuations in exchange rates, as well as the effect of the government policy focused on increasing domestic ownership e.g. in the banking sector<sup>61</sup>.

Over the past decade, over USD 12.6 billion in direct foreign investments has been flowing into Poland. The continued FDI inflow at a stable level exceeding USD 10 billion - with a temporary limitation of inflow of FDI to Poland in 2013 reflecting the weakening sentiments of investors on the global scale - proved Poland's strong position as an attractive location for foreign capital. However, Polish economy shows less dependence on FDI than other countries in the region and at the same time higher dependence than France, Germany or Italy. FDI inflow is an important support for domestic investments - it does not show significant fluctuations in time and remains below 15%.

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<sup>59</sup> NBP, based on data contained in the annual report. All data in the report are presented in EUR, which required exchange rate conversions. For the transaction data, values were converted at the annual average rate, while for liabilities, at the rate as of 31 December of a given year.

<sup>60</sup> 2014 data were revised.

<sup>61</sup> UNCTAD, World Investment Report 2017.

**Table 23. FDI resources in relation to GDP and FDI inflow in relation to the value of gross fixed capital formation in selected EU Member States and on the global level**

	FDI/GDP (%)						FDI/ Gross fixed capital formation (%)					
	2000	2012	2013	2014	2015	2016	2000	2012	2013	2014	2015	2016
Czech Republic	35.2	65.8	64.0	58.5	63.0	59.7	26.4	14.9	6.9	10.5	1.0	14.2
<b>Poland</b>	19.5	39.7	43.7	38.8	38.3	39.8	23.5	12.5	3.7	13.3	14.1	13.1
Slovakia	33.7	59.0	58.9	49.3	50.0	46.5	48.2	15.0	- 3.0	- 2.5	- 1.0	- 1.6
France	13.4	25.4	27.1	24.6	28.5	28.3	9.4	2.7	5.5	0.4	9.0	5.4
Germany	24.1	30.4	25.8	21.9	23.4	22.2	44.1	4.0	2.1	0.5	5.0	1.4
Italy	10.7	18.1	17.1	16.4	18.5	18.7	5.7	0.0	6.6	6.4	6.3	9.2
United Kingdom	26.8	54.2	55.6	54.2	49.2	45.5	38.7	13.1	11.8	9.0	6.8	57.9
EU	24.6	45.8	45.4	42.3	47.8	46.7	31.3	14.4	9.7	7.1	15.2	17.5
World	21.4	30.2	31.7	31.5	33.5	35.0	16.2	8.8	7.7	6.8	9.5	9.4

Source: DDS of the Ministry of Economic Development on the basis of UNCTAD data; World Investment Report 2017.

According to UNCTAD data, in 2016 India, China and the US, the world's major recipients of FDI, had the largest share in foreign capital distribution. Poland's share in the announced greenfield projects fluctuated around 1%, and their number reached 311.

On the other hand, according to EY<sup>62</sup> data, in 2016, 256 new FDI projects were announced in Poland (21% more y/y), which gave Poland the 5<sup>th</sup> position in this category. These investments will translate into 22,074 jobs (12% more y/y). After the United Kingdom, this is the second result in Europe.

Foreign expansion in the form of FDI is increasingly being implemented also by Polish investors. Still, a small percentage of companies choose foreign expansion other than exports. Investments abroad are usually made by large companies seeking cheaper resources or new production technologies, or development of distribution networks. Poland cannot boast too many so-called born globals, or global brands. Many companies have succeeded on foreign markets, often operating in niche markets and effectively managing them.

In 2015, according to the National Bank of Poland data, net value of Polish foreign direct investment transactions abroad amounted to EUR 2.8 billion<sup>63</sup>. The balance of cash flows from the acquisition and disposal of shares and other forms of equity by Polish direct investors was also lower than in 2014. It amounted to EUR 2.5 billion, while in 2014 it was EUR 4.1 billion.

Among the geographical destinations of expansion of Polish companies in 2015, the highest value of investments in shares was observed for investments in Cyprus (EUR 2.5 billion) and in Switzerland (EUR 0.9 billion).

As of the end of 2015, receivables of Polish foreign investors amounted to less than EUR 22 billion, i.e. they were slightly lower compared to almost EUR 23 billion in 2014. However, compared to 2004, they increased by more than 40 times. Therefore, Poland is, alongside Hungary, one of the leaders in terms of the accumulated value of FDI located outside the country among EU Member States that joined the Community after 2004.

<sup>62</sup> EY European Attractiveness Survey (publications cover the period 2008-2017).

<sup>63</sup> Excluding transactions of special purpose vehicles.



According to UNCTAD data, Polish foreign investment in 2016 doubled compared to 2015, to USD 6.4 billion. Thus, Poland ranked 31<sup>st</sup> on the list of world capital exporters. Polish direct outward investment position at the end of 2016 increased by about 3% y/y in 2016 and amounted to USD 24.8 billion.

Polish entities show much greater activity in greenfield projects and mergers and acquisitions than other V4 countries or other countries admitted to the EU in 2004 and in subsequent enlargements, which results from Poland's far greater economic potential. However, in comparison with the EU-15, Poland is implementing fewer projects. Among the old EU countries, it is only ahead of Greece and in recent years (2012-2016) the result is close to Portugal.

**Table 24. Number of greenfield projects implemented by polish entities compared to selected EU Member States**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Poland	30	40	51	46	38	45	39	55	67	61	66	44
Hungary	11	22	28	28	19	19	24	10	18	24	19	10
Slovakia	1	4	2	7	2	7	5	9	6	3	5	5
Czech Republic	22	45	32	55	14	40	43	61	36	35	40	24
Spain	218	281	516	654	652	638	650	582	680	546	487	529
Portugal	24	33	69	107	65	74	65	51	73	78	65	46

Source: DDS of the Ministry of Economic Development on the basis of UNCTAD data; World Investment Report 2017.

The results of studies carried out by the Central Statistical Office concerning the activity of entities holding shares in entities seated abroad indicate that the activity of Polish enterprises abroad has increased. In terms of geographical reach, subsidiaries were located in 92 countries, of which 59.5% in the EU. In terms of respective countries, entities registered in the territories of Ukraine (8.7%), Germany (8.8%), Russia (8.2%) and the Czech Republic (7.2%) prevailed. Polish enterprises decide to increase the range of internationalisation by implementing greenfield investment projects also in geographically distant regions: in Asia, Africa or the Americas.

#### 4.2.3. System and instruments supporting internationalisation

The actions taken by the Ministry of Economic Development are focused on supporting the internationalisation of enterprises, building their competitiveness and creating a strong brand of Poland in the world. The aim is to initiate closer ties with international markets by expanding the number of participants in international exchange and developing more advanced forms of cooperation with foreign countries, as well as increasing exports of high technology goods.

The Ministry of Development has changed the architecture of the system of entities supporting the internationalisation of Polish enterprises by concentrating them in the Polish Development Fund Group consisting of Polski Fundusz Rozwoju S.A. (PFR), Korporacja Ubezpieczeń Kredytów Eksportowych S. A. (KUKE), Bank Gospodarstwa Krajowego (BGK), Industrial Development Agency (ARP), Polish Agency for Enterprise Development (PARP) and Polish Investment and Trade Agency S.A. (PAIH). A broad spectrum of instruments aimed at supporting Polish entrepreneurs on foreign markets has also been prepared, including promotional activities, networking assistance, insurance and financing.

Bank Gospodarstwa Krajowego provides a financial support system for Polish exports based on the Government Programme Financial Support for Export, which is implemented in cooperation with Korporacja Ubezpieczeń Kredytów Eksportowych S.A. It includes both short-term instruments (e.g. letters of credit, guarantees, pre-financing of exports) and long-term instruments (e.g. loans for the acquirer, debt redemption). Its scope of activities will be extended and BGK's activities in terms of financing foreign expansion under foreign direct investments implemented by Polish companies will be intensified.

KUKE carries out export insurance guaranteed by the State Treasury, ensuring the safety of trading on the high risk markets. The insurance offers the certainty to receive payment for the goods and services provided, and also facilitates decisions about cooperation with new customers.

The corporation has also special offers for entrepreneurs looking for a business destination on markets outside the European Union. For this purpose, more flexible export transaction security options were established for five countries, selected as prospective markets for the Polish economy (Algeria, India, Iran, Mexico, Vietnam). Exporters may also take advantage of an insurance offer dedicated to Eastern markets (Policy for the East).

Polish Investment and Trade Agency S.A. created on the basis of the Polish Information and Foreign Investment Agency S.A., has much broader competence than before. It has become the coordinator supporting foreign expansion of Polish entrepreneurs, the point of first contact for exporters and investors and the knowledge centre for entrepreneurs planning the development of export activity. PAIH will integrate activities related to the promotion of the Polish economy and export development, and will also conduct analytical and information work. Its task will be to coordinate all operational, mission, and exhibition instruments, as well as instruments dedicated to industries or markets.

PAIH is building a network of foreign trade offices<sup>64</sup> that will support Polish entrepreneurs abroad and replace the existing Trade and Investment Promotion Offices of Polish Embassies and Consulates. Trade offices are opened primarily on prospective, yet more difficult and less known markets in non-EU countries. They will offer access to free information and support in the development of operations for Polish entrepreneurs, as well as provide specialist services on a commercial basis.

In spite of the reform implemented in 2016, WPHI continued to support Polish companies interested in cooperation with foreign partners, in particular in the field of exports and Polish investments on foreign markets. The current 49 WPHI, located in 44 countries around the world, have implemented a total of nearly 78,000 measures, including responding to inquiries of entities (Polish and from the country of office), B2B meetings, studies/information (macroeconomic, industry-related, legal and other), and organisation or participation in organisation of seminars, conferences or workshops. Moreover, in 2016, 19 Polish embassies<sup>65</sup> implemented promotional programmes<sup>66</sup>.

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<sup>64</sup> To date, such offices were established in Shanghai, Nairobi, San Francisco, Budapest, Ho Chi Minh City, Mexico City, Singapore, Tehran and Toronto.

<sup>65</sup> Applicable to: Australia, Azerbaijan, Chile, Georgia, Iran, Colombia, North Korea, Cuba, Latvia, Mexico, Moldova, Peru, Senegal, Singapore, Slovakia, Slovenia, Thailand, Venezuela, and the Warsaw Trade Office in Taiwan.

<sup>66</sup> In accordance with the Agreement of 14 September 2006 between the Minister of Foreign Affairs and the Minister of Economy on cooperation in the performance of tasks of the Minister of Economy relating to promotion of trade and foreign investments by Polish diplomatic missions abroad where they do not operate (WPHI).

Micro, small and medium-sized enterprises can benefit from the co-financing under the projects *Supporting SMEs in promoting product brands - Go to Brand* and *Promotion of the economy on the basis of Polish product brands - Brand of Polish Economy - Brand*. Support can be allocated e.g. to cover the costs of renting, construction and operation of the exhibition stand or other expenses related to the participation in industry promotion programs:

- **12 selected industries** (medical equipment, machinery and equipment, cosmetics, IT/ICT, biotechnology and pharmaceuticals, Polish fashion, construction and finishing of buildings, yachts and boats, furniture, Polish food specialties, health services, car and aircraft parts);
- **5 promotional programs on prospective markets** (Algeria, India, Iran, Mexico and Vietnam);
- promotion programs during major media events.

Special support is dedicated to small and medium-sized enterprises from the macroregion of Eastern Poland. The development of their export activities is supported by the project *Internationalisation of SMEs*, aimed at increasing their economic activity on the international markets.

For the most innovative companies, *Polish Technology Bridges* project is being prepared to support them in gaining new foreign markets. Entrepreneurs will be able to participate in acceleration programs on selected 20 foreign markets<sup>67</sup>, enabling them to tailor and implement the company's expansion strategy on a given market, adjust the product/service to local requirements, and acquire mentoring services customised to the needs of companies (e.g. internationalisation, cooperation with foreign partners).

Coordinators and members of national key clusters can use professional advisory services to support their expansion into new markets under the *Internationalisation of National Key Clusters* project. The instrument aims at enhancing the cluster's ability to cooperate with foreign entities on a permanent basis and to strengthen its cooperation within the cluster. Aid is focused on supporting the cluster's international expansion in conjunction with its R&D&I activities as well as national and international networking.

Support for Polish entrepreneurs is also provided under *de minimis* aid. The support is used to finance e.g. obtaining a product certificate required on foreign markets, organising seminars, conferences, collective presentations, publishing projects promoting exports or sales on the European Union internal market, as well as sectoral promotional projects supporting projects implemented by a group of at least four entrepreneurs.

Increasing the competitiveness of Polish companies on foreign markets is also achieved by enabling domestic entrepreneurs to establish business contacts under business missions and cooperative exchanges, including through the Polish network of Enterprise Europe Network centres coordinated by the Polish Agency for Enterprise Development.

In response to insufficient participation of Polish companies in the global public procurement market in 2015, a project of the Polish Agency for Enterprise Development *International Public Procurement (IPP) Information Point* was launched. Its purpose is to inform Polish entrepreneurs about business opportunities resulting from participation in international public procurement estimated at USD 50 billion per annum.

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<sup>67</sup> They include: US, China, Mexico, Turkey, Hong Kong, Russia, Norway, India, Iran, United Arab Emirates, Ukraine, Switzerland, Algeria, South Africa, Canada, Egypt, Japan, South Korea, Vietnam and Saudi Arabia.

Among the various instruments that facilitate the conquest of new foreign markets, it is worth highlighting the **Go programmes** for several non-European markets. Under the programs, forums, conferences, foreign and Polish missions for entrepreneurs are organised. For each program (Go China, Go Africa, Go Arctic, Go India, Go Iran and Go ASEAN) dedicated web portals have been created, where exporters and investors can find valuable information about business conditions.

Support for Polish entrepreneurs is also offered at the EU level with regard to protection of the EU market against unfair imports, injuring the EU, including Polish producers, and actively taking steps to avoid or mitigate the negative impact of protection measures applied by non-EU countries to Polish exports. A success was e.g. the entry into force at the end of April 2016 of the EU import supervision of steel products from non-EU countries and the imposition of anti-dumping duties on imports of reinforced steel bars from Belarus imported to Poland on unfair terms injuring Polish producers.

Measures were also taken to reduce the costs of imports of raw materials and components, which were not available on the EU market, and which were used by the EU, including Polish, companies for further processing and production of finished goods for the purposes of such sectors as household appliances, automotive, or fireproof materials. The regulations adopted in 2016 included a total of 26 applications from Polish entrepreneurs.

The works were carried out by the Team for Barriers in Access to Third-Country Markets at the Ministry of Economic Development and Finance. This team deals with the identification of barriers in access to particular non-EU markets for Polish producers and exporters and the measures taken by the Polish administration aimed at striving to eliminate those barriers that are particularly affecting Polish producers and exporters. Overall, under the works of the Team since the beginning of 2016, 57 non-EU countries have been analysed and identified, and over 575 barriers in access to their markets have been discussed.

In connection with Poland's participation in Astana EXPO 2017, an economic program for micro, small and medium-sized enterprises was developed, implemented by the Polish Agency for Enterprise Development. For entrepreneurs, a range of promotional activities has been prepared including fair events, economic missions, Polish-Kazakh Economic Forum, which was supplemented by so-called general activities promoting the offer of Polish companies.

Poland has also participated in the works on the European defence policy, which aims to develop a competitive and innovative European Defence Technological and Industrial Base (EDTIB). At present, the Commission has intensified works on defence sector integration, such as the European Defense Action Plan (EDAP). Its aim is to develop innovation and competitiveness through the implementation of the three pillars relating to research, investment and market. EDAP provides for effective use of European Structural Funds and investment funds for dual use projects. The Commission will use tools to support SMEs, in particular the use of the COSME Program.

## 4.3 Cooperation of enterprises within Special Economic Zones and clusters

### 4.3.1 Special Economic Zones

#### ***Terms and conditions for granting state aid to entrepreneurs operating in the zones***

Special Economic Zones (SEZ) are separate administrative areas in Poland where entrepreneurs implementing new investments can benefit from income tax exemptions with respect to the income received in the zone.

A permission for conducting economic activity in a given zone is the basis to benefit from state aid. Permissions are issued by companies tasked with the management of zones by way of a joint tender or negotiations. The rules and manner of conducting tenders and negotiations are specified – separately for each zone – by the Ordinance of the Minister of Economy and Labour of 2004 on tenders and negotiations as well as the evaluation criteria for plans concerning business activities to be conducted by entrepreneurs within the given zone.

The rules and conditions of investments within SEZ as well as the benefits which stem from the fact of pursuing economic activities within such economic zones are defined in the Act of 20 October 1994 on Special Economic Zones (Dz. U. of 2017, item 1010), as well as in implementing acts to the abovementioned act.

In SEZs, entrepreneurs may receive public aid in the form of tax exemptions on account of costs of new investments and creating new jobs.

The size of the aid depends on the maximum intensity of the aid set for the area where a given investment project is implemented as well as the amount of the costs eligible for aid. For entrepreneurs who wish to benefit from the aid for employment, eligible expenditure includes two-year labour costs of newly employed workers, whereas for entrepreneurs who opt to benefit from investment aid, the costs of the new investment project.

The maximum aid intensity in the case of investment projects implemented in Lubelskie, Podkarpackie, Warmińsko-Mazurskie and Podlaskie Voivodeships is 50%; in Opolskie, Świętokrzyskie, Małopolskie, Lubuskie, Zachodniopomorskie, Pomorskie, Łódzkie and Kujawsko-Pomorskie Voivodeships as well as in Ciechanowsko-Płocki, Ostrołęcko-Siedlecki, Radomski and East Warsaw Subregions of Mazowieckie Voivodeship the figure is 40%, while in Dolnośląskie, Wielkopolskie and Śląskie Voivodeships it amounts to 25%; the value for the West Warsaw Subregion is 20%, and for the area of the capital city of Warsaw – 15% until the end of 2017 and 10% after that date.

For small and medium-sized enterprises the aid may be increased by 20 pps and by 10 pps, respectively. The increase shall not apply in the case of large investment projects (i.e. where the costs eligible for aid exceed the equivalent of PLN 50 million).

#### ***The zones' area and location***

There is a total of 14 SEZ in Poland. As of the end of December 2016, their total area amounted to over 21,500 ha. The zones were located in 179 cities and 287 gminas. Total surface area of the zones increased by over 1,600 ha compared to 2015. The boundaries of 12 zones have changed, i.e. Kostrzyn-Słubice, Katowice, Krakow, Legnica, Łódź, Mielec, Pomerania, Słupsk, Starachowice, Tarnobrzeg, Wałbrzych (three times) and Warmia and Masuria.

### **Effects of the zones**

As for 31 December 2016, entrepreneurs had 2,263 valid permissions for conducting economic activity in zones. In 2016 alone, a total of 257 licences were issued. As compared to 2015, the number of the granted permissions was higher by 18%. Total number of permissions issued from the beginning of zones' operation until the end of 2016 amounted to 3,687, out of which 1,424 were excluded from legal circulation in consequence of withdrawal, expiry, annulment or revoking.

Until the end of 2016, entrepreneurs operating in Special Economic Zones invested almost PLN 112.3 billion and provided 332,000 jobs in total, out of which over 225,000 (i.e. 68%) were new jobs, i.e. jobs created by investors after obtaining business permissions for operation in the zone and resulting directly from the implementation of new investment projects. Compared to 2015, the accumulated value of investment projects increased by over PLN 0.6 billion, while the number of jobs by almost 20,100, although the number of new jobs only increased by 310.

Information about the number of permissions, investment expenditure and number of jobs in individual zones are presented in the table below.

**Table 25. Effects of the operation of Special Economic Zones as of 31 December 2016**

No.	Special Economic Zone	Number of valid permissions	Investment expenditure (cumulatively in PLN million)	Number of jobs	
				new	maintained
1	Kamienna Góra	62	2,403.9	6,577	770
2	Katowice	280	14,101.1	29,586	30,378
3	Kostrzyn-Słubice	182	6,858.4	19,707	12,220
4	Krakow	171	3,544.7	14,233	11,629
5	Legnica	90	7,949.0	14,113	254
6	Łódź	220	15,577.7	28,679	7,443
7	Mielec	228	6,596.0	14,961	9,854
8	Pomerania	162	11,778.8	17,729	5,192
9	Słupsk	88	1,693.0	3,399	542
10	Starachowice	78	2,268.7	4,273	2,987
11	Suwałki	79	1,941.7	3,144	4,114
12	Tarnobrzeg	205	8,635.3	17,816	5,918
13	Wałbrzych	313	24,364.1	41,487	7,467
14	Warmia and Masuria	105	4,540.8	9,828	7,814
<b>Total</b>		<b>2,263</b>	<b>112 253,2</b>	<b>225,532</b>	<b>106,582</b>

Source: Ministry of Economic Development.

At the end of 2016, almost 71% of invested capital came from six countries: Germany (23.7%), Poland (20.1%), Netherlands (8.2%), USA (8.1%), Belgium (5.9%) and Italy (4.7%). In the previous year, Japan made the list instead of Belgium and the share of the abovementioned countries amounted to almost 74.6% of investment expenditure.

### **Box 2. New zone policy**

The current zone policy has not been fully effective, which results e.g. from the dispersed model of investor management that lacks a single leading entity in the region; to date, this task was performed by 8 institutions whose duties as business environment institutions often overlapped. Lower effectiveness also results from extensive application documentation relating to public support and the lengthiness of processing applications for hanging the borders of Special Economic Zones.

This calls for new solutions and management instruments which would eliminate the ineffective processes. Implementation of a new concept of investment support under tax exemption facility offered under SEZ system is being planned. The tax exemption facility will be available for new investments that meet the quantitative criteria understood as investment expenditure and the qualitative criteria consistent with the Responsible Development Strategy. Investments with positive impact on the economic development of Poland and the region, e.g. by know-how transfer or ensuring favourable conditions for employees, will be particularly appreciated.

The main objectives of the new zone policy include e.g.:

- Implementation of a new standard of investor management by the companies managing the SEZ. The companies will be the main contact point in the region under the investor management system, as well as the regional coordinator for the award of public aid in the area of tax exemption facility and government subsidies.
- Abandonment of territorial limitations. Tax incentives will be available nationwide (without territorial limitations), while the current rules relating to land purpose will remain unchanged. This would lead to elimination of the lengthy and burdensome procedure for changing the borders of Special Economic Zones.
- Introduction of new requirements for investments. Apart from the quantitative criteria (applied to date), qualitative criteria will be introduced for new investments (in accordance with RDS). Investment having impact on sustainable development (high quality jobs, investments located in endangered areas) or supporting the cooperation between business and science will be fostered in particular.
- Regionalisation of the duration of tax exemptions. The duration of tax exemption will be linked with the intensity of public aid allowed by the European Commission in a given voivodeship. This period will be 10 to 15 years long. The current investments operating in SEZ will receive support on unchanged conditions.

As a result of the planned changes, Poland will improve its competitiveness compared to other Central and Eastern European countries. Diversification of the criteria in terms of quality, a solution which is not applied in any other V4 country, will allow for focusing the offer on investments that contribute the highest value added to the Polish economy.

### **4.3.2 Clusters in Poland**

One of the economic priorities of the government is to ensure the development of Polish enterprises and the increase in the competitiveness of the Polish economy in the EU and on the global markets. Nowadays the competitiveness of economy is becoming more based on research, development and innovation (R&D&I). The activity to promote the development of the enterprises implementing innovative solutions is becoming increasingly important.

Clusters are the key to achieve this objective; thanks to a naturally established cooperation of enterprises, research institutes, business environment institutions, non-governmental organisations and local authorities, clusters are also referred to as catalysts of innovation processes. Cluster structures largely support the growth of the level of innovation and the improvement of the potential capacity of knowledge transfer.

The dynamic growth of the number of enterprises operating within clusters contributes to a faster economic growth, higher productivity, increased profits, inflow of direct investments, increased exports

and creation of new jobs. The establishment of clusters in high technology sectors improves the innovativeness of enterprises. The operation of small and medium-sized enterprises within clusters is of particular importance; without institutional support and a value chain established within the cluster, such companies often would not be able to meet the challenges of the modern market.

The first clusters were established in Poland in 2003-2005. In 2015, the Polish Agency for Enterprise Development prepared an analysis of clusters in Poland, which focused on determining the actual number of clusters functioning in the country. In the course of inventory, 134 clusters created between 2003 and 2015 were identified. Although the study revealed that the oldest clusters had been operating for 12 years, the majority of clusters (over 60%) are young, i.e. created between 2011 and 2015, and the average age amounts to over 4 years. 106 potential clusters were also identified. Part of these structures seems to be able to turn into fully fledged clusters in the near future. Polish clusters operate in both high technology sectors, i.e. ICT sector or creative industry, and traditional sectors. Among the clusters operating in traditional sectors, the following clusters are worth mentioning: woodworking cluster, furniture cluster, construction cluster, raw material cluster, metalworking cluster, healthy food cluster, life quality cluster and tourism cluster.

*The Enterprise Development Programme 2020*, an executive document based on the *Strategy for the Innovativeness and Efficiency of the Economy*, involves the establishment of a close link between the activities pertaining to the development of clusters and the so-called smart specialisation introduced to the regional policy of the EU. These activities should be diversified at the local and central levels. The activities at the local level are to stimulate the establishment of new clusters and to support the already existing regional clusters and they will relate to the development of the cooperation between the existing clusters and large enterprises, business environment institutions, local authorities and research institutes in order to achieve a higher level of cohesion of cluster activity and the development of new innovative products and services within the individual clusters. The activities supporting new clusters established in the areas of particular importance for the competitiveness of the region in the EU and within Special Economic Zones will be conducted at the regional level.

In its 2012 report, the Cluster Policy Workgroup recommended that the innovativeness and competitiveness of the Polish economy should be reinforced through the intensification of cooperation, interactions and knowledge transfer within the framework of clusters as well as through supporting the development of strategic economic specialisations by selecting National Key Clusters (NKC). The idea for the designation of NKCs is related with the implementation of the assumptions of the Europe 2020 strategy as well as of the smart specialisation concept promoted by the European Commission, which assumes the concentration of efforts and resources on a specific, relatively small number of priority tasks or economic specialisations.

According to assumptions made for the purposes of the Smart Growth Operational Programme 2014-2020, National Key Clusters, i.e. clusters of major importance to the national economy and high international competitiveness, identified at the national level based on such criteria as: critical mass, development and innovation potential, current and planned cooperation, as well as experience and potential of the coordinator, will form the basic group of clusters supported at the national level.

In 2015, the first round of the competition for the National Key Cluster status was held, under which seven selected clusters were granted the abovementioned status (the Aviation Valley, Interizon, Metal Processing Cluster, Mazovia ICT Cluster, Polish Aluminium Cluster, Eastern Construction Cluster and Green Chemistry West Pomeranian Chemical Cluster).



The second round of the abovementioned competition was held in 2016. 9 new clusters received the National Key Cluster status, i.e.: LifeScience Klaster Krakow, MedSilesia Cluster, NUTRIBIOMED Cluster, Silesian Aviation Cluster, Eastern Cluster ICT, Waste Management and Recycling Cluster, Sustainable Infrastructure Cluster, „North-South” Logistics & Transport Cluster, and Bydgoszcz Industrial Cluster. The third round of the competition for the National Key Cluster status will be held in 2018.

In 2017, measures were taken to reinforce the potential of the National Key Clusters, including meetings with the representatives of NKC. In May 2017, a meeting was held at the Ministry of Economic Development to appoint a Working Group for cluster policy. Representatives of 16 Marshal Offices of respective voivodeships and regional agencies, as well as representatives of the National Key Clusters, were present at the meeting. During the meeting, the results of the review of implementation of the recommendations of the Working Group for cluster policy which worked in 2011-2012 were presented along with the objectives of the organisation and the scope of operation of the new Working Group for cluster policy, whose appointment was approved by the Interministerial Innovation Team at the Ministry of Development.

In June 2017, the Ministry of Economic Development organised the Cluster Conference entitled *Cluster policy and clusters' cooperation of V4+4 countries*, under which training was carried out with regard to cluster development strategies and internationalisation. Moreover, the conference covered 5 parallel sessions on means of transportation, healthy society, sustainable energy and smart and energy-efficient construction, natural resources and waste management, as well as a session addressed to policy makers regarding the reinforcement of cluster policy and support for the cooperation between V4+4 countries.

