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GLOBAL ENTREPRENEURSHIP MONITOR

Poland



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Dear Readers,

We have the pleasure to present the fourth edition of **Global Entrepreneurship Monitor Report – Poland 2014**. It is based on the results of research carried out under the largest international research project in the area of entrepreneurship i.e. Global Entrepreneurship Monitor (GEM), which originated in 1999 as a joint initiative of Babson College (USA) and London Business School (United Kingdom). In 2014, the number of countries covered by surveys increased to 73, which translates into over three-fourths of the global population and 90% of the global GDP. Poland participated in the GEM survey in 2004 and joined the group of countries participating in the project again in 2011 as the team established by the Polish Agency of Enterprise Development (PARP) and the University of Economics in Katowice.

The annual GEM survey includes an analysis of the adult population in terms of entrepreneurial attitudes, perception of entrepreneurship and entrepreneurial aspiration. The project developed original indicators to distinguish individual stages of business activity, with the key measure being TEA (Total early-stage Entrepreneurial Activity). It is a forward indicator since it enables to forecast intensity of business activity in the society. A great advantage of this international project is its continuity, which allows to analyse the trends, as well as the large population covered by the survey which enables regional comparisons in the global perspective and comparisons between individual countries.

GEM identifies and monitors trends related to entrepreneurship of women, youth entrepreneurship and innovation, depending on the stage of the company development, or entrepreneurship inside the organisation (intrapreneurship). Therefore, the project is extremely comprehensive and aimed at collecting information about all important trends influencing the entrepreneurship.

With every year of Poland's participation in GEM, we can better capture various phenomena and provide their in-depth interpretation, since the amount of data and the database of respondents are increasing. Therefore, apart from the analysis of the GEM main indicators, in this year's Polish GEM Report we present the analysis of data combined for 2012-2014 and the analysis of data on youth entrepreneurship.

On behalf of the authors of the Report, other persons involved in the implementation of the GEM project in PARP and the University of Economics in Katowice and myself, I would like to thank all the Experts who participated in the National Experts Survey which is a fixed element of the GEM project.

I wholeheartedly invite you to read the Report.

Bożena Lublińska-Kasprzak
President of the Polish Agency
for Enterprise Development

Executive summary

Polish entrepreneurship: knowledge, ambitions, and concerns

Image of entrepreneurship

Poles appreciate a career path that envisages starting one's own business. Such opinion was expressed by 63% of Poles, which ranks us 5th among the European Union Member States. Yet this opinion is not accompanied by a positive perception of successful business owners. Although in the opinion of more than half of Poles (56%) successful entrepreneurs enjoy high social status and respect, in many European countries this opinion is much more widespread (EU average at the level of 67%). Despite a growing start-up market in Poland and development of a number of initiatives for the start-up ecosystem at the level of virtually all sectors (public, private, and non-governmental), only just under 55% of Poles see the presence of topics related to setting up new companies in the media. It is slightly above the EU average (53%), but far from the figure in innovation-oriented countries (67%). Compared to the 2013 study, the values of all the three indicators declined.

Entrepreneurial attitudes

Entrepreneurial intentions, or the percentage of people who plan to start up a business within 3 years, is an indicator in terms of which Poland has stood out in a positive way in recent years (16% in Poland and 12% for the EU and innovative countries). Yet this value brings us closer to the said groups of countries than to the group of efficiency-driven countries (to which Poland formally belongs) as this indicator reaches the value of 23% there. The positive developments stem from the ability to recognise opportunities. The share of Poles who believe that conditions in their environment are good to start up a business is increasing (31% in 2014, 26% in 2013, and 20% in 2012), and so is their self-assessment of entrepreneurial competences (54% in 2014 and 52% in 2013). Against this background, a considerable increase in the share of Poles who fear the risk of a business failure (58%) is surprising. Throughout Europe Poles express such concerns most frequently and related figures are higher than the averages for all groups of economies covered by the GEM study.

Level of entrepreneurship

The level of entrepreneurship measured by the percentage of companies at various stages of development in Poland is closer to innovation-driven than efficiency-driven countries. Compared to the 2013 study, the value of the TEA indicator covering nascent entrepreneurs (companies under preparation operating not longer than 3 months) and new entrepreneurs that have operated for up to 3.5 years decreased slightly and amounted to 9.2% (with EU average at 7.8%). The percentage of established enterprises increased from 6.5% in 2013 to 7.2% in 2014. The indicators concerning discontinuance of companies in Poland did not deteriorate in 2014 compared to 2013. In 2014, 4% of entrepreneurs discontinued their business activity, of which one in four companies stayed on the market and three were closed down completely. In innovation-driven countries and in terms of the EU average the survival rate is slightly higher: in 2014, the discontinuation average was 2.6-2.7% of entrepreneurs.

Motivations to start a business activity

In 2014 for the first time in the four-year study cycle, the motivation of opportunity outpaced necessity when it comes to setting up new companies in Poland. For three years Poles more frequently started business activity out of necessity, but in 2014, the trend reversed. Currently, 47% owners of young companies established them because they noticed an opportunity, and 37% out of necessity. Although the motivation of necessity remains a strong feature of Polish entrepreneurs (on average 23% of EU companies), a positive motivation connected with noticing an opportunity equals the EU average (48%).

Sector of activity of young companies

Compared to 2013, the percentage of companies set up in the extraction and manufacturing industries declined for the benefit of the B2B and B2C sectors. The greatest positive change concerns strengthening of the share of young companies in B2B services from 15% in 2013 to over 24% in 2014. Extraction and manufacturing are sectors which dominate in factor-driven economies (extraction) and efficiency-driven economies (production). Greater involvement of Polish companies in modern B2B and B2C services bring us closer in structural terms to innovative economies where a major role is played by the service sector, in particular highly specialised services for businesses.

Growth aspirations

The owners of young Polish companies (present on the market for up to 3.5 years) generally more frequently plan the expansion of their companies in five years through taking on more employees. High growth aspirations (10 new jobs and a 50% personnel increase in five years) are declared by 23% of companies while the average for the EU and innovation-driven countries is 17%, and for efficiency-driven countries, it is 14%. Medium growth aspirations (five new jobs in five years) are declared by 28% of entrepreneurs in Poland, and the average for the EU and innovation-driven countries is slightly lower (26%). As individual country data vary widely for those indicators, their interpretation entails an additional analysis of selected parameters in specific countries.

Internationalisation

In 2014, the percentage of companies not engaged in exports decreased (from 21% to 17%), with a simultaneous strong growth of the share of small scale exporters (from 56% in 2013 to 69% in 2014). Yet it took place at the expense of more specialised exporters (a decline by 5 pp among medium scale exporters and by 3 pp among advanced exporters).

Entrepreneurship among women

Invariably for several years now, women have appreciated their entrepreneurial skills less frequently than men (39% for women against 70% for men in 2014). They fear failure in business more, but here the differences are less pronounced (62% for women and 55% for men). Contrary to other countries in Europe, Polish women are distinguished by the perception of opportunities, or conviction of conditions favourable to setting up companies, higher than that of men (33% for women and 30% for men). It is reflected by the share of women in companies present on the market. In Poland, women become company owners two times less frequently than men, in both young and established companies.

Intrapreneurship

The GEM study provides for a category of intrapreneurship, i.e. organisational entrepreneurship, which may contribute to socio-economic development, sometimes even more considerably than individual entrepreneurship. Intrapreneurship is present in innovation-driven countries to the greatest extent. In Poland, the level of intrapreneurship is higher than the average for its group of countries (efficiency-driven economies). The leading role in organisational entrepreneurship in the past 3 years was declared by 7% of employees (8% in innovation-driven economies). Current activity in this area was declared by 4.4% of employees in Poland and an average of 6.4% in innovation-driven countries.

Selected indicators of entrepreneurship in Poland and in the EU (average)

Indicator	Poland	EU	Poland	EU
	2014		2013	
Entrepreneurial intentions	15.6	12.1	17.3	13.5
Perceived opportunities	31.4	34.8	26.1	28.7
Perceived capabilities	54.3	42.3	51.8	42.3
Fear of failure	58.5	40.7	46.7	39.8
Entrepreneurship as desirable career choice	63.3	56.9	66.8	56.9
High status of an entrepreneur	56.5	66.6	59.9	65.5
Positive media attention for entrepreneurship	54.5	53.3	58.5	49
TEA	9.2	7.8	9.3	8.0
Established enterprises	7.3	6.7	6.5	6.4
Discontinuation of business	4.2	2.6	4.0	2.9
Necessity-driven entrepreneurship	36.8	22.8	47.4	22.7

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2013–2014 data.

1. About the GEM study

Global Entrepreneurship Monitor has been dynamically developing since its inception in 1997 and the first research conducted in 1999 when around 10 countries took part in the project. In 2014, the surveys covered 73 countries worldwide. GEM is based on a uniform methodology of data collection (it includes a quantitative survey on a sample of at least 2,000 adult respondents and at least 36 interviews with experts in the field of entrepreneurship). The process of data collection is closely supervised by persons responsible for the quality of data in GEM.

GEM is the largest and most prestigious entrepreneurship-related research project that focuses on early-stage entrepreneurship. This project is purely scientific, which allows it to gain a deep insight into the process of entrepreneurship.

The Global Entrepreneurship Monitor has three main objectives:

- to measure differences in entrepreneurial attitudes, activity and aspirations across economies,
- to uncover factors determining the nature and level of national entrepreneurial activity, and
- to identify socio-economic policy implications for enhancing entrepreneurship.

1.1. GEM models

GEM research is based on theoretical models of entrepreneurship established on the basis of years of scientific achievements. The two most important theoretical models are the model of economic relationships and the model of the individual entrepreneurial process.

1.1.1. Interpretation of entrepreneurship in GEM

While entrepreneurship is a multifaceted phenomenon with many different meanings, GEM operationalizes this concept as “any attempt at new business or new venture creation, such as self-employment, a new business organisation, or the expansion of an existing business, by an individual, a team of individuals, or an established business”. While entrepreneurship is defined narrowly as a new business activity, it takes a broad view of what it recognises business activity to be. This has its implications in measuring the level of entrepreneurship in GEM that is not limited to registration of new business activity, but it is treated in behavioural rather than in institutional terms, and it includes both entrepreneurial activities aimed at registration of new business entities, and entrepreneurial activities in the existing organisations.

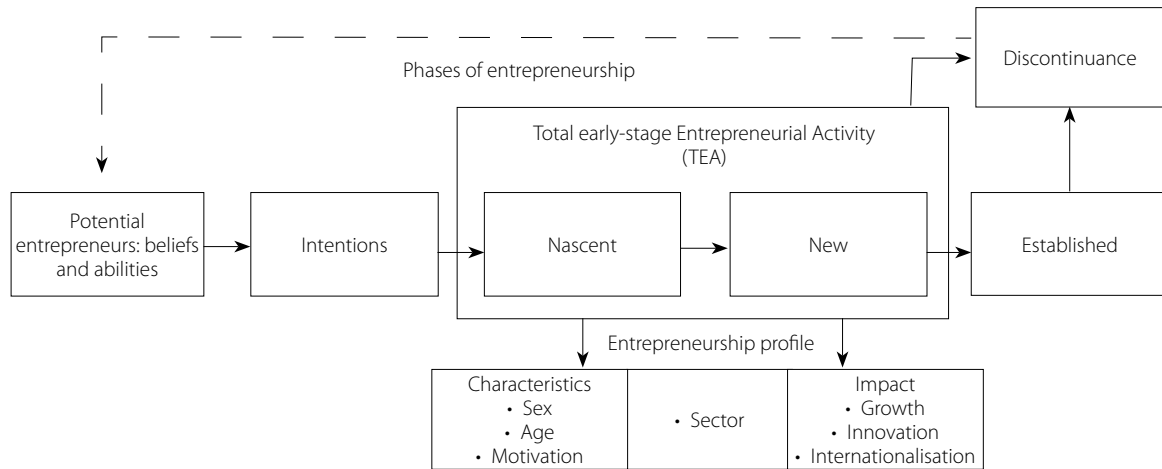
1.1.2. Model of entrepreneurship process

In GEM, it is important to differentiate the business activity according to its phases (Figure 1). What is more, phases before formal registration are also subject to the analysis, and most attention is paid to the phase of early-stage activity. It is one of the significant elements distinguishing GEM from other research projects on entrepreneurship where registration of new entities is studied based on data of national statistical offices, which does not enable good insight into the nature of the new enterprises.