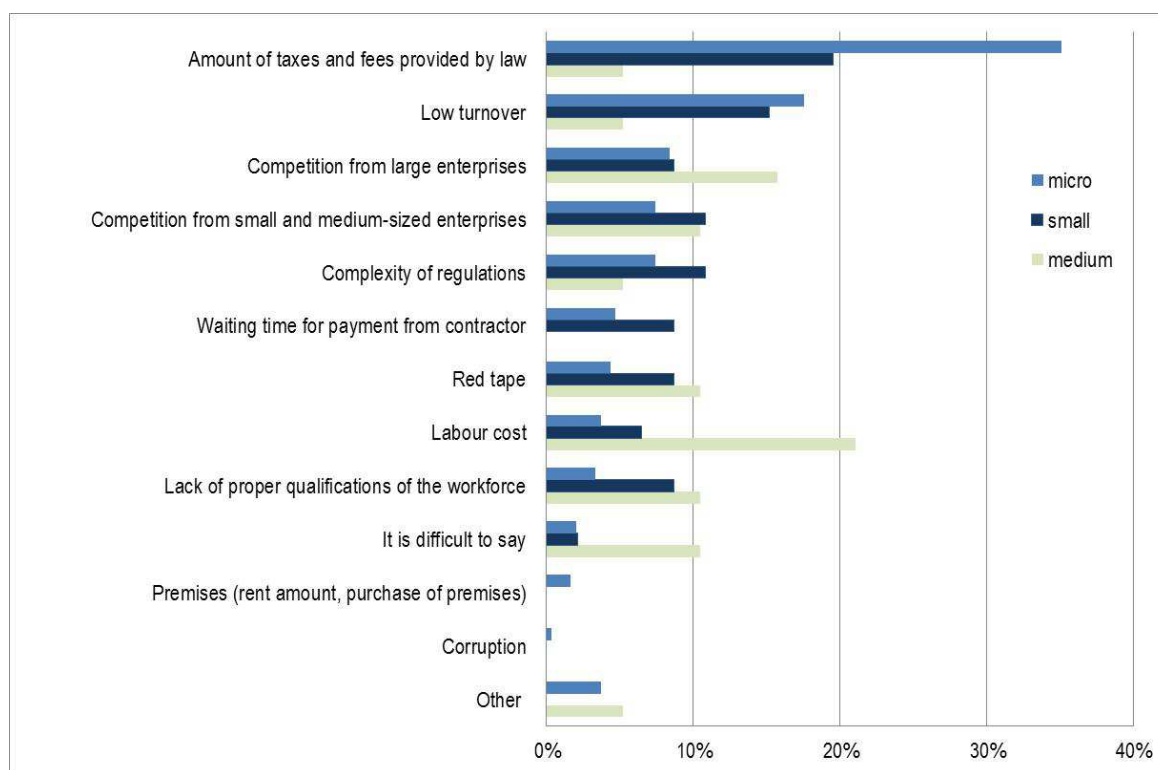
## **4.4 Barriers to business activity**

### **4.4.1. Barriers to business activity from the perspective of entrepreneurs**

Doing business is connected with a number of challenges, which entrepreneurs decide to face in a changing business environment. Some of them constitute barriers to business growth and operation, it is therefore important to define them and on this basis implement public interventions and monitor the progress of their implementation. One of the analytical tools that complement public statistics in the field of enterprise research is qualitative surveys.

The questionnaire surveys *Development trends in micro, small and medium enterprises from the perspective of entrepreneurs*, carried out by the Ministry of Economic Development on a regular basis since 1998, are a source of information on barriers to economic activity faced by entrepreneurs. The most recent survey was carried out on the turn of February and March 2017 in a randomly selected group of enterprises.

**Chart 32. Main barriers to the enterprise development according to SMEs taking part in the survey in H2 2016**



Source: Development trends for micro-, small and medium-sized enterprises in H2 2016, Ministry of Economic Development, May 2017.

For years, the main problem faced by entrepreneurs has been the level of taxes and fees (31.6% total responses). These issues are more important for the self-employed than for entrepreneurs employing workers (the difference in answers amounted to 16 pp); at the same time, in the recent years the significance of this area has been decreasing, as the share of responses has been dropping. The second most often mentioned barrier to running a business is low turnover (16.6% in total). Competition of large enterprises and of small and medium-sized enterprises are barriers whose share has slightly increased in the recent survey (8.9% and 8.0% total indications, respectively). Less than 10% of respondents point to complexity of regulations. Factors related to employees, i.e. costs and qualifications, have not exceeded 5% of responses each, while red tape has been mentioned by 5.3% of respondents.

Among microenterprises, the share of indications to the level of statutory taxes and fees as the most important barrier to running a business, amounted to 35.1% H2 2016. The second most important barrier was low turnover – 17.6% of indications. 8.4% of respondents mentioned competition of large enterprises, while 7.4% of respondents pointed out competition of small and medium-sized enterprises as well as complexity of regulations. The remaining barriers are less important to the smallest companies - only less than 5% of respondents mentioned them.

In the group of owners of small companies, 19.6% of respondents pointed to the level of statutory taxes and fees as the most important barrier. 15.2% mentioned low turnover, similarly to microenterprises.

For owners of medium-sized enterprises, the most important barriers included: labour costs (21.1%) and competition of large enterprises (15.8%)

The effective regulations and procedures have significant impact on business activity. In H2 2016, high share of negative responses (the quality of regulations assessed as bad or very bad) was observed with regard to regulations and procedures of tax law (59%), followed by commercial judiciary (43%). The share of negative opinions on the control of business activity (38%) and labour law (35%) was high. However, positive responses prevailed in the area of regulations and procedures relating to settlements with contractors.

The majority of entrepreneurs declared that the conditions for running a business remained unchanged in H2 2016. At the same time, respondents mentioned deterioration of tax regulations (39%), business control (26%), business law in general (24%), labour law (22%), and commercial judiciary (18%). On the other hand, opinions were mostly favourable on the opening and closing a business (14%).

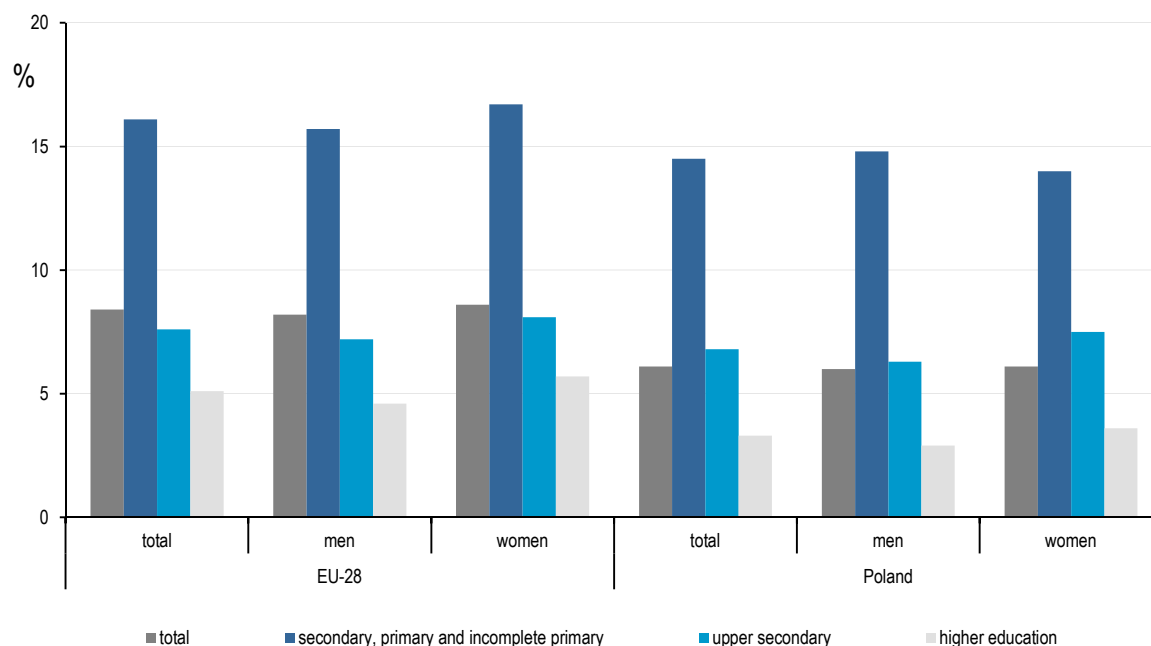
#### **4.4.2 Competency gaps on the labour market**

The processes taking place in the Polish economy (e.g. economic, demographic, relating to climate or energy security) change the structure of labour demand both on the domestic market and on local labour markets. Changing the structure of demand for labour requires appropriate adjustment of labour supply by improving the qualifications of employees and increasing their mobility.

Human capital with sufficiently high competences and qualifications adjusted to the challenges of the changing reality is one of the key factors in the rapid social and economic development in the country and in the improvement of the quality of life of citizens, which along with the advancing demographic processes and other global challenges (such as automation or digitisation) will become even more important for gaining competitive advantages in the global economy.

There is a noticeable correlation between the level of education and the unemployment rate. Higher education is still a factor in lowering the risk of unemployment. It should also be noted that it was in the group of persons with higher education that the unemployment rate in Poland was lower than the EU-28 average and in 2016 it amounted to 3.3% (EU-28: 5.1%).

**Chart 33. Unemployment rate by the level of education (persons aged 20-64) in 2016**



Source: DDS of the Ministry of Economic Development on the basis of Eurostat data.

### Box 3. The National Action Plan for Employment for 2015-2017

The National Action Plan for Employment 2015-2017 (KPDZ/2015-2017) was adopted by the Council of Ministers on 10 March 2015. The Action Plan is intended to designate the directions of the state policy pertaining to the labour market, including in particular: employment promotion, mitigation of the consequences of unemployment, as well as stimulation of labour force participation; at the same time, it also forms the basis which voivodeship local governments must take into account when drawing up Regional Action Plans for Employment. The total amount earmarked for the implementation of the National Action Plan for Employment for 2015-2017 over the course of 3 years is PLN 29,915,297 thousand, with national funds and international funds accounting for 89.01% and 10.9% of the said amount, respectively.

The primary objective of the National Action Plan for Employment for 2015-2017 is to achieve the employment rate among people aged 20-64 at the level of 68.1% by the end of 2017.

Two priorities were defined to be implemented through measures included in the National Action Plan for Employment for 2015-2017:

Priority 1: Increasing the efficiency of labour market management in order to support employment growth, by means of:

- improvement of job placement services and career counselling provided by public employment services;
- improvement of the education system and matching it better with expectations of entrepreneurs.

The support will be provided mainly to persons aged 15-24, in particular those not in education, employment or training (NEET).

Priority 2: Increasing the adaptive potential on the labour market, by means of:

- encouraging Polish citizens to change or complete their qualifications;
- encouraging citizens to seek jobs outside their current place of residence;
- supporting marginalised persons, e.g. the long-term unemployed, persons aged 50+, persons having a NEET status, disabled persons and parents with young children;
- improving the quality and attractiveness of professional education and ensuring that it remains adjusted to the needs of the labour market.

Under the measure *Development of innovative labour market policies* (priority area 1 *Increasing the efficiency of labour market management in order to support employment growth*), measures implemented under the **Youth Guarantee** were included in KPDZ/2015-2017. One of the four pillars of the implementation of the *Youth Guarantee* in Poland is to support the entrepreneurship of young people through the **First Business – Support at the Start** programme.

Under the programme implemented since November 2014 by Bank Gospodarstwa Krajowego (managing separated Labour Fund resources), last-year students, graduates and unemployed persons may apply for loans with preferential interest rates for starting a business and creating a job. Apart from loans, programme participants receive comprehensive consultancy and training services. In 2016, 1,096 applications were submitted for the amount of over PLN 70.6 million. In the same period, 781 loans were granted for the amount of PLN 49.6 million (753 loans for starting a business amounting to PLN 49.0 million and 28 loans amounting to almost PLN 0.6 million for the creation of jobs for the unemployed by entrepreneurs). From the beginning of the implementation of *First Business - Support at the Start* programme, by mid-2017, 4,881 applications were submitted for the amount of PLN 308.9 million, while 3,242 loans were granted for the amount of PLN 201.4 million (3,159 loans for starting a business for PLN 199.5 million and 83 loans for the amount of PLN 1.9 million for the creation of a job). The abovementioned loans are a repayable instrument, with funds from loan repayment and interest supplying the programme again. It is expected that by 2021 nearly PLN 500 million will be transferred to BGK.

In 2016, the implementation of the amended *Act on employment promotion and labour market institutions*, which was introduced on 27 May 2014, continued; in order to better match the qualifications to the requirements of the labour market, the amended Act introduced new solutions: trilateral training contracts, the voucher system, e.g. an internship voucher and a training voucher, and the National Training Fund (NTF).

In 2016, the abovementioned instruments were used e.g. by:

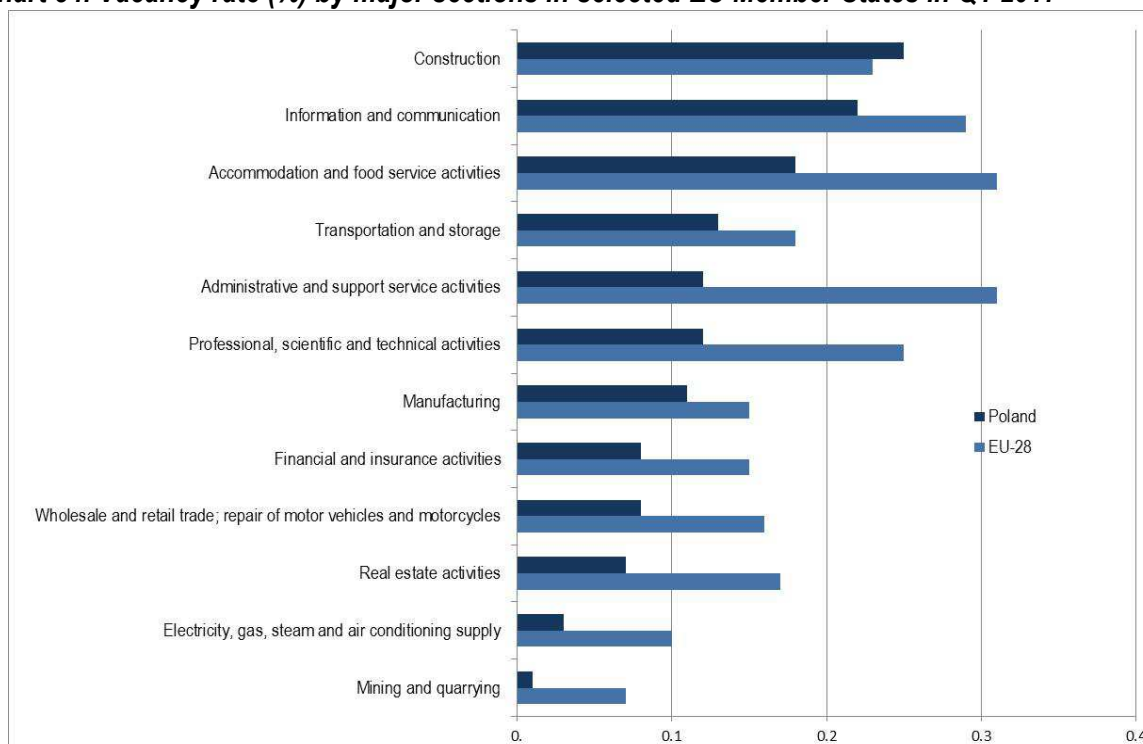
- over 52,000 unemployed persons (3.6% of registered unemployed), who completed training courses, of which 32,900 (63.2%) took up work during or within three months after the completion of the training; 4,300 training participants completed training with the use of the training voucher, of which 3,300 persons (76.6%) took up work during or within three months after the completion of the training;
- 682 unemployed persons who participated in the training under trilateral training contracts (signed between the employer, the poviast labour office and the training institution), 365 employers (including 166 employers employing up to 9 persons) as a result of trilateral contracts found candidates for work trained to meet their needs;
- over 173,700 unemployed persons (12% of registered unemployed), who completed the internship, of which 145,100 (83.5%) took up work during or within three months after the completion of the internship; 5,100 training participants completed the internship with the use of the internship voucher (the holder of the voucher seeks an employer who guarantees employment for the period of 6 months); 4,600 persons (90.7%) continued work after the expiry of the internship voucher;
- 17,900 entities received co-financing from the National Training Fund (NTF finances 80% of training costs, entities employing up to 9 employees receive full co-financing); 115,600 persons participated in the training financed from NTF, of which 96% were employees and 4% were employers. In 2016, the total of PLN 185.12 million was disbursed from NTF.

Robotisation of jobs is becoming everyday reality. A smart, autonomous vehicle is a good example of implementing plans in the sectors that used to be considered inaccessible, and smart factories will be handling a major part of industrial production in future, in accordance with the objectives of Industry 4.0.

Digitisation is now entering all areas of business operations, and yet entrepreneurs very often are unable to find employees with the required qualifications. The emergence of new occupations and the related demand for specific competencies calls for re-education of human resources, and the ability to manage four different generations of employees is becoming a strategic advantage.

The good condition of the Polish economy is accompanied by one of the lowest vacancy rates (the ratio of vacancies to the total number of jobs) in the European Union. In Q1 2017, the EU average (EU-28) was 1.9% (total for industry, construction and services), while for Poland it was 1.0%, with only Portugal (0.9%) and Spain (0.8%) ranking lower. Countries with high vacancy rates are Belgium (3.2%), the Czech Republic (3.1%), Sweden (2.7%) and Germany (2.6%).

**Chart 34. Vacancy rate (%) by major sections in selected EU Member States in Q1 2017**



Source: DDS of the Ministry of Economic Development on the basis of Eurostat data.

At the same time, entrepreneurs often lack suitable candidates for vacant positions. In 2016, a record number of job offers was posted to the labour offices, i.e. employers submitted nearly 1.5 million vacancies and places of occupational activation<sup>68</sup>. It was 215.9 thous. more than in 2015 (an increase by 16.9%). Although the number of vacancies and places of occupational activation offered by the labour offices in 2016 did not guarantee full coverage with the number of the unemployed, employers could not find candidates for their job offers. According to the SME survey conducted by the Ministry of Economic Development<sup>69</sup>, 14% of the surveyed entrepreneurs employing workers and recruiting in H2 2016 stated that no candidate responded to the posted job; 23% had only 1, 43% had from 2 to 4, and 20% had more than 5 candidates. Entrepreneurs are not always able to find the adequate staff, most often due to too high salary expectations and lack of the required qualifications. At the same time, in

<sup>68</sup> Ministry of Family, Labour and Social Policy data.

<sup>69</sup> Development trends for micro-, small and medium-sized enterprises in H2 2016.

companies employing staff, vacancies for skilled workers existed in 21% of the entities, with 3% offering jobs for unskilled workers and 6% for both skilled and unskilled workers.

Additional incentives for specialist positions (benefits) are no longer an attractive bonus, and they are becoming an expected component of remuneration, in particular for the new generation of employees. One of the most important challenges in modern human resources management is addressing the motivation of generations of employees: baby boomers and generations X, Y and Z. Due to the need to reconcile so many different expectations, needs and motivations of employees and their integration, nowadays human resources management is much more diverse and complex. There are trends such as the Chief Happiness Officer position<sup>70</sup> and the turquoise management model<sup>71</sup>, and the interest in those trends is growing, as the introduction of innovative methods that increase employee involvement and motivation proves to be viable in terms of better achievement of business objectives.

Following the accession of Poland to the European Union and the gradual opening up of labour markets by the Member States, many Polish citizens decided to move abroad to work. The consequence was a significant increase in emigration in the first years after the accession.

According to the estimates of the Central Statistical Office, at the end of 2015 almost 2.4 million Poles were temporarily living abroad, i.e. 3.3% more than in 2014. After the observed decrease in the number of Poles temporarily staying abroad in 2008-2010, 2015 was another year when the number of Poles in other countries grew. About 2.1 million persons stayed in Europe, with the vast majority (around 2 million) in EU Member States. This figure increased by 4.3% compared to 2014.

With regard to the EU, the majority of persons lived in the United Kingdom (720,000), Germany (655,000), the Netherlands (112,000), Ireland (111,000) and Italy (94,000). In 2015 saw a significant increase in the number of Poles residing in Germany and in the United Kingdom, i.e. in the main target countries of emigration from Poland in recent years. In the case of Germany, this figure increased by almost 7%, compared to 5.1% for the United Kingdom. A small increase in the number of Poles was also observed in other EU Member States, such as Belgium, the Netherlands, Sweden, Austria, Denmark and France.

At the same time, there was a further increase in the number of persons residing in European countries other than EU Member states, including Norway, where 84,000 Poles lived in 2015. A drop in the number of emigrants from Poland in comparison to the previous year was reported in Spain (-6.3%) and Greece (-11%), i.e. in countries with high unemployment rates. It is estimated that about 80% of temporary emigrants from Poland stay abroad for at least 12 months. These people, together with people who emigrated permanently, are referred to as long-term emigrants.<sup>72</sup>

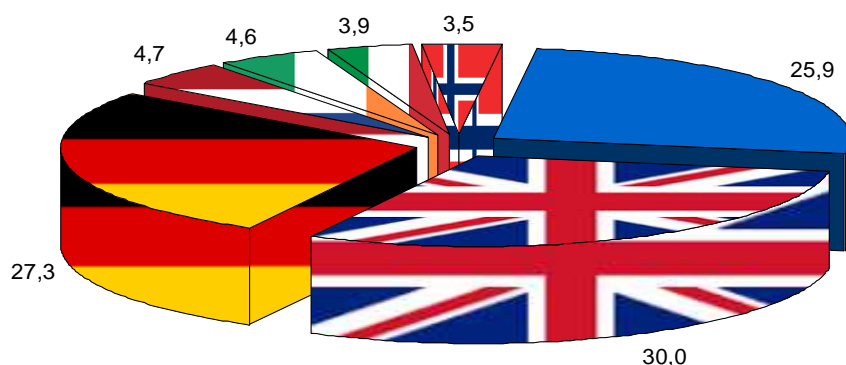
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<sup>70</sup> A trend observed since a few years, mainly in global corporations. CHO's duties include ensuring satisfaction and motivation of employees.

<sup>71</sup> A term invented by Frederick Laloux for organisations with "flat" structure, lack of hierarchy, where every employee is responsible for their area, while ensuring freedom of operation; major issues and challenges are settled collectively.

<sup>72</sup> Central Statistical Office (2016) Information the size and directions of temporary emigration from Poland in 2004-2015, Warsaw.

**Chart 35. Estimated share of Polish citizens temporarily residing abroad, by country in 2015 (%)\***



Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data; \*results of the estimation prepared by the Central Statistical Office should be considered approximations.

Apart from working abroad, return migration is also observed. In 2013-2015, there was a decline in the impact of negative economic factors on the return of emigrants to Poland (in 2015, economic reasons were declared only by 23.6% of emigrants, while in 2013 – by 36.1%). The percentage of people who indicated termination or loss of job as the reason for the return saw the largest slump (a decrease by 7.9% in 2015 compared to 2013). The main reason for returns in 2013-2015 was the return after a short-term economic migration as part of a life plan (23.8% of responses in 2015).<sup>73</sup> According to data from the National Census 2011, 49.7% of emigrants plan to return to Poland, 11.7% do not intend to return, while the rest do not have specific plans.<sup>74</sup>

Poland is transforming from a typical emigrant country into an immigrant-emigrant country, although the influx of foreigners into Poland is still insignificant in comparison with e.g. Western European countries. Foreigners account for only 0.3% of permanent residents of Poland.

According to the Eurostat report *Residence permits for non-EU citizens* relating to residence permits issued for the first time in the European Union, in 2015 Poland, for the third year in a row, ranked second in the EU in terms of the number of issued documents (residence permits and visas) – 542,000, i.e. 20.8% of all such documents issued in the EU (including long-term visas). The United Kingdom issued the largest number of permits (633,000, i.e. 24.3% of all such documents issued in the EU).

One of the reasons for the inflow of foreigners is to work in Poland. Employment of foreigners in Poland has been on the rise for several years. In 2016 was the record year for both the number of work permits issued in Poland for foreigners and the registered declarations of intention to vest the work in a foreigner (so-called simplified procedure).

In 2016, almost 127,400 work permits were issued in Poland for foreigners (94% more than in 2015). The largest group of eligible persons were the citizens of Ukraine (83.4%), followed by Belarus (3.8%), Moldova (2.2%) and India (1.4%). The majority of foreigners took up work in construction; transportation

<sup>73</sup> Czapiński J., Panek T. (eds.) (2015) *Social Diagnosis 2015*, Social Monitoring Council, Warsaw.

<sup>74</sup> Central Statistical Office (2013) *International migration of population. 2011 National Population and Housing Census*, Warsaw.



and storage; as well as in professional, scientific and technical activities.<sup>75</sup> In the first months of 2017, the number of permits issued continued to increase (according to indicative data, between January and April 2017 approximately 65,000 permits were issued - an increase by over 100% y/y).

In 2006, a simplified procedure was introduced for the short-term employment of citizens of Russia, Belarus, Ukraine, then also Georgia, Moldova and Armenia, without the need to obtain a work permit. In order to be able to work in Poland for the period not exceeding 6 months in the next 12 months, nationals of these countries need only a declaration from the employer of their intention to assign work and a residence title allowing them to work (e.g. visa). Thanks to the introduced simplification, the number of foreigners working in Poland has increased. In 2016, more than 1.3 million declarations of this type were registered, 68% more than in 2015. More than 96% related to Ukrainian citizens. The main sectors of employment were administrative and support service activities; agriculture, forestry and fishing; and construction.<sup>76</sup> In the first months of 2017, the increase in registered declarations continued (according to indicative data, between January and April 2017 about 600,000 declarations were registered - an increase of about 40% y/y).

The highest demand for foreigners' work was again reported in Mazowieckie Voivodeship - in 2016, 38% of permits were issued in this region and 28% of declarations were registered. However, the share of this voivodeship clearly drops compared to the rest of Poland and a gradual increase in the share of other regions is observed, e.g. Dolnośląskie, Małopolskie or Wielkopolskie Voivodeships.

The number of foreigners registered in the Polish social insurance system is increasing (currently about 1.9% of the total number of the insured). According to the Social Insurance Institution data, as of the end of 2016 the number of the insured who declared citizenship other than Polish for the purposes of retirement and pension insurance amounted to about 293,000. The number of insured citizens of Ukraine is growing particularly fast (as of the end of 2016, Ukrainian citizens accounted for about 66% of insured foreigners). In their case, the increase in the number of the insured since the beginning of 2016 amounted to about 92%. Employees have the largest share in the total number of insured foreigners - less than 58%. Entrepreneurs account for slightly more than 5%.

In the context of the current challenges, the aging population and the reduction of the local labour force, migration policy is of particular importance. The growing mobility of the population, in particular the mobility of labour resources, is becoming a *sine qua non* for the economic and social development of many economies.

According to the latest report of the European Commission *Employment and Social Developments in Europe* and the report of the International Monetary Fund prepared as part of the annual review of the Polish economy (in accordance with Article IV of the IMF Statute), Poland is at risk of shortages in the labour market, which will hamper economic growth in the future. According to the European Commission's scenario, by 2040 the number of people in working age will be decreasing at a rate of 0.8% per year. This has serious implications for the economic potential. In the long term, the potential GDP growth rate would be 1.6% per annum (faster growth could only be achieved with a significant increase in productivity).

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<sup>75</sup>Ministry of Family, Labour and Social Policy, <http://www.mpips.gov.pl/analizy-i-raporty/cudzoziemcy-pracujacy-w-polsce-statystyki/>, Collective data 2016, [05.07.2017]

<sup>76</sup>Ministry of Family, Labour and Social Policy, <http://www.mpips.gov.pl/analizy-i-raporty/cudzoziemcy-pracujacy-w-polsce-statystyki>, Declarations – 2016, [05.07.2017].

The 2017 European Commission report points to positive trends in the labour market and relating to social matters, as well as to the sustained economic growth, but underlines the heavy burden on young people. Polish society is aging, as do most EU countries, which means that the smaller labour force will have to maintain the current growth rate. At the same time, fewer remitters will contribute to pension schemes, or at best the contributions would be reduced or irregular, as they will not correspond to standard full-time employment, and more and more pensioners will be depending on them. In the future, this will result in fewer hands to work and more retired people to be supported by the active workers.

According to the European Commission, this situation can be mitigated or delayed by: full use of human potential on the labour market, i.e. activation of all generation groups, equipping them with appropriate skills and ensuring a proportional relationship between the period of active participation and the average life expectancy; measures in support of a higher birth rate (although the effects on the labour market appear with considerable delay); effective migration management (accepting immigrants); raising the retirement age or promoting innovation and increasing the effective disbursement of funds on investment in skills and education for young and elderly people. At present, the birth rate in Poland is low, the retirement age has been reduced and immigrants are not willingly accepted by the state.

The European Commission is seeking to address the issues raised in the annual reports on employment and social developments. An example is the European Pillar of Social Rights (offering guidelines to create a fair and well-functioning labour market); the *New Skills Agenda for Europe* (supporting the development of citizens' skills to prepare them for changes in the world of labour), as well as extended youth guarantees (financial tools of the initiative for employment of young people).

IMF considers demographic challenges to be the most important for the Polish economy. According to IMF, by 2050 the number of working age persons will decrease by one quarter. According to the latest IMF forecasts, in the medium term unfavourable demographic trends will affect employment growth and they will reduce GDP growth to the potential level, i.e. to about 2.7% by 2022, despite moderate improvement in investment and productivity growth. Long-term growth will be weaker unless demographic data and structural constraints on growth in investment and productivity are removed.

According to IMF, a method to mitigate the effects of the ageing population is the migration policy and the encouragement of not only Ukrainians who perform simple work to arrive in Poland, but also other skilled immigrants, as well as increasing productivity, which may occur by moving the workers from agriculture to other sectors of the economy, or by investing in a better educated labour force. In addition, IMF recommends caution with regard to support for natural growth. In the current economic climate, it should not occur at the expense of women's participation in the labour market; therefore it should be supported by organised pre-school care, flexible employment contracts or tax reliefs. Higher professional activity mainly implies raising the retirement age, liquidation of retirement benefits, or part-time work, which is particularly interesting for women and young people.

The IMF report encourages structural reforms to increase potential growth, to prioritise pressure on improving product market regulations, to implement more effective labour market policies, and to improve the efficiency of EU-funded infrastructure and R&D investments, as well as to take measures to increase the participation of the labour force and encourage employees to work longer.

IMF assesses the prospects for economic growth similarly to the European Commission: maximum 1.5% per annum for the next decades. In recent years, GDP has grown due to employment growth, but this driver is running out, so productivity has to be increased, which, according to IMF, is a very difficult challenge.

The prospects of demographic changes require a long-term and coherent approach to this challenge, taking into account migration management, which was discussed in the Responsible Development Strategy of February 2017. In the context of labour market needs, the Strategy assumes that the specific situation of Poland as a still-emigrant country (since 2002, the number of persons temporarily residing abroad has been steadily growing), but also an immigrant one (the growing economic attractiveness resulting in a gradual increase in the share of foreigners in the labour market, in particular from Eastern Europe and Asia), requires parallel actions:

- With regard to the emigration process: counteracting the permanent outflow of highly qualified human resources from the Polish market; efforts to reduce long-term emigration and creation of incentives for Poles to return home with a set of valuable skills gained while working abroad; public institutions' integrated information activities; and introduction of instruments in the form of incentives in housing, family or education policies for Poles who want to return to their country.
- With regard to the immigration process, the challenge which together with the demographic changes will be playing an increasingly important role: ensuring that migrants with high or rare qualifications (e.g. medicine, IT) and those with the most sought qualifications (e.g. skilled technicians, nurses etc.) arrived in Poland, thus bridging the deepening human capital gap in certain industries and sectors with high demand for these qualifications. At the same time, the level of employment of foreigners in Poland should not affect the chances of keeping or finding jobs by Polish citizens.

The main instruments of the state policy in this area should be:

- to develop a concept of responsible immigration policy (based e.g. on limits and point system - modelled on Canadian or Australian policy), focusing on the needs of the labour market and Polish entrepreneurs;
- to develop integration instruments addressed to Poles returning to the country (e.g. support for setting up business, recognition of qualifications, vocational guidance);
- to create integration paths for selected categories of foreigners, e.g. for workers with the qualifications and competences most necessary for the Polish labour market, including in particular in sectors where the labour supply deficit is recorded;
- to limit illegal immigration and the scale of abuse related to taking up jobs by foreigners in Poland (development and implementation of simple and clear pre-screening mechanisms and tools to assess the impact of migration on the social and economic situation).

An informed migration policy in the context of active recruitment of highly qualified workers should also include measures in the area of educational migration, which is becoming the second largest mobility type after economic migration. Educational immigration should result in graduates staying in Poland, offsetting the shortages on the labour market and replacing generations. In the case of educational immigration, the priority is to limit the scale of premature transformation of educational immigration into economic immigration, or to treat Poland as a transit country in migration to western Europe. It is worth noting that the Strategy focuses on encouraging foreigners to study and stay in Poland by means of various types of incentives such as scholarship programs, internships, or quotas for foreign students to study in the fields of practical application that are crucial for the Polish economy.

## 5. INSTITUTIONAL ENVIRONMENT OF ENTERPRISES

Legal regulations, which are the key component of the institutional environment of business, remain one of the factors hampering enterprise development in Poland. Overly complicated and incomprehensible law is listed in public opinion polls as one of the barriers for setting up and pursuing business activity. Very often the law imposes excessive obligations on entrepreneurs, causing unjustifiable costs on their part - such are the common experiences of entrepreneurs. The quality of regulatory environment constitutes one of the basic dimensions and indicators of the functioning of a modern state based on the rule of law.

Since the publication of the previous report, measures have continued to improve the legal conditions for conducting business. The first package of 100 facilitations for running a business in Poland aims to eliminate the problems relating to lengthy and formalised proceedings in offices, inadequate administrative penalties, time-consuming debt recovery and a number of regulations that hinder the companies' operations, hampering their development. For instance, on 1 January 2017 the Act amending certain acts to improve the legal environment of entrepreneurs entered into force. The aim of the Act is to reduce certain administrative obligations, to support enterprise development and to increase the effectiveness of work, as well as to streamline the investment process. A "certainty of the law clause" was included to offer protection against the adverse effects of a retroactive change to the interpretative practice of the authorities, including tax authorities.

The analysis of barriers presented in the previous chapter shows that the statutory rates of taxes and charges are most often mentioned as a major obstacle in business operations. This barrier affects microenterprises and small enterprises the most. A decisive response of economic policy to this problem is the act reducing the tax burden of small entrepreneurs (CIT payers). The regulation, which entered into force with the beginning of 2017, introduced a reduced 15% corporate income tax rate. It is estimated that almost 400,000 companies may take advantage of this reduced rate. Moreover, the Ministry of Finance increased the limit of tax exemption for VAT payers whose annual income did not exceed PLN 200,000 (formerly PLN 150,000), which is also an opportunity for smaller enterprises. Information on major tax changes, although they undoubtedly form part of a regulatory business environment, is provided in Annex III. The Annex also contains other information that is complementary to this chapter and related to the practical implementation of the Small Business Act.

In 2016, the value of loans for larger companies increased by 5%, while for microenterprises rose by 3.4%. As of the end of the year, the value of loans taken by these two groups amounted to PLN 295.5 billion and PLN 60.7 billion, respectively. In addition to bank loans, enterprises have broader access to non-bank sources of business funding. An example of such solution is leasing, and the turnover of this industry in 2016 was higher by 16.6% y/y, reaching PLN 58.1 billion. New opportunities for enterprise development, particularly in terms of developing their competitiveness, will be offered by the financial perspective for 2014-2020. Under the Partnership Agreement, beneficiaries (including e.g. business operators) will receive an amount of approximately EUR 77 billion. Smart Growth Operational Programme and regional operational programmes are of particular importance for entrepreneurs.

Infrastructure is another factor with an impact on business environment. It affects the time and cost of transportation of goods and movement of persons, it also has an impact on starting economic activity, and in particular on involvement in specific investment projects. Many years of negligence in the period of centrally managed economy, combined with very high capital-intensity, point to the transport infrastructure (roads and railways in particular) as the area which continues to be a problem. Structural funds provide a great opportunity to overcome these problems.

## 5.1 Institutional and legal environment

### 5.1.1 Horizontal business regulations

Poland is becoming a better place to do business, which is confirmed by international rankings. This does not exempt from the obligation to constantly seek the best possible solutions that would allow the development of Polish entrepreneurship and encourage foreign investors.

In July 2016, the **amendment of the Public Procurement Law (PPL)** entered into force, aimed at transforming PPL into a strong economic and social policy instrument of the state (implementation of the announcement from the Responsible Development Plan), where the state is to become a technologically demanding customer, ordering high quality goods. The amendments to the implementation of EU directives increased the transparency of legislation and simplified tender procedures.

With regard to the creation of a smart public procurement system, PPL provides for departure from the lowest tender price criterion, facilitations for small and medium-sized enterprises, taking into account points for innovation and social clauses, rewarding entrepreneurs for employing on the basis of employment contracts, and preferential treatment of reliable contractors. The amendment simplified public procurement procedures and rendered them more flexible (use of negotiations as a means to specify contract terms and reduction of formalities at the stage of applying for a contract), which is particularly favourable for small and medium-sized enterprises. Easier award of contracts in parts should ensure better access to the market for small and medium-sized enterprises.

The amendment of PPL constituted the first stage of works on the new purchasing policy aimed at ensuring informed use of public procurement as a tool for achieving important economic objectives, such as increasing innovation or pro-social measures. At present, analytical works are under way on a new act regulating public procurement. One of the priorities of these works will be to facilitate access to public procurement for small and medium-sized enterprises. The identified good practices, including those applied in other countries, will also be included in the works. The new public procurement law will be developed in cooperation with representatives of contracting authorities, contractors, business organisations and academics, so as to take into account the experiences of market actors.

On 14 December 2016, the Act of 21 October 2016 **on the concession contract for construction works or services** entered into force, which introduced transparent rules of concluding concession contracts in accordance with the EU law. The new act introduces a number of changes that will make the rules for concluding and implementing concession contracts easier and more transparent. It is particularly important for the public-private partnership market. Concession contracts represent more than 2/3 of PPP contracts concluded.

Legislative measures relating to regulatory business environment, launched in 2016 and continued in 2017, respond to the problems reported by business organisations, which are faced by Polish companies on a daily basis. The *100 changes for enterprises* and the *Business Constitution* packages, prepared in cooperation with entrepreneurs, do not impose on entrepreneurs the rules designed by the offices, but they result from the joint hard work of both parties. The synergies achieved in this way are a sign that administration and business may understand and trust each other.

The first **package of 100 pro-enterprise facilitations** to business activity in Poland is aimed at eliminating the problems of formalised proceedings in offices which often last for years, inadequate administrative sanctions, time-consuming debt recovery, lack of legal form of activity suitable for innovative start-ups and other young companies seeking financing, lack of regulations allowing the enterprise to continue uninterrupted operations after the owner's death, and many provisions that hamper the company's operation and discourage enterprises from growing.

On 1 January 2017, the Act of 16 December 2016 **amending certain acts to improve the legal environment of entrepreneurs** entered into force. The aim of the Act is to reduce certain administrative obligations, to support enterprise development and to increase the effectiveness of work, as well as to streamline the investment process. New regulations provide e.g. for the reduction of the inconvenience of control by prohibiting repeated control of the same entity, or preceding the control with the planning supported by the analysis of the risk of infringement (no more "blind" inspections). A "certainty of the law clause" was included to offer protection against the adverse effects of a retroactive change to the interpretative practice of the authorities, including tax authorities. An entrepreneur who will adhere to established practices will not suffer such negative consequences. Labour law requirements were eased for small enterprises. Companies employing less than 50 employees were exempted from the obligation to draw up remuneration and work regulations and to establish a Company Social Benefits Fund. The deadlines for appeals to the labour court were extended and the sanctions for lowering accident insurance premiums were alleviated.

In order to relieve small and medium-sized enterprises from burdensome administrative and financial obligations, the limits for net annual revenues (from sales of goods, products and financial operations) was increased from EUR 1.2 million to EUR 2 million, up to which PIT payers may keep simplified accounting records (revenue and expense ledgers). At the same time, the maximum annual revenues threshold entitling to use business taxation method in the form of lump-sum tax on recorded revenues was increased from EUR 150,000 to EUR 250,000. This solution will reduce the administrative burden related to fulfilling tax obligations, as lump-sum records are simplified and less laborious for the entrepreneur.

Simplifications were also introduced in construction law, environmental protection law and in the law on technical supervision. For instance, certain construction works were exempted from construction permits or notifications, the deadline for the protest of the authority competent for the notification of works was shortened to 21 days, the possibility of using a temporary structure until the time of obtaining construction permit decision was introduced, and the term of use of such structure was extended from 120 to 180 days. Entrepreneurs who marketed products in packaging with a total mass of up to 1 tonne in a given calendar year were exempted from the obligation to carry out an educational campaign, and environmental users, including entrepreneurs, were exempted from the reporting obligation if the annual fee for environmental use did not exceed PLN 100 per each type of environmental use.

The Act on technical supervision eliminated the obligation for technical tests preceding the issuance of decisions authorising operation of the equipment in the event of a change of operator, and the possibility of occasional repair or modernisation of technical equipment without the obligation of the repairing or modernising party to have a license for the repair or modernisation of such equipment, as well as materials and components for their manufacture. The amendments introduced by this Act are expected to generate PLN 230 million savings to enterprises already in the first year of application.

In mid-2017, provisions of the Act of 7 April 2017 **amending the Code of Administrative Procedure and certain other acts** entered into force. The change of administrative procedure is aimed at faster

recognition of cases, introduction of partner relations between the authority and the parties, and adjustment of administrative penalties to infringements of law.

As a result of the amendments, the authority will not presume infringement of the law by the party or fraudulent actions of the party. The authorities will more effectively cooperate for the benefit of the citizen (the "silos" approach of respective offices will be reduced) and they will less often refer the case for reconsideration. In specific uncomplicated cases, it will be possible to apply a simplified procedure, including the assumption that the lack of response of the authority results in the case being settled in accordance with the request of the citizen; the party will have an impact on how many instances would be recognising its case, which would e.g. reduce the time of consideration of the case. Citizens will have a real opportunity to participate in the developing a solution, including in the settlement of disputes, which would reduce the tendency among the parties to question the manner of settling the case. At the same time, possible administrative penalties will be adjusted to the nature of the infringement and to the circumstances of the specific case, so that they are not automatically and inconsiderately imposed.

In the beginning of June 2017 (with certain exceptions), provisions of the Act of 7 April 2017 **amending certain acts to facilitate the recovery of claims** entered into force, in order to streamline the recovery of claims and to prevent payment gridlocks.

The problems associated with inability to enforce receivables or with delayed payments by business contractors have a large impact on the level and stability of the company's finance, which may be vital for the maintenance or development of the enterprise on the market, and in its extreme cases even for its survival. SMEs are particularly vulnerable to negative impact of untimely payment of liabilities, as they often do not have sufficient own funds or capacity to accept financial liabilities (loans, credits) allowing them to "credit" their current activity at the time of payment gridlock. Such entrepreneurs less often can afford to cover the costs of litigation or debt collection services and therefore try to recover claims personally in court. Very often the entrepreneur's bad debtor is another entrepreneur, who sometimes operates on a larger scale and does not consider the obligation to pay debts to another entrepreneur a priority, which puts smaller entrepreneurs at a disadvantage.

Although it is not possible to completely eliminate failure to pay for the provided service or for the supplied product, this problem can be overcome through legal instruments allowing the verification of the creditworthiness of contractors and, in the event of a delay in payment, prompt and effective recovery and enforcement of the amount due by using botherless and relatively inexpensive debt collection mechanisms for entrepreneurs being creditors. Therefore, the proposed solutions are aimed at popularising the use of business information bureaus. Instruments have been introduced to increase the scope and reliability of data provided by business information bureaus which collect data on debtors, e.g. by providing access to aggregate economic information from several bureaus on the basis of a single application, or by extending the scope of information that may be collected in the register to data on unsuccessful enforcement and public debt, while ensuring the protection of the debtor's legitimate rights.

Due to the fact that the construction industry experiences the largest payment gridlocks, the rules of investor's liability for liabilities to the subcontractor in the construction process were modified. After the amendments, subcontractors will receive protection on clear conditions and the investors' risk of multiple payments for the same works will be mitigated. "Implied" consent of the investor, which nowadays is the source of uncertainty for all participants of the construction process, will be eliminated.

In 2016, under the *100 changes for enterprises* package, works on a draft act **amending certain acts due to the reduction of the employee files storage period and their digitisation** were initiated. The draft act assumes that every employer will be able to collect and store personal files and documentation

related to the employment relationship either in hard copy or in electronic form. At the same time, as a rule, the employer will be required to keep personal files and employee documentation for the period of 10 years from the date of termination of employment relationship (currently 50 years). Reducing the retention period will involve the transfer of data by the employer to the Social Insurance Institution, which will be used in the future to determine the right to a retirement or pension benefit and the amount thereof. The proposed changes will make it easier for employers to fulfil their obligations under labour law. The legislative process for the project continues in 2017.

The works initiated in 2016 are under way on the draft act **on successive management of an enterprise by a natural person**, which should ensure uninterrupted operation of a one-person business after the death of the owner. The proposed regulations will allow the company to be managed by a proxy appointed by the heirs or by the business owner when they were still alive, and that civil law contracts, employment contracts, tax rights and obligations and administrative decisions relating to such enterprise will remain in force.

Works are also in progress on the draft act **amending the Code of Commercial Companies and Partnerships and certain other laws**, which will regulate the so-called simple joint stock company. It is assumed that a Simple Joint Stock Company would offer the combined benefits of a limited liability company and a joint stock company. It could constitute an initial stage of business development, where the founders would develop an innovative idea and raise the necessary funds, preparing for the entry into the mature phase of development.

In 2016, the second stage of the reform of the Polish economic law began, i.e. the **"Business Constitution" Package**. The Package includes a draft Entrepreneurs' Law laying down the conditions for conducting business activity in Poland, which will replace the current Act of 2 July 2004 on freedom of economic activity, a draft Act on the Business Ombudsman, a draft Act on Central Registration and Information on Business and on the Information Point for Entrepreneurs, a draft act on simplifications for entrepreneurs in tax and economic law, draft act on the rules of participation of foreign entrepreneurs and other foreigners in economic transactions, and a draft act on simplifications relating to disbursement of EU funds. The works on the package continue in 2017.

### **5.1.2 Non-legislative actions for the better law**

Under the Responsible Development Strategy, specific objective *III - Efficient state and economic institutions supporting growth and social and economic inclusion* is implemented. It focuses on improving the quality of the law and on its application. In the area *Law in the service of citizens and the economy*, implementation of a strategic project has been planned: *Development of a system to assess impact of regulations and social participation in the legislative process*. The project provides for the strengthening of the regulatory impact assessment, standardisation of IT tools used in regulatory impact assessments, development of a methodology for estimating the costs and benefits of regulations and the rules of using public sector data to create evidence-based legislation, development of modern public debate tools and guidelines for the implementation of EU law into national legislation, including the regulatory impact assessment system for European projects.

The strategic project provided for in RDS also results from the evaluation of the *Better Regulations 2015* programme, which was carried out in 2016. On the basis of the conclusions from Programme implementation, it was recommended to continue the efforts to improve the quality of legal regulations, which constitute one of the pillars of the state's institutional efficiency and management of its development.



In 2016, a draft of the manual on calculation of regulatory costs was prepared. The purpose of the document is to standardise information on the types of regulatory costs, methods of their measurement and methods of their reduction to be used in legislative works in order to reduce regulatory costs for entrepreneurs, in particular microenterprises and small and medium-sized enterprises, but also other recipients of regulations (citizens, administration). In particular, the document will be addressed to persons involved in the assessment of the impact of the drafted or effective regulations, including persons responsible for the proper conduct of the legislative process.

The document will address the following matters:

1. types of regulatory costs - typology of costs related to the implementation of regulations;
2. methods of measuring respective types of regulatory costs - methods of quantifying the costs incurred by recipients of regulations;
3. methods of reduction of regulatory costs - a list of solutions to reduce identified regulatory costs both at the stage of drafting regulations and during their application.

### **5.1.3 Reporting obligations of entrepreneurs**

Reporting obligations are imposed on entrepreneurs by public authorities by virtue of law. Official studies of the scale of reporting obligations of Polish entrepreneurs towards public institutions are not carried out. Entrepreneurs submit a large number of various questionnaires, forms, reports, declarations etc. to fiscal and tax authorities and to statistical offices.

The problem for entrepreneurs is not only the large number of reporting obligations and their thematic scope, but also different deadlines for submitting the reports.

Many reporting obligations, applicable to all economic operators, i.e. legal persons, organisational units without legal personality and natural persons carrying out economic activity, are imposed by the Act on public statistics (Dz. U. 2016, item 1068, as amended). Economic activity within the meaning presented above shall be any gainful activity related to manufacturing, construction, trade or services, as well as prospecting and exploration of mineral deposits, and any continuous and organised professional activity.

Pursuant to Article 30 of the abovementioned Act, entities are under obligation to regularly or periodically, free of charge, transfer information and statistical data on their activities, in forms, on dates and in line with methodological principles laid in detail in the statistical survey programme of official statistic (SSPOS). Statistical surveys of official statistics may be related to any domain of social and economic life and related developments that may be observed and analysed.

The reporting obligations of entrepreneurs were laid down in 2016 in the Statistical survey programme of official statistics introduced by the Ordinance of the Council of Ministers of 21 July 2015 on the statistical survey programme of official statistics for 2016 (Dz.U. 2015, item 1304, as amended). It includes 253 survey topics (in 2015 – 248, 2014 – 250, 2013 – 243, 2012 – 246).

SSPOS defines the detailed scope of data collected and entities oblige to report them, e.g. by types of legal and organisational form or types of activity.

Statistical surveys may be obligatory or voluntary. If a survey has been described as obligatory, entities (excluding microenterprises to the extent covering data for the calendar year in which they started their activity) are under obligation to provide full and exhausting information in the scope, form and on the date requested.

Statistical data shall be transmitted in reporting forms, statistical questionnaires and surveys or otherwise. The Prime Minister, in line with the authorisation provided for in Article 31 of the Act on public statistics, every year determines, by way of an ordinance, the model reporting forms, statistical questionnaires and surveys, as well as instructions on their completion.

In 2016, the Ordinance included over 400 model forms, statistical questionnaires and surveys, including about 300 addressed directly to entrepreneurs. The models defined the detailed scope of data to be provided and the entities placed under an obligation to provide such data for the purposes of public statistics by specific deadlines.

Public statistics takes measures to reduce the reporting burden on respondents and to facilitate the fulfilment of reporting obligations by introducing online reporting, the use of data from administrative sources, the development of modern data collection technologies such as CATI – Computer Assisted Telephone Interview, CAII – Computer Assisted Internet Interview, or CAPI – Computer Assisted Personal Interview.

In general, entities obliged to submit specific reports submit them electronically via the Reporting Portal of the Central Statistical Office<sup>77</sup>. Entrepreneurs who employ up to 5 persons may submit statistical data in hard copy, having informed the statistical office about the selection of this form of delivery.

The statistical office informs every entity, by letter or e-mail, about the types of reports and the deadlines for their submission. Without such notification the entities do not have a statistical reporting obligation.

In the case of compulsory studies, conducted using a representative method or a nonprobability sampling, each company operating on the market may be selected for a statistical study conducted by the Central Statistical Office.

If the economic operators fail to fulfil their statistical obligation or submit statistical data after the deadline, they may receive a fine. The submission of untrue data is subject, apart from a fine, to a penalty of restriction of liberty or imprisonment for up to 2 years.

Apart from statistical obligations resulting from official statistics research, the Polish law provides for a large number of administrative reporting obligations imposed by administration bodies, including tax authorities.

From 1 July 2016, in accordance with the Tax Ordinance entrepreneurs have been obliged to provide detailed tax data to treasury control bodies. The information must be generated and sent in electronic form in the so-called “Single Control File” (SCF) format. SCF is a set of data created from the IT system of a given entity through their direct export, having the format defined by the Minister of Economic Development and Finance.

Taxpayers who keep VAT accounts using computer software are obliged to provide monthly information about the accounts in the form of SCF without the tax authority's request. This obligation has been implemented gradually. The largest taxpayers submit information for the months starting from 1 July 2016; small and medium-sized enterprises have been covered by this obligation from January 2017; and microenterprises will report for the months starting from 1 January 2018.

Monthly VAT information is sent to the Minister of Economic Development and Finance by means of electronic communication. The provisions of tax law do not provide for any other form of submission, e.g. on CDs or DVDs.

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<sup>77</sup> <https://raport.stat.gov.pl/>

In order to make it easier for small and medium-sized enterprises to meet their obligation of submitting monthly VAT accounts in the form of SCF, the Ministry of Finance has prepared a free application with all the functionalities necessary for submitting SCF. The software enables validation of input data stored in a spreadsheet, generating a JPK\_VAT document and importing it to the Ministry of Finance.

Moreover, new regulations governing the documentation of transactions with related entities entered into force in early 2017. The amendment implements the regulations developed by the European Union and OECD into the national legal system. The new provisions impose additional reporting obligations on companies and entrepreneurs, which in the opinion of the Ministry of Finance will seal the tax system and facilitate the identification of entities lowering their income.

According to the new regulations, entities whose revenues or costs in the preceding year amounted to EUR 2 million are obliged to draw up current transfer pricing documentation. They must document transactions with related entities that had a material impact on the amount of their income or loss. The reporting obligation also includes those who enter into transactions with entities from tax havens. In addition, taxpayers who exceed the EUR 10 million threshold, apart from the current transfer pricing documentation, will also have to prepare comparative analyses, i.e. justification of the market level of the prices.

The Act of 15 December 2016 amending the Accounting Act (Dz.U. 2017, item 61) introduces new reporting obligations in 2017, which will cover large entities, in particular those operating mainly on the financial market including banks, insurance companies, issuers of securities and large capital groups. The regulations will increase the transparency of corporate social responsibility (CSR) information presented in the management report (in the form of a statement) or in a separate report on environmental, social and labour issues, respect for human rights and combating corruption.

Entrepreneurs have many reporting obligations with regard to environmental reporting. An entrepreneur is obliged to report e.g. to three different institutions responsible for environmental protection (National Centre for Emissions Management, Voivodeship Marshal's Office, city hall or gmina office).

The creation of a single electronic platform for companies to submit reports to public authorities and to process data for respective offices, while preserving information security, remains a challenge for government administration.

#### 5.1.4 Audits and supervision over entrepreneurs

Basic regulations pertaining to the control of business activity of an entrepreneur have been provided for in the *Act of 2 July 2004 on freedom of economic activity* (Dz.U. 2016, item 1829). The Act defines, inter alia, the rules and the procedure of control and obligations and rights of entities conducting control, as well as obligations and rights of the entrepreneur in the course of control activities.

Taking into account the number of entities that are authorised to control enterprises and the difficulties presented by the generalisation of trends in this regard, the data pertaining to control procedures conducted by selected institutions, in particular the **National Labour Inspectorate, Treasury Control Offices, Trading Standards Association** as well as the **Office of Competition and Consumer Protection**, are presented below.

Compliance with labour law, in particular with the regulations and rules of occupational health and safety, is supervised and controlled by the **National Labour Inspectorate**. In 2016, the inspectors of the National Labour Inspectorate conducted about 82,500 inspections (at about 67,700 employers who

employed 3.8 million persons). In connection with the revealed breaches of the regulations concerning occupational health and safety, more than 310,800 decisions were issued, i.e. 2.7% more than in 2015. In 2016, regional labour inspectors issued 8 decisions ordering the cessation of business activity or activity of a certain type (in 2015, the number of such decisions was 16). The decisions concerned the companies from the following sectors: manufacturing (1), transportation and storage (4), construction (1), trade and repairs (1), professional activity (1). During the reporting year, apart from the decisions relating to occupational safety, inspectors issued 6,100 decisions ordering the payment of remuneration or other benefits stemming from the employment relationship. These decisions concerned the receivables for 61,600 employees, amounting in total to PLN 106.8 million. In addition, inspectors filed 279,200 requests in resolutions and issued 12,900 verbal instructions to the controlled entities.

In 2016, 27 and 20 complaints were filed with Voivodeship Administrative Courts against decisions and resolutions of regional labour inspectors, respectively. By the end of 2016, 15 complaints against decisions were examined, 9 were dismissed, 4 were rejected and one was discontinued. In one case the complaint was considered justified and the decision of regional labour inspector was repealed. As regards the complaints lodged against resolutions, a total of 12 cases were considered (5 were dismissed and 7 rejected). During the same period, a total of 24 cassation appeals were filed with the Supreme Administrative Court (16 concerned the judgments of the Voivodeship Administration Courts issued as a result of appeals against decisions of regional labour inspectors and 8 – resolutions of those authorities), of which 17 were lodged by employers. Regional labour inspectors appealed against 7 judgments of voivodeship administrative courts. During the reporting period, the Supreme Administrative Court examined 2 cases filed by authorities and granted the appeal, and examined 3 appeals of employers, of which 2 were approved and 1 was dismissed. A total of 19 cassation appeals remained unexamined (as of 31.12.2016).

In 2016, the Supreme Administrative Court resolved 25 cassation appeals concerning the rulings of regional labour inspectors, lodged in previous years. In 2 cases, the cassation appeals were granted, in 22 cases, the cassation appeals were dismissed (19 appeals lodged by parties being employers), while out of 4 appeals filed by regional labour inspectors, 1 was granted. One case was discontinued (filed by an employer).

Labour inspectors found the cases of illegal employment, consisting in entrusting work without confirming the employment contract in writing and failure to report the person employed or performing other gainful work for social insurance, in every third audited entity (34% in 2015).<sup>78</sup>

In 2016, the **Treasury Control Offices** performed 9,900 audits in total, i.e. 4.7% more than in the previous year. Furthermore, acting at the request of other institutions, they performed more than 2,400 actions aimed at verifying the documents of counterparties of taxpayers subjected to control, as well as more than 1,700 interviews and inspections. As a result of audits, irregularities were identified resulting in tax depletions for the total amount of almost PLN 22.2 billion, including findings with regard to which decisions were issued, which amounted to PLN 21.7 billion.

Taxpayers, as a result of conducted audit procedures, submitted voluntary tax return adjustments, increasing their tax liabilities by PLN 479.1 million. As a result of activities undertaken by the tax auditors, the payment of a total amount of almost PLN 1.03 billion of unduly applied-for VAT refunds from the budget was prevented. The amounts determined during a single audit also increased (with PLN

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<sup>78</sup> Based on the data of the National Labour Inspectorate.

2.2 million on average in 2016, 14.3% more than in 2015), and so did the amounts determined during a single completed fiscal audit (PLN 3.8 million, increase by 23.4%).