In modelling the process of entrepreneurship, GEM applies three stages of economic project development. Depending on the phase an entrepreneur is in, they may be defined as a nascent entrepreneur, a new entrepreneur, or an established enterprise. In the GEM methodology:

- **Nascent entrepreneurs** are individuals who have not established business activity yet, but they plan to, and those who have already established business activity and are at its early stage – up to 3 months from the establishment of business activity. Business activity is considered to be established when wages are paid for the period of three months. Such individuals start to take first steps to establish a business: they obtain financial support, do the business planning, apply for legal protection of their intellectual property.
- **New entrepreneurs** are people who established their business activities between 3 and 42 months before the beginning of the research. The period of 3.5 years is considered to be critical in running entrepreneurial activity. After surviving this period one may consider the first stage to be a success, i.e. the company has been established and now it is in transition to the next stage - management of the existing enterprise.
- **Established enterprises** are those that have been operating on the market for the period longer than 42 months (3.5 years).

Figure 1. GEM model of entrepreneurship process



Source: Bosma N., Wennekers S., Amoros J.E., *Global Entrepreneurship Monitor 2011 Extended Report: Entrepreneurship and Entrepreneurial Employees Across the Globe*, London, GERA 2012, p. 10.

Apart from the phases, the GEM entrepreneurship process identifies beliefs and abilities preceding the decision regarding setting up business activity, as well as reasons for discontinuance by former entrepreneurs, which is significant due to re-establishing business by some of them.

The approach based on research and analysis of people, not enterprises, is featured into GEM and enables better insight into the nature of the entrepreneurship process. It gives twofold results. It enables the analysis of the entrepreneurship process in many dimensions, e.g. identification of people with similar attitudes and characteristics. On the other hand, it provides the opportunity to discover more differences between the countries, since we obtain information not only about the number of entrepreneurs in a country but also about differences in their attitudes and characteristics in certain phases of running a business activity.

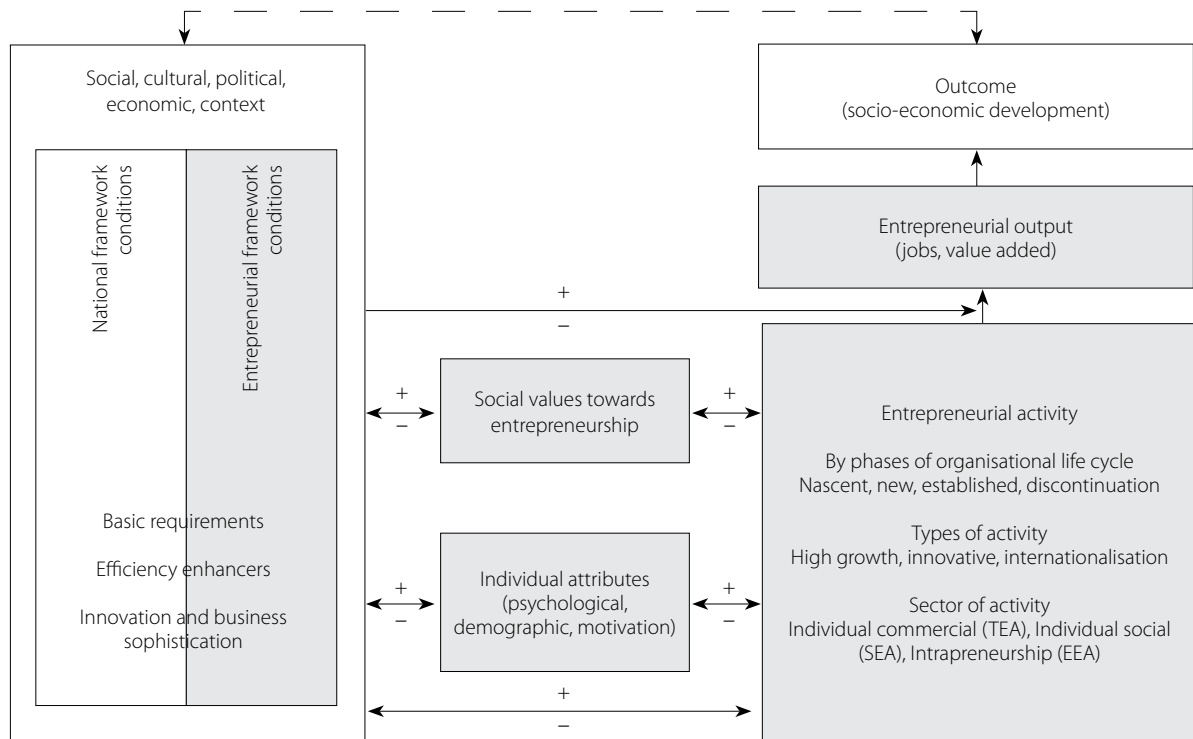
1.1.3. GEM model of economic development

GEM model of economic development is based on several significant assumptions. First of all, an economy's prosperity is highly dependent on a dynamic entrepreneurship sector. Although this is true across all stages of development, the nature of this activity can vary in character and impact. Necessity-driven entrepreneurship, particularly in less developed regions or those experiencing declines in employment, can support the economy when there are fewer work options available. More developed economies, on the other hand, generate more entrepreneurial opportunities as a result of their wealth and innovation capacity, yet they also offer more wage employment options to attract those that might otherwise become independent entrepreneurs.

Second, an economy's entrepreneurial capacity is based on individuals with the ability and motivation to start businesses, and may be strengthened by the positive social perception of entrepreneurship. Finally, high-growth entrepreneurship is a key contributor to new employment in an economy, and national competitiveness depends on innovative and cross-border entrepreneurial ventures.

In 2014, a new GEM model was introduced (Figure 2). It presents a complex network of dependencies between determinants of entrepreneurship, individual attributes of entrepreneurs, type of enterprises, entrepreneurial output and its impact on social and economic life. A particularly important aspect of the new model is highlighting the significance of individual (psychological, demographic and motivational) attributes, social values towards entrepreneurship and the nature of the entrepreneurial activity. The latter category comprises the phases of an enterprise's life cycle, type of activity (high growth, innovative, internationalisation) and the sector activity which comprises Total early-stage Entrepreneurial Activity (TEA), Social Entrepreneurial Activity (SEA) and Employee Entrepreneurial Activity (EEA).

Figure 2. GEM model of economic development

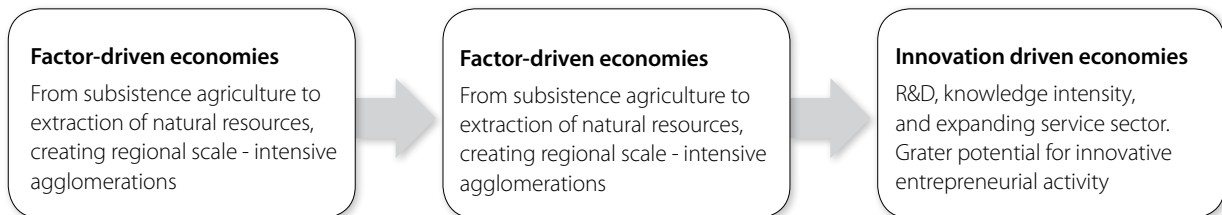


Source: Singer, S., Amoros, J.E., Moska, D., *Global Entrepreneurship Monitor 2014 Global Report*, London, GERA 2015, p. 20.

1.1.4. Phases of economic development

The division of countries into three groups by phases of economic development: factor-driven, efficiency-driven and innovation-driven¹ (Figure 3) is important in GEM. In the factor-driven economies, competitiveness is organised at the level of factors of production, such as labour and natural resources. Competitiveness is based on price, productivity is low, so are labour costs. Countries transforming into efficiency-driven economies, along with increasing labour costs, must create more efficient methods of production and increase the quality of products and services. Countries transforming into innovation-driven economies are able to maintain a high level of wages and high standard of living only if enterprises are able to compete on the basis of new and specialised products and other innovative solutions.² In 2014, similarly as in previous years, Poland was included into the efficiency-driven economies.

Figure 3. Three phases of economic development



Source: Bosma N., Wennekers S., Amoros J.E., *Global Entrepreneurship Monitor 2011 Extended Report: Entrepreneurship and Entrepreneurial Employees Across the Globe*, London, GERA 2012, p. 13.

¹ Porter M.E., Sachs J.J., J. Mc Arthur, *Executive Summary: Competitiveness and Stages of Economic Development*, in *The Global Competitiveness Report 2001-2002*, M.E. Porter, J.J. Sachs, J.W. Mc Arthur and K. Schwab (ed.), New York, NY, 2002: Oxford University Press.

² Countries are categorised in groups according to the classification adopted in the Global Competitiveness Report issued by the World Economic Forum.

In each of the three phases of economic development, the role of the country in supporting entrepreneurship and economic growth is different. In the case of factor-driven economies, the state should support the development of institutions, infrastructure, macroeconomic stability and provide the efficient health care system and primary education. In efficiency-driven economies government focus should be on getting labour and capital markets working more efficiently, attracting foreign direct investments and creating an educational system to educate the workforce to successfully adopt technologies. In innovation-driven economies, the key role of the country is to provide and commercialise knowledge.

1.2. Indicators of entrepreneurship in GEM

GEM applies several criteria differentiating entrepreneurial activity. The results of employing these criteria are the indicators used in the project.

1.2.1. Total early-stage Entrepreneurial Activity (TEA)

TEA is a central measure established in the GEM research. It presents the percentage of working age population involved in establishing business activities or running a new enterprise. In the GEM model of entrepreneurship process, Total early-stage Entrepreneurial Activity includes nascent entrepreneurs and new entrepreneurs but does not include established enterprises. The methodology of calculation of TEA measure is relatively complex and it is based on answers to several questions concerning intentions and actions taken in terms of establishing and running business activity. It has to be stated that TEA does not measure share of people running a business, but the share of people establishing and running a business in early stage among the adult population. In this context, it is a forward indicator since it enables to forecast intensity of business activity in the society.

1.2.2. Employee Entrepreneurial Activity (EEA)

Apart from individual entrepreneurship, GEM is also interested in intrapreneurship, also called organisational or corporate entrepreneurship. It means the establishment of entrepreneurship projects by an employee not on one's own, but on behalf of the employer. This form of entrepreneurship is measured by EEA which means the percentage of the population playing the leading role in organisational entrepreneurship.

1.3. Research within GEM

Research within GEM project is conducted in two parts. The first one is a typical quantitative adult population survey (APS) conducted on a sample of working age population. The second part of the research is the qualitative survey consisting in a collection of national experts' opinions (National Experts Survey – NES).

1.3.1. APS

Adult population survey is conducted on a sample of at least 2,000 people in every country involved in the project, every year. In general, the survey is conducted with CATI method with consideration of land-based and mobile telephony applied in households. APS survey measures TEA, it also provides information about society's aspirations and perception of entrepreneurship, growth aspirations of entrepreneurs, their international orientation, as well as financing business activity.