As for the findings made in 2016 with regard to taxation, VAT constituted 90.41% of total findings, followed by corporate income tax (6.54%) and personal income tax (1.26%), while the figure for excise tax was 1.61%.

Sectors with a particularly high risk of fiscal irregularities include the trade in fuels as well as the electronics industry.<sup>79</sup>

In 2016, the **Office of Competition and Consumer Protection** conducted 257 proceedings pertaining to general security of products, of which 207 were completed. The products which were controlled most frequently included clothes for children (151), bicycles and accessories (35), electrical accessories (27) and articles for children (23). Out of 138 decisions issued, the President of the Office imposed specific obligations on entrepreneurs in 13 cases and fines in 29 cases.

In 2016, the Office of Competition and Consumer Protection conducted 393 proceedings pertaining to the conformity assessment system; 226 of which were completed. The products which were examined most frequently included toys (354), electrical equipment (145), individual protection means (36) and pyrotechnical materials (9). As a result, the President of the Office issued 144 decisions, imposing obligations specified in the applicable act on entrepreneurs in 16 cases. As a result of the Office's actions, over 70,000 products which did not conform to the effective legal and technical standards were withdrawn from the market.

Moreover, in 2016 additional audits of electrical equipment, individual protection means and pressure equipment and machinery were conducted on request of the President of the Office of Competition and Consumer Protection. The audits included laboratory tests for the total amount of over PLN 170,000. The audits revealed that 50% of products did not meet the requirements.

In 2016, voivodeship inspectorates of the Trading Standards Association conducted over 7,500 planned audits on request of the Office of Competition and Consumer Protection, of which most were related to agri-food products (2,600) as well as to other non-food products and services (1,800). In thematic terms, a total of 20 nationwide inspections of agri-food products were performed in 2016, their aim being to disclose any possible adulteration of foodstuffs. Also, 13 nationwide thematic audits of non-food products and services were conducted.

The Trading Standards Association also performs the tasks of the Office of Competition and Consumer Protection in cases related to fuel quality control. In 2016, 933 fuel samples (petrol and diesel fuel) were examined. Among them, 2.36% did not satisfy quality requirements. The data presented pertain to the control exercised under the monitoring of the quality of liquid fuels. In relation to liquefied gas (LPG), irregularities were found in 2.24% of 491 collected samples. Taking into account the results of controls conducted in 2016, one must conclude that the quality of LPG in Poland has slightly improved. In the case of liquefied fuels, the quality diesel oil has improved, while petrol results show deterioration in the quality of this fuel compared to the previous year.<sup>80</sup>

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<sup>79</sup> See: *Statement of tax audit activities 2016*, Ministry of Finance – Tax Audit Department, Warsaw 2017.

<sup>80</sup> Based on the data of the Office of Competition and Consumer Protection.

### 5.1.5 Labour law and social insurance

Labour law and social insurance law have been recently amended in the manner favourable for entrepreneurs, employees and persons employed on the basis of specific civil law contracts.

The following amendments were introduced to labour law in 2016 and in the first half of 2017:

- The Act of 13 May 2016 **amending the Labour Code** (Dz.U. 2016, item 910), which entered into force on 1 September 2016 and introduced an obligation for employers to confirm basic arrangements related to the conclusion of an employment contract otherwise than in writing to the employee before such employee begins working. The introduced regulation facilitates claiming the benefits and rights under the employment relationship for employees and enjoying the protection guaranteed by social insurance regulations. It also provides a more effective tool for the National Labour Inspectorate to ensure efficient control in respect of legal employment of staff.
- The Act of 22 July 2016 **amending the Act on minimum remuneration and certain other acts** (Dz. U. 2016, item 1265, as amended), which introduced a guaranteed minimum wage to the current legal order, including for specific contracts concluded on the basis of the civil law. From 1 January 2017, specific contracts of mandate (Article 734 of the Civil Code) and contracts for the performance of services to which the provisions governing mandates apply (Article 750 of the Civil Code) have been covered by the obligation to apply the minimum hourly wage. In accordance with the Proclamation of the Prime Minister of 21 September 2016 *on the amount of the minimum hourly wage in 2017* (M.P. item 934), the wage amounts to PLN 13 for each hour of the performed mandate or provided services; in the coming years, the wage will be indexed to reflect the increase in the minimum remuneration of employees. The guarantee of the minimum hourly wage applies to natural persons who do not carry out economic activity and natural persons who carry out economic activity alone and who perform the tasks under the contract in person. The entities obliged to fulfil the obligations related to the minimum hourly wage are both entrepreneurs and other organisational units (e.g. public institutions or government administration bodies). The National Labour Inspectorate was authorised to control the fulfilment of the obligation to guarantee the minimum hourly wage. Payment of remuneration to the person accepting the mandate or providing services for each hour of the performed mandate or provided services that would be lower than the effective amount of the minimum hourly wage is subject to a PLN 1,000 to PLN 30,000 fine. Labour inspector may impose a fine amounting up to PLN 2,000. If a person fined at least twice for the offence specified in the Act of 10 October 2002 on the minimum remuneration commits such offence within two years from the date of the last fine, the labour inspector may impose a fine amounting up to PLN 5,000. The inspector may also submit a motion for punishment to court; the court may impose a fine amounting up to PLN 30,000. Moreover, from 1 January 2017 the possibility to determine remuneration for employees with tenure shorter than one year in the amount of 80% of the minimum remuneration has been abolished. The components of the minimum remuneration have also been changed, no longer including the night work bonus.
- The Act of 7 April 2017 **amending the Act on employment of temporary workers and certain other acts** (Dz.U. 2017, item 962), which has been effective since 1 June 2017, except the part of the provisions of the Act on employment promotion and labour market institutions, which will enter into force on 1 January 2018. The Act introduced solutions aimed at improving the standards of temporary work; improving the conditions of employment of temporary workers and the legal safety of employers of persons using the services of temporary work agencies; as well as improving the efficiency of inspections carried out by the National Labour Inspectorate. The main changes include determination of the limits of temporary work both for temporary work agencies and for employers; introduction of increased protection of pregnant employees performing temporary work, introduction of an obligation for employers to present the content of internal regulations to the temporary work

agency with regard to remuneration and to notify the temporary work agency of any changes to such regulations; extension of the legal protection of temporary workers; extension of the list of offences consisting in failure to comply with the provisions of the Act by temporary work agencies and employers; imposing an obligation on temporary work agencies to provide contact details to temporary workers in order to enable them to directly contact agency representatives; amendment of provisions relating to works that cannot be vested in temporary workers etc.

- **Labour Law Codification Committee** was created on the basis of the Ordinance of the Council of Ministers of 9 August 2016 on the Labour Law Codification Committee (Dz.U. 2016, item 1366). The Committee commenced its works in mid-September 2016. It is composed of 14 persons (7 nominated by the government party and 7 nominated by representative trade union organisations and by representative employers' organisations). The task of the Committee is to prepare in 18 months a draft Labour Code and a draft Collective Labour Code.

The following amendments have been made with regard to social insurance:

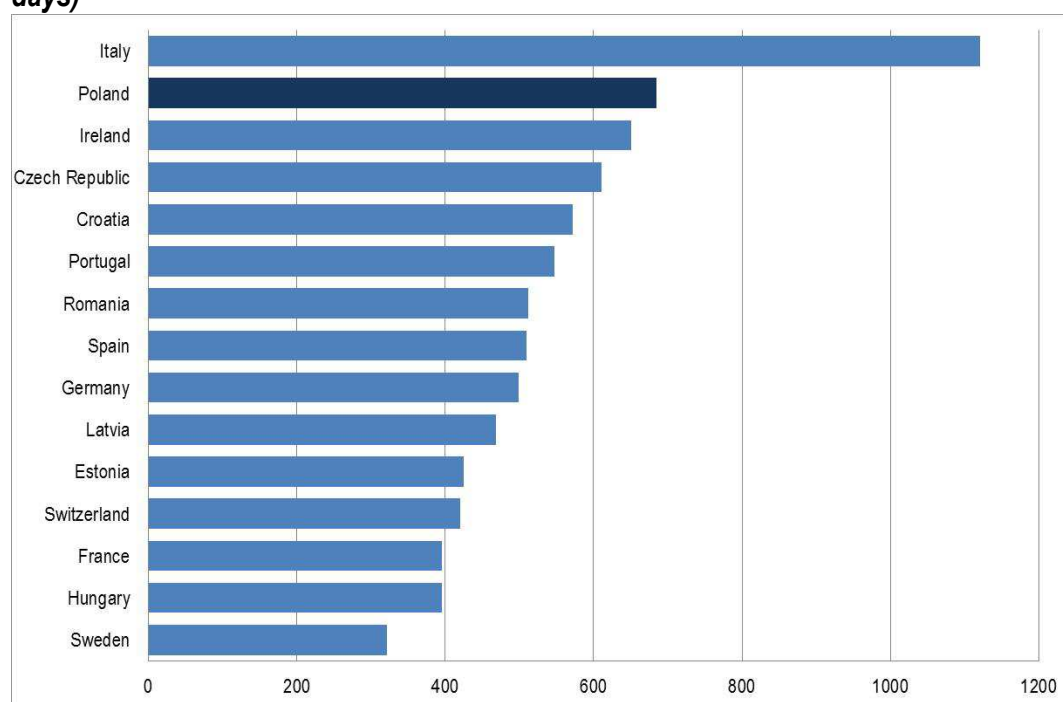
- Ordinance of the Minister of Family, Labour and Social Policy of 16 February 2017 **amending the Ordinance on the determination of model forms of registration for social insurance and health insurance, personal monthly reports and corrective personal monthly reports, remitter's registration forms, statements and corrective statements, notification of data about work in special conditions or of special nature and other documents** (effective as of 1 March 2017). It introduced a new code for the reason for deregistration of an insured 800 – deregistration of an employee due to the fact that their work place was transferred in whole or in part to a new employer in accordance with Article 231 of the Act of 23 June 1974 - Labour Code (Dz.U. 2016, item 1666, as amended). As a result, Social Insurance Institution knows about the termination of the previous employment relationship due to the fact that the employee was taken over by a new employer, which allows for the monitoring of the flow of employees and for the ongoing control and analysis of the correct fulfilment of social insurance obligations.
- The Act of 21 April 2017 **amending the Act on cash benefits under social insurance in case of illness and childbirth and certain other acts**, which introduced a new method of authorisation of digital certificates of temporary unfitness for work issued by doctors (entry into force on 1 December 2017). The aim of the amendments is to encourage doctors to issue digital certificates which would enable employers to faster learn about the unfitness for work of their employees and the duration of such unfitness, which in turn would support organisation of work and reduce the number of situations requiring recalculation of the sick benefit or care benefit due to late submission of the certificate to the remitter by the insured.
- The Act of 11 May 2017 **amending the Act on the social insurance system and the Act amending the Labour Law and certain other acts** (Dz.U. item 1027), under which each entrepreneur will have an individual contribution account to which they would pay all amounts for the collection of which the Social Insurance System is obliged. Instead of the current three or four payments, entrepreneurs will now make a single payment. A single payment to the Social Insurance Institution will replace the current contributions for social insurance, health insurance, Labour Fund and Guaranteed Employment Benefit Fund, as well as Bridging Pension Fund. Moreover, the Act provides for e.g. facilitations for contribution remitters in terms of issuing clearance certificates by the Social Insurance Institution for such remitters, e.g. for the purposes of tender procedures, by equalling in legal terms the certificates issued in hard copy and the printouts of electronic versions generated by the remitters themselves from the digital systems of the Social Insurance Institution. The Act also provides for staff outsourcing in order to reduce the burden of contributions for entrepreneurs who used such solutions by enabling the Social Insurance Institution to reclassify the already made payments to the accounts of the actual remitters, thus reducing their arrears related to contributions. The provisions governing introduction of individual contribution accounts will

become effective on 1 January 2018, while the remaining provisions of the Act, such as those referring to clearance certificates or outsourcing, will become effective 14 days after the publication of the Act, i.e. on 13 June 2017.

### 5.1.6 Functioning of the judiciary

The quality, efficiency and independence of the judiciary are the key factors of business activity. Matters related to the settlement of disputes or the lengthiness of proceedings are of fundamental importance for entrepreneurs. Although a number of measures have been initiated in recent years to increase the effectiveness of the enforcement of rights arising from contracts, according to the World Bank report the quality of enforcing contracts measured by average time to resolve a commercial dispute through the courts is one of the poorest in the European Union.

**Chart 36. Average time required to enforce a contract through the courts in selected countries (in days)**

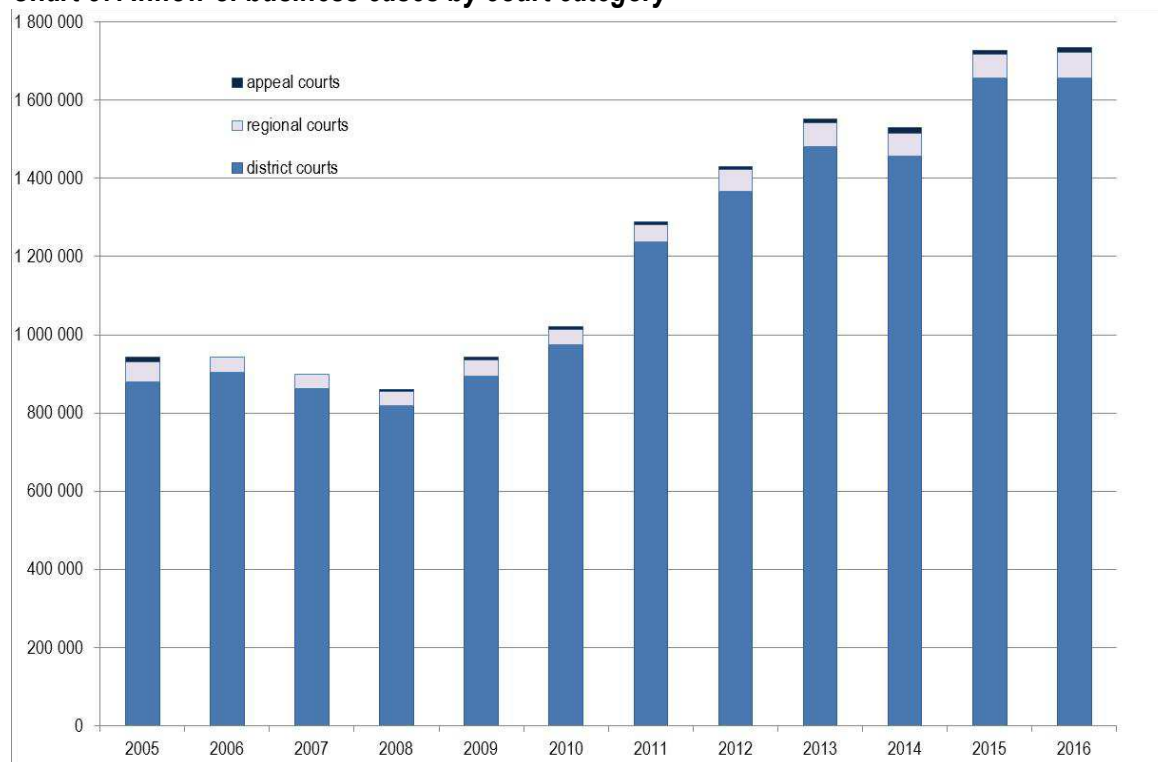


Source: *Doing Business 2017 report, World Bank.*

In 2016, 1.7 million business cases were filed to common courts of law (an increase by 0.4%). District courts, where 95.4% of business cases were filed in 2016, for the first time in years did not report an increase in this respect. The largest increase in the number of cases was reported in courts of appeal: the number of complaints against legal proceedings was 2.5 times higher than in the previous year (with 1,051 cases filed). District courts received 29% more cases relating to bankruptcy and restructuring proceedings. Regional courts of first instance saw a significant increase in the inflow of cases relating to payment-order or writ of payment proceedings (27% more).



**Chart 37. Inflow of business cases by court category**



Source: DDS of the Ministry of Economic Development on the basis of Ministry of Justice data.

**Table 26. Inflow of business cases in 2008-2016**

Specification	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>TOTAL BUSINESS CASES</b>	861,059	945,366	1,025,815	1,295,324	1,444,597	1,594,515	1,629,573	1,729,953	1,737,307
<b>TOTAL courts of appeal (second instance)</b>	5,992	6,279	6,352	6,987	7,805	11,474	14,150	10,751	11,505
<b>TOTAL regional courts</b>	35,109	41,599	41,199	43,781	56,546	60,598	59,868	59,405	65,571
<b>Contentious (first instance)</b>	7,932	9,328	9,607	9,972	13,628	16,506	15,621	15,367	15,499
<b>payment-order/writ of payment (first instance)</b>	8,339	12,632	12,305	13,335	19,174	19,021	17,165	15,518	19,727
<b>Appeals (second instance)</b>	6,627	7,048	7,462	8,076	10,079	10,175	11,382	12,535	13,716
<b>Complaints (second instance)</b>	7,235	7,456	7,054	8,034	9,069	9,923	10,396	10,899	11,541
<b>complaints against legal proceedings ("S" list, second instance)</b>	76	95	122	187	223	318	435	465	411
<b>Court for Competition and Consumer Protection</b>	888	2,816	4,538	6,524	14,449	41,556	3,617	2,409	2,327
<b>TOTAL district courts (first instance)</b>	819,019	894,616	973,654	1,237,913	1,365,652	1,480,719	1,551,754	1,657,179	1,657,695
<b>contentious</b>	28,986	35,128	36,114	42,352	87,829	104,364	110,865	129,011	141,840
<b>contentious (simplified)</b>	22,096	26,339	29,357	32,503					
<b>total registry</b>	528,118	538,063	552,139	584,176	638,504	710,908	821,799	876,996	945,277
<b>payment-order/writ of payment</b>	211,183	262,916	324,638	544,455	597,323	603,239	558,360	583,908	511,666
<b>bankruptcy and rehabilitation</b>	6,854	8,638	8,662	8,401	10,615	11,447	10,887	18,781	24,259

Source: Ministry of Justice.

## **Legislative changes aimed at improvement of operation of commercial courts<sup>81</sup>**

### ***Changes relating to corporate law***

On 1 April 2016, the second part of the provisions of the Act of 28 November 2014 amending the Code of Commercial Companies and Partnerships and certain other acts entered into force (the majority of the provisions of this Act, extending the system of online incorporation of companies and partnerships, so-called S-24, to date covering only limited liability companies, to general and limited partnerships, entered into force on 15 January 2015). The solutions introduced in this part of the Act allowed (from 1 April 2016) to amend the memoranda of association of the abovementioned companies and partnerships (general partnerships, limited partnerships and limited liability companies) in the ICT system with the use of appropriate templates, to appoint an attorney in fact in order to incorporate a company or partnership, to grant procuration, as well as to dissolve the company or partnership. The introduced solutions accelerated and streamlined registry proceedings at commercial courts with regard to companies and partnerships incorporated under S-24.

Works and under way on the draft act amending the Act on the National Court Register and certain other acts, in order to:

- accelerate and streamline registry proceedings and facilitation of contacts with the court for the parties;
- enable registry courts to bring to order persons obliged to appoint representatives of a company or partnership if such persons fail to perform their obligations (summons, fines, appointment of a probation officer in accordance with Article 42 of the Civil Code, who could carry out ordinary management activity and represent the entity until the management board is appointed);
- create a publicly available online portal providing access to all documents submitted to the National Court Register for the parties and other business actors, and to allow downloading of a full copy of the entry in the National Court Register from the website of the Ministry of Justice.

## **5.2 Financing business activity**

### **5.2.1. Financial gap**

The key condition of long-term economic growth is the potential to invest, in particular in the way that shifts resources from declining industries to industries with high and growing value added in the international context. Since own resources of enterprises are too small to ensure their development, a number of different intermediaries operate to match Polish and foreign savings and the investing companies, who build financial and capital markets.

In terms of the availability of financing on these markets, the situation of the whole sector of non-financial enterprises can be considered good. According to many studies, including comparative international analyses, Poland is one of the countries with a relatively low risk of the gap between the needs of enterprises and the potential to finance them. For example, according to the 2016 study of the European Investment Bank, only 5% of the analysed Polish companies making investments admitted to have experienced limitations with regard to access to financing in the form of rejection, reduction, too high cost or high probability of rejection of their applications for external financing<sup>82</sup>.

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<sup>81</sup> Since the presentation of the previous report.

<sup>82</sup> EBI, EIBIS 2016/2017 Surveying Corporate Investment Activities, Needs and Financing in the EU, 2016.

However, it is a common opinion that the financial gap is particularly acute in the case of microenterprises and small enterprises carrying out a relatively low innovation-intensive activity at the local level. Persons associated with PE/VC funds express an opinion that there is always financing available for projects with high potential<sup>83</sup>, they describe problems with finding promising projects<sup>84</sup> or even suggest that there is excessive liquidity on the Polish market with regard to the supply of interesting projects<sup>85</sup>.

The suggestion that lack of capital, or a too small capacity of channels of capital transfer, was not the main cause of the relatively low investment rate in Poland in 2016, is supported by the fact that this problem is global even despite the very expansive monetary policy implemented by major central banks. Alternative explanations include the reduced supply of investment projects with a satisfactory rate of return, the conservative approach of companies to using third party capital, the macroeconomic and political uncertainty, and increasing problems with the availability of qualified employees. These are external factors with regard to financial markets. However, an important internal factor limiting the access of small companies to external financing is the information asymmetry, which can be mitigated in many ways, e.g. through easily available and credible credit registers, development of relational banking, appropriate legal regulations, in particular with regard to second chance policy, or solutions of a guarantee nature<sup>86</sup>.

In 2013, the *Strategy for the Innovativeness and Efficiency of the Economy* emphasised the major importance of equity in the structure of financing business activity. This seemed to result from the aversion of enterprises to the risk associated with assuming formal obligations. In terms of third party capital, the prevailing share of bank loans was noted and the problems with obtaining such loans for small, young and innovative enterprises. Increasing the availability of external financing and extending the offer in this respect was considered as a priority measure.

The abovementioned diagnosis from 2013 to a great extent also applies to the current situation. The share of bank loans in total liabilities of Polish enterprises is estimated at present as 30%, while the share of bonds and shares is estimated as 28%, compared to the EU average assessed as 39%<sup>87</sup>. The Responsible Development Strategy identifies challenges both in the area of debt financing and with regard to equity financing. The main problems listed in the Strategy include excessive focus of the banking sector on the financing of consumption and real estate at the expense of investments, and the stagnation on the capital market manifesting itself with low liquidity, falling share of individual investors in transactions, and the plunging number of offerings on the primary market. In 2016, for the first time since 2003, the number of debuts on the main market was not larger than the number of exits (19 each). On the other hand, the dynamic growth of WIG20 on the turn of 2016 and 2017, combined with the improving economic conditions and reforms announced in the Responsible Development Strategy, give hope that adverse developments would be mitigated and the level of the markets' adjustment to the needs of consumers of financial products (whether savings, investment or credit) and to the current economic, geopolitical and technological challenges would improve.

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<sup>83</sup> Ł. Wejchert (interview), *I want to be the face of digital Poland (Chcę być twarzą cyfrowej Polski)*, *Forbes*, September 2016.

<sup>84</sup> A. Góral (interview), *Do not let go of small and medium-sized enterprises (Nie odpuszczajmy małych i średnich firm)*, <http://forsal.pl/artykuly/981965,adam-goral-nie-odpuszczajmy-malych-i-srednich-firm.html> (accessed 29-05-2017).

<sup>85</sup> T. Czechowicz (interview), in: K. Rybiński, *Go global! Interviews with the creators of Polish companies that won the international markets (Go global! Wywiady z twórcami polskich firm, które zdobyły rynki międzynarodowe)*, 2014.

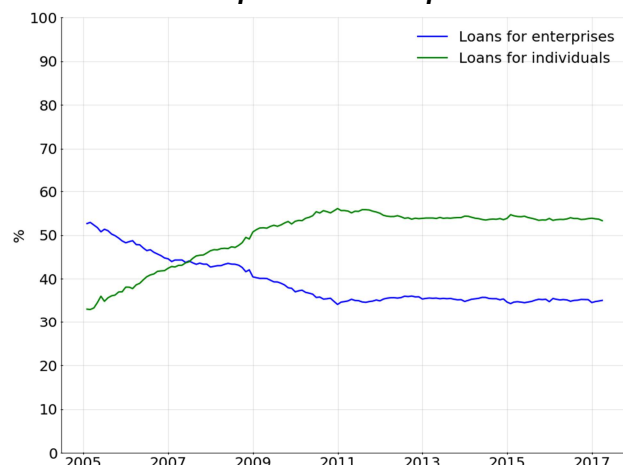
<sup>86</sup> NBP, *Availability of financing for non-financial enterprises in Poland*, 2016.

<sup>87</sup> PWC, *Development challenges and regulatory environment and market situation of investment firms in Poland*, 2017.

## 5.2.2. Bank loans

The share of corporate loans in total number of bank loans for real market economy entities (i.e. excluding banks and the government) had been consistently decreasing until 2011, when it stabilised at the level of about 35%. This resulted from the dynamic growth in consumer and mortgage loans for individuals.

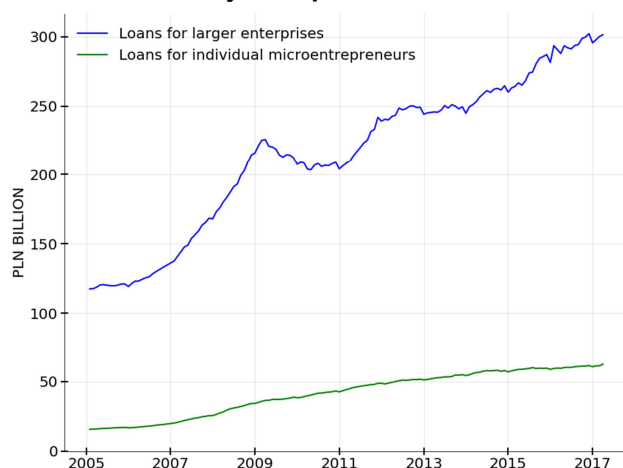
**Chart 38. Share of private and corporate loans**



Source: DDS of the Ministry of Economic Development on the basis of NBP data.

At the end of 2016, total corporate loans granted by banks exceeded PLN 356 billion. Loans for microenterprises account for about 1/6 of the abovementioned amount. Consequently, also the corporate lending rate as a whole is more closely correlated with the lending rate of larger companies.

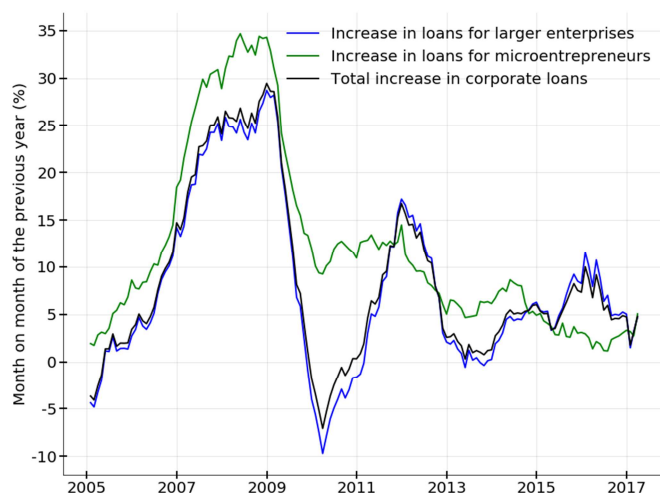
**Chart 39. Loans by enterprise size - value**



Source: DDS of the Ministry of Economic Development on the basis of NBP data.

The slowdown in investments more affected the lending rate of sole traders, which remained notably lower than in the case of larger companies throughout 2015 and 2016, although it started growing at the end of 2016. In general, after a 10% increase in January 2016, the corporate lending rate slowed down. Throughout 2016, the value of loans was higher by 5% in the case of larger enterprises and 3.4% in the case of microenterprises compared to the previous year. As of the end of Q1 2017, loans for larger enterprises rose by 4.7% and for microenterprises increased by 5% compared to Q1 2016.

**Chart 40. Loans by enterprise size – growth rate**



Source: DDS of the Ministry of Economic Development on the basis of NBP data.

Overdraft facilities continued to prevail in total corporate loans as of the end of 2016 (41.5 %). Compared to December 2015, their share decreased by almost 2 pps. The share of mortgage loans also slightly decreased, while the share of investment loans grew by 2.5 pp to 36.6%. At the same time, it should be noted that the lending structure does not fully reflect the purposes to which enterprises allocate the obtained capital (e.g. part of entrepreneurs tend to finance investments with overdraft facility).

### 5.2.3. Leasing

Leasing is a civil law contract under which the lessor offers the right to use specific assets to the lessee in return for payments in the form of lease instalments. Leasing is, after bank credit, the most common external source of investment financing for Polish enterprises. At the end of 2016, total value of the active portfolio in the leasing sector amounted to PLN 105.1 billion, which was comparable to the balance of bank investment loans (PLN 114.5 billion). During the year, lessors financed investments amounting to PLN 58.1 billion, which was an increase by 16.6%. This rate is very similar to the high average rate for 2012.

**Table 27. Leasing structure in 2016**

Assets financed by the leasing sector in 2016 r. (total: PLN 58.1 billion)		
Type	Share	Change y/y
Passenger cars, delivery vans and trucks up to 0.5 tonne	42.1 %	30.9 %
Heavy vehicles (tractors, heavy duty vehicles, buses etc.)	29.7 %	27.7 %
Machinery and equipment (industrial, construction, agricultural, medical, IT)	26.4 %	- 3.4 %
Real estate	1.2 %	- 49.6 %
Other	0.6 %	3.7 %

Source: Polish Leasing Association.

Investments in means of transport remain and probably will remain the pillar in the sector. However, the financing of machinery reflected the slowdown in investments resulting e.g. from the transitional period between cycles of financing from EU funds.

Leasing services are mainly used by microenterprises and small enterprises. According to the estimated in the industry, 70% of its value are services for enterprises with annual turnover lower than PLN 20 million.

In 2017, the sector expects that the dynamic growth will continue at 16.5 %<sup>88</sup>.

#### 5.2.4. Warsaw Stock Exchange

On the main market of the Warsaw Stock Exchange 487 companies were listed as of the end of 2016, which was identical to the previous year. This resulted from the same number of debuts and exits. The number of debuts decreased from 30 to 19 compared to 2015, similarly to the value of offered shares (from almost PLN 2 billion to PLN 1.09 billion). With regard to 2017 debuts, their value by the end of the May reached PLN 2.26 billion, which mainly resulted from the large issuance of Dino Polska supermarket chain (PLN 1.65 billion). Return on the main indices was generally much higher in 2016 than in 2015, and the recovery observed in November 2016 continued in H1 2017.

**Table 28. WSE indices value in 2012-2017**

Return on the main WSE indices in 2014-2017 (%)						
Index/Year	2012	2013	2014	2015	2016	2017 (Jan to May)
WIG	26.24	8.06	0.26	-9.62	11.38	16.11
WIG 20	20.45	-7.05	-3.54	-19.72	4.77	17.11
mWIG40	17.42	31.06	4.13	2.40	18.18	13.83
sWIG80	22.92	37.28	-15.55	9.11	7.93	13.75

Source: DDS of the Ministry of Economic Development on the basis of WSE data.

Foreign investors continued to prevail in terms of turnover on the main market with 53% of turnover in 2016 (13% for individual investors, 34% for institutional investors). Individual investors prevail on New Connect (73%), while Polish institutional investors are in the majority on Catalyst (63%).

In 2016, 26 companies had their debut on New Connect, offering shares for the total value of PLN 39.3 million. This was almost twice as low as in 2015, when 19 issuers obtained the total of PLN 75.8 million; however, it should be noted that the 2015 result to a great extent was due to one relatively large offering with the value exceeding PLN 39.4 million, where the offering party (Adiuvo Investments fund) thus

<sup>88</sup> Based on the data provided by the Polish Leasing Association ([www.leasing.org.pl](http://www.leasing.org.pl)).

obtained more funds from the market than all other offering companies. Since the peak in 2011 (172 debuts), the number of companies debuting on New Connect has been decreasing with every year.

In 2016, 19 new issuers appeared on Catalyst to obtain PLN 1.4 billion and EUR 754 million in total. This was a slight decrease compared to the previous year, when 28 new issuers offered corporate bonds with the value of PLN 5.1 billion. A few relatively large issuances may significantly increase their total value. The largest issuances in 2016 were those of Orlen Capital AB (EUR 750 million) and Polska Grupa Farmaceutyczna S.A. (PLN 500 million).

### **5.2.5. Private Equity/Venture Capital/National Capital Fund**

According to the report of the European investors' association Invest Europe, the value of Private Equity investments in enterprises located in Poland in 2016 accounted for 0.17% of GDP, compared to 0.19% of GDP in 2015<sup>89</sup>. These amounts exceed PLN 3 billion per year, i.e. less than the amounts generated by bond issuers on Catalyst in previous years, yet more than total initial public offerings on the WSE main market. The economic importance of PE/VC funds does not follow merely from the amount of financing. These funds typically finance the most innovative or dynamically growing industries and support enterprises not only with capital, but also with knowledge and experience relating to management and networking on foreign markets.

The development of the Polish VC market is supported by the activity of Krajowy Fundusz Kapitałowy (the National Capital Fund, KFK). KFK is a joint stock company with Bank Gospodarstwa Krajowego as the sole shareholder. It operates in the funds of funds formula, i.e. co-finances, up to 50% of capitalisation, the funds managed by private entities, which in turn provide capital to Polish SMEs. In accordance with EU law, such support constitutes public aid and it is granted under a support programme approved by the European Commission. In 2016, KFK implemented three projects under the programme: one under an earmarked grant of the minister competent for the economy, one under IE OP 2007-2013, and one under the Swiss-Polish Cooperation Programme.

From 2007 until the end of January 2017, KFK provided capital to 18 funds for the total amount of PLN 302 million, of which PLN 63 million was provided in 2016 and PLN 55 million was provided in January 2017. By the end of 2016, equity funds of KFK concluded 194 investment agreements with SMEs, the majority of which (147) under IE OP. The funds provided to entrepreneurs in that period amounted to PLN 387.5 million.

Pursuant to the Act of 5 August 2015 amending the Act on certain forms of support for innovative activity and the Act on the National Capital Fund, and the Act of 25 September 2015 amending certain acts relating to innovation support, the permitted scope of KFK operations changed. Apart from providing financial support to equity funds and indirectly investing in enterprises, KFK could directly invest in enterprises and manage assets on request.

On 22 April 2016, a new ordinance of the Minister of Economic Development on the rules of providing financial support by KFK entered into force. The new Ordinance implements the rules of high risk investments provided for in Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty and allows KFK to grant financial support to new equity funds until 2020. By way of the new

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<sup>89</sup> Invest Europe, 2016 European Private Equity Activity, [www.investeurope.eu](http://www.investeurope.eu).



Ordinance on the rules of providing financial support by KFK, new EU investment rules entered into force which were more flexible and better adjusted to the market needs than the previous regulations from 2007.

#### **5.2.6. Loan funds**

Loan funds have been operating in Poland for about 25 years. They are separated book accounts kept by non-profit organisations, allowing for obtaining external financing both by new and by the already operating enterprises (entered in the Central Registration and Information on Business database or in the National Court Register). The funds do not require a credit history, but potential borrowers should not be registered as a bad debtor. When preparing to take a loan, one should remember to draw up an integral and reasonable business plan and to take potential loan security into account. Repayment should be secured by blank bill of exchange and e.g. a third party guarantee, a pledge on real property or on movables.

The maximum amount of the loan is not clearly determined, which means that the financing may apply to good business ideas amounting to both several dozen and several hundred thousand zloty. Another advantage is the cost, which is limited to interest (no fees for application consideration of application, obligatory insurance etc. apply) and thus it may amount to zero. The maximum repayment period is usually 5 years, whereas a grace period is allowed, which is particularly important at the initial stage of operations. Along with the funds, an entrepreneur often receives training support from experts.

In 2016, loan funds granted nearly 6,360 loans for a total amount of PLN 751.32 million, which was a slight decrease compared to the previous year (8,772 loans for PLN 878.8 billion). Average loan value in 2016 was PLN 114,287. The least loans were granted in Lubuskie Voivodeship, which resulted in the lowest value of granted loans. The largest number of loans was granted in Pomorskie Voivodeship, but the highest total value of loans was reported in Łódzkie Voivodeship. Microenterprises receive 87% of total loans and 72% of the value of loans. It is estimated that over 90% of loan capital originates from EU funds.

#### **5.2.7. Guarantees**

In quantitative terms, the main instrument of enterprise support with the use of guarantees was, similarly to the previous years, the government programme implemented by Bank Gospodarstwa Krajowego. From March 2013 until the end of December 2016, BGK granted de minimis guarantees amounting to PLN 34.91 billion. Total value of loans secured with those guarantees amounted to PLN 61.96 billion. Over 118,000 entrepreneurs used the de minimis guarantee programme in that period. In 2016, BGK granted de minimis guarantees amounting in total to PLN 9.36 billion.

The experiences obtained during the programme enabled BGK to prepare new portfolio guarantee products for SMEs, which became available in 2016, i.e. guarantees granted on the basis of the European Investment Fund (EIF) counter-guarantees under COSME initiative and guarantees for new innovative entrepreneurs from the SME sector granted under the Innovative Economy Operational Programme. BGK also prepared for implementation the guarantees for innovators under the Smart Growth Operational Programme, which will become available in 2017 after the expiry of the guarantee programme under IE OP.

Moreover, in 2016 43 guarantee funds operated in Poland, with total capital of about PLN 1.09 billion and 7,400 granted guarantees amounting to PLN 949 million. Total amount of exposure (the value of active guarantees) in 2016 amounted to PLN 1.42 billion, accounting for 130% of capital.

### 5.2.8. Factoring

Factoring is a financial activity consisting in the repurchase of trade receivables of enterprises that have not yet reached maturity. A factoring enterprise carried out at least two out of the following four activities: finances undisputed and unmatured receivables; is in charge of reporting and accounts of debtors; enforces repayment of the amounts due; and takes over the solvency risk of the recipient. Factors provide enterprises with funds on the basis of unpaid invoices relating to both domestic and exports sales. Enterprises may receive up to 90% of the value of the issued invoices at the time of dispatch of goods (or of the provision of services), and the remaining part is paid after the recipient's payment to the factor's account.

A typical factoring client is an enterprise offering sales with deferred payment, with large demand for flexible financing, closely cooperating with recipients, carrying out an expansive strategy to increase turnover e.g. by applying relatively long payment deadlines.

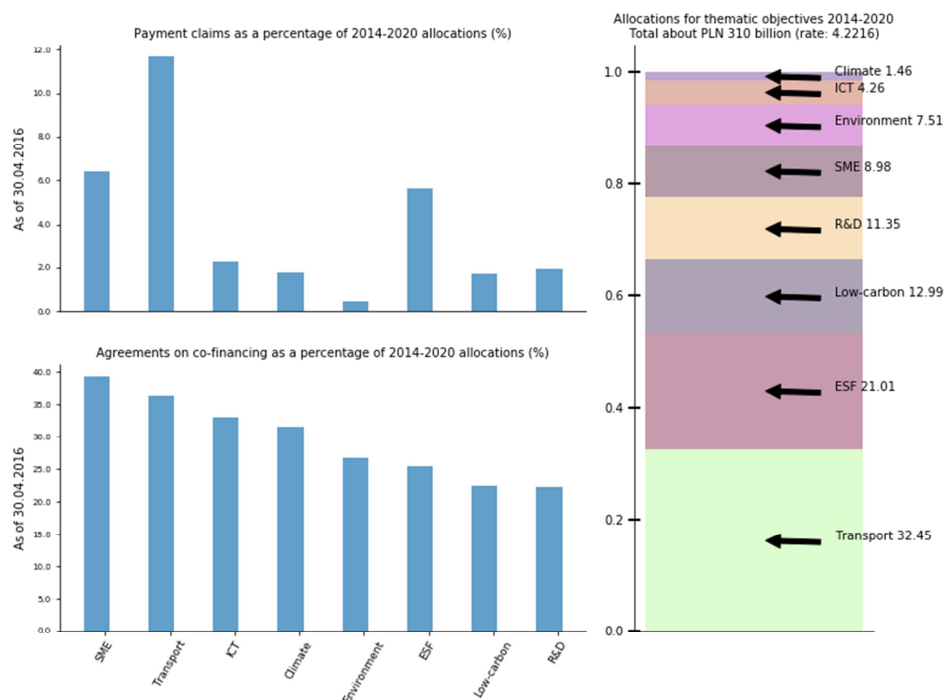
Since 2009, the industry has been growing at a double-digit rate. In 2016, the turnover of enterprises being members of the Polish Factors Association grew by 20.6% to PLN 158 billion of the financed invoices.

### 5.2.9. EU funds

In 2016, projects under the financial perspective 2007-2013 were being finalised, while implementation of the programmes under the financial perspective 2014-2020 was slowly gaining momentum. Under the new perspective, more funds were allocated to objectives related to R&D, innovation and broadly understood competitiveness of enterprises.

Support addressed strictly to enterprises was provided for under Thematic objective 3 *Enhancing the competitiveness of SMEs, the agricultural sector and the fisheries and aquaculture*. Enterprises may also obtain a significant part of funds under Thematic objective 1 *Strengthening research, technological development and innovation*. More than 20% of total funds were allocated to those objectives. Entrepreneurs who seek financing should focus in particular on the Smart Growth programme and regional operational programmes. Apart from that, a number of opportunities are available for specific types of enterprises, e.g. for the development of ICT networks, implementation of environmentally-friendly production technologies, start-ups or social economy under other programmes of the 2014-2020 perspective.

**Chart 41. Thematic objectives under the Partnership Agreement 2014-2020 and progress of their implementation**



Source: DDS of the Ministry of Economic Development on the basis of SL2014 system data (agreements and payments) and the Partnership Agreement. For simplification purposes, a single EURPLN exchange rate was applied. Allocation excluding RDP, technical assistance and mobility, social innovation and supranational cooperation programmes.

By the end of April 2017, under thematic objectives 1 and 3 agreements on co-financing were concluded for the total amount of PLN 18.8 billion, and the expenditure specified by beneficiaries in the applications for payment reached PLN 2.46 billion.

With the use of EU funds from the Smart Growth programme, the programme *Start in Poland* was initiated. It is an umbrella brand accumulating key instruments for start-up support in Poland. Measures related to equity instruments are carried out by the Polish Development Fund, while an important role for acceleration programmes is performed by the Polish Agency for Enterprise Development. Under the first launched acceleration component Scale-up with the budget of PLN 60 million, 10 accelerators were selected who in cooperation with large enterprises from various industries (e.g. energy, fintech, food, healthcare, automotive, machine, or transportation) ensure that start-ups participate in dedicated programmes combining financial aid (up to PLN 250,000), mentoring and networking. The effect should be commercialisation of innovative solutions by the supported start-ups, including products and services responding to the needs of large enterprises cooperating for the purposes of programme implementation.

In terms of equity instruments, Polish Development Fund under PFR Ventures brand created five funds with total amount of PLN 2.2 billion to finance capital exposure at different stages of start-up operation. In the first launched fund, PFR Starter, a material change was introduced with regard to the rules provided for in the National Capital Fund, i.e. the maximum threshold for the share of public funds in total capitalisation of the supported venture capital funds was set at 80%, compared to 50% in the

National Capital Fund. This decision may be considered one of the methods to mitigate the problem of mismatched expectations of public and private investors with regard to the sharing of risks, profits and decision-making powers relating to the supported investments<sup>90</sup>.

## 5.3 Infrastructural conditions in enterprise development

The existence of a modern and efficient infrastructure (transport, energy and telecommunications) constitutes the necessary element of competitive economy on both regional and national level. The presence of an adequate infrastructure, along with a transparent economic law system, is an important factor which affects the decision of an entrepreneur about starting their own economic activity, as well as it constitutes one of the basic factors of its further development.

### 5.3.1 Road transport

The basic problems of road transport remain unchanged: the lack of a complete network of motorways and expressways, maladjustment of many roads to the capacity of 11.5 tonnes per axle, heavy traffic through built-up areas caused by the lack of bypasses around key cities, and the technical condition of roads which still cannot be described as satisfactory. Road safety remains a key challenge, although it is only to a lesser extent caused by the condition of the infrastructure.

As of the end of 2016, total length of the expressways and motorways network is 3,161 km, including about 1,627 km of motorways and about 1,533 km of expressways. About 1,311 km of new national roads are under construction, with about 400 km of national roads should be completed in 2017 (including about 330 km of expressways).

The motorways network is largely constructed or under construction. With regard to the motorways A1, A2 and A4, there are motorways routes (further works are needed e.g. on the sections: Pyrzowice-Tuszyn, or Warsaw-Terespol). Further works are necessary on the network of expressways, which currently are formed by non-interlinked sections of different length of roads.

At the end of 2016, the share of roads in good technical condition was 51.8% (a drop by 8.8 pp), while the share of those in unsatisfactory or poor condition was 48.2%. The share of roads in poor technical condition increased to the level of 16.9% (by 2.8 pp compared to the previous year). Around 3,474 km out of 20,984 km of national roads under the management of the General Directorate for National Roads and Motorways require the performance of immediate maintenance works.<sup>91</sup> However, according to the National Road Construction Programme 2011-2015, as of the end of 2013 the share of roads in good technical condition was supposed to be 66%.<sup>92</sup>

Despite the volatile macroeconomic conditions, the volume of road transport in Poland has been constantly growing. Even in 2009-2010, Poland reported an increased while other EU Member States saw slumps in the volume of road transport with the onset of the financial crisis. Moreover, none of those economies recovered to the pre-crisis levels with regard to freight volume.

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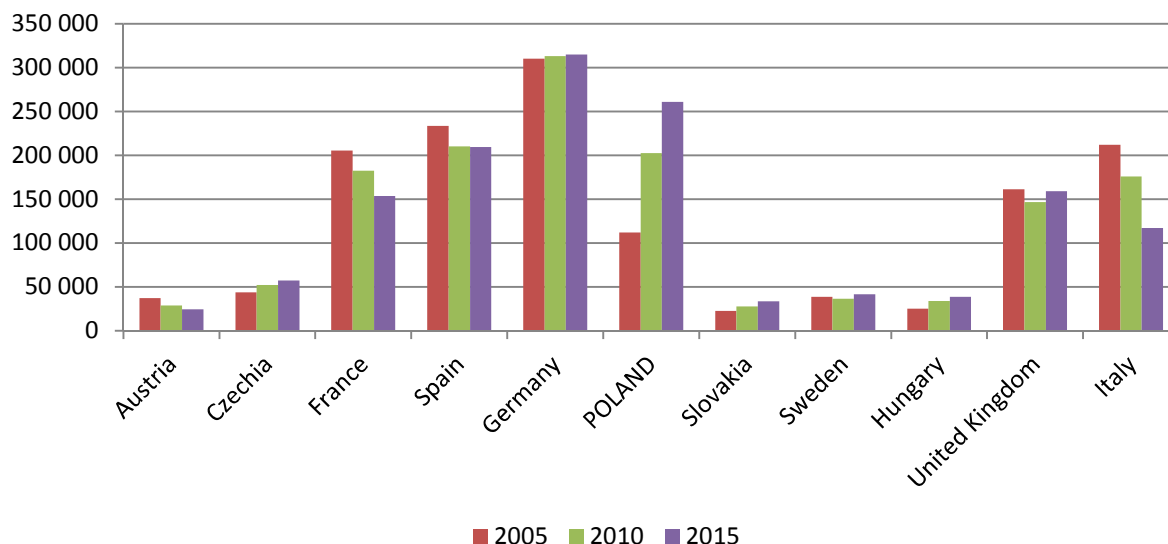
<sup>90</sup> M. Bagiński (interview), *New system offers several interesting advantages* (*Nowy system oferuje kilka ciekawych udogodnień*), *Parkiet* No. 133, 14-18.06.2017.

<sup>91</sup> See *Report on the technical condition of asphalt and concrete surfaces of the national road network as of the end of 2016*, the General Directorate for National Roads and Motorways, Warsaw, March 2017, p. 8

<sup>92</sup> See *National Road Construction Programme 2011-2015*, p. 25.

From 8 September 2015, the National Road Construction Programme 2014-2023 (PBDK 2014-2023) adopted by the resolution of the Council of Ministers and updated in May 2017 has been in force. The Programme specifies the investment objectives and priorities (construction and extension of infrastructure, renovation and maintenance works), indicates the level and sources of the necessary funding (state budget, National Road Fund), as well as lists tasks to be performed.

**Chart 42. Road transport in selected EU Member States (in tonne-km million)**



Source: DDS of the Ministry of Economic Development on the basis of Eurostat data.

### 5.3.2 Railway transport

Poland has a relatively dense railway network, and ranks second in the EU in terms of the length of railway lines (after Germany)<sup>93</sup>. Its technical condition is improving. According to the PKP PLK S.A. data<sup>94</sup>, at the end of 2016, as much as 55.1% of railway tracks were in good condition (increase by about 0.9 pp compared to the previous year); 29.3% were in sufficient condition; whereas 15.6% were in unsatisfactory condition (decrease by approximately 2.7 pp compared to the previous year). The maximum timetable speed in the mainline tracks used is also growing (34.9% up to 120-160 km/h; 33.8% to 80-120 km/h; 30.6 below 80 km/h). Investment expenditure on renovation and modernisation of railway lines amounted to about PLN 4.1 billion in 2016, while expenditures on maintenance amounted to about PLN 2.7 billion. The state of underinvestment in the railway transport sector has been gradually subsiding, which results in a better technical condition of the used mainline tracks. However, the current level of investment expenditure is still insufficient to meet the needs in this respect.

At present, there are 117 rail carriers on the Polish rail market (2 less than in the previous year) which hold 191 licences for the carriage of passengers and goods and for subletting of traction vehicles/provision of traction services (3 less than in the previous year).<sup>95</sup> The Polish rail market,

<sup>93</sup> See Eurostat data (rail\_if\_tracks) (accessed on 30 June 2017)

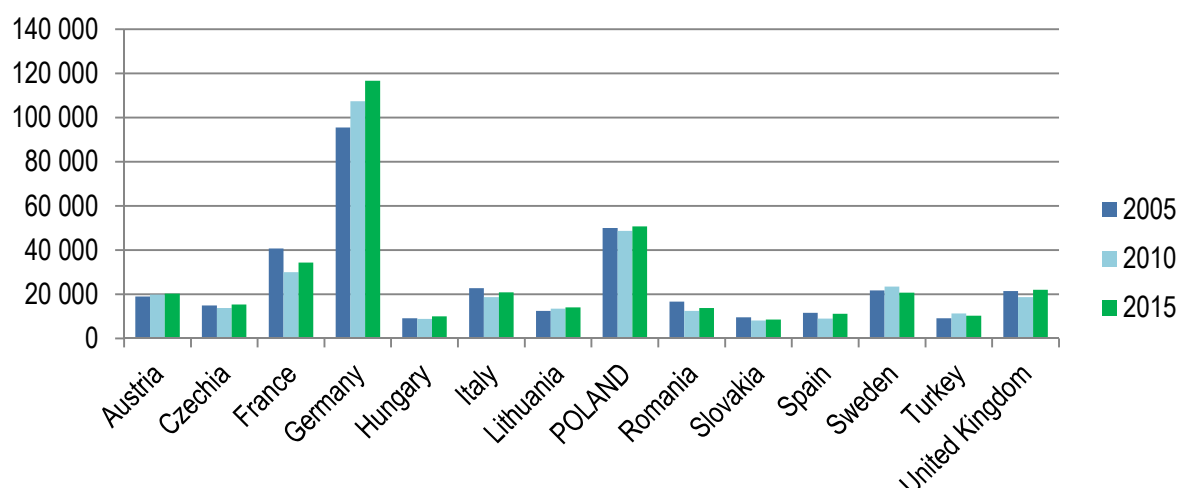
<sup>94</sup> See PKP Polskie Linie Kolejowe data as of the end of 2016 (letter ref. ILK2c-071-41/17).

<sup>95</sup> See <https://www.utk.gov.pl/pl/rejestry/licencjonowani-przewozni/13081,Wykaz-licencjonowanych-przewoznikow-kolejowych.html> (accessed on 30 June 2017)

including both the passenger and the freight rail sector, is characterised by a high level of market concentration as well as a high level of specialisation of individual carriers.

PKP Cargo S.A. continued to lead in the freight market in 2016 (about 44% of the market share calculated according to mass of freight and about 51% according to the transportation activities performed), although its market share decreased by about 3 pps compared to the previous year. At the same time, changes have been observed among enterprises on the remaining positions as a result of the consolidation operations initiated by private carriers.

**Chart 43. Railway freight transport in selected EU Member States (in tonne-km million)**



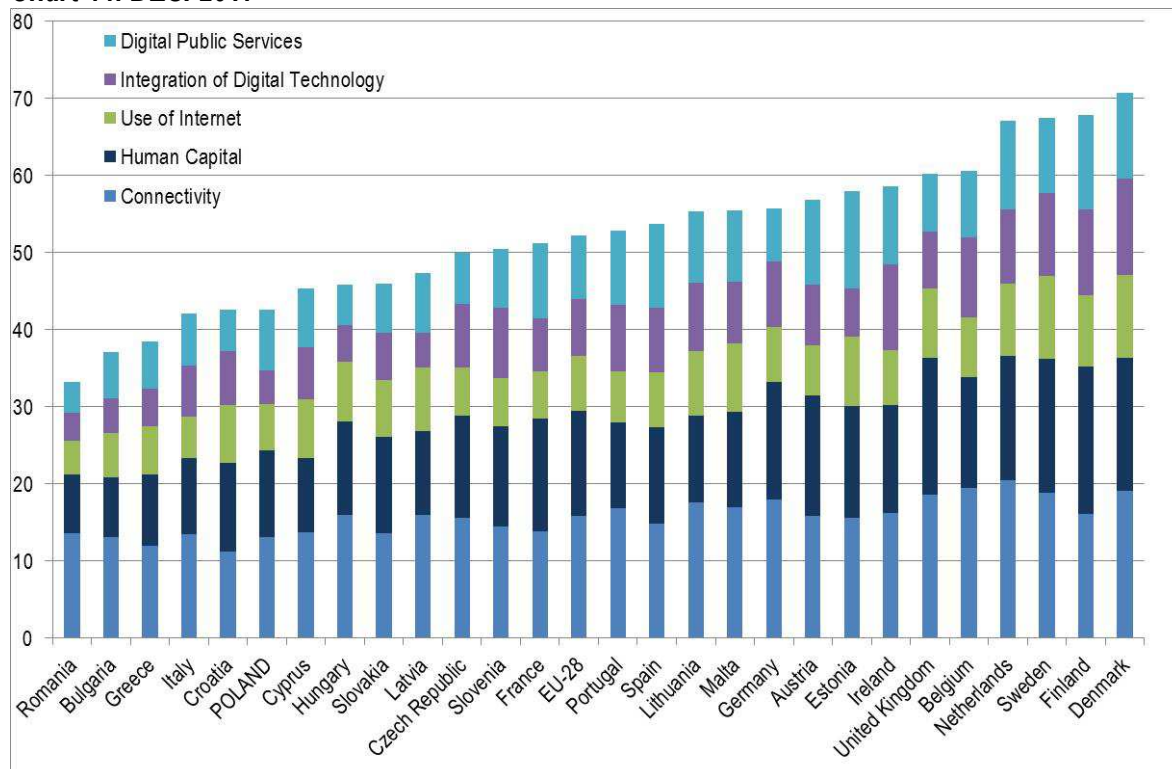
Source: DDS of the Ministry of Economic Development on the basis of Eurostat data.

### 5.3.3 Information and telecommunications infrastructure

*Telecommunications infrastructure plays an important role in the operation of enterprises. In the age of advancing digitisation, most areas of business operation, such as sales/procurement, internal and external communications, finance, HR are based on network infrastructure. Therefore the availability, the quality and the costs related to the use of telecommunications infrastructure have an impact on the competitiveness of enterprises.*

DESI - Digital Economy and Society Index, is a synthetic indicator measuring the level of digitisation of respective EU Member States published by the European Commission. This indicator is composed of about 30 data items, allocated to sets and given relevant weights. The primary partial indicators are: Connectivity (weight 25%), Human Capital and its digital skills (weight 25%), Integration of Digital Technology by business (weight 20%), the Use of Internet (weight 15%) and Digital Public Services (weight 15%). It should be noted that in the case of the last component Poland is only slightly deviating from the EU average, but ranks much lower in the case of the remaining components, and in the Integration of Digital Technology by business category (components: digitisation of enterprises and e-commerce) Poland is last but one. With the result of 42.6, Poland is well below the EU average (52.3).

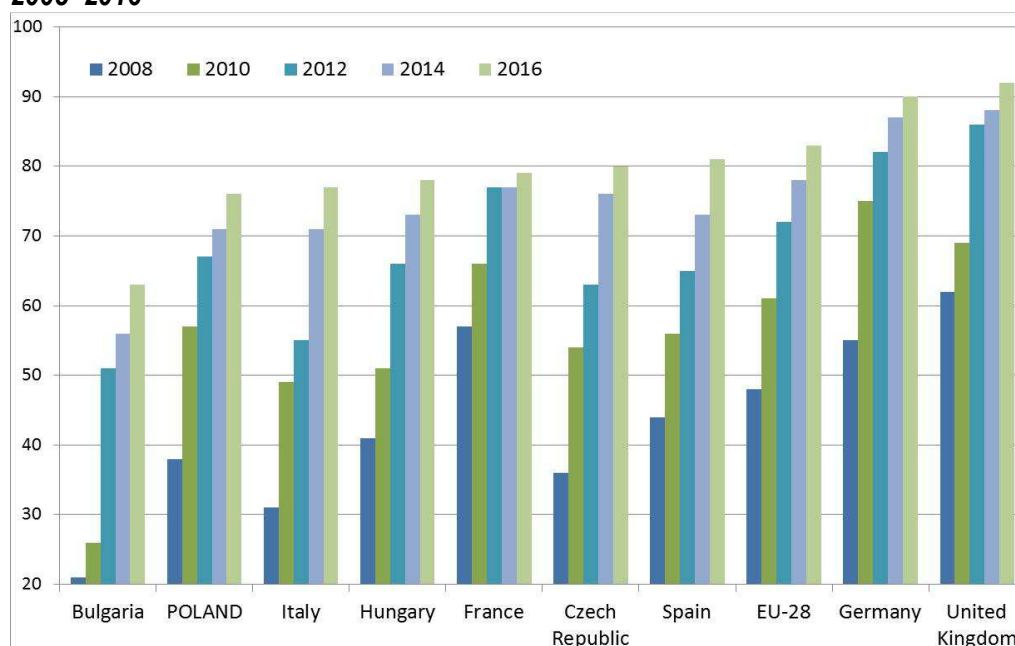
**Chart 44. DESI 2017**



Source: DDS of the Ministry of Economic Development on the basis of DESI data.