1.3.2. NES

National experts survey is conducted on a sample of at least 36 experts from various fields directly and indirectly connected to entrepreneurship. This part of the survey is aimed at identification of framework conditions for entrepreneurship in all countries participating in GEM project. In every country the group of experts is selected in accordance with the same criteria. The main criteria are: the type of activity (scientist, manager, politician, etc.) and experience in running entrepreneurial activity (entrepreneur, non-entrepreneur).

2. Entrepreneurship in Poland – results of the adult population survey (APS)

This chapter presents the image of entrepreneurship in Poland compared to Europe, the European Union in particular, and the world. It is based on data from the quantitative adult population survey (APS) conducted in the framework of the GEM project in 2014. The survey covered over 206,000 people from 73 countries globally, including 23 European Union Member States.³ The APS allows comparing the development degree of entrepreneurship in individual countries in several dimensions: entrepreneurial perceptions, entrepreneurial attitudes (including aspirations), entrepreneurial activity, and features of entrepreneurs. All of the dimensions are presented in this chapter.

Data for all the 73 countries participating in the GEM study in 2014 were presented in the *Global Entrepreneurship Monitor. 2014 Global Report*.⁴ In this national report, we present the data primarily as a background for data on Poland. According to the GEM methodology, we have grouped the countries into three categories: factor-driven economies, efficiency-driven economies (Poland included), and innovation-driven economies. We particularly strongly refer to two aspects: EU average and the average for innovation-driven economies, which constitute our benchmark in the process of economic development. In 2014 surveys under the GEM project were conducted in Poland for the fourth time in a row, which allows proposing theses and hypotheses on trends and dependencies resulting from the comparison of data for this period to a greater extent than earlier on.

2.1. Social determinants of entrepreneurship development

According to the assumptions of the GEM model, economic activity is the result of three types of factors: individual (consisting of psychological and demographic determinants and motivations), external determinants (economic, political, social, and cultural, described in Chapter 5), and social values attributed to entrepreneurship. Social values are expressed as four variables: aiming at equalising the standard of living, entrepreneurship as a desirable career choice, high-status successful entrepreneurship, and media attention for entrepreneurship. They are an attempt to grasp entrepreneurship perception by a given country's society which influences entrepreneurship level and development by creating a specific framework. Data for Poland, other EU Member States and global data are presented below. Reading the data, it needs to be noted that although they are answers to the same questions posed to the residents of 73 countries covered by the 2014 survey, they may be understood differently due to historical, cultural, political, and primarily economic determinants.

As shown by GEM data for 2014, compared to other areas of the world, in Europe – and in the EU in particular – entrepreneurship does not constitute such high social value as in African and Northern American societies. Analysing individual indicators, it becomes visible that Europe comes out particularly unfavourably when it comes to media attention for entrepreneurship, and the Union does poorly in terms of entrepreneurship as a desirable career choice.

What is the position of the Polish society against this background? Over 63% of Poles believe that entrepreneurship is a good choice career-wise. It is quite a good rank: 5th in the EU, similar to the USA, and among European countries – close to Croatia, Portugal, and Italy. It is a result above the average for innovation-driven economies, where the market of hired labour provides equally good opportunities of development and enrichment as pursuing the business activity. It is well reflected by the case of Luxembourg, where only 40% of people believe that a company of one's own is a good career path and where people pursuing business activity constitute only 6.2% of the working population, while 79% are employed in the services sector⁵ that has played a major role in the country's economy since the mid-1970s. Financial services and services for business have been developing equally dynamically, in terms of both generating values added and creating new jobs⁶. In Poland the situation is quite different as relatively many Poles still believe that owning a business is a good idea for a living. One aspect of this conviction is the employer's market' in Poland and low salaries, which boost the attractiveness of pursuing the business activity.

Conviction of a good choice of running one's own business does not pair up with Poles' opinion of a high social status of entrepreneurs. Although over half of adult Poles (56%) agree that success as an entrepreneur is linked with high social status, it is one

³ In 2014, the GEM study did not cover the following countries: Bulgaria, Cyprus, Czech Republic, Latvia, and Malta.

⁴ Singer S., Amorós J. E., Moska D., *Global Entrepreneurship Monitor. 2014 Global Report*, 2015.

⁵ OECD data for 2014 accessed on 13 November 2015.

⁶ Statistics Portal Grand Duchy of Luxembourg.

of the poorest results in the EU (4th rank following Belgium, Spain, and Croatia), lower than the EU average by 10 pp and by 20 pp from the USA – an example of an innovation-driven economy and a similar result to ours in terms of entrepreneurship as a career path. Lower result for Poland in this area is the effect of historical circumstances and still a relatively short period of economic freedom when private initiative has thrived.

As proven by the PARP study,⁷ Poles still perceive entrepreneurs as hard working for success, but at the same time, they consider them somewhat egoistic because they care for their own business. Negative opinions are more frequently expressed by elderly people who believe that entrepreneurs use others and the legal system and care for their own interests and nothing more. They see more problems than benefits in running a company. Young people are more positive about entrepreneurs.⁸

Results similar to those for Poland were recorded in Slovakia and Lithuania, countries with also a short period of economic freedom. In turn, the lowest social status of entrepreneurs according to GEM data is currently recorded in Spain and Croatia (48-46%) due to a difficult economic situation.

Table 1. Entrepreneurial perception in the European countries and in the USA (%)

Country	Entrepreneurship as good career choice	High-status successful entrepreneurship	Media attention for entrepreneurship	Aiming at equalising the standard of living
Factor-driven economies	67.78	76.08	72.28	58.34
Efficiency-driven economies	68.05	66.09	63.82	63.12
Innovation-driven economies	55.07	68.22	60.32	62.53
EU average	56.9	66.6	53.3	65.72
Austria	NDA	NDA	NDA	NDA
Belgium	52.41	51.73	50.82	55.78
Bosnia and Herzegovina	78.15	69.94	39.85	86.92
Croatia	63.27	46.58	40.44	75.8
Denmark	NDA	NDA	NDA	NDA
Estonia	55.56	64.93	43.34	57.72
Finland	41.24	84.4	66.93	68.55
France	59.05	70.43	38.98	52.66
Germany	51.66	79.1	51.41	63.27
Greece	58.42	66.42	45.8	56.4
Hungary	47.39	72.38	33.47	66.19
Ireland	49.39	76.88	75.68	74.55
Italy	65.05	72.09	48.28	70.27
Lithuania	68.81	58.33	55.14	71.34
Luxembourg	40.66	68.18	43.54	44.28
Netherlands	79.11	67.77	55.66	61.44
Norway	58.16	83.47	NDA	NDA
Poland	63.28	56.45	54.52	71.25
Portugal	62.23	62.94	69.75	75.99
Romania	73.64	75.22	71.34	68.61
Russia	67.12	65.93	50.43	67.79
Slovakia	45.42	58.05	52.57	68.43
Slovenia	53.39	72.31	57.56	82
Spain	53.94	48.99	46.33	71.92
Sweden	51.58	70.9	60.3	57.91
Switzerland	42.3	65.81	50.43	52.25
United Kingdom	60.3	74.99	58.36	NDA
USA	64.73	76.87	75.83	49.19

Source: the authors' own elaboration based on Global Entrepreneurship Monitor 2014 data.

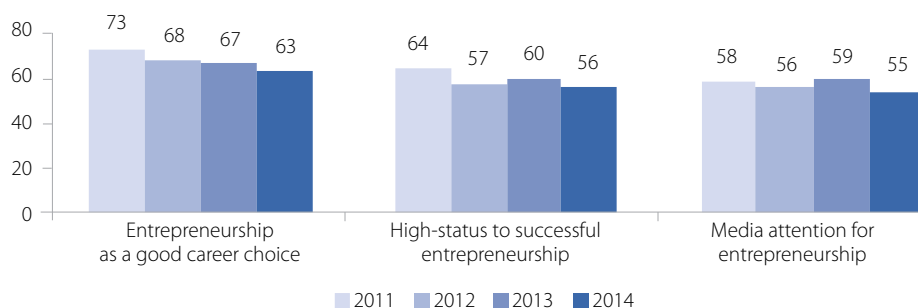
⁷ Report on the study: *Study on effectiveness of actions taken under the project – Improvement of entrepreneurs' image and promotion of entrepreneurial attitudes*, PARP 2013; the study was conducted in December 2012.

⁸ Ibidem.

Society's views on entrepreneurs and their work are the effect of media influence to some extent as well. Therefore GEM analyses opinions on the presence of the topic of entrepreneurship in the media. In Poland, about 55% of people think the media devote much attention to entrepreneurship. In these terms, Poland ranks in the middle of EU countries, following the Netherlands and Lithuania, and outpacing Slovakia and Germany. This is a major change compared to the previous edition of the study when Poland was 9 pp away from the EU average (at present it is 1 pp), but it results mainly from a decrease in this indicator's value for the EU.

Poles' perception of entrepreneurship is changing in time (Diagram 1). The values of indicators have decreased gradually since 2011 in all the three categories described above (i.e. entrepreneurship as a desirable career choice, high-status successful entrepreneurship, and media attention for entrepreneurship). The greatest decline concerns entrepreneurship as good career choice. When we launched our studies in 2011, 73% of adult Poles believed that own business was a good choice. Four years later, only 63% think so – as if every one in ten Poles changed his/her mind. The percentage of people attributing high social status to successful entrepreneurs has also decreased considerably (from 64% to 56%). In this context, a decline in the percentage of Poles who see the role of the media in disseminating the image of entrepreneurs by 3 pp in four years is quite a good result. It is now worthwhile to take a look at changes compared to the previous edition of the study (2013). Also, here you can see declines of 4-6 pp in all categories. In the same period, the EU recorded the same or slightly higher values of the indicators (by 1-3 pp).

Diagram 1. Entrepreneurial perceptions in Poland in the years 2011-2014 (%)



Source: the authors' own elaboration based on Global Entrepreneurship Monitor 2011-2014 data.

The above changes in social perception of entrepreneurship to some extent reflect the deterioration of society's sentiments as to economic situation – it is particularly visible in 2011/2012 when the decline in GDP growth rate and an increase in unemployment were the greatest. Making up for losses in the economy that started in 2013 resulted in smaller declines year-on-year and even an increase in social status of entrepreneurs in 2013. On the one hand, these changes raise concerns as they prove deterioration of entrepreneurs' esteem in the Polish society, especially lower status of entrepreneur. On the other hand, the above outcomes confirm positive developmental changes going on in the Polish economy – a visible decrease in the percentage of Poles who believe that entrepreneurship is a desirable career choice brings us closer to the average for innovation-driven economies and indirectly may be a sign of improvement on the hired labour market. To some extent the above changes in society's perception of entrepreneurship expose lingering mistrust, stereotypical attitude to entrepreneurs, and a sense of equality and aversion to those who achieved more instilled in Poles over a quarter a century ago.

Another variable analysed by GEM, namely aiming at equalising the standard of living,⁹ sheds more light on the above hypotheses. Similar to the previous edition of the study, also currently, the indicator for Poland is high, exceeding 71%. This ranks Poland 7th in the EU, where the average is approximately 66%. The result is much higher than the average for efficiency-driven, innovation-driven, and factor-driven economies (for the latter, the difference is 13 pp). Looking at individual countries, it appears that the highest percentage of people who believe we should aim at equalising the standard of living live in Bosnia and Herzegovina, and in Slovenia (ca. 82%). The lowest percentage was recorded in the USA (49%) and in Switzerland (52%). A result similar to the one for Poland was recorded for Lithuania, Spain, and Italy (about 71%). In Poland, it is interesting that primarily people who do not run business activity opt for equalising the standard of living. The ratio of the number of such people to the number of entrepreneurs who agree with this statement is 6:1.

The attitude of the Polish society to entrepreneurship is not one of appreciation of setting up and running a business activity. Similar to the previous edition of the study, the majority of Poles (71%) thinks we should aim at equalising the standard of living.