Internet access is becoming more common. In 2016, 76% of Polish households had broadband access to the Internet. Although it is lower than the EU average by a few percentage points (83%), in a situation where the ratio is slowing down the distance from digitisation leaders (92%) seems significant. The situation among enterprises in Poland is closer to situation observed in the European Union – in 2016, 93% of them had broadband Internet access, compared to the EU-28 average of 94%. On the other hand, 99% of all enterprises with Internet access use broadband Internet, which is comparable to the EU-28 average (98%). The figures were similar in the previous year, which proves that saturation is high.

**Chart 45. Share (%) of households with broadband Internet access in selected EU countries in 2008–2016 <sup>96</sup>**



Source: DDS of the Ministry of Economic Development on the basis of Eurostat data.

Almost all Polish enterprises are computerised and have access to the global network. In 2016<sup>97</sup>, 94.7% of enterprises were equipped with computers, 93.7% had Internet access, and 93.2% – broadband Internet access. However, access to the Internet differs among enterprises depending on their size. While nearly all large and medium-sized companies (99.7% and 98.8%, respectively) had access to the Internet in 2016, for small companies (10-49 employees) this figure was 92.5%. In 2016, enterprises most frequently used a DSL broadband connection – 86.9% of all business entities, while mobile Internet (smartphones, notebooks, laptops etc.) was used in 64.7% of enterprises.

Online marketing, including using company websites, is a new approach to the market strategy of enterprises that every company should keep in mind. In 2016, 2/3 of the analysed enterprises have their own websites, while only every eight company sent newsletters to their clients. Own website was mainly used to present the company's market offer (63.6%). The potential of websites relating to purchases/booking (13.5%), or recruitment (information about job offers, submitting applications – 18.3%) is still not fully used. It should be added that 27.7% of enterprises pay for online advertising.

Entrepreneurs are becoming to appreciate the social media as a source of business opportunities in the context of communication and promotion. In 2016, 25.3% of companies were using this platform for communication (mainly social media), including every second large enterprise and every third medium-sized enterprise. Although this ratio was higher by a few percentage points than in 2015, Poland has still one of the worst results in the EU-28 in this respect (according to Eurostat data for 2016, Poland - 22%, EU-28 - 42%).

<sup>96</sup> No data for the United Kingdom for 2010; 2009 data were used in the chart.

<sup>97</sup> According to the Central Statistical Office data.



Digitisation changes the structure of trade. Retail market has been dynamically moving online, transforming consumption and distribution patterns. E-commerce, the fastest growing sales channel, accounted for about 16% of turnover of European enterprises in 2016<sup>98</sup>. In Poland, the share of e-commerce in company turnover amounted to 14.4%, compared to about 8% in 2010. Ireland (about 35%), the Czech Republic (about 31%), and Belgium (about 29%) are the leaders in e-commerce.

In 2015, 12.4% of companies offered online sales, which was much lower than the EU average (about 18%). Online sales was mainly used by large enterprises (35.5%), followed by medium-sized enterprises (18.8%); the situation was the worst among small enterprises, where only every tenth company used this distribution channel. Online sales of products and services is most often offered by enterprises operating in tourism (58%), software publishing (46.1%), accommodation (43.1%), media (41.5%), as well as computer servicing (35.8%). At the same time, every second enterprises considered lack of possibility (incapacity) to sell products/services online as a barrier to online trade.

34.8% of enterprises declared to follow the online purchasing path (e-purchasing); in terms of size, in 2015 this applied to 68.7% of large enterprises, 44.8% of medium-sized enterprises and 31.5% of small enterprises. The EU-28 amounted to about 42%, with Austria (about 66%), the Czech Republic (about 62%), and France (about 55%) leading in this respect. E-purchasing is mainly used by enterprises operating in computer servicing (82.1%) and IT (71.2%).

E-administration not only makes the operations of enterprises more efficient by saving time, but also reduces the costs of activities performed. In 2015, 93.7% of enterprises used the Internet to contact public administration, mostly for the purposes of submitting completed forms (93.5%), downloading forms to be completed (84.9%) and obtaining information (77.9%); the use of the Internet for the purposes linked to public procurement was least reported (18.5%).

#### **5.3.4 Energy infrastructure**

The main challenge faced by the Polish energy sector despite the implemented investment and replacement projects is the need to increase production and transmission capacities. Most of 400 kV and 220 kV transmission lines and transformer units (transformers) were built in 1970s and 1980s. This, however, does not mean that the existing transmission system is inadequate.

Long-term modernisation plans of PSE S.A.<sup>99</sup> include the development of 400 kV network along the existing 220 kV routes, which will result in the extension of the total length of 400 kV lines and, at the same time, shortening of the total length of 220 kV lines. As a Transmission System Operator (TSO) in Poland, PSE S.A. remains responsible for the operation and maintenance of facilities which form part of the transmission system in order to comply with the duty to ensure the operability of all components of the transmission network at a level which guarantees the required degree of reliability of electricity supply.

Major investments in transmission network are located in northern, north-eastern, and western Poland. They mainly involve connection and provision of capacities from new power plants, including both conventional power plants and renewable energy sources (RES). Meanwhile, the development of cross-border connections is aimed at increasing cross-border transmission capacities.

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<sup>98</sup> According to Eurostat data.

<sup>99</sup> The company performing the function of a Transmission System Operator (TSO) on the territory of Poland.

In accordance with the *Development plan to satisfy current and future demand for electricity for years 2016–2025*<sup>100</sup>, total amount of planned investment expenditure of PSE S.A. throughout the period covered by the plan amounts to almost PLN 13.3 billion in constant prices from 2015, PLN 9.8 billion of which will be allocated for intended actions related to construction and extension of the transmission network objects.

The development of energy infrastructure is heading towards innovation mainly based on the construction of smart grids. They will allow for the management of direct interactions and communication between energy consumers and suppliers, as well as for the application of the mechanisms managing demand for electricity.<sup>101</sup>

At present, works are under way on the implementation of one of the smart grid components, i.e. the electricity meters with the automatic meter reading. By the end of 2016, about 1.4 million out of approximately 12.8 million smart meters have been implemented in Poland.

In line with the schedule, system investments with the total capacity of over 5,200 MW are currently being carried out in Poland. The most important projects currently under implementation are the following power plants: Płock (PKN ORLEN S.A.) – 608 MW, Włocławek (PKN ORLEN S.A.) - 463 MW, Koźienice (ENEA S.A.) – 1,000 MW, Opole (PGE S.A.) - 2 x 900 MW, Turów (PGE S.A.) - 450 MW, Jaworzno (TAURON Polska Energia S.A.) - 910 MW.

According to the *Doing Business 2017* report compiled by the World Bank, Poland ranks 46<sup>th</sup> (up by 2 places) in a sub-ranking devoted to the access to electricity (*getting electricity*). The sub-ranking analyses the ease of obtaining a permanent connection to the electricity grid by an enterprise. The time-consuming nature of the whole process (122 days compared to 115 days on average in the countries in Europe and Central Asia) had a negative impact on the score obtained by Poland in this regard.

An intensive investment programme relating to development of infrastructure for diversification of sources and directions of natural gas supply has been under implementation for several years in Poland. With the investments in a new gas connection with Czech Republic (Cieszyn) and in the extension of the connection with Germany (Lasów), the technical potential of importing natural gas to Poland from new directions, alternative to the Eastern direction, has increased.

Moreover, as a result of the implementation of investment project consisting in the reconstruction of the underground storage of natural gas, its capacity increased from about 1.6 billion m<sup>3</sup> accessible in 2009 to the current level of about 2.7 billion m<sup>3</sup>. Three projects relating to the development of the capacity of underground storage by PGNiG S.A. are still being implemented. They will be completed after 2020 and the available storage will increase to about 0.4 billion m<sup>3</sup>. At the same time, as the construction of the LNG terminal in Świnoujście has been completed, Poland increased its possibility of gas supply by 5 billion m<sup>3</sup> per year. The process of contracting LNG supplies from new directions (e.g. US, Qatar) has also begun.

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<sup>100</sup> Approved in January 2016 by the President of the Energy Regulatory Office.

<sup>101</sup> DMS – demand management system

At present, the gas use in Poland amounts to about 15.2 billion m<sup>3</sup> per year, and the current potential for gas supply to Poland from a direction other than the East already amounts to approx. 12.4 billion m<sup>3</sup>, with the domestic extraction amounting to approximately 4.4 billion m<sup>3</sup>.

Works are currently under way on the implementation of further investments which will allow for increasing the diversification of gas supply and thus it will have a positive impact on the energy security of Poland. The projected investments received the EU PCI<sup>102</sup> status and thus they have been recognised as being of key importance from the European gas market development perspective. GAZ-SYSTEM S.A. is the investor for the purposes of PCI projects in the area of natural gas, planned for implementation on the territory of the Republic of Poland.

To date, Polish representatives ensured the award of the PCI status to the following projects relating to natural gas transmission infrastructure:

1. Baltic Pipe (interconnection Poland-Denmark);
2. Reconstruction of the LNG terminal in Świnoujście;
3. Gas interconnection Poland-Lithuania (GIPL);
4. Gas interconnection Poland-Slovakia;
5. Gas interconnection Poland-Czech Republic (Stork II).

Moreover, due to insufficient transmission capacity of the existing infrastructure, extension of the interconnection with Ukraine is planned. Such extension will allow for a significant increase in the potential to transmit natural gas from Poland to Ukraine, including gas purchase by Ukrainian enterprises from any direction with the use of LNG terminal in Świnoujście.

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<sup>102</sup> PCI – Projects of Common Interest.

## 6. COMPETITIVE POSITION OF POLISH ECONOMY

### 6.1 International competitiveness rankings

Over the recent years, Poland's position in some international comparisons and rankings of competitiveness has been systematically improving. This proves that progress has been made and that the implemented changes – including, in particular, changes related to deregulation – are proceeding in the right direction.

Information included in such rankings may be helpful while making investment decisions, but it should be noted that their methodology has certain limitations, and therefore they should be interpreted only in specific contexts.

Evaluations of the competitive position of the Polish economy as compared to other countries, based on a number of selected publications on the subject, are presented below.

#### 1. *Doing Business 2017* – World Bank and IFC<sup>103</sup> Report

The World Bank Report is one of the most renowned and frequently quoted competitiveness studies. The World Bank experts focus solely on the microeconomic aspects of economic activity. They are generally related to regulations in 10 areas which are considered crucial for business, such as paying taxes, enforcing contracts, starting a business or obtaining loans.

According to the results contained in the latest edition of the *Doing business 2017* report, Poland was ranked **24<sup>th</sup>** (among 190 countries) in the general ranking on the ease of doing business. Taking into account the annual change in methodology and data update<sup>104</sup>, this means a growth by 1 place compared to the report for 2016.

Poland, as 15 other EU-28 countries, ranks as **the first** in sub-ranking “trading across borders”. Therefore, it had been included in the group of countries where import/export procedures are the least costly and time-consuming.

As it was the case in the previous edition of the ranking, the “getting credit” category was scored high (**20<sup>th</sup>** position – a drop by 1 place compared to 2016). Assessment of the insolvency law was also positive (**27<sup>th</sup>** position). More effective regulations in this respect allowed for a rise by 6 positions compared to DB 2016. A visible improvement was also reported with regard to the “dealing with construction permits” category: Poland rose by 6 places to the **46<sup>th</sup>** position. This was allowed by considerable reduction of the number of the required procedures (from 19 to 12) and their duration (from 212 to 153 days). At the same time, Poland still has very low costs of obtaining a permit compared to the OECD average (0.3% vs. 1.6% of the value of warehouse being constructed).

Although in DB 2016 Poland had reported a spectacular improvement (by 38 positions) with respect to paying taxes, in the current edition of the ranking there was a drop by 3 places to the 47<sup>th</sup> position. Currently, according to the estimations of the report's authors, an entrepreneur wishing to comply with the requirements of the Polish tax provisions has to make a total of 7 payments per annum (compared

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<sup>103</sup> International Finance Corporation.

<sup>104</sup> It should be noted that DB 2017 was prepared on the basis of data collected until June 2016.

to average of 10.9 in OECD) and spend a total of 271 hours for this purpose (163.4 in OECD). Total tax rate is lower compared to the OECD average (40.4% vs 40.9%). Top positions in EU-13 were those of Latvia (15<sup>th</sup>), Estonia (21<sup>th</sup>), Slovenia (24<sup>th</sup>), Malta (33<sup>rd</sup>) and Cyprus (34<sup>th</sup>). It should be noted that all those countries significantly improved their positions compared to the previous edition of the report.

A higher score compared to the previous year was reported with regard to access to electricity. In this category, reduced duration of the required procedures from 133 to 122 days (mainly due to elimination of the need to obtain a permit for cuttings for external connection purposes) resulted in a rise by 2 places to the **46<sup>th</sup>** position.

With regard to the enforcement of contracts, Poland currently holds the **55<sup>th</sup>** position (rise by 1 place). According to the calculations of the report's authors, even as recently as in 2012 the time necessary to enforce contracts amounted to 830 days. At present it has been limited to 685 days (with the average of 553 days in OECD countries). Top positions in EU-13 were those of Lithuania, Croatia and Estonia (6<sup>th</sup>, 7<sup>th</sup> and 11<sup>th</sup> position, respectively). At the same time, Lithuania and Croatia ranked the highest among EU Member States.

With regard to registering property, Poland dropped by 2 places to the **38<sup>th</sup>** position. Although the registration costs are much lower than the OECD average (0.3 vs 4.2% of property value), the remaining aspects included in the assessment, e.g. the number of the required procedures, the time required to complete the process, and the quality of land management (calculated as an index) need improvement. A drop by 2 places to the **42<sup>nd</sup>** position was also reported in the "protecting minority investors" category.

"Starting a business" was the lowest graded category. In this case Poland reported a decrease by 5 places to the **107<sup>th</sup>** position. The low rank resulted from the number of days which, in the opinion of the report's authors, must pass before one can start a business (37 days compared to an average of 8.3 in OECD countries) and the costs (12.1% of income per capita compared to the OECD average of 3.1% ). Top positions in EU-13 were those of Estonia (14<sup>th</sup>), Latvia (22<sup>nd</sup>) and Lithuania (29<sup>th</sup>).

**Table 29. Ease of doing business ranking**

	United Kingdom	Germany	France	Spain	Lithuania	Czech Republic	Italy	Slovakia	Poland
<b>2016 ranking</b>	6	14	28	33	21	26	44	30	<b>25</b>
<b>2017 ranking</b>	7	17	29	32	21	27	50	33	<b>24</b>

Source: DDS of the Ministry of Economic Development, based on *Doing Business 2017*.

## **2. Ernst & Young 2017 European Attractiveness Survey**

This year's European Attractiveness Survey marks the 15<sup>th</sup> edition of the Ernst & Young study. As it was the case in the previous year, Poland was deemed the most attractive in terms of investments among all Central and Eastern European countries. In 2016, 256 new FDI projects were announced (a rise by 21% y/y), giving Poland the 5<sup>th</sup> position in this category. Those investments would translate into 22,074 jobs (a rise by 12% y/y). This is the second position in Europe after the United Kingdom.

**Table 30. Ranking of countries according to the number of jobs created by FDI**

	United Kingdom	Germany	France	Spain	Lithuania	Czech Republic	Italy	Slovakia	Poland
<b>2016 ranking</b>	1	3	5	12	-	11	17	10	<b>2</b>
<b>2017 ranking</b>	1	3	5	9	-	8	20	12	<b>2</b>

Source: DDS of the Ministry of Development, based on Ernst & Young European Attractiveness Survey 2016, 2017.

### 3. The Global Competitiveness Report by the World Economic Forum 2017-2018

The global competitiveness ranking is the key component of the annual report of the World Economic Forum entitled *The Global Competitiveness Report*. It is drawn up on the basis of an evaluation of the so called Global Competitiveness Index (GCI) which measures the overall competitiveness of the economy. The index was calculated on the basis of over 100 partial indicators grouped into 12 categories (competitiveness pillars) and assigned to three main areas (basic requirements; efficiency enhancers; innovations and business sophistication). Some of the partial indicators which formed the basis for the evaluation were determined on the basis of the results of a survey performed among entrepreneurs/managers in the period between February and June 2017.<sup>105</sup>

In the latest WEF ranking – GCI 2017-2018 – Poland dropped by 5 positions, ranking **39<sup>th</sup>** among 137 countries. However, Poland ranks higher than 12 members of the EU-28: Lithuania, Portugal, Italy, Slovenia, Bulgaria, Latvia, Slovakia, Hungary, Cyprus, Romania, Croatia and Greece.

Among the 12 categories analysed, Poland reported the relatively best results in: market size (21<sup>st</sup> position – no change), health and primary education (38<sup>th</sup> position – no change), higher education and training (40<sup>th</sup> position – a drop by 3 places) and macroeconomic environment (41<sup>st</sup> position – a rise by 4 places).

Poland ranked the lowest with regard to labour market efficiency (78<sup>th</sup> position – a rise by 1 place), institutions (72<sup>nd</sup> position – a drop by 7 places), innovation (59<sup>th</sup> position – a rise by 1 place), and business sophistication (57<sup>th</sup> position - a drop by 3 places). Despite the relatively poor assessment of infrastructure (44<sup>th</sup> position), it should be noted that Poland's rank considerably improved compared to the previous ranking (by 10 places).

A survey among the management defined the biggest barriers to the pursuit of economic activity: tax regulations (mentioned by 17.6% of respondents), tax rates (13.8%), restrictive labour market regulations (12.5%) and political instability (11.5%).

**Table 31. Ranking according to the Global Competitiveness Index (GCI)**

	United Kingdom	Germany	France	Spain	Lithuania	Czech Republic	Italy	Slovakia	Poland
<b>2016-2017 ranking</b>	7	5	21	32	35	31	44	65	<b>36</b>
<b>2017-2018 ranking</b>	8	5	22	34	41	31	43	59	<b>39</b>

Source: DDS of the Ministry of Economic Development on the basis of Global Competitiveness Report 2016-2017 and 2017-2018.

<sup>105</sup> 204 representatives of top management from the companies operating in Poland participated in the survey.

#### 4. Index of Economic Freedom 2017 - Heritage Foundation and Wall Street Journal

The authors of the annual *Index of Economic Freedom* ranking evaluate e.g. the freedom of economic activity, trade policies, tax burdens, budget policies, labour market policies and level of corruption.

In the current edition of the economic freedom ranking encompassing a total of 180 countries, Poland ranked **45<sup>th</sup>**, thus dropping by 6 positions. At present, Poland ranks 15<sup>th</sup> among EU-28 countries.

Compared to the 2016 ranking, improvement was reported in 3 areas (government spending, tax burden, labour freedom), while a drop was reported in 5 categories (government integrity, property rights, business freedom, monetary freedom and trade freedom); the results for the remaining 4 criteria (investment freedom, fiscal health, financial freedom, judicial effectiveness) remained unchanged.

The highest scores were reported for trade freedom (87.0), monetary freedom (84.7), fiscal health (76.1) and tax burden (76.0). According to the report's authors, the economic freedom in Poland is mostly limited by government spending (46.9).

**Table 32. Ranking of economic freedom**

	United Kingdom	Germany	France	Spain	Lithuania	Czech Republic	Italy	Slovakia	Poland
<b>2016 ranking</b>	10	17	75	43	13	21	86	56	<b>39</b>
<b>2017 ranking</b>	12	26	72	69	16	28	79	57	<b>45</b>

Source: DDS of the Ministry of Economic Development, based on *Index of Economic Freedom* 2016, 2017.

#### 5. World Competitiveness Yearbook 2017 - International Institute for Management Development (IMD)

The latest IMD *World Competitiveness Yearbook* evaluates the competitiveness of 63 countries on the basis of more than 300 detailed criteria. Factors which are taken into account in the course of the evaluation include, among others, economic results (economic growth, international trade results, employment, price levels, etc.), public finance, fiscal policy, quality of business legislation, efficiency of enterprises (e.g. productivity, financial situation of enterprises, management, innovation), infrastructure (including technical, technological, scientific, healthcare and educational infrastructure). In the current ranking of the most competitive economies Poland ranked **38<sup>th</sup>** (a drop by 5 places), ahead of 10 EU Member States<sup>106</sup>.

**Table 33. IMD Ranking**

	United Kingdom	Germany	France	Spain	Lithuania	Czech Republic	Italy	Slovakia	Poland
<b>2016 ranking</b>	18	12	32	34	30	27	35	40	<b>33</b>
<b>2017 ranking</b>	19	13	31	34	33	28	44	51	<b>38</b>

Source: DDS of the Ministry of Development on the basis of *World Competitiveness Scoreboard* 2016, 2017.

<sup>106</sup> With respect to EU-28 countries, Malta was not included in the ranking.

## 6.2 Poland compared to other EU Member States

Progress of implementation of the EU social and economic strategy Europe 2020 is assessed according to ten headline indicators divided into five thematic categories. In the context of competitiveness, particular focus should apply to indicators relating to innovation and education.

Compared to the EU average, Poland's position in terms of education is relatively sound, but its innovation position is clearly below the EU average.

### **Box 4. Headline indicators - definitions**

1. **Employment rate, age group 20-64** is the share of persons employed aged 20-64 in total population of this age group.
2. **Gross domestic expenditure on R&D (GERD)** reflects the share of gross domestic expenditure on R&D in GDP. It includes expenditure by business enterprises, higher education institutions, as well as government and private non-profit organisations.
3. **Greenhouse gas emissions** correspond to the emission volume of 6 main greenhouse gases, weighted by their potential impact on global warming compared to the baseline year (1990=100).
4. **Share of renewable energy in gross final energy consumption** is defined as a ratio of electric energy generated from renewable sources to total consumption of electric energy.
5. **Primary energy consumption** is calculated as gross domestic energy consumption excluding consumption for non-energy purposes (such as natural gas used not for combustion but for producing chemicals). This quantity is important for the measurement of the actual energy consumption.
6. **Final energy consumption** is the total energy consumed by industry, transport, households, services sector and agriculture (excluding energy used by energy transformation sector and the energy sector). This quantity is important for the measurement of the energy consumption by end users.
7. **Greenhouse gas emissions in non-ETS sectors** (million tonnes CO<sub>2</sub> equivalent) are calculated by deducting ETS verified emissions, CO<sub>2</sub> emissions from domestic aviation and NF3 emissions from national total emissions.
8. **Early leavers from education and training** correspond to the share of the people aged 18 to 24 who have completed at most lower secondary education and are not involved in further education or training in the total population aged 18 to 24.
9. **Tertiary educational attainment, age group 30-34** is defined as the share of the population aged 30-34 who have successfully completed a tertiary education programme in the total population aged 30-34.
10. **People living in households with very low work intensity** are defined as the share of persons aged 0-59 living in a household where the members of working age worked less than 20% of their total potential during the previous 12 months. The work intensity of a household is the ratio of the total number of months that all working-age household members have worked during the year and the total number of months the same household members theoretically could have worked in the same period. Moreover, a working-age person is a person aged 19-59, with the exclusion of students in the age group between 18 and 24 years.
11. **At-risk-of-poverty rate** is the share of people with an equivalised disposable income below the at-risk-of-poverty threshold in the total population. The threshold is set at 60% of the national median equivalised disposable income after social transfers.
12. **Severe material deprivation rate** is the share of persons expressing the inability to afford at least four out of nine needs (e.g. to pay week-long holidays for all household members once a year, not being able to afford a colour television set, a washing machine, a car or a telephone).



**Table 34 Headline indicators of Europe 2020 strategy: Poland compared to EU-28**

No.	Indicator	Year	Poland	EU-28	Poland's target by 2020	EU target by 2020
	<b>Employment</b>					
1	Employment rate, age group 20-64	2016	69.3	71.1	71%	75%
		2015	67.8	70.1		
	<b>Research and Development</b>					
2	Gross domestic expenditure on R&D to GDP	2015	1.0	2.03 <sup>p</sup>	1.7%	3%
		2014	0.94	2.04		
	<b>Climate change and energy</b>					
3	Greenhouse gas emissions	2015	82.76	77.88	Reduction by 14% compared to 1990	Reduction by 20% compared to 1990
		2014	82.11	77.39		
4	Share of renewable energy in gross final energy consumption	2015	11.8	16.7	15.48%	20%
		2014	11.5	16.1		
5	Primary energy consumption (index, 2005=100)	2015	102.7	89.3	Energy efficiency increased by 14%	Energy efficiency increased by 20%
		2014	101.7	88.0		
6	Final energy consumption (index, 2005=100)	2015	106.5	90.8	Energy efficiency increased by 14%	Energy efficiency increased by 20%
		2014	105.4	88.9		
7	Greenhouse gas emissions in non-ETS sectors	2015	102.3 <sup>p</sup>	86.5 <sup>p</sup>	114	90,7
		2014	102.28	85.04		
	<b>Education</b>					
8	Early leavers from education and training	2016	5.2	10.7	4.5%	10%
		2015	5.3	11.0		
9	Tertiary educational attainment, age group 30-34	2016	44.6	39.1	45%	40%
		2015	43.4	38.7		
	<b>Poverty and social exclusion</b>					
10	People living in households with very low work intensity (% of population)	2015	6.9	10.7	Reduction of the number of excluded persons by 1.5 million	Reduction of the number of excluded persons by 20 million
		2014	7.3	11.2		
11	At-risk-of-poverty rate (% of population)	2015	17.6	17.3		
		2014	17.0	17.2		
12	Severe material deprivation rate (% of population)	2015	6.7 <sup>p</sup>	8.1		
		2014	8.1	8.9		
	Risk of poverty or social exclusion (aggregate indicator combining the above three indicators) (% of population)	2015	23.4	23.8		
		2014	24.7	24.4		

*p – preliminary estimate*

Source: Eurostat.

## ANNEX I STATISTICAL TABLES – DATA ON ENTERPRISES

**Table 35. Entities of the national economy according to the projected number of employed persons as well as to selected sections of the Polish Classification of Activities (PKD)**

Specification a – 31.12.2016 b – dynamics (2015=100)		total	0-9	10-49	50-249	250-999	1,000 and more
in total	a	4,237,691	4,055,946	148,002	29,280	3,703	760
	b	101.3	101.3	100.6	100.1	100.8	99.0
mining and quarrying	a	4,863	4,256	438	132	27	10
	b	102.6	102.8	101.9	99.2	96.4	100.0
manufacturing	a	377,167	342,127	26,993	6,606	1,239	202
	b	100.5	100.6	100.1	99.5	100.2	96.7
electricity, gas and water supply	a	9,223	8,594	362	198	44	25
	b	105.7	106.4	95.8	96.6	102.3	96.2
construction	a	494,724	477,114	15,535	1,896	157	22
	b	101.4	101.5	99.9	99.2	101.3	95.7
trade; repair of motor vehicles	a	1,044,727	1,013,668	27,616	3,067	317	59
	b	98.6	98.5	100.0	99.4	100.0	103.5
transportation and storage	a	260,156	254,376	4,818	757	163	42
	b	101.4	101.4	101.4	100.0	98.8	105.0
accommodation and food service activities	a	130,927	125,438	5,152	293	38	6
	b	100.9	100.9	100.5	99.7	105.6	85.7
information and communication	a	142,561	139,326	2,770	378	69	18
	b	107.2	107.4	100.6	98.7	109.5	90.0
financial and insurance activities	a	124,643	122,577	1,506	454	73	33
	b	97.7	97.6	100.1	99.6	102.8	103.1
real estate activities	a	240,621	236,716	3,132	694	74	5
	b	103.3	103.3	102.8	102.7	98.7	83.3
professional, scientific and technical activities	a	421,565	414,491	6,164	753	135	22
	b	104.2	104.2	102.9	103.4	108.9	100.0
administrative and support service activities	a	126,902	122,118	3,709	830	197	48
	b	103.3	103.2	104.7	101.7	100.0	98.0
public administration and defence; compulsory social security	a	27,113	21,033	3,359	2,275	375	71
	b	100.8	100.9	101.3	100.0	100.8	102.9
education	a	149,834	115,460	27,605	6,626	86	57
	b	101.5	101.8	100.7	100.4	101.2	100.0
human health and social work activities	a	234,019	225,224	6,566	1661	466	102
	b	103.1	103.2	100.9	100.4	100.2	100.0
arts, entertainment and recreation	a	76,480	72,772	3,069	603	31	5
	b	102.5	102.6	100.9	100.2	106.9	100.0
other service activities	a	276,891	271,442	4,495	812	118	24
	b	102.1	102.2	100.3	101.0	98.3	96.0

Source: Structural changes of groups of entities of the national economy entered into the REGON register, 2016, Central Statistical Office, Warsaw 2016.

**Table 36. Financial data of enterprises according to ownership sector**

	2009	2010	2011	2012	2013	2014	2015	2016
revenues from overall activity (PLN billion)								
all sectors	2,322.61	2,451.58	2,791.26	2,898.81	2,916.62	2,995.71	3,087.98	3,194.12
public sector	296.18	294.40	311.62	310.47	290.05	275.18	279.72	261.38
private sector	2,026.43	2,157.18	2,479.64	2,588.34	2,626.58	2,720.54	2,808.26	2,932.74
costs of overall activity (PLN billion)								
all sectors	2,206.55	2,319.65	2,650.35	2,770.06	2,782.60	2,859.61	2,945.49	3,030.23
public sector	282.45	271.97	283.56	290.61	271.55	257.60	263.08	244.79
private sector	1,924.10	2,047.68	2,366.78	2,479.44	2,511.05	2,602.01	2,682.41	2,785.43
gross financial result (PLN billion)								
all sectors	116.09	131.76	141.01	128.86	134.11	136.29	142.65	163.89
public sector	13.74	22.41	28.09	19.88	18.53	17.56	16.61	16.59
private sector	102.35	109.35	112.92	108.97	115.58	118.73	126.03	147.31
net financial result (PLN billion)								
all sectors	95.81	109.94	116.63	107.41	114.77	114.98	120.57	138.30
public sector	10.44	18.72	23.41	16.16	15.61	13.70	12.37	12.93
private sector	85.37	91.22	93.22	91.24	99.16	101.27	108.20	125.37
gross turnover profitability rate (%)								
all sectors	5.00	5.37	5.05	4.45	4.60	4.55	4.62	5.13
public sector	4.64	7.61	9.01	6.40	6.39	6.38	5.94	6.35
private sector	5.05	5.07	4.55	4.21	4.40	4.36	4.49	4.89
net turnover profitability rate (%)								
all sectors	4.13	4.48	4.18	3.71	3.93	3.84	3.90	4.33
public sector	3.53	6.36	7.51	5.21	5.38	4.98	4.42	4.95
private sector	4.21	4.23	3.76	3.53	3.78	3.72	3.85	4.15
return on assets (%)								
all sectors	5.00	5.30	5.11	4.53	4.62	4.36	4.32	4.71
public sector	2.32	3.88	4.73	3.12	3.06	2.57	2.10	2.22
private sector	5.83	5.72	5.22	4.93	5.03	4.82	4.92	5.31
share of profitable units (%)								
all sectors	76.96	77.75	77.43	76.08	77.70	79.52	81.12	79.98
public sector	70.40	70.31	68.66	69.67	72.36	71.40	72.71	70.27
private sector	77.33	78.17	77.90	76.41	77.98	79.93	81.54	80.47

Source: Ministry of Economic Development on the basis of F-01 report of the Central Statistical Office.

**Table 37. Revenues and net financial result per one enterprise and per one person employed**

	2009	2010	2011	2012	2013	2014	2015	2016
<i>revenues from overall activity per one enterprise (PLN thousand)</i>								
more than 9 employed persons	45,915.1	50,197.2	55,517.7	56,343.3	56,876.5	57,215.9	59,032.3	60,704.0
10-49	11,269.5	12,531.7	14,016.9	14,148.3	14,334.3	14,541.7	15,033.7	15,282.5
50-249	42,502.4	44,237.1	50,260.1	50,578.1	51,941.6	53,480.0	54,899.7	55,077.7
more than 249 employed persons	428,423.4	456,992.1	516,682.4	535,510.4	536,111.7	529,055.2	531,145.4	534,801.3
<i>net financial result per one enterprise (PLN thousand)</i>								
more than 9 employed persons	1,894.0	2,251.1	2,319.7	2,087.6	2,238.0	2,195.9	2,304.9	2,628.3
10-49	470.9	588.2	254.0	632.0	542.1	579.0	659.2	688.0
50-249	1,493.6	1,518.7	1,564.8	1,499.0	1,796.0	2,086.7	2,345.7	2,344.9
more than 249 employed persons	18,941.7	22,452.2	27,586.8	20,458.2	22,465.6	19,935.6	19,145.0	23,056.4
<i>revenues from overall activity per one person employed (PLN thousand)</i>								
more than 9 employed persons	474.5	498.6	565.2	589.7	588.9	589.4	594.8	596.0
10-49	476.9	519.6	589.6	608.8	619.7	627.5	638.6	642.1
50-249	430.7	433.9	493.9	509.3	513.2	518.7	527.7	526.4
more than 249 employed persons	499.6	529.3	597.5	628.5	620.6	614.7	616.5	617.7
<i>net financial result per one person employed (PLN thousand)</i>								
more than 9 employed persons	19.6	22.4	23.6	21.9	23.2	22.6	23.2	25.8
10-49	19.9	24.4	10.7	27.2	23.4	25.0	28.0	28.9
50-249	15.1	14.9	15.4	15.1	17.7	20.2	22.5	22.4
more than 249 employed persons	22.1	26.0	31.9	24.0	26.0	23.2	22.2	26.6

Source: Ministry of Economic Development on the basis of F-01 report of the Central Statistical Office.

**Table 38. Financial data of enterprises according to number of employed persons**

	2009	2010	2011	2012	2013	2014	2015	2016
<i>revenues from overall activity (PLN billion)</i>								
more than 9 employed persons	2,322.6	2,451.6	2,791.3	2,898.80	2,916.60	2,995.70	3,088.0	3,194.1
10–49	360.3	388.6	457.3	474.5	483.8	509.5	523.5	532.2
50–249	662.0	652.3	731.2	747.6	747.3	750.9	775.0	786.9
more than 249 employed persons	1,300.3	1,410.7	1,602.7	1,676.7	1,685.5	1,735.3	1,789.4	1,875.0
<i>costs of overall activity (PLN billion)</i>								
more than 9 employed persons	2,206.5	2,319.6	2,650.3	2,770.1	2,782.6	2,859.6	2,945.5	3,030.2
10–49	342.3	366.9	446.0	449.6	462.7	486.0	497.2	504.7
50–249	633.6	624.9	703.6	721.0	716.9	716.8	736.6	747.9
more than 249 employed persons	1,230.6	1,327.8	1,500.8	1,599.4	1,603.0	1,656.8	1,711.7	1,777.7
<i>gross financial result (PLN billion)</i>								
more than 9 employed persons	116.1	131.8	141.0	128.9	134.1	136.3	142.6	163.9
10–49	18.0	21.7	11.4	24.9	21.1	23.6	26.5	27.5
50–249	28.5	27.1	27.6	26.6	30.4	34.2	38.4	39.0
more than 249 employed persons	69.6	83.0	102.0	77.3	82.6	78.6	77.8	97.4
<i>net financial result (PLN billion)</i>								
more than 9 employed persons	95.8	109.9	116.6	107.4	114.8	115.0	120.6	138.3
10–49	15.1	18.2	8.3	21.2	18.3	20.3	23.0	24.0
50–249	23.3	22.4	22.8	22.2	25.8	29.3	33.1	33.5
more than 249 employed persons	57.5	69.3	85.6	64.1	70.6	65.4	64.5	80.8
<i>gross turnover profitability rate (%)</i>								
more than 9 employed persons	5.00	5.37	5.05	4.45	4.60	4.55	4.62	5.13
10–49	5.00	5.58	2.49	5.25	4.37	4.62	5.05	5.17
50–249	4.30	4.16	3.77	3.56	4.07	4.55	4.96	4.96
more than 249 employed persons	5.35	5.88	6.37	4.61	4.90	4.53	4.35	5.19
<i>net turnover profitability rate (%)</i>								
more than 9 employed persons	4.13	4.48	4.18	3.71	3.93	3.84	3.90	4.33
10–49	4.18	4.69	1.81	4.47	3.78	3.98	4.39	4.50
50–249	3.51	3.43	3.11	2.96	3.46	3.90	4.27	4.26
more than 249 employed persons	4.42	4.91	5.34	3.82	4.19	3.77	3.60	4.31
<i>return on assets (%)</i>								
more than 9 employed persons	5.00	5.30	5.11	4.53	4.62	4.36	4.32	4.71
10–49	5.43	5.93	2.40	5.82	5.05	4.94	5.25	5.41
50–249	4.70	4.56	4.24	3.93	4.29	4.76	5.10	4.89
more than 249 employed persons	5.03	5.42	6.12	4.44	4.66	4.06	3.79	4.47
<i>share of profitable units (%)</i>								

more than 9 employed persons	77.0	77.8	77.4	76.1	77.7	79.5	81.1	80.0
10-49	76.7	77.3	77.1	75.7	76.7	78.5	80.2	79.2
50-249	76.8	77.8	77.8	76.2	78.9	81.3	82.7	81.3
more than 249 employed persons	80.6	81.7	79.6	79.9	83.2	83.1	83.5	82.7

Source: Ministry of Economic Development on the basis of F-01 report of the Central Statistical Office.

**Table 39. Enterprise debt**

	2009	2010	2011	2012	2013	2014	2015	2016
<i>short-term liabilities (PLN billion)</i>								
more than 9 employed persons	522.4	571.0	644.1	639.2	662.4	672.2	715.5	775.9
10-49	82.6	97.0	118.0	110.5	109.4	119.7	128.3	141.4
50-249	148.3	151.3	172.1	172.6	178.6	179.2	182.2	196.2
more than 249 employed persons	291.5	322.7	354.0	356.1	374.4	373.3	405.1	438.4
<i>long-term liabilities (PLN billion)</i>								
more than 9 employed persons	248.4	263.1	317.0	325.5	346.6	414.9	437.2	473.7
10-49	43.0	47.8	58.9	59.8	54.8	70.0	75.0	71.6
50-249	63.7	70.6	75.1	83.0	91.7	96.6	100.0	105.4
more than 249 employed persons	141.8	144.8	182.9	182.7	200.2	248.4	262.2	296.6
<i>long-term liabilities per one enterprise (PLN thousand)</i>								
more than 9 employed persons	4,910.7	5,387.2	6,304.4	6,326.1	6,759.2	7,925.2	8,358.0	9,002.1
10-49	1,344.9	1,540.6	1,806.0	1,781.7	1,622.6	1,997.3	2,153.0	2,056.5
50-249	4,086.7	4,785.3	5,164.2	5,615.6	6,371.5	6,879.1	7,086.6	7,379.5
more than 249 employed persons	46,705.4	46,899.3	58,967.0	58,354.6	63,670.6	75,725.3	77,824.6	84,604.5
<i>long-term liabilities per one person employed (PLN thousand)</i>								
more than 9 employed persons	50.7	53.5	64.2	66.2	70.0	81.6	84.2	88.4
10-49	56.9	63.9	76.0	76.7	70.1	86.2	91.5	86.4
50-249	41.4	46.9	50.7	56.5	62.9	66.7	68.1	70.5
more than 249 employed persons	54.5	54.3	68.2	68.5	73.7	88.0	90.3	97.7

Source: Ministry of Economic Development on the basis of F-01 report of the Central Statistical Office.

**Table 40. Enterprise debt indices**

	2009	2010	2011	2012	2013	2014	2015	2016
<i>debt index (liabilities/assets)</i>								
more than 9 employed persons	0.40	0.40	0.42	0.41	0.41	0.41	0.41	0.43
10–49	0.45	0.47	0.51	0.47	0.45	0.46	0.46	0.48
50–249	0.43	0.45	0.46	0.45	0.45	0.45	0.43	0.44
more than 249 employed persons	0.38	0.37	0.38	0.37	0.38	0.39	0.39	0.41
<i>liabilities/equity</i>								
more than 9 employed persons	0.77	0.78	0.85	0.80	0.79	0.82	0.82	0.87
10–49	0.89	0.99	1.2	0.98	0.92	0.96	0.97	1.03
50–249	0.83	0.93	0.97	0.95	0.92	0.93	0.88	0.90
more than 249 employed persons	0.72	0.68	0.73	0.71	0.72	0.75	0.77	0.82
<i>long-term liabilities/equity</i>								
more than 9 employed persons	0.25	0.25	0.28	0.27	0.27	0.31	0.31	0.33
10–49	0.31	0.33	0.40	0.34	0.31	0.35	0.36	0.35
50–249	0.25	0.30	0.30	0.31	0.31	0.32	0.31	0.32
more than 249 employed persons	0.24	0.21	0.25	0.24	0.25	0.30	0.30	0.33
<i>long-term liabilities/revenues from sales of basic products and services</i>								
more than 9 employed persons	0.19	0.19	0.20	0.20	0.22	0.25	0.25	0.27
10–49	0.33	0.33	0.35	0.34	0.31	0.36	0.36	0.34
50–249	0.19	0.21	0.20	0.21	0.23	0.24	0.24	0.25
more than 249 employed persons	0.17	0.16	0.18	0.18	0.19	0.23	0.24	0.26

Source: Ministry of Economic Development on the basis of F-01 report of the Central Statistical Office.

**Table 41. Liquidity ratios**

	2009	2010	2011	2012	2013	2014	2015	2016
<i>liquidity ratio</i>								
more than 9 employed persons	1.47	1.49	1.48	1.48	1.45	1.52	1.50	1.48
10–49	1.56	1.59	1.49	1.66	1.62	1.66	1.64	1.55
50–249	1.52	1.53	1.48	1.52	1.51	1.53	1.59	1.58
more than 249 employed persons	1.42	1.45	1.47	1.40	1.37	1.46	1.40	1.42
<i>elevated liquidity ratio</i>								
more than 9 employed persons	1.05	1.08	1.05	1.03	1.02	1.08	1.06	1.06
10–49	1.10	1.16	1.09	1.20	1.16	1.19	1.18	1.13
50–249	1.06	1.07	1.03	1.05	1.05	1.07	1.12	1.11
more than 249 employed persons	1.03	1.06	1.05	0.97	0.97	1.04	1.00	1.02
<i>high liquidity ratio</i>								
more than 9 employed persons	0.40	0.42	0.40	0.38	0.38	0.42	0.41	0.40
10–49	0.40	0.46	0.42	0.49	0.44	0.46	0.44	0.42
50–249	0.36	0.36	0.33	0.35	0.37	0.39	0.42	0.40
more than 249 employed persons	0.41	0.43	0.42	0.36	0.36	0.41	0.39	0.40

Source: Ministry of Economic Development on the basis of F-01 report of the Central Statistical Office.

**Table 42. Indicators of export activities**

	2009	2010	2011	2012	2013	2014	2015	2016
<i>share of export sales in revenues from overall activity (%)</i>								
more than 9 employed persons	16.37	17.53	18.30	19.08	20.17	20.37	20.40	21.41
10–49	6.79	7.52	7.84	8.24	9.15	9.66	9.25	9.64
50–249	12.01	12.82	13.06	14.55	15.72	15.81	15.92	16.91
more than 249 employed persons	21.24	22.46	23.67	24.17	25.30	25.48	25.61	26.64
<i>growth rate of revenues from overall activity (%)</i>								
more than 9 employed persons	100.9	105.6	113.9	103.9	100.6	102.7	103.1	103.4
10–49	98.2	107.8	117.7	103.7	102.0	105.3	102.8	101.7
50–249	101.5	98.5	112.1	102.2	100.0	100.5	103.2	101.5
more than 249 employed persons	101.5	108.5	113.6	104.6	100.5	103.0	103.1	104.8
<i>export sales growth rate (%)</i>								
more than 9 employed persons	100.1	113.0	118.9	108.3	106.3	103.7	103.3	108.5
10–49	95.7	119.5	122.7	109.0	113.2	111.1	98.4	106.0
50–249	104.8	105.2	114.2	113.9	108.0	101.1	103.9	107.9
more than 249 employed persons	99.2	114.7	119.7	106.8	105.2	103.7	103.6	109.0

Source: Ministry of Economic Development on the basis of F-01 report of the Central Statistical Office.



**Table 43. Investment activity of enterprises employing more than 9 employed persons**

	2009	2010	2011	2012	2013	2014	2015	2016
<i>investment expenditure value (PLN billion)<sup>1</sup></i>								
more than 9 employed persons	118.7	113.9	127.5	124.7	129.1	146.1	164.2	145.6
0–49	15.2	15.3	17.1	15.3	14.6	15.9	17.5	15.3
50–249	26.0	25.3	28.7	27.1	30.0	31.2	34.7	31.0
more than 249 employed persons	77.6	73.3	81.7	82.3	84.6	99.0	111.9	99.2
<i>investment expenditure value per one enterprise (PLN thousand)</i>								
more than 9 employed persons	2,347.4	2,332.7	2,535.1	2,424.0	2,517.9	2,789.5	3,138.2	2,766.2
10–49	476.1	494.1	522.8	455.3	431.4	452.7	502.9	438.7
50–249	1,667.0	1,717.8	1,970.4	1,835.5	2,084.4	2,222.8	2,458.5	2,172.7
more than 249 employed persons	25,552.6	23,736.9	26,348.4	26,288.9	26,899.3	30,177.3	33,227.5	28,304.1
<i>investment expenditure value per one person employed (PLN thousand)</i>								
more than 9 employed persons	24.3	23.2	25.8	25.4	26.1	28.7	31.6	27.2
10–49	20.1	20.5	22.0	19.6	18.6	19.5	21.4	18.4
50–249	16.9	16.8	19.4	18.5	20.6	21.6	23.6	20.8
more than 249 employed persons	29.8	27.5	30.5	30.9	31.1	35.1	38.6	32.7
<i>investment expenditure to revenues from sales of basic products and services (in %)</i>								
more than 9 employed persons	9.3	8.3	8.2	7.7	8.0	8.8	9.5	8.1
10–49	11.6	10.6	10.2	8.7	8.1	8.2	8.5	7.4
50–249	7.9	7.6	7.7	6.9	7.6	7.7	8.2	7.2
more than 249 employed persons	9.4	8.3	8.0	7.9	8.2	9.3	10.1	8.6
<i>share of investment expenditure in financial surplus (%)</i>								
more than 9 employed persons	62.3	55.0	57.2	55.8	55.9	62.3	65.1	54.9
10–49	60.9	53.6	84.6	44.5	47.0	46.5	47.3	40.3
50–249	57.3	57.0	61.3	56.0	57.9	56.5	58.2	50.4
more than 249 employed persons	64.5	54.6	52.4	58.6	57.1	68.2	71.9	60.0
<i>share of investment expenditure in depreciation</i>								
more than 9 employed persons	1.62	1.50	1.58	1.45	1.46	1.57	1.54	1.43
10–49	2.36	2.18	2.24	1.86	1.73	1.72	1.79	1.51
50–249	1.61	1.56	1.67	1.48	1.59	1.60	1.65	1.38
more than 249 employed persons	1.53	1.39	1.46	1.38	1.39	1.54	1.48	1.43

Source: Ministry of Economic Development on the basis of F-01 report of the Central Statistical Office.

**Table 44. Number of entities employing more than 9 employed persons and the number of employed persons**

	2009	2010	2011	2012	2013	2014	2015	2016
<i>number of analysed business operators</i>								
more than 9 employed persons	50,585	48,839	50,277	51,449	51,280	52,358	52,310	52,618
10–49	31,974	31,007	32,627	33,536	33,748	35,037	34,824	34,825
50–249	15,576	14,745	14,548	14,782	14,388	14,041	14,117	14,287
more than 249 employed persons	3,035	3,087	3,102	3,131	3,144	3,280	3,369	3,506
<i>number of persons employed</i>								
more than 9 employed persons	4,895,073	4,916,471	4,938,733	4,915,414	4,952,889	5,082,495	5,191,272	5,359,026
10–49	755,646	747,761	775,680	779,367	780,683	811,971	819,817	828,825
50–249	1,537,021	1,503,426	1,480,406	1,468,112	1,456,350	1,447,572	1,468,717	1,494,899
more than 249 employed persons	2,602,406	2,665,284	2,682,647	2,667,935	2,715,856	2,822,952	2,902,738	3,035,302
<i>number of persons employed per one enterprise</i>								
more than 9 employed persons	96.8	100.6	98.2	95.5	96.6	97.1	99.2	101.8
10–49	23.6	24.1	23.8	23.2	23.1	23.2	23.5	23.8
50–249	98.7	101.9	101.8	99.3	101.2	103.1	104.0	104.6
more than 249 employed persons	857.5	863.4	864.8	852.1	863.8	860.7	861.6	865.7

Source: Ministry of Economic Development on the basis of F-01 report of the Central Statistical Office.

**Table 45. Number of active enterprises in years 2009-2015**

	2009	2010	2011	2012	2013	2014	2015
total	1,673,527	1,726,663	1,784,603	1,794,943	1,771,460	1,842,589	1,914,141
fewer than 10 employed persons	1,604,417	1,655,064	1,710,598	1,719,187	1,693,785	1,764,597	1,838,365
10–49	50,189	52,591	54,999	57,071	59,128	59,166	56,713
50–249	15,808	15,841	15,817	15,484	15,329	15,470	15,631
more than 249 employed persons	3,113	3,167	3,189	3,201	3,218	3,356	3,432

Source: Central Statistical Office of Poland: Activity of non-financial enterprises in 2015 (and earlier).

**Table 46. Average gross monthly remuneration in enterprises in years 2009–2015 (in PLN)**

	2009	2010	2011	2012	2013	2014	2015
total	3,139	3,300	3,481	3,628	3,761	3,899	4,017
fewer than 10 employed persons	1,879	2,006	2,059	2,172	2,210	2,315	2,437
10–49	n/d	n/d	n/d	3,309	3,441	3,508	3,652
50–249	3,242	3,363	3,568	3,706	3,850	4,015	4,180
more than 249 employed persons	3,850	4,012	4,255	4,430	4,563	4,731	4,832

Source: Central Statistical Office of Poland: Activity of non-financial enterprises in 2015 (and earlier).

**Table 47. Revenues, costs, income and investment expenditure in enterprises (nominal values)**

		2009	2010	2011	2012	2013	2014	2015
Total revenues in PLN billion	total	3,079	3,297	3,666	3,763	3,793	3,908	4,076
	fewer than 10 employed persons	699	719	761	762	780	808	896
	10–49	417	449	520	555	562	580	578
	50–249	657	689	769	767	765	778	802
	more than 249 employed persons	1,306	1,439	1,616	1,680	1,686	1,743	1,801
Total costs in PLN billion	total	2,872	3,046	3,425	3,542	3,550	3,653	3,818
	fewer than 10 employed persons	614	618	665	675	681	705	776
	10–49	393	420	501	523	531	543	538
	50–249	625	649	738	736	730	736	757
	more than 249 employed persons	1,239	1,358	1,521	1,608	1,608	1,670	1,748
Gross profit in PLN billion	total	256	291	298	276	294	311	335
	fewer than 10 employed persons	105	121	114	106	118	121	142
	10–49	30	34	36	39	41	45	47
	50–249	39	46	41	40	43	51	53
	more than 249 employed persons	81	89	107	90	93	94	93
Investment expenditure in PLN billion	total	143	141	161	155	162	183	201
	fewer than 10 employed persons	22	25	28	24	26	30	30
	10–49	16	17	19	17	18	19	20
	50–249	31	29	34	33	34	36	40
	more than 249 employed persons	75	70	80	80	83	98	111

Source: Central Statistical Office of Poland: Activity of non-financial enterprises in 2015 (and earlier). In relation to the data presented in previous charts (derived from the Polgos module and based on the F-01 reports of the Central Statistical Office), the data presented above (the non-financial entities group) do not extend to section A (Agriculture, forestry and fishing) and section K (Financial and insurance activities); section P (Education) is included, with the exception of higher education.

## **ANNEX II      RANKING OF VOIVODESHIPS IN TERMS OF ENTERPRISE DEVELOPMENT**

The ranking of voivodeships presented below was prepared with the use of the linear ordering method, on the basis of nine variables constituting, in our opinion, a synthetic measure of enterprise development. All the variables below are stimuli, and all have the same weight:

- Z1 – Number of new entities of the national economy entered in the REGON register per 1,000 people (2016)
- Z2 – Number of active non-financial enterprises per 1,000 residents (2015)
- Z3 – Investment expenditure in enterprises to GDP (2014)
- Z4 – Natural persons pursuing economic activity in rural areas per 100,000 working-age persons (2016)
- Z5 – Revenues per one SME entity (non-financial enterprises) (2015)
- Z6 – 3-year growth rate of revenues from overall activity of SMEs (2016, 2013=100, current prices)
- Z7 - 3-year growth rate of investment expenditure of SMEs (2016, 2013=100, current prices)
- Z8 - 3-year growth rate of the number of persons employed in SMEs (2016, 2013=100)
- Z9 – Average share of innovative enterprises<sup>107</sup> in total number of enterprises from the industrial and services sectors (2015)

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<sup>107</sup> Industrial enterprise/service enterprise that is innovative in terms of product and process innovations is an enterprise which in the analysed three years' period marketed at least one product or process innovation (a new or significantly improved product or a new or significantly improved process) and whose primary operations have been classified as industry/services according to the Polish Classification of Activities (PKD 2007).

**Table 48. Data used in the ranking of voivodeships in terms of enterprise development**

	z1	z2	z3	z4	z5	z6	z7	z8	z9
Dolnośląskie	9.92	52.6	0.105	13	1,030	114	103	106	0.142
Kujawsko-Pomorskie	7.69	43.5	0.090	11	1,089	105	88	99	0.125
Lubelskie	6.69	37.4	0.073	10	948	107	82	101	0.135
Lubuskie	9.18	46.4	0.071	12	979	81	130	102	0.116
Łódzkie	8.17	48.6	0.093	12	994	108	133	104	0.125
Małopolskie	9.62	52.7	0.077	13	1,108	99	94	106	0.152
Mazowieckie	12.69	64.5	0.088	16	1,711	109	134	106	0.145
Opolskie	6.29	39.4	0.106	11	1,071	109	76	101	0.150
Podkarpackie	6.74	36.0	0.085	9	1,005	110	75	102	0.142
Podlaskie	6.81	39.0	0.073	10	1,061	106	87	108	0.153
Pomorskie	11.13	54.1	0.099	14	1,138	108	81	103	0.126
Śląskie	7.57	47.6	0.090	12	1,204	104	91	101	0.131
Świętokrzyskie	7.28	38.8	0.067	11	920	104	102	101	0.115
Warmińsko-Mazurskie	7.21	38.0	0.076	10	900	109	105	102	0.113
Wielkopolskie	9.71	56.5	0.086	14	1,219	114	114	106	0.130
Zachodniopomorskie	10.41	55.7	0.081	15	927	108	78	107	0.158

Source: DDS of the Ministry of Economic Development on the basis of Central Statistical Office data.

Transformations of variables<sup>108</sup> led to the following ranking:

**Table 49. Ranking of voivodeships in terms of enterprise development**

Ranking position	Voivodeship	Distance from the "model" (0-1)
1.	Mazowieckie	0.29
2.	Dolnośląskie	0.39
3.	Zachodniopomorskie	0.40
4.	Wielkopolskie	0.41
5.	Łódzkie	0.48
6.	Pomorskie	0.49
7.	Małopolskie	0.51
8.	Śląskie	0.62
9.	Podlaskie	0.69
10.	Opolskie	0.69
11.	Kujawsko-Pomorskie	0.70
12.	Warmińsko-Mazurskie	0.72
13.	Lubuskie	0.73
14.	Lubelskie	0.74
15.	Świętokrzyskie	0.74
16.	Podkarpackie	0.75

<sup>108</sup> Calculations were made by the DDS of the Ministry of Economic Development, with the use of *Taksonomia numeryczna* software by K.Kolenda, attached to the book *Taksonomia numeryczna*, M.Kolenda, Wrocław 2006.

Despite elimination of the variables which would offer additional boost for a voivodeship due to the region's economic potential (e.g. global volume of investment expenditure or revenues of enterprises) by focusing e.g. on the dynamics of development processes, the resulting ranking appears to be closely correlated to that potential.

Zachodniopomorskie Voivodeship is a certain exception in this respect, with high rank despite negative growth rate of investment expenditure of SMEs. Its position is mainly affected by high propensity to carry out economic activity, presented by variables  $z_1$ ,  $z_2$  and  $z_4$ , but also by the highest share of innovative enterprises of all voivodeships (or at least this is what can be concluded from the statements of the analysed companies, based on which this measure is calculated).

The ranking confirmed the relatively weak position of the five voivodeships from Eastern Poland. One of the reasons might be poor saturation of those voivodeships with enterprises, even compared to the number of residents, which is particularly noticeable in the case of Podkarpackie Voivodeship.

## **ANNEX III IMPLEMENTATION OF THE SMALL BUSINESS ACT IN POLAND IN 2016**

### **I. Implementation of the SBA priority areas at the central level**

One of the priorities of the Polish economic policy is to provide the best possible opportunities for the operation, development and competitiveness of small and medium-sized enterprises. The main strategic document at the EU level determining the SME policy framework is the Communication entitled *Think Small First. A Small Business Act for Europe*, COM(2008) 394. It builds on the Commission's and Member States' policy achievements, creates a new policy framework which integrates the existing enterprise policy instruments and modern approach to SME policy.