⁹ The question in the survey is as follows: "People prefer an equal standard of living for all" (possible answer: Yes/No).

More than half of Poles see media involvement in creating the image of an entrepreneur – in this regard, the situation has been stable since 2011. The fact of concern is that the social status of an entrepreneur is low and has been decreasing for four years. Also, the number of Poles convinced that owning a business is the right choice career-wise is decreasing, although Poland's rank in these terms is relatively good compared to the EU. The extent to which these changes are the effect of convergence of Poland's economy to developed countries and whether it is a short-lived historical effect will be visible in the coming years when we will be able to analyse the above indicators in the long run.

2.2. Entrepreneurial attitudes of Poles

In GEM entrepreneurial attitudes are measured using four indicators: entrepreneurial intentions, perceived opportunities, perceived capabilities, and fear of failure.

Entrepreneurial intentions¹⁰ stand for plans to start a business. They measure the percentage of adults (aged 18-64) who are not running a business but plan to start a business in the next three years. GEM shows that entrepreneurial intentions are most common in factor-driven economies (an average of 40% of people have such plans) where there is no alternative of finding employment. Intentions to become an entrepreneur decrease with transition to a higher development phase: in efficiency-driven economies (such as Poland) the percentage of people who plan to start a business is lower by nearly a half (22.7%), and in innovation-driven countries, it is only 12%. In Poland, almost 16% of adults currently not involved in economic activity plans to establish their own business within the next three years. This is one of the highest results in the EU –5th place after Romania (where the percentage of people planning to establish a business is the highest in Europe and almost twice higher than in Poland), Lithuania, Croatia and Portugal. In the latter, as in Slovakia, a similar percentage of the population plans to start their own business. Among the EU member states, the percentage of people planning to become entrepreneurs is the lowest in Germany (5%), Denmark and the United Kingdom (approx. 7% in each) (Table 2).

Table 2. Entrepreneurial attitudes in the European countries and in the USA (%)

Country	Entrepreneurial intentions (% of adult population not involved in business activity)	Perceived opportunities	Perceived capabilities	Fear of failure
Factor-driven economies	40.19	54.63	64.7	31.42
Efficiency-driven economies	22.77	42.39	54.89	31.65
Innovation-driven economies	12.34	38.85	42.02	37.79
EU average	12.1	34.8	42.3	40.7
Austria	8.1	44.4	48.67	43.64
Belgium	10.6	35.93	30.4	49.82
Bosnia and Herzegovina	20.4	19.59	47.3	37.5
Croatia	19.5	18.43	45.91	44.47
Denmark	6.9	59.66	34.88	41.32
Estonia	9.8	49.44	42.47	49.71
Finland	7.9	42.38	34.88	42.11
France	14.2	28.26	35.44	42.84
Germany	5.9	37.59	36.4	46.37
Greece	9.5	19.91	45.54	70.59
Hungary	13.9	23.4	40.94	48.09
Ireland	7.2	33.36	47.24	42.46
Italy	11.4	26.57	31.31	57.07
Lithuania	19.7	31.66	33.44	49.16
Luxembourg	11.9	42.54	37.56	50.7

¹⁰ In GEM, there are two variables describing entrepreneurial intentions: the percentage of the population aged 18–64 who plan to establish a business within the next three years and the percentage of the population aged 18–64 who are not currently involved in business activity, but plan to establish a business within the next three years. In this year's Report, we focus on the second indicator since it presents entrepreneurial intentions of the adult population of individual countries more precisely than the first one. For those concerned: the first indicator for Poland looks as follows: 2011 – 27%, 2012 – 24%, 2013 – 21%, 2014 – 19%.

cont. Table 2

Netherlands	9.3	45.55	44.26	38.72
Norway	5	63.45	30.54	33.05
Poland	15.6	31.35	54.3	58.47
Portugal	15.8	22.87	46.59	47.93
Romania	31.7	32.41	48.44	47.93
Russia	3.5	26.5	27.83	40.93
Slovakia	15.1	23.5	54.4	46.05
Slovenia	11.4	17.25	48.6	38.7
Spain	7.1	22.61	48.13	46.52
Sweden	8.5	70.07	36.65	40.68
Switzerland	7.1	43.67	41.59	33.98
United Kingdom	6.9	40.99	46.44	37.67
USA	12.1	50.85	53.34	32.81

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

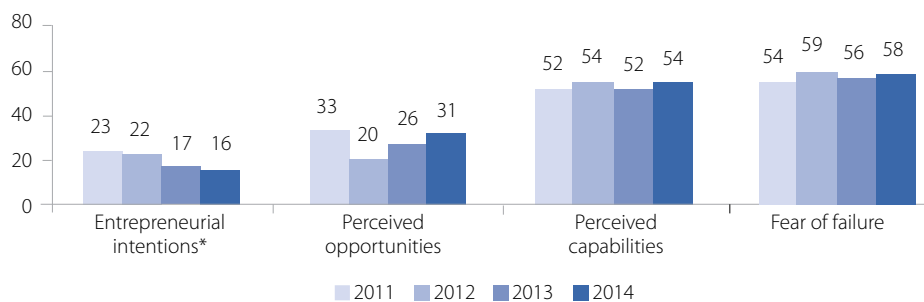
The second indicator of entrepreneurial attitudes of the population of individual countries – i.e. perceived opportunities – is measured as a percentage of people who believe that conditions in their environment are good to start up a business within the next 6 months. In Poland, it amounts to 31.4% which means that almost one in three adults perceive their environment as the place conducive for starting a business. It is the result at the level of Lithuania, Ireland and Romania, slightly below the EU average (34.8%). The distance is much greater in the case of figures for efficiency-driven economies (42%) and innovation-driven economies (38.9%). As stated in the last year's Report, the data for 2014 also point to a wide range of values of this variable in Europe, from below 20% (i.a. Slovenia, Croatia) to 60-70% (Norway and the leader, i.e. Sweden). Compared to the results of the 2013 research, the indicator of perceived opportunities has improved in the majority of the analysed European countries and the USA, while decreases of 3 pp were recorded only in Luxembourg and Bosnia and Herzegovina. Similarly to Ireland and Sweden, also in Poland the percentage of people considering the conditions in their environment to be good for establishing a business increased by 5 pp (the EU average – 6 pp).

Fear of failure seems to be an inherent trait of Poles. As many as 58% of Poles do not start their own business for that reason. This is the second highest result in the EU, exceeding the average by 18 pp. The percentage of people having such fear is higher only in Greece (almost 71% of adults). The figure for Italy is very similar to that for Poland. Apart from those three countries, the indicator of the fear of failure does not exceed 50%. In the EU, the percentage of people not starting business activity for this reason is the smallest in the United Kingdom (37.5%), and in the entire group of surveyed countries in the USA (33%). Fear of failure depends on the level of economic development and is the highest for innovation-driven economies (38%) and the lowest in factor-driven economies (31.4%), which results from different market conditions, determined by the competitiveness of the economy and consumer expectations, as well as legal conditions related to bankruptcy proceedings.

Poles fear failure as much as they believe in their entrepreneurial capabilities. The data for 2014 show that over 54% of Poles believe they have sufficient knowledge and capabilities to run a business. This result places Poland at the leading position in the EU (after Slovakia with an almost identical result), Europe and the USA. This also means that Poles assess themselves much better than average inhabitants of innovation-driven (42%) or efficiency-driven economies (55%).

The analysis of the data for 2011-2014 reveals the stabilisation of certain trends in entrepreneurial attitudes of Poles. On the one hand, compared to the EU, Poles highly assess their entrepreneurial capabilities, with over half of adult population believing they have adequate skills and knowledge to run their own business. The situation in this regard has remained stable for four years. It is similar in the case of refraining from starting a business for fear of failure, with almost six in ten Poles not establishing a business for this very reason. On the other hand, over the last four years, the percentage of people planning to start their own business has fallen (in 2011, 23 in 100 adult Poles had such plans, while in 2014 only 16 in 100). The indicator measuring the percentage of people who perceive opportunities to start their own business made up for the loss from 2012 and in 2014 returned to the level close to that reported four years ago, with one in three Poles currently perceiving business opportunities.

Diagram 2. Entrepreneurial attitudes in Poland in the years 2011-2014 (%)



* % of adult population not involved in business activity

Source: the authors' elaboration on the basis of Global Entrepreneurship Monitor data.

It is evident that Poles' belief in having sufficient capabilities to run a business is relatively high and has been constant over the last four years. It is similar with the fear of failure – from 2011 approximately 60% not starting a business for this reason. The percentage of the Polish population who plan to become entrepreneurs within the next three years is decreasing. It is worth noting that starting from 2012 the indicator of entrepreneurial intentions has been declining while the measure of perceived opportunities has been growing, recording an increase by 5 pp in 2014 compared to the previous year. This situation may raise concerns, since, on the one hand, it demonstrates that fewer Poles plan to start a business over the next years, and, on the other hand, it shows the improving situation on the hired labour market since 2014 and as such may be treated as the indication that the Polish economy changes from efficiency-driven to innovation-driven.

2.3. Entrepreneurial attitudes of women and men

Compared to the previous edition of GEM research, entrepreneurial attitudes of both women and men have changed. On the one hand, they have improved, with the percentage of women and men perceiving business opportunities increasing in the majority of European countries and the United States.¹¹ Over a half of European countries recorded a decrease in the percentage of women and men who do not start a business for fear of failure. On the other hand, the percentage of people assessing highly their entrepreneurial capabilities has declined in over a half of the analysed countries.

In Poland, the percentage of women and men perceiving opportunities to start a business within the next 6 months increased in 2014 compared to 2013. The increase is almost twice higher among men (6.6 pp against 3.8 pp).

However, still more women than men perceive business opportunities (33% compared to almost 30%). In the case of women, the result is at the level of the EU average, while for men is below this average (37.3%). Sweden is the EU leader in terms of this indicator for both sexes (68.5% and 71%, respectively). Croatia is at the end of the list with the percentage of 17% and 19%, respectively. It is worth noting that the fact that more women than men in Poland perceive business opportunities is an exception in comparison with other EU countries. Men dominate in this regard in other countries, although the data for 2014 reveal a decreasing difference between the percentage of men and women perceiving business opportunities. The difference between women and men has also decreased in Poland.

The percentage of women assessing well their knowledge and capabilities to run a business has been declining, albeit slightly (by 1 pp). Currently, 39% women believe they have sufficient entrepreneurial capabilities. The figure is close to the EU average (33.8%). Polish men make an entirely different picture. In comparison to the previous figures (2013), the percentage of men believing in their capabilities in this regard grew by 6 pp. Almost 70% of them believe they have adequate capabilities to run a business. This is the best result among all analysed countries, exceeding the EU average by 19 pp. The figures for Slovakia and the USA (66% and 61%, respectively) are the most similar. Among the EU countries, the percentage of men believing they have sufficient capabilities to run a business is the lowest in Italy (34%).

As regards the last indicator, i.e. fear of failure, it is currently slightly¹² higher for both sexes than in 2013. However, still more women than men in Poland (62% compared to 55%) do not decide to start a business for fear of failure. The similar figures are reported for the EU, although they are lower for both sexes (on average 42% for men and 52% for women). The figures for Poland are among the worst in the EU, being the second highest in the EU (after Greece) for men and third (after Greece and Italy) for women.

¹¹ In only four of the analysed countries, the indicator of perceived opportunities decreased among men (the most, i.e. by 4 pp, in Bosnia and Herzegovina), and in three countries among women (the most, i.e. by almost 4 pp, in Luxembourg).

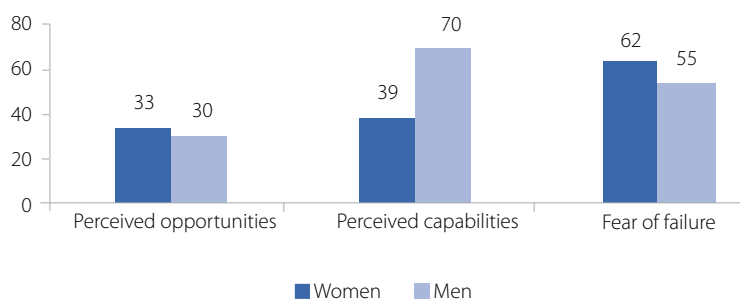
¹² By 1-2 pp.

Table 3. Entrepreneurial attitudes of women and men in the European countries and in the USA (%)

Country	Perceived opportunities – men	Perceived opportunities – women	Perceived capabilities – men	Perceived capabilities – women	Fear of failure – men	Fear of failure – women
Factor-driven economies	56.79	52.51	67.82	61.67	31.14	33.30
Efficiency-driven economies	43.26	39.50	59.74	48.58	32.06	38.94
Innovation-driven economies	41.56	36.00	49.43	34.44	37.87	46.37
EU average	37.27	32.25	50.86	33.84	41.78	52.19
Austria	46.99	41.81	56.82	40.43	35.04	52.2
Belgium	41.18	30.48	38.88	21.96	46.18	53.49
Bosnia and Herzegovina	21.56	17.62	56.23	38.28	33.58	41.4
Croatia	19.49	17.37	54.48	37.56	40.45	48.4
Denmark	62.21	57.05	44.11	25.57	36.28	46.42
Estonia	49.58	49.3	50.26	35.02	42.54	56.61
Finland	41.54	43.27	39.58	30.13	35.42	48.91
France	28.57	27.97	46.37	24.75	39.49	46.11
Germany	41.97	32.97	43.97	28.67	38.29	54.64
Greece	21.84	17.97	50.86	40.23	66.29	74.9
Hungary	24.75	22.05	51.02	31.14	42.9	53.14
Ireland	37.53	29.15	57.88	36.69	36.55	48.3
Italy	30.16	22.97	34.06	28.6	51.45	62.58
Lithuania	34.59	28.99	43.41	24.29	38.83	58.8
Luxembourg	47.5	37.28	43.81	31.07	49.01	52.46
Netherlands	51.59	39.24	54.56	33.83	34.75	42.74
Norway	68.4	58.35	38.32	22.84	31.27	34.83
Poland	29.72	32.94	69.8	39.07	54.93	61.99
Portugal	26.4	19.51	53.92	39.64	43.18	52.41
Romania	33.25	31.63	58.09	38.96	40.99	54.81
Russia	29.48	23.67	30.84	25.11	37.5	44.04
Slovakia	26.37	20.57	66.31	42.62	38.62	53.51
Slovenia	20.8	13.5	57.23	39.59	34.39	43.25
Spain	25.91	19.24	53.41	42.77	42.73	50.36
Sweden	71.42	68.54	45.82	27.75	35.54	45.98
Switzerland	46.26	40.92	50.59	32.36	27.74	40.34
United Kingdom	43.91	37.96	55.13	37.89	37.01	38.32
USA	53.02	48.66	61.02	45.94	29.86	35.65

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

Diagram 3. Entrepreneurial attitudes among women and men in Poland (%)



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

The figures demonstrate increasing differences in entrepreneurial attitudes of women and men. Still more women than men perceive business opportunities, although the data for 2014 show that the difference is decreasing as compared to 2013. On the other hand, women seem to be less prone to take a risk in the form of own business than men. The latter assess their entrepreneurial capabilities significantly (and increasingly compared to 2013) better than women. Men less often than women are afraid of failure in business. However, regardless of the sex, the percentage of people not starting a business for fear of failure in Poland is still the highest in Europe. This may be the greatest barrier to the development of entrepreneurship at the level of individuals.

2.4. Level of entrepreneurship

According to Wagner, the creation of a new venture is a process similar to the biological cycle of a human being, from an a conception stage, through gestation, to infancy and adolescence. There are three key moments in the process, which mark the transition to a more advanced stage. The first of them begins when one or more persons start to commit time and resources to founding a new firm. The second is the time when gestation is complete and the new venture starts operating on the market or when the efforts made by the persons to establish a business prove inefficient. The third and last moment is the transition from infancy to adolescent, i.e. from a new firm to an established firm¹³.

GEM distinguishes four forms of entrepreneurship depending on the stage of the company's development. They are illustrated by the following indicators:

- **nascent entrepreneurs** (individuals actively involved in setting up a business they will own or co-own; they include enterprises under organisation, which have not paid salaries/payments to the owners for more than 3 months);
- **new entrepreneurs** (individuals who are owners or co-owners of enterprises that have been operating, i.e. paying salaries/payments to the owners for more than 3 months, but less than 42 months);
- **established entrepreneurs** (individuals who are owners or co-owners of enterprises that have been operating, i.e. paying salaries/payments to the owners for over 42 months);
- **discontinuance** (persons who over the last 12 months discontinued business activity or sale, winding up or resignation from running a business – in this case the firm remains on the market).

GEM also calculates the Total early-stage Entrepreneurial Activity (TEA) which comprises of nascent and new entrepreneurs, i.e. persons starting and running business activity for up to 3.5 years. The detailed methodology of this division is described on page 9 of this Report, while the values of individual indicators in selected countries and compared to the average for individual categories of economies are presented in Table 4 and 5.

The GEM research shows that the level of entrepreneurial activity is the highest in factor-driven economies. On average in this group of countries, 12 out of 100 inhabitants starts or runs a business for up to 3 months, another 12 in 100 people are owners of new enterprises and the same number owns companies operating on the market for over 3.5 years. Along with the transition into a higher level of economic growth, the share of the population involved in running own business decreases. In efficiency-driven economies, there are on average 8% of nascent entrepreneurs, 6% of new entrepreneurs and 8% of established entrepreneurs in the adult population. In the most economically developed countries, there are only 5% of nascent entrepreneurs, 3% of new entrepreneurs and almost 7% of those operating on the market for over 3.5 years.

Poland fares well in comparison with other European countries, including the EU. Almost 6% of Poles are nascent entrepreneurs. It is the figure higher than the EU average only by 1 pp, but it places Poland at the 8th position among 23 EU countries participating in the GEM research in 2014. The highest number of nascent entrepreneurs in the research was recorded in the United States (almost 10%) and Slovakia (almost 7%), while the lowest –in Russia (2%), Norway and Belgium (below 3%). The percentage of nascent entrepreneurs in Austria, Portugal, Croatia and Hungary is similar to the figure for Poland.

Poland is also at the 8th place in the EU in terms of percentage of new enterprises, with 3% of the adult population, i.e. 740,000 people, running a business for from 3 months to 3.5 years. It is the result close to the EU average, at a similar level to Finland, Greece and Hungary. The percentage of new enterprises is the highest in Romania (over 6%) and the lowest in Italy (slightly over 1%).

As mentioned before, nascent entrepreneurs and new enterprises constitute the Total early-stage Entrepreneurship (TEA). It amounts to 9.2% in Poland and translates into over 2.2 million people starting and running businesses for less than 3.5 years. It should be remembered that among them approximately 1.4 million are nascent entrepreneurs who are setting up a business or their business has operated on the market for up to three months. Over 9% of early-stage entrepreneurs places Poland at the 9th position in the EU. Similar figures are reported for Hungary, Portugal, Estonia and the Netherlands. TEA is the highest in the USA (almost 14%) and in the EU in Lithuania and Romania (approximately 11%). In Italy, it amounts to just 4%.

¹³ J. Wagner, *Nascent Entrepreneurs*, 2004.

According to the GEM data for 2014, the percentage of enterprises operating for over 3.5 years amounts to 7.3% in Poland. Similar figures are recorded in Spain, Romania and Slovakia. In the EU, 6.7% of the adult population on average have been running a business activity for over 3.5 years. The percentage of established enterprises is the highest (almost 13%) in Greece and the lowest in France (2.9%).

Table 4. Level of entrepreneurship in the European countries and in the USA – starting and running a business (%)

Country	Nascent entrepreneurs	New entrepreneurs	TEA	Established enterprises
Factor-driven economies	12.4	11.72	23.26	12.71
Efficiency-driven economies	8.15	6.24	14.04	8.52
Innovation-driven economies	5.3	3.4	8.54	6.74
EU average	4.8	3.2	7.8	6.7
Austria	5.8	3.06	8.71	9.86
Belgium	2.93	2.55	5.4	3.54
Bosnia and Herzegovina	4.48	2.94	7.42	6.67
Croatia	5.95	2.02	7.97	3.61
Denmark	3.07	2.49	5.47	5.09
Estonia	6.34	3.54	9.43	5.7
Finland	3.45	2.29	5.63	6.6
France	3.69	1.71	5.34	2.94
Germany	3.05	2.25	5.27	5.15
Greece	4.58	3.37	7.85	12.84
Hungary	5.56	3.87	9.33	7.95
Ireland	4.36	2.46	6.53	9.91
Italy	3.18	1.28	4.42	4.27
Lithuania	6.07	5.34	11.32	7.84
Luxembourg	4.94	2.33	7.14	3.7
Netherlands	5.15	4.53	9.46	9.59
Norway	2.75	2.95	5.65	5.35
Poland	5.77	3.58	9.21	7.3
Portugal	5.83	4.4	9.97	7.58
Romania	5.33	6.17	11.35	7.6
Russia	2.39	2.35	4.69	3.95
Slovakia	6.7	4.35	10.9	7.8
Slovenia	3.78	2.66	6.33	4.76
Spain	3.33	2.21	5.47	7.03
Sweden	4.86	1.9	6.71	6.46
Switzerland	3.38	3.81	7.12	9.1
United Kingdom	6.28	4.48	10.66	6.5
USA	9.67	4.25	13.81	6.95

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

The final stage of economic activity, i.e. its discontinuation, is analysed in GEM using two variables: the share of entrepreneurs who completely discontinued their business (liquidated their business and discontinued their business activity) in adult population and the share of entrepreneurs who discontinued their business, but their business remained on the market. The GEM data for all countries of the world show that at least twice more often entrepreneurs discontinue their business and liquidate their company rather than leave it on the market. In efficiency-driven economies in only one in four cases of business discontinuation, the enterprise remains on the market while the three remaining ones are liquidated and the entrepreneur discontinues business activity completely. The situation is similar in innovation-driven economies, with one in three enterprises remaining on the market after discontinuation of business activity.

It should be noted that compared to the previous edition of the research, the year 2014 saw a slight decline in business discontinuation rates in total in the majority of countries, which was the highest (1.5 pp) in factor-driven economies and in Greece and Romania, as well as the USA (approx. 1-2 pp in each).