SBA determines e.g. the principles of support and measures to support SMEs at every stage of their life cycle within the following 10 priority areas which should be covered by the intervention:

- 1) creating an environment in which entrepreneurs and family businesses can thrive and entrepreneurship is rewarded;
- 2) ensuring that honest entrepreneurs who have faced bankruptcy quickly get a second chance;
- 3) designing rules according to the 'think small first' principle;
- 4) making public administrations responsive to the needs of small and medium-sized businesses (SMEs);
- 5) adaptation of public policy tools to SMEs' needs: facilitation of SMEs' participation in public procurement and better use of State aid possibilities for SMEs;
- 6) facilitating SMEs' access to finance and development of a legal and business environment supportive to timely payments in commercial transactions;
- 7) helping SMEs to benefit more from the opportunities offered by the EU's single market;
- 8) promoting the upgrading of skills in SMEs and all forms of innovation;
- 9) enabling SMEs to turn environmental challenges into opportunities;
- 10) encouraging and supporting SMEs to benefit from the growth of markets.

The SBA programme creates a new framework for the entrepreneurship policy which integrates the existing support instruments, focusing in particular on the creation of a modern SME policy. One of the key preconditions for the effective implementation of the SBA objectives is the regular monitoring of the activities performed according to a specific methodology for collecting information. In order to determine the effectiveness and progress of implementation of measures in respective SBA priority areas in Poland, information was collected on the ongoing as well as planned SBA initiatives. Information presented below includes the measures initiated and implemented in respective SBA areas during the period between July 2016 and June 2017. It should be emphasised that, apart from the measures described below, support schemes / measures initiated in the previous years were functioning in Poland simultaneously.

In order to determine the effectiveness and progress of implementation of measures in respective SBA priority areas in Poland, information was collected on the ongoing SBA initiatives on the domestic level.

Priority area	Project description
<b><i>I. Create an environment in which entrepreneurs and family businesses can thrive and entrepreneurship is rewarded</i></b>	<ul style="list-style-type: none"> <li>• <b><i>Improving the competitiveness of regions through corporate social responsibility (CSR)</i></b> programme implemented by the Polish Agency for Enterprise Development (PARP) under Swiss-Polish Cooperation Programme. The main objective of the project is to raise awareness and knowledge about corporate social responsibility among representatives of SMEs, Marshal Offices, and Investors and Exporters' Service Centres. The project also aims at promoting socially responsible entrepreneurs by means of local government unit activities. It should also encourage implementing CSR ideas through implementation of pilot projects of SMEs.</li> <li>• Lending programme <b><i>First Business – Support at the Start II</i></b> (MRPiPS + BGK). The objective is to develop entrepreneurship and to create new jobs as components of labour market development, to combat unemployment and to promote employment.</li> </ul>
<b><i>II. Ensure that honest entrepreneurs who have faced bankruptcy quickly get a second chance</i></b>	<ul style="list-style-type: none"> <li>• Early Warning Poland (PARP) project is addressed to entrepreneurs in a critical situation or recognising the first symptoms of the problems to come. They will be supported by consultants and mentors, experienced entrepreneurs who faced many a crisis before.</li> </ul>
<b><i>III. Design rules according to the 'think small first' principle</i></b>	<ul style="list-style-type: none"> <li>• New regulations were introduced: <ul style="list-style-type: none"> <li>○ The Act of 26 January 2017 <i>amending the Act on freedom of economic activity</i>, on the basis of which all draft normative acts relating to the property rights and obligations of enterprises and their rights and obligations towards public administration bodies are analysed in terms of their impact on SMEs. The result of this analysis is a mandatory component of the justification for the draft normative act;</li> <li>○ The Act of 16 December 2016 <i>amending certain acts in order to improve the legal environment of entrepreneurs</i>, aimed at reduction of certain administrative obligations, support enterprise development and increasing labour productivity or streamlining the investment process;</li> <li>○ <i>Responsible Development Strategy (RDS)</i> – in the area <i>Law at the service of citizens and the economy</i> implementation of a strategic project has been planned: <i>Development of a system to assess impact of regulations and social participation in the legislative process</i>. The strategy provides e.g. for reinforcement of regulatory impact assessment or development of a methodology to estimate costs and benefits of regulations.</li> </ul> </li> <li>• From 2016, work on the Package of 100 pro-enterprise facilitations (MoED). The aim is to eliminate problems in proceedings in offices, inadequate administrative penalties, time-consuming debt recovery, numerous regulations that hinder the company's operation and make it unprofitable for businesses to expand their scale of operations, lack of legal form of activity suitable for innovative start-ups and other young companies looking for funding and the lack of regulations that allow for uninterrupted operation of the company after the owner's death.</li> <li>• Beginning in 2016 of the second stage of reform of Polish economic law, <i>Business Constitution</i> (MoED). The package consists of projects: <i>the Entrepreneurs' Law</i>, the <i>Act on simplifications for</i></li> </ul>



	<p><i>entrepreneurs in tax and commercial law, the Act on the rules of participation of foreign entrepreneurs and other foreigners in economic transactions, and the Act on simplifications in disbursement of EU funds.</i></p> <ul style="list-style-type: none"> <li>• Implementation of guidelines for impact assessments and public consultations within the government legislative process of 5 May 2015, with a focus on the cost-benefit analysis of regulations for the SME sector. In the event of a significant negative impact of the project on the SME sector, consideration should be given, in consultation with SME representatives, of the introduction of alternative mechanisms and flexible arrangements to facilitate the adaptation of these entities to new procedures (the SME test). The obligation to carry out an assessment of draft regulations for SMEs is reflected in the RIA form used in the government legislative process.</li> <li>• The Act of 5 September 2016 <i>amending the Act on personal income tax and the Act on corporate income tax</i> (O.J. item 1550) introduces a reduced corporate tax rate of 15% from which it may benefit close to 400,000 companies. (MoF)</li> <li>• The Act of 1 December 2016 <i>amending the Act on value added tax and certain other acts</i> (O.J. item 2024) - defines an increase in the exemption limit in tax on goods and services for taxpayers whose annual income does not exceed PLN 200,000 (previously PLN 150,000). This type of exemption is a great privilege and opportunity for smaller entrepreneurs. As a result, they do not need to spend time calculating the tax and sending it to the tax office and preparing interim statements, and when dealing with dishonest contractors who do not pay for the goods or services they do not pay to the tax office the amount of tax out of their own pocket. (MoF)</li> </ul>
<p><b>IV. Make public administrations responsive to the needs of small and medium-sized businesses (SMEs)</b></p>	<ul style="list-style-type: none"> <li>• Revision of <i>the Code of Administrative Procedure</i> to improve the efficiency and flexibility of administration. The Act of 7 April 2017 <i>amending the Code of Administrative Procedure and certain other acts</i> introduces changes which aim at faster resolution of cases, creation of partnership relations between the authority and parties and adjustment of administrative penalties for violations of law. (MoED)</li> <li>• The Polish Committee for Standardization (PKN) offers an electronic management tool for standards - <i>SZN - PKN Standard Management System</i> and <i>E-access</i> and <i>Lex-standard</i> services. In addition, since 2016, draft standards can be viewed free of charge and commented on via the Internet platform as part of the universal survey. PKN is actively participating in the works of the European Standards Organization CEN and CENELEC to improve access to standards and processes for standardization by SMEs.</li> <li>• The Patent Office of the Republic of Poland conducts permanent cooperation with the EU Intellectual Property Office in order to improve the situation of SMEs. Thanks to the joint work, important technical and IT projects are implemented.</li> </ul>
<p><b>V. Adapt public policy tools to</b></p>	<ul style="list-style-type: none"> <li>• The draft act <i>on the rules of supporting new investments</i>, assuming</li> </ul>

<p><b><i>SMEs' needs: facilitate SMEs' participation in public procurement and better use of State aid possibilities for SMEs</i></b></p>	<p>changes in the functioning of Special Economic Zones (SEZs), supports adjustment of the instruments of implemented policies to the needs of SMEs. It is about facilitating the participation of SMEs in public procurement and the use of state aid opportunities for SMEs. The draft act will make it easier for SMEs to access the tax exemption instrument. The conditions for obtaining are based on the size of the business. The opportunities and needs of SMEs have been taken into account in both new quantitative and qualitative criteria. The quantitative criteria for the minimum investment amount have been reduced compared to the standard criteria for large companies. (MoED)</p> <ul style="list-style-type: none"> <li>• <b>Effective Public Procurement</b> project aims to strengthen the administrative capacity in public procurement. It is co-financed by the European Social Fund, implemented by the Public Procurement Office. One of the aims of the project is to raise awareness among SMEs about the support available to them in this process.</li> <li>• Act of 22 June 2016 <i>amending the Public Procurement Law and certain other acts</i>, which aims at transforming the public procurement law into a strong economic and social policy instrument of the state. The state is to become a technologically demanding customer, ordering high quality goods. Amendments to the implementation of the EU directives have contributed to increasing the transparency of legislation and simplifying tendering procedures.</li> <li>• The Ministry of Science and Higher Education, in agreement with the Minister of Finance, introduced the so-called first Act on innovation, which is to increase the level of expenditures on research and development of Polish enterprises. It includes: <ul style="list-style-type: none"> <li>○ (permanent) abolition of taxation of income from in kind contribution of intellectual and industrial property;</li> <li>○ extending the possibility of deducting costs for R&amp;D activities from 3 to 6 years;</li> <li>○ cash back for start-ups;</li> <li>○ stabilisation of funding for activities related to the commercialisation of research and development results;</li> <li>○ modification (of a deregulatory nature) of the procedure for "appropriation of scientists" (acquiring property rights for inventions);</li> <li>○ elimination of the time limit (currently five years) in which inventors had a stake in the benefits of commercialisation;</li> <li>○ rendering the rules of disposal by the state legal persons of the owned infrastructure more flexible (including research infrastructure);</li> <li>○ enabling the financing of projects related to the implementation and operation of the environmental technology verification system.</li> </ul> </li> </ul>
<p><b><i>VI. Facilitate SMEs' access to finance and develop a legal and business environment supportive to timely payments in commercial transactions</i></b></p>	<ul style="list-style-type: none"> <li>• The <b>European Fund for Strategic Investment (EFSI)</b> implements guarantee and equity instruments operated by the <b>European Investment Fund (EIF)</b> dedicated to SMEs and medium capitalisation companies. EFSI finances the following framework programmes:</li> </ul>

	<ul style="list-style-type: none"> <li>○ <b>InnovFin SMEG</b> in Horizon 2020 - EU programme for 2014-2020 to support research and innovation,</li> <li>○ <b>COSME</b> - EU Program for 2014-2020 to strengthen entrepreneurship and competitiveness of SMEs,</li> <li>○ <b>EaSI</b> - EU Program for 2014-2020 to promote high levels of employment and social innovation.</li> </ul> <p>From the beginning of 2016, six agreements on distribution of support guaranteed by EIF by four national financial intermediaries: BGK, PKO Leasing, Nest Bank and Idea Bank have been concluded within the window for SMEs and medium capitalisation companies.</p> <ul style="list-style-type: none"> <li>• The Managing Authorities for Regional Operational Programmes for years 2014-2020 have decided to implement financial instruments in the new EU financial perspective using the fund of funds model. BGK was entrusted with the role of manager responsible for the implementation of financial instruments such as e.g. support for the development of SMEs or improving energy efficiency in the housing sector and SMEs. So far, agreements with 15 voivodeships have been signed to finance projects for a total of ca. PLN 6 billion.</li> <li>• The Act of 7 April 2017 <i>amending certain acts to facilitate the recovery of claims</i> was adopted, which is designed to streamline the recovery of claims and to prevent payment gridlocks.</li> </ul>
<b>VII. Help SMEs to benefit more from the opportunities offered by the EU's single market</b>	<ul style="list-style-type: none"> <li>• Access to the search engine offered by the WIEDZA (KNOWLEDGE) learning platform, managed by PKN, is an important source of information on the standards and processes for creating them, both for SMEs and for any entity interested in standardisation issues.</li> </ul>
<b>VIII. Promote the upgrading of skills in SMEs and all forms of innovation</b>	<ul style="list-style-type: none"> <li>• Action Sector <i>R&amp;D programs</i> support the implementation of large R&amp;D projects, relevant to the development of particular branches / sectors of the economy. In the area of SMEs, actions have been taken to promote the development of competences of SMEs in research and innovation, to increase competitiveness, and to finance innovation. In years 2015-2023, approximately EUR 875 million will be available from the European Regional Development Fund for co-financing of projects in this measure: GAMEINN – video games, INNOCHEM – chemicals; INNOLOT - the aerospace industry, INNOMED – innovative medicine, INNOMOTO - automotive industry, INNONEUROPHARM - pharmaceutical industry, INNOSBZ - unmanned aerial vehicle industry, INNOSTAL – steel industry, INNOTABOR - the railway industry, INNOTECH - various scientific areas and industrial sectors with a focus on advanced technologies, INNOTEXTILE - textile industry.</li> <li>• It is planned to replace the current <i>Programme of supporting investments of significant importance for the Polish economy for 2011-2023</i>, under which support for entrepreneurs on the basis of state aid is granted with the new <i>Support Programme for Entrepreneurs</i>. The minimum requirements for creating new jobs will make it possible for SMEs in the Programme to seek a grant for innovative investments, R&amp;D and <i>Business Support Systems</i>, which will stimulate innovation in this sector. It is assumed that the criteria</li> </ul>

	<p>for entry into the <i>Programme of supporting investments of significant importance for the Polish economy</i> in terms of jobs created within the new investments will be lowered, which will enable the support of a wider group of entrepreneurs from the SME sector.</p> <ul style="list-style-type: none"> <li>• As in other countries, a training aid instrument is planned. In the procedure of awarding public aid, the creation of high-paying jobs for employees with higher technical education is assumed. These changes will help to improve the qualifications of employees in the SME sector.</li> <li>• Maintenance and development of <i>Development Services Base</i> - this is a free and open database of development services offered in various forms (e.g. training, professional courses, counselling, postgraduate studies, mentoring and coaching). As a result, SMEs can develop their competencies and pursue their educational and business goals. The administrator of the database is PARP.</li> <li>• Action implemented by PARP <i>Erasmus</i> for young entrepreneurs - a cross-border exchange program that gives prospective and novice entrepreneurs the opportunity to learn from experienced partners who run small businesses in other EU countries.</li> <li>• The Ministry of Science and Higher Education monitors the situation in the area of scientific achievements, increasing their influence on the development of innovation and strengthening the cooperation between the scientific community and the economic environment. For this purpose, the <i>Innovation Incubator+</i> was created. It supports the management of research and development results, particularly in the field of commercialization.</li> </ul>
<p><b>IX. Enable SMEs to turn environmental challenges into opportunities</b></p>	<ul style="list-style-type: none"> <li>• The project <i>The national support system for the public sector, housing and companies in the area of energy efficiency and RES</i> is implemented by the National Fund for Environmental Protection and Water Management in cooperation with partners throughout the country. The main objective is to help SMEs to acquire the necessary skills to pursue a low-carbon, resource-efficient economy. This is done, inter alia, through EU funds. The project facilitates access to Structural Funds by SMEs, allowing them to submit all the data they need to get support.</li> </ul>
<p><b>X. Encourage and support SMEs to benefit from the growth of markets</b></p>	<ul style="list-style-type: none"> <li>• Exhibitions EXPO is one of the most prestigious events organized internationally. Polish entrepreneurs interested in promoting their products and services have the opportunity to finance the costs of participating in events from European funds. Entrepreneur can, among others: participate in trade fairs, participate in business missions or create information and promotional materials. PARP actively participates in the organization of Poland's presence at EXPO 2017.</li> </ul>

## II. Implementation of the SBA priority areas at regional level

SMEs are often characterised by high level of integration with the region by engaging in activities at many levels of social life. Many measures the implementation of which is difficult at the central level could be taken at the regional level. Therefore, involvement of the regions is particularly important for the further successful implementation of SBA in Poland. Selected measures from 16 voivodeships have been presented below as good practices.

Priority area	Project description
<p><b><i>I. Create an environment in which entrepreneurs and family businesses can thrive and entrepreneurship is rewarded</i></b></p>	<ul style="list-style-type: none"> <li>Individual voivodeships distinguish many competitions which have certainly contributed to improving the operations of companies in their areas, such as <b><i>the World Entrepreneurship Week</i></b>, which organised projects such as: Meeting of Young Businesses, Lesser Poland Economic Award, Lesser Poland - here technology becomes a business, <i>Modernisation of vocational training in Lesser Poland II</i>, Innovation Contest Mazovia.</li> <li><i>Subsidiary Development Financing System in Podlaskie Voivodeship</i> is dedicated to Podlaskie entrepreneurs and their employees. It allows entrepreneurs to take advantage of the opportunity to reimburse some of their costs (subsidies from 50% to 80% of the value of development services) incurred for staff training. By the end of June 2017, 104 entrepreneurs and 630 employees benefited from the project support. In the first half of 2017, agreements were signed with 232 entrepreneurs. The total value of concluded contracts is approx. PLN 3.8 million.</li> <li>In the second half of 2016 two meetings of the <i>Lesser Poland Information Society Council</i> took place. The first one was devoted to the Career Direction project addressed to adults living, working or studying in the Lesser Poland Region, who are disadvantaged in the labour market. It also included SKILLS+ titled To support the capacity of SMEs operating in the area of ICT for development and innovation by improving regional policy and infrastructure. The second meeting was devoted to cyber-security, including the issues of personal data protection, information security of the scientific community of Krakow and the security of digital public administration.</li> <li>The Podlaskie Voivodeship is active in the area of qualification development in SMEs through, inter alia, activities carried out by Career Centres and Information Centres in the Voivodeship Labour Offices in Białystok, Łomża and Suwałki, whose mission is to promote entrepreneurial attitudes and support the development of individual entrepreneurship.</li> <li>The aim of the <i>Business Mentoring Program in Opolskie Voivodeship</i> is to disseminate and promote the mentoring concept in business. The program is a transfer of knowledge and experience of Opole entrepreneurs who have achieved market success in micro and small companies with high growth potential.</li> </ul>

	<ul style="list-style-type: none"> <li>Dolnośląskie Voivodeship contributes to stimulating social interest in products and services of the craft. <i>The craft support program</i> is designed to promote craft businesses and their products among the inhabitants of the region and interest in niche craft industries of the young generation.</li> </ul>
<b>IV. Make public administrations responsive to the needs of small and medium-sized businesses (SMEs)</b>	<ul style="list-style-type: none"> <li>Lubuskie Voivodeship continues the eGovernment activities implemented within the framework of <i>Lubuskie e-Office</i> and <i>Electronic Documentation System (ESOD) phase II</i> projects co-financed from the Lubuskie Regional Operational Programme for 2007-2013. It is planned to implement <i>Lubuskie e-Office II</i> project, aimed at improving access to public e-services for inhabitants and entrepreneurs of the Voivodeship and increasing the use of ICT systems in the administration. It is planned to launch 14 e-services.</li> <li>There is a network of <i>European Funds Information Centres</i> throughout the country. Professionals employed in Centres provide potential beneficiaries, including entrepreneurs, with free consultation on the possibilities of supporting a given project with the use of European funds. Information Centres, meeting the expectations of beneficiaries, organize information meetings and trainings on European Funds, implementation of projects co-financed by EU funds, as well as specialized.</li> <li>Podlaskie Voivodeship implements <i>Measure 8.1 Development of public services provided electronically</i> by ROP PV 2014-2020. It envisages continuation of the intervention consisting in supporting projects concerning the development of electronic public services and development of IT infrastructure, including access to applications and database systems aimed at improving the implementation of electronic services in administration. Priority is given to activities within the e-services addressed to entrepreneurs, whose expected economic benefits may be the highest.</li> </ul>
<b>VI. Facilitate SMEs' access to finance and develop a legal and business environment supportive to timely payments in commercial transactions</b>	<ul style="list-style-type: none"> <li>Kujawsko-Pomorski Fundusz Pożyczkowy sp. z o.o. in Toruń in 2016 implemented 3 projects co-financed by the European Union, aimed at facilitating access to capital for SME entrepreneurs and minimising the financial gaps. The projects related to: <i>Entrepreneurship loans</i> aimed at supporting self-employment in the Kujawsko-Pomorskie Voivodeship, <i>Increasing the accessibility of enterprises from the Kujawsko-Pomorskie Voivodeship to the loan capital</i> and <i>Investment loans for enterprises from the Kujawsko-Pomorskie Voivodeship</i>. At the end of 2016, the total value of the loans was paid.</li> <li><i>Access to Microfinance for Small and Medium-sized Enterprises</i> in the Świętokrzyskie Voivodeship is based on cooperation in the exchange of experience and knowledge sharing between local microfinance institutions, in order to create better access to finance for the SME sector and increase the social reach of financial institutions. The effect is to be the creation of regional action plans and new instruments of support policy for the SME sector.</li> <li>Agency for Regional Development S.A. in Zielona Góra, whose shareholder is the self-government of the Lubuskie Voivodeship,</li> </ul>

	<p>created a loan fund in its structure. This fund has been operating since 2005, and its capital is currently PLN 32.15 million. Since the inception, the Fund has paid 623 loans in the amount of PLN 58.46 million.</p> <ul style="list-style-type: none"> <li>• <i>Debt consolidation and borrowing opportunities for increasing external financing for SMEs. Support instruments for loan guarantees and loan funds in Eastern Poland.</i> This project is being implemented in 5 voivodeships of Eastern Poland. Funds are distributed through financial intermediaries who offer loans and guarantees to SMEs. At present, support is provided by BGK within the framework of the project <i>Enterprising Eastern Poland - Tourism</i>, under the agreement with the Ministry of Economic Development.</li> <li>• Opolski Regionalny Fundusz Poręczeń Kredytowych sp. z o.o. - grants standard guarantees, which are collateral for working and investment credits and loans and free guarantees under <i>de minimis</i> aid to development credits and loans.</li> <li>• Development of financial instruments in the Warmińsko-Mazurskie Voivodeship was carried out thanks to the continuation of four projects within the Regional Operational Program Warmia and Masuria 2007-2013: <i>Recapitalisation of loan funds in Warmia and Masuria, Increase of the potential of loan funds in Warmia and Masuria, Recapitalisation of guarantee funds in Warmia and Masuria and Co-financing of guarantee funds in Warmia and Masuria.</i></li> <li>• Within the ROP project of the Podkarpackie Voivodeship, <i>Implementation of financial instruments in measure 1.4 Support to SMEs, Sub-measure 1.4.2 Financial instruments</i> support is provided in the form of loans and guarantees for the SME sector, particularly SMEs in the early stages of development or implementing innovative projects.</li> </ul>
<b>VII. Help SMEs to benefit more from the opportunities offered by the EU's single market</b>	<ul style="list-style-type: none"> <li>• The Centre Business in Lesser Poland is a unique initiative in Poland, aimed at improving the service of the investor and the exporter and the economic promotion of the region. This centre has become the most visited by foreign guests of the economic promotion institutions in Lesser Poland. Every year it receives about 20-30 foreign delegations.</li> <li>• Main assumptions of the project <i>The economic promotion of the Dolnośląskie Voivodeship</i> on the national and international markets is the promotion of the economic and investment potential of the region through, among others: media campaign, participation in international fairs (Hannover Messe 2018, CeBIT 2018, CIFIT 2018), production of information and promotion materials and the use of innovative multimedia technologies.</li> </ul>
<b>VIII. Promote the upgrading of skills in SMEs and all forms of innovation</b>	<ul style="list-style-type: none"> <li>• The development and adoption of <i>the Innovation Development Programme (IDP)</i> in Lubuskie Voivodeship in 2016 enabled the development of an effective innovation policy based on the areas of intelligent specialisation in the Lubuskie Voivodeship, which are areas with the highest potential for innovation in the region. Calls for</li> </ul>

	<p>proposals were started to the ROP-Lubuskie Voivodeship, including within the framework of <i>the Priority Axis I Economy and Innovation</i> addressed mainly to entrepreneurs.</p> <ul style="list-style-type: none"> <li>• The Małopolska Innovation Council is a consultative and advisory body for the Board of the Małopolska Region in the field of innovation and entrepreneurship. It is a key element of the regional innovation system, it participates in the process of entrepreneurial discovery and implementation of smart specializations in the Małopolskie voivodship.</li> <li>• <i>Research and Implementation Fund - Research Voucher</i> is a grant project implemented in the Kujawsko-Pomorskie Voivodeship, concerning the construction and development of an innovation system and a non-repayable financial support program for the implementation of research and development for enterprises for SMEs. The expected effect of the project is to increase the level of cooperation between the enterprise sector and specialized research units and commercialization of research and development results.</li> <li>• Examples of innovation support in the Podlaskie Voivodeship include: <i>Entrepreneurship Development Plan based on intelligent specializations of the Podlaskie Voivodeship for the years 2015-2020+ support</i>, which assumes primarily investments in R&amp;D infrastructure of the scientific institutions, used in joint research projects with enterprises in response to demand from the economy; <i>Supporting the transfer of knowledge, innovation, technology and commercialization of R&amp;D results and development of R&amp;D activities in enterprises</i> envisages that enterprises will receive support in the field of creation or development of research and development facilities for innovative activity. The scope of the project <i>Support of investment in enterprises</i> remains in direct relation to the abovementioned activities. Its main objective is to increase the competitiveness of SMEs, which is to support broadly understood innovations involving the implementation of new products, processes, organization and marketing methods.</li> <li>• <i>Cooperative Opolskie</i> - a professional business environment consists in creating and improving cooperation networks in the area of innovation and entrepreneurship in the Opolskie Voivodeship. The objectives are to strengthen cooperation and improve communication between companies from SMEs to business environment institutions, and to create a new, integrated model of cooperation.</li> <li>• In Warmińsko-Mazurskie Voivodeship, cooperation of business environment institutions was initiated to improve the quality of services for SMEs by coordinating the Regional Service System. Currently, there are 14 business environment institutions in the System belonging to this region.</li> <li>• <i>Lower Silesian Innovation Voucher</i> supports the realization of research, development or research and development services by scientific units for SMEs. The result is an improvement of the</li> </ul>
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	<p>business activity, thanks to the use of knowledge derived from the scientific community.</p> <ul style="list-style-type: none"> <li>• In Dolnośląskie Voivodeship, the measure <i>Development of products and services in SMEs</i> was implemented. It aims to increase the use of innovation in enterprises, improve productivity and technological advancement, introduce new products and services and new production technologies.</li> <li>• <i>SHOES MADE in EU</i> is a project implemented under the <i>ERASMUS + Vocational Education and Training</i> program, prepared at the initiative of the European Confederation of Footwear Industry, which Poland has for many years been a member of. The aim of the project is to develop an innovative teaching program in the footwear sector, tailored to the needs of the modern labour market (both for new employees and those already employed). The idea of the project came from the need to improve the professional skills of employees in the footwear sector and the need to replace aging staff.</li> </ul>
<p><b>IX. Enable SMEs to turn environmental challenges into opportunities</b></p>	<ul style="list-style-type: none"> <li>• <i>Support for investments in enterprises</i> of ROP Podlaskie 2014-2020 envisages solutions for an integrated approach to the efficient use of resources, including energy and raw materials. This area includes the range of interventions envisaged by SME-directed measure <i>Energy efficiency in enterprises</i> in ROP PV 2014-2020.</li> <li>• Measure <i>Energy efficiency in SMEs</i> is a deep energy upgrade of facilities, including the replacement or modernization of energy sources. This is to increase energy efficiency by reducing heat loss and electricity consumption. This action will lead to a decrease in demand for conventional energy and reduction of electricity consumption in production processes through changes in technological processes, thermo-modernization of heavily depreciated, old and very energy-intensive facilities, which are the backbone of enterprises in Lower Silesia.</li> </ul>
<p><b>X. Encourage and support SMEs to benefit from the growth of markets</b></p>	<ul style="list-style-type: none"> <li>• The Marshal's Office of the Lubuskie Voivodeship organized 5 outbound economic missions: to Belarus, Belgium and Luxembourg, Italy, US and Germany. As a result of the expedition, Lubuskie companies established commercial contacts. The missions, combined with participation in conferences, workshops and visits in technology parks, enabled Lubuskie entrepreneurs to get acquainted with new technologies and materials, as well as gaining knowledge about supporting innovative activities and promoting start-ups. Then the employees of the Marshal Office of the Lubuskie Voivodeship implemented a system project entitled <i>Network of Investors and Exporters Service Centres</i> (COIE). Information meetings on export opportunities on foreign markets, planned missions, exhibitions, B2B meetings in Poland and abroad were organized. 10 meetings were held in that period.</li> <li>• <i>Lodzkie4business</i> consists in developing an integrated mechanism of export promotion, launching tools for supporting SMEs in raising their level of innovation, competitiveness and internationalization.</li> </ul>

	<p>Two advisors have been set up, dealing, among others, with optimization of the company's biotech business agendas, shutting down the production cycle, finding new environmental technologies, and searching for international partners. The project aims to increase the level of foreign trade of SMEs and to promote the economic and investment activity of the Łódzkie Voivodeship, with particular emphasis on regional specializations.</p>
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