Table 5. Level of entrepreneurship in the European countries and in the USA – discontinuation (%)

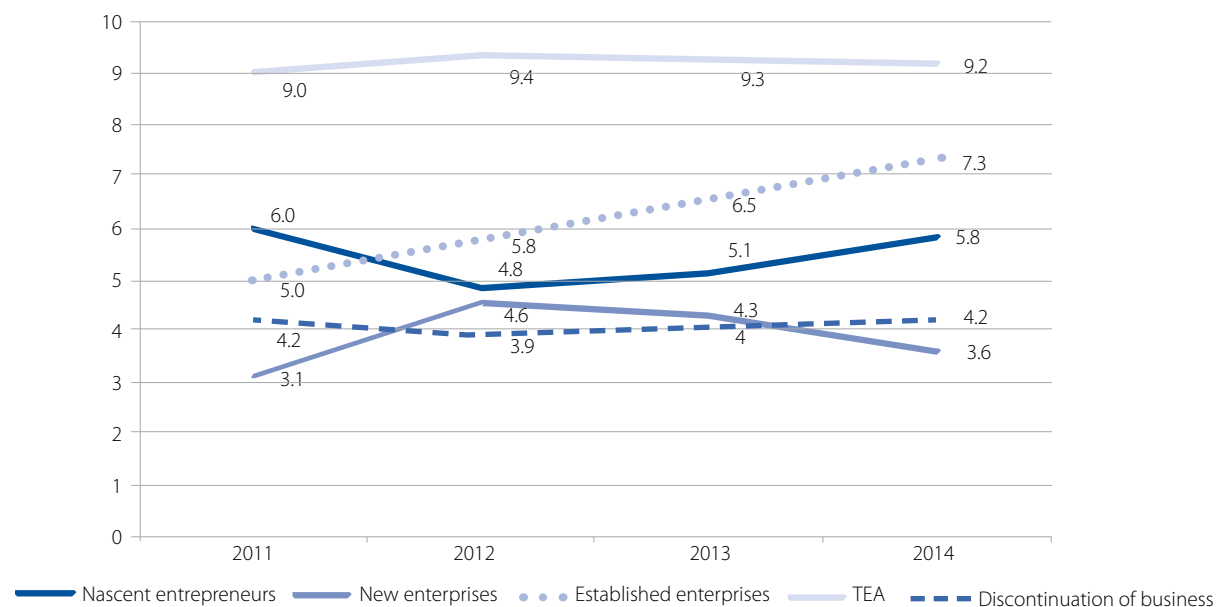
Country	Discontinuation with enterprise closure (1)	Discontinuation, enterprise remains on the market (2)	Total discontinuation ¹⁴
Factor-driven economies	7.9	2.9	10.9
Efficiency-driven economies	3.2	1.2	4.4
Innovation-driven economies	1.7	0.9	2.7
EU average	1.7	0.8	2.6
Austria	1.7	0.9	2.71
Belgium	0.9	1.3	2.3
Bosnia and Herzegovina	2.8	1.7	4.5
Croatia	2.6	1.2	3.9
Denmark	1.5	0.8	2.3
Estonia	1.3	0.7	2.0
Finland	1.2	1.1	2.3
France	0.9	0.9	1.8
Germany	0.9	0.7	1.8
Greece	2.2	0.7	2.8
Hungary	2.7	0.41	3.1
Ireland	1.2	0.7	1.9
Italy	1.6	0.53	2.1
Lithuania	1.9	1.0	2.9
Luxembourg	1.6	1.0	2.6
Netherlands	1.3	0.4	1.8
Norway	1.5	0.4	1.9
Poland	2.9	1.3	4.2
Portugal	2.0	0.9	2.9
Romania	2.5	0.71	3.19
Russia	0.9	0.25	1.18
Slovakia	3.2	1.9	5.15
Slovenia	1.0	0.45	1.47
Spain	1.3	0.7	1.9
Sweden	1.6	0.48	2.1
Switzerland	0.6	0.85	1.49
United Kingdom	1.5	0.37	1.9
USA	2.5	1.53	4.0

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

In Poland, the overall business discontinuation rate exceeds 4%. The figure is 1.5 times higher than the EU average where 2.6% of adult population discontinued their business activity in 2014. Out of four discontinued businesses, three enterprises are shut down, while one remains on the market. Both the general discontinuation rate and the percentage of entrepreneurs completely discontinuing their business activity and those who discontinue their activity, but the enterprises remain on the market have not changed from the previous edition of research in Poland.

¹⁴ Slight differences of ca. 0.1 in the total discontinuation values in relation to its components, i.e. the values from columns 1 and 2 are due to rounding to the first decimal place, if calculations were made to two decimal places.

Diagram 4. Level of entrepreneurship in Poland in the years 2011-2014 (%)



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2011-2014.

The comparison of the level of individual forms of entrepreneurship in Poland in the last four years shows a relative stability of TEA. In general, the percentage of people setting up and running businesses for up to 3.5 years has remained unchanged from 2011 (it slightly exceeds 9%). The discontinuation rate exhibits a similar trend (4.2%). The values of the other three indicators are interesting. The percentage of new enterprises (operating for 3 to 42 months) and nascent entrepreneurs (up to 3 months) changed in the opposite direction in the years 2011-2014. After an increase in 2012, the percentage of new enterprises fell to 3.6% in 2014, while the percentage of nascent entrepreneurs decreased in 2012 and then grew to 5.8% in 2014. The year 2012 was the year of a pronounced economic downturn and thus increasing unemployment rate and deteriorating conditions for running business activity, which was not conducive to setting up enterprises. From 2012, the share of nascent entrepreneurs has been growing. The share of established enterprises has been increasing as well (from 5% to 7.3%), constantly from 2011. However, the percentage of new enterprises is decreasing. What do those changes demonstrate? They show that entrepreneurial activity of Poles is high, there is a constant large number of new enterprises (TEA) and the quality of enterprises is improving, as evidenced by the increasing number of established enterprises.

2.5. Entrepreneurship among women and men

Individual regions and countries vary significantly in terms of entrepreneurship among women and men. The entrepreneurial activity of women is usually lower than of men, and it decreases along with economic development. Table 6 shows that in the poorest countries, the share of both TEA and established enterprises are at a similar level for both sexes. In innovation-driven economies, there are on average two times more enterprises run by men than those run by women.

Table 6. Level of entrepreneurship among women and men in the European countries and in the USA (%)

Country	TEA men	TEA women	Established enterprises – men	Established enterprises – women
Factor-driven economies	24.85	21.75	14.23	11.25
Efficiency-driven economies	16.43	12.89	10.93	6.97
Innovation-driven economies	10.55	6.44	8.73	4.72
EU average	10.21	5.45	9.02	4.35
Austria	10.38	7.06	12.87	6.86
Belgium	7.65	3.14	4.82	2.26
Bosnia and Herzegovina	10.6	4.25	9.34	4

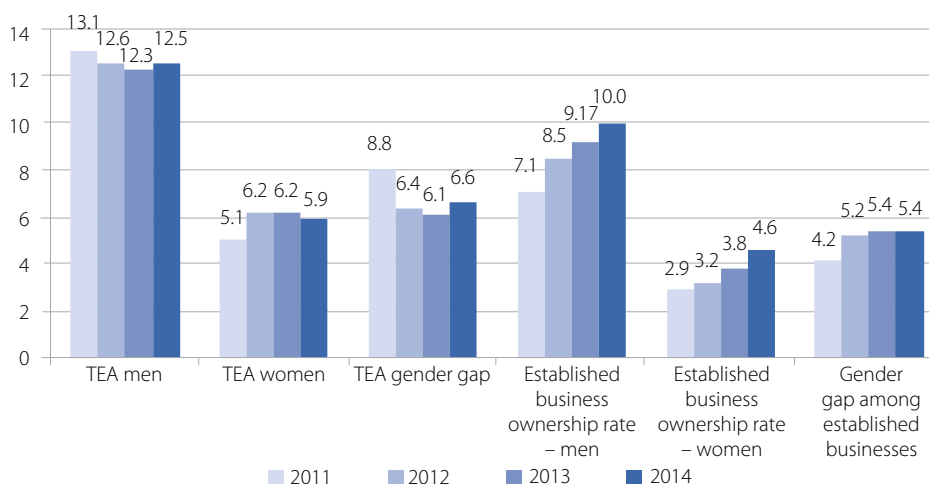
cont. Table 6

Croatia	11.28	4.75	5	2.26
Denmark	7.12	3.79	7.46	2.69
Estonia	11.21	7.71	7.01	4.44
Finland	6.63	4.63	9.19	3.97
France	6.68	4.03	4.24	1.68
Germany	6.54	3.97	7.14	3.12
Greece	9.89	5.81	18	7.67
Hungary	13.48	5.29	10.98	4.99
Ireland	8.87	4.23	13.83	6.06
Italy	5.71	3.15	5.69	2.87
Lithuania	16.19	6.78	11.63	4.29
Luxembourg	8.89	5.32	4.34	3.04
Netherlands	11.62	7.27	12.07	7.08
Norway	7.29	4	6.99	3.7
Poland	12.5	5.95	10	4.63
Portugal	11.68	8.36	9.97	5.32
Romania	16.02	6.57	10.09	5.1
Russia	5.77	3.7	4.58	3.38
Slovakia	14.37	7.41	11.68	3.91
Slovenia	8.29	4.25	6.63	2.78
Spain	6.36	4.57	8.01	6.04
Sweden	9.54	3.79	8.01	4.87
Switzerland	7.03	7.2	10.04	8.15
United Kingdom	13.82	7.53	8.82	4.21
USA	16.53	11.2	8.79	5.18

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

The situation is similar in Poland. Early-stage activity (up to 3.5 years) is run by 6% of women and 12.5% of men while the percentage of established enterprises run by women amounts to almost 5% and by men to 10%. This means that women start and run a business on average two times less often than men. The difference in entrepreneurial activity of women and men is even more pronounced in Sweden and Hungary, where there are 2.5 enterprises run by men per one enterprise run by women in the group of businesses operating up to 3.5 years. In Lithuania and Denmark, the ratio of established enterprises run by women and men amounts to 1:2.7. The only country where women and men equally often start their own business is Switzerland.

Diagram 5. Level of entrepreneurship among women and men in Poland in the years 2011-2014 (%)



Source: the authors' own elaboration based on Global Entrepreneurship Monitor 2011-2014 data.

Compared with data from 2013, the gender gap in Poland measured as a difference between men and women running businesses increased slightly in the case of TEA and remained unchanged for established enterprises (see: Diagram 5). It currently amounts to 6.6 pp for TEA and 5.4 pp for established enterprises. In both cases, it is higher than the EU average (the gap for TEA is 4.8 pp and for established enterprises – 4.7 pp). In the longer perspective of 2011-2014, the gender gap in Poland decreased among early-stage enterprises (from 8 to 6 pp) and increased among established enterprises (from 4.2 to 5.4 pp). The changes were due to the faster growth of businesses set up by women and the faster increase in established enterprises run by men. This shows that women are increasingly interested in own business, but record worse results than men in terms of maintaining the business on the market.

2.6. Motivations to start a business activity

The analysis of motivations to start business activity is necessary to understand the nature of entrepreneurship in a given country. The GEM analyses extreme motivations: opportunity and necessity. Opportunity is understood as gaining independence or personal income growth, which translates into an improved standard of living. Necessity means the lack of alternative in the form of finding employment on the labour market.

The table below presents the data on motivations of persons running early-stage businesses (TEA). The higher the level of economic growth, the larger and higher quality the offer of hired labour, therefore the percentage of enterprises established as a result of perceived opportunities should be higher. In poorer countries, the percentage of business established out of necessity is expected to be higher. The GEM data for 2014 confirm those expectations. In factor-driven and efficiency-driven economies, approximately 28% enterprises were established out of necessity, while in innovation-driven economies – only 18%. The EU, where the majority of countries are innovation-driven economies, still includes efficiency-driven countries, such as Poland, and thus the percentage of enterprises established out of necessity is slightly higher (23%).

In Poland, 36.7% early-stage businesses were established out of necessity. Many more, i.e. 47.1%, were set up as a result of perceived opportunities. Compared to the EU average, in Poland, more people become entrepreneurs because of the lack of an alternative form of employment (the difference amounts to approx. 14 pp and it is the second highest figure in Europe) while the share of opportunity-driven entrepreneurs is the same in Poland and in the EU. Hungary and Slovakia have a similar motivation structure to Poland. In the EU, the most favourable motivation structure is recorded in Sweden and Denmark (approximately 5-8% of TEA established out of necessity and approximately 60% as a result of opportunity). Apart from Poland, the percentage of necessity-driven entrepreneurship is the highest in Croatia (47%) and in Greece (35%).

Table 7. Level of opportunity- and necessity-driven entrepreneurship in the European countries and the USA (% TEA)

Country	Necessity (% TEA)	Opportunity related to improving the standard of living (% TEA)
Factor-driven economies	28.16	47.03
Efficiency-driven economies	27.25	45.08
Innovation-driven economies	17.96	54.91
EU average	22.8	47.9
Austria	10.95	37.37
Belgium	30.67	43.12
Bosnia and Herzegovina	50.83	25.16
Croatia	46.57	28.67
Denmark	5.43	60.15
Estonia	15.1	41.15
Finland	15.62	63.12
France	16.06	69.15
Germany	23.18	53.74
Greece	34.77	30.53
Hungary	33.19	36.27
Ireland	29.65	48.56
Italy	13.59	38.58
Lithuania	19.61	43.78

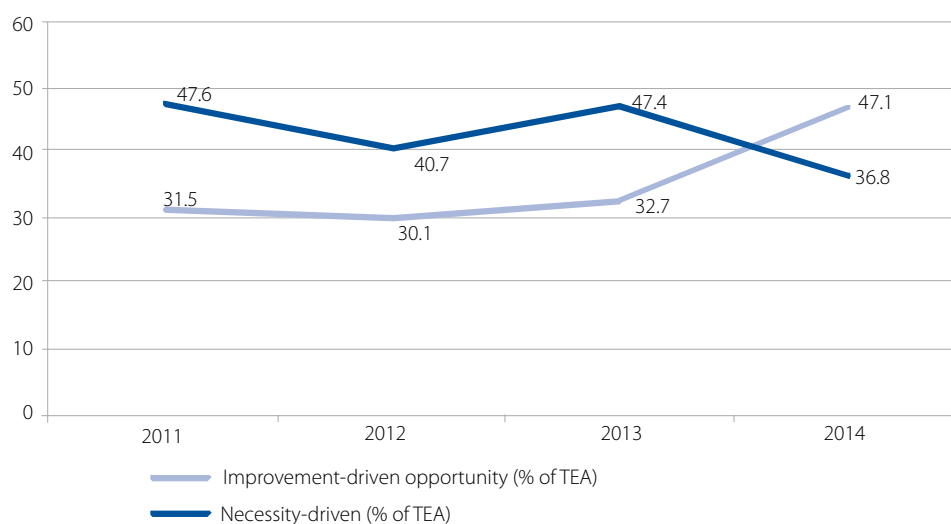
cont. Table 7

Luxembourg	11.81	59.81
Netherlands	15.67	62.77
Norway	3.54	69.03
Poland	36.75	47.11
Portugal	27.37	49.31
Romania	28.94	49.75
Russia	39.02	41.56
Slovakia	32.57	51.83
Slovenia	25.46	44.78
Spain	29.79	33.48
Sweden	7.91	56.16
Switzerland	14.35	58.14
United Kingdom	12.9	52.71
USA	13.5	66.93

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

While in the years 2011-2013 the changes in motivations to run a business were insignificant, in 2014 the previous trend with necessity being the dominating motivation to start a business in Poland was reversed (Diagram 6). The percentage of early-stage necessity-driven enterprises fell by 10.6 pp while the share of opportunity-driven enterprises increased by 14.4 pp. Currently, more enterprises are established because of perceived opportunities.

Diagram 6. Level of opportunity- and necessity-driven entrepreneurship in Poland in 2011-2014 (%)



Source: the authors' elaboration on the basis of Global Entrepreneurship Monitor data.

The structure of motivations of persons establishing business activity in Poland has changed for the better in 2014. Previously, businesses were mainly established because of the lack of an alternative to finding employment. Poland was the EU leader in this regard. Currently, there are more enterprises set up as a result of their owners perceiving an opportunity to improve their standard of living by means of gaining independence or increasing their income. The relevant figures for Poland are similar to the EU average while in 2013 they differed significantly (the percentage of opportunity-driven TEA in Poland amounted to 33% and in the EU to 47%).

2.7. Motivations of women and men

Contrary to entrepreneurial activity or self-assessment of one's abilities, or other variables discussed above, motivations to start a business activity do not vary significantly between women and men in a given country. As in the case of motivations of entrepreneurs in general, differences in motivations between the sexes result mainly from the level of development of a given country.

In the EU, on average more men and women running a business for up to 3.5 years established the business because of perceived opportunities. Still women more often than men get involved in business activity out of necessity (25% TEA of women compared to 21% TEA of men).

Table 8. Motivations of women and men in European countries and in the USA (% TEA men/women)

Country	Men – opportunity	Women – opportunity	Men – necessity	Women – necessity
EU average ¹⁵	75.29	69.91	21.32	25.47
Austria	82.48	80.54	11.31	10.43
Belgium	66.41	55.29	29.38	33.83
Bosnia and Herzegovina	52.45	38.51	47.55	58.98
Croatia	52.11	49.38	46.27	47.24
Denmark	91.72	89.81	5.64	5.02
Estonia	75.89	72.5	13.39	17.5
Finland	82.55	78.90	14.54	17.2
France	87.25	73.50	11.42	23.57
Germany	77.58	72.67	20.99	26.88
Greece	67.13	51.82	30.01	42.90
Hungary	67.73	57.25	29.34	42.75
Ireland	73.12	58.47	26.01	37.2
Italy	75.72	83.21	16.38	8.62
Lithuania	82.81	72.31	16.59	26.35
Luxembourg	85.87	84.49	11.97	11.55
Netherlands	79.69	81.58	16.61	14.15
Norway	89.04	82.5	0	10.00
Poland	59.33	58.82	36.09	38.14
Portugal	74.69	66.92	23.95	31.89
Romania	70.4	69.94	28.3	30.06
Russia	60.37	56.34	37.66	40.93
Slovakia	64.58	63.51	31.94	33.78
Slovenia	76.21	61.48	22.62	31.31
Spain	69.61	61.03	26.13	34.95
Sweden	85.62	80.35	6.61	11.3
Switzerland	79.85	69.93	10.97	17.72
United Kingdom	83.24	84.17	14.91	9.27
USA	83.85	78.24	11.7	16.04

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

In Poland, approximately 59% of women and men established a business because of the perceived opportunity. 36% of men and 38% of women own businesses were necessity-driven. The difference in motivations of women and men is thus insignificant. For the sake of comparison, in Bosnia and Herzegovina, France, Ireland and Hungary the differences in motivations between the sexes exceed 10 pp, as may be expected, to the disadvantage of women. The above data paint a positive picture of entrepreneurship in Poland.

¹⁵ The indicator for individual groups of countries by level of development is unavailable.

2.8. Business activity by sector

The GEM model identifies four categories of sectors: extraction, production (processing), business-to-business services and business-to-customer services.

Sectoral structure of early-stage enterprises (TEA) varies depending on the level of economic development in a given country. In less developed countries (factor-driven and efficiency-driven), the number of enterprises in the extraction sector is the highest (almost 13% and 9%, respectively). The production sector accounts for a similar percentage of enterprises regardless of the development level of the country (approximately 22-24%), but there are slightly fewer such enterprises in factor-driven economies (18%). Regardless of the country development, the sector of services is dominated by business-to-customer services. This type of services is the most popular in less developed countries (64% of TEA operate in this sector in factor-driven economies and only 40% of TEA in the EU), while business-to-business services are more frequent among young enterprises operating in more developed countries (29% of TEA in the EU, 28% in innovation-driven economies, 6% TEA in factor-driven economies).

In the European Union, the largest number of early-stage entrepreneurs offer business-to-client services (40% of the TEA). Also, a lot of entrepreneurs (29%) provide business-to-business services. 24% of enterprises are involved in production in EU, and only 6.8% of all entities that belong to TEA are active in extraction.

Sectoral structure of Polish early-stage enterprises is somewhat different. In Poland, the predominant sector is the sector of production, in which 42% of enterprises operate. A substantial number of enterprises provide services to individual customers (32%) and business-to-business services (24%). The lowest number of early-stage enterprises operate in the extraction sector (less than 2% of TEA).

The differences in the sectoral structure of enterprises operating in Poland in comparison with the EU average are currently the largest in the industrial production sector (17 pp to the advantage of Poland). Compared to the EU, there are fewer entrepreneurs involved in extraction and services, in particular, business-to-customer services (a difference of 8 pp), in Poland. The EU leaders in terms of services for individual customers are Greece and Spain, where over a half of early-stage enterprises are active in this area. B2B services are the most popular among enterprises in Sweden and Denmark (47%-44% of TEA). The extraction sector is the most popular among early-stage enterprises in Romania (27%). Poland is at the first place in the EU in terms of the share of TEA in the production sector (42%).

Table 9. Early-stage entrepreneurship (TEA) by individual economy sectors in the European countries and in the USA (%)

Country	Extraction	Production	B2B services	B2C services
Factor-driven economies	12.76	17.94	5.77	63.53
Efficiency-driven economies	8.91	23.30	11.77	56.03
Innovation-driven economies	5.05	22.08	28.83	44.03
EU average	7.02	24.09	29.13	39.76
Austria	3.72	17.7	35.01	43.58
Belgium	9.41	11.36	28.97	50.27
Bosnia and Herzegovina	30.67	31.96	13.4	23.97
Croatia	10.05	23.17	30.64	36.14
Denmark	3.53	19.49	43.43	33.55
Estonia	6.94	31.21	30.06	31.79
Finland	12.99	24.97	23.85	38.18
France	1.41	28.92	31.42	38.25
Germany	1.38	16.62	37.3	44.69
Greece	3.09	28.7	14.43	53.78
Hungary	15.16	27.47	22.15	35.22
Ireland	7.06	28.59	34.39	29.96
Italy	8.99	18.45	22.61	49.95
Lithuania	9.71	28.83	16.81	44.66
Luxembourg	1.59	10.92	40.2	47.29
Netherlands	2.33	27.1	29.77	40.81
Norway	11.5	17.7	36.28	34.51
Poland	1.89	41.93	24.36	31.81

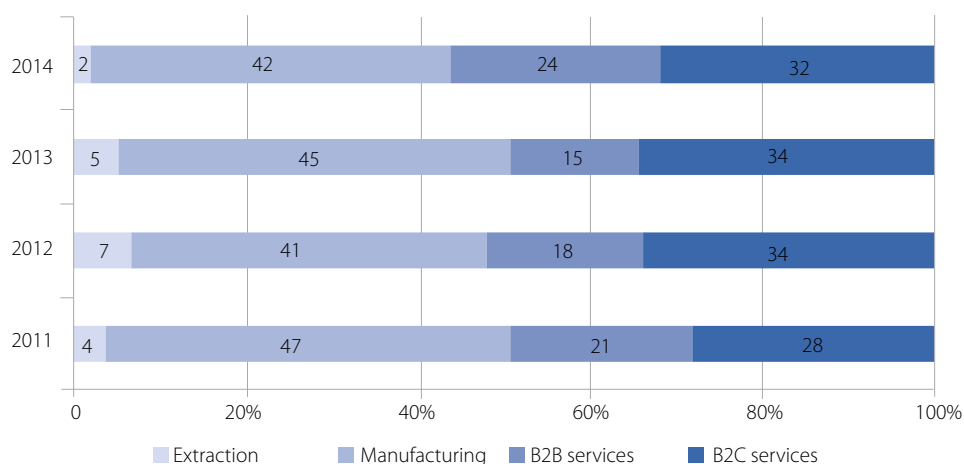
cont. Table 9

Portugal	4.7	23.34	22.21	49.75
Romania	26.89	31.31	21.11	20.69
Russia	6.47	34.06	14.36	45.1
Slovakia	4.95	34.65	25.25	35.15
Slovenia	10.77	24.63	33.44	31.16
Spain	4.49	15.1	28.66	51.75
Sweden	9.98	12.44	46.84	30.74
Switzerland	6.37	15.79	31.76	46.08
United Kingdom	0.43	27.12	27.19	45.25
USA	2.96	18.7	35.53	42.8

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

The analysis of data on the sectoral structure of Polish enterprises operating for up to 3.5 years between 2011 and 2014 reveals an increasing importance of services for individual customers (by 4 pp) and for business (by 3 pp). Over a half of early-stage enterprises are service providers. The significance of extraction and production sectors is decreasing, by 2 pp and 5 pp in 2011-2014, respectively. More pronounced changes were recorded in 2014 when the share of early-stage enterprises in the extraction and production sectors decreased by 3 pp while the percentage of enterprises providing business-to-business services grew by as many as 9 pp (from 15% to 24% – almost one-fourth of TEA). In the same period, the share of enterprises providing customer-to-business services fell by circa 3 pp.

Diagram 7. TEA in Poland, by sector, in the years 2011-2014 (%)



Source: the authors' own elaboration based on Global Entrepreneurship Monitor 2011-2014 data.

Changes in the sectoral structure of enterprises classified as TEA make Poland resemble more developed: innovation-driven economies. It is particularly visible in the strong growth of the sector of services for business and a decrease in the share of the extraction and production sector. In the case of industrial production, Poland continues to outpace all groups of countries, but as has already been mentioned the interest of young enterprises in this category has been declining on a regular basis.

2.9. Growth aspirations

GEM allows to assess the growth aspirations of early-stage enterprises, understood as the declared creation of new jobs or an increase in employment, in individual countries. Table 10 presents the data on aspirations of entrepreneurs operating for up to 3.5 years with respect to two variables, expressed by the *percentage of enterprises with medium aspirations* – declared wish to create at least 5 new jobs over the next five years and the *percentage of enterprises with high aspirations* – declared creation of at least 10 new jobs with the employment growth by at least 50% over the next 5 years.

Growth aspirations understood as an increase in employment rising with economic development level. In factor-driven economies 19% of early-stage enterprises intend to create at least 5 jobs over the next five years, in efficiency-driven economies the figure is 22%, and in innovation-driven ones, it is 26%. It is similar in the case of more ambitious enterprises that plan to create at least 10 jobs and achieve employment increase of at least 50% in this period. In all countries analysed under the GEM project, regardless of their level of economic development, there are more entrepreneurs with medium growth aspirations than those with bolder company development plans based on employment increase.

Table 10. Growth aspirations of new enterprises in Europe and the USA (%)

Country	%TEA – at least 5 new jobs within 5 years	%TEA – at least 10 new jobs and employment growth by at least 50% within 5 years
Factor-driven economies	19.28	10.07
Efficiency-driven economies	22.91	14.40
Innovation-driven economies	26.22	16.91
EU average	26.09	17.09
Austria	14.84	9.56
Belgium	16.88	12.45
Bosnia and Herzegovina	32.88	18.48
Croatia	40.5	27.89
Denmark	21.84	17.31
Estonia	22.4	14.06
Finland	15.7	12.78
France	30.81	16.85
Germany	27.43	14.1
Greece	12.02	7.69
Hungary	41.32	25.31
Ireland	34.18	27.27
Italy	14.16	8.28
Lithuania	34.32	24.23
Luxembourg	28.55	13
Netherlands	19.5	8.01
Norway	15.04	6.19
Poland	27.65	22.67
Portugal	23.03	11.56
Romania	47.17	31.83
Russia	23.99	17.48
Slovakia	34.4	27.06
Slovenia	28.58	17.08
Spain	19.29	10.91
Sweden	21.53	14.37
Switzerland	20.31	10.07
United Kingdom	24.02	18.86
USA	39.28	27.34

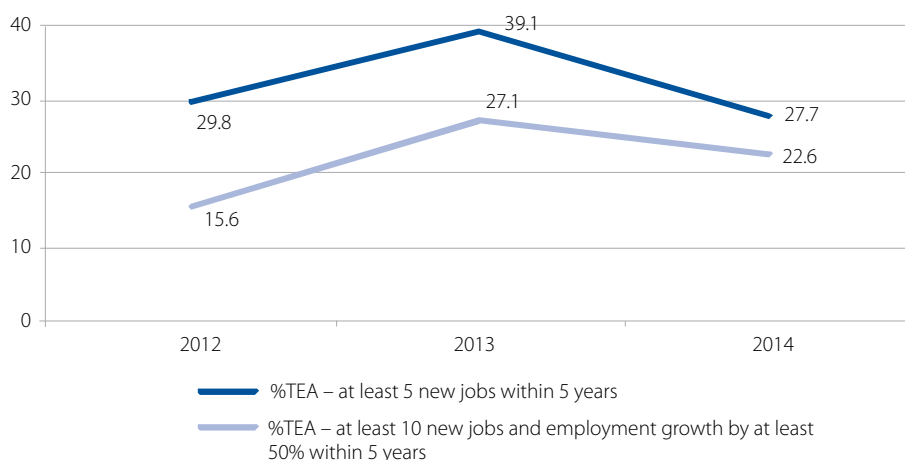
Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

Growth aspirations of enterprises that have been on the market for up to 3.5 years are slightly higher in Poland than on average in the EU. Nearly 28% of Polish companies plan to set up at least 5 new jobs in the next five years while, 23% of enterprises wish to create at least 10 jobs and increase employment by a minimum of 50% during that time. In the EU, 26% and 17% of enterprises plan that, respectively. These data confirm that Polish companies have equally high and even higher growth aspirations than their EU counterparts.

On the other hand, data for 2014 show that ambitions of Polish companies grow visibly weaker. Compared to the previous year, the percentage of enterprises with medium growth aspirations declined by 11 pp, and the number of companies with high aspi-

rations declined by 4 pp it is the greatest decrease in Europe in terms of medium development plans and one of the highest for high plans. Poland is still at the level of Germany or Slovenia when it comes to the percentage of enterprises that plan to set up at least 5 jobs, and Lithuania – for high aspirations.

Diagram 8. Growth aspirations of new enterprises in Poland in the years 2012–2014 (% TEA)



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data.

2014 brought about deterioration of the situation in terms of employment expansion plans of enterprises operating for less than 3.5 years in Poland. Growth aspirations concerning both creation of at least 5 jobs within five years and the more ambitious: of a minimum of 10 new jobs and increasing employment by at least 50% during that time have weakened. The percentage of enterprises with medium growth plans decreased in 2014 compared to the previous year from 39% to 28% (by ca. ¼), while the percentage of those with high aspirations declined from 27% to 23% (by 1/7). Despite the decline, young companies in Poland have higher growth aspirations in terms of new job creation than their EU counterparts; in particular, it concerns enterprises with high ambitions, of which there is 1/3 more in Poland than in the EU on average.

2.10. Internationalisation

Internationalisation constitutes an important element of enterprise development, regardless of the specificity of a given country. The GEM model attempt at grasping the relationship between the degree of internationalisation and enterprise development stage using four variables. They measure the percentage of customers from outside of the country in question per early-stage entrepreneurs (TEA). Similar to last year's Report, for the purposes of this analysis they were called as follows:

- *non-exporters*, i.e. entrepreneurs at an early stage (TEA) that do not have customers outside their home country;
- *exporters*:
 - *small scale exporters*, i.e. entrepreneurs at an early stage (TEA) that have from 1% to 25% of customers outside their home country,
 - *medium scale exporters*, i.e. entrepreneurs at an early stage (TEA) that have from 25% to 75% of customers outside their home country,
 - *advanced exporters*, i.e. entrepreneurs at an early stage (TEA) that have from 75% to 100% of customers outside their home country.

The level of internationalisation increases with economic growth. In factor-driven economies, 77% of enterprises at an early stage (TEA) have no foreign customers. In the next group, i.e. efficiency-driven economies, such enterprises are nearly 20 pp less numerous, and in innovation-driven economies, there is 36 pp less of them. The most internationalised area is the EU, where only 36% of companies active for up to 3.5 years have no foreign customers. Every one in ten EU enterprises is an advanced exporter – it is almost twice as many as in efficiency-driven economies. The EU also has the highest percentage of small and medium scale exporters globally: 41% of companies at an early stage have up to 25% customers outside their home country and 13% – from 25% to 75%.

Data for 2014 show the deepening of the current differences in the degree of internationalisation of individual groups of countries. In factor-driven and efficiency-driven economies the percentage of non-internationalised enterprises increased (by 9 and

4 pp, respectively) while in innovation-driven economies it remained almost unchanged and in the EU it increased by 3 pp. Similar changes concern the percentage of exporters, especially small scale ones – in less developed countries their percentage decreased by 4 pp, while in the EU it increased by 2 pp. In this case also, in innovation-driven economies, this indicator decreased by 2 pp.

Table 11. Internationalisation of entrepreneurs in Europe and in the USA (% TEA)

Country	Non-exporters	Small scale exporters	Medium scale exporters	Advanced exporters
Factor-driven economies	76.67	18.43	3.25	1.63
Efficiency-driven economies	58.05	27.24	8.73	5.99
Innovation-driven economies	40.49	38.8	12.12	8.59
EU average	36.07	40.95	12.88	10.1
Austria	34.11	41.15	14.3	10.44
Belgium	28.29	38.99	16.77	15.94
Bosnia and Herzegovina	47.8	34.26	12.89	5.06
Croatia	20.53	41.09	14.9	23.48
Denmark	70.7	16.01	7.23	6.06
Estonia	29.45	46.58	14.38	9.59
Finland	54.95	32.16	2.63	10.26
France	36.31	41.73	10.43	11.53
Germany	43.50	35.42	13.07	8.01
Greece	41.78	40.51	6.54	11.18
Hungary	32.86	43.81	15.73	7.6
Ireland	39.74	36.00	14.02	10.24
Italy	50.06	29.16	14.64	6.13
Lithuania	24.70	52.14	14.36	8.80
Luxembourg	4.13	54.03	25.09	16.76
Netherlands	49.45	34.68	9.19	6.68
Norway	67.27	22.73	6.36	3.64
Poland	16.79	68.71	8.88	5.63
Portugal	23.75	54.29	11.63	10.32
Romania	23.96	46.71	20.68	8.64
Russia	90.34	4.82	1.13	3.71
Slovakia	14.49	66.18	13.04	6.28
Slovenia	28.57	39.82	19.66	11.95
Spain	67.57	18.87	7.17	6.39
Sweden	33.56	39.08	13.2	14.16
Switzerland	28.89	40.1	21.22	9.78
United Kingdom	60.45	24.66	8.75	6.14
USA	16.34	69.14	9.14	5.38

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

At the level of individual countries, it is visible that only in three countries, namely in Sweden, Italy, and Spain, the level of enterprise internationalisation increased. The other countries recorded either an increase in non-exporters or a decrease in some exporter category. The least favourable changes in the structure of enterprises are visible in the case of Switzerland, where the percentage of non-exporters at an early stage declined by over 9 pp in 2014 compared to 2013, and the percentage of small scale exporters declined by nearly 13 pp.

Changes in internationalisation intensity are also visible in the case of Polish enterprises. In 2014 (compared to 2013) the percentage of enterprises that do not pursue export activity decreased by 4 pp and now amounts to nearly 17%. When it comes to exporters, the percentage of small scale exporters increased strongly (by 13 pp – it was the greatest increase in Europe in this

category) while the percentage of enterprises exporting on a greater scale declined (by 5 pp in the case of medium scale exporters and by 3 pp in the case of advanced exporters). Therefore, at present, the share of exporters having up to 25% customers outside Poland among companies at an early development stage is as much as 69%. There are much less medium scale exporters – nearly 9% and advanced exporters – about 6%.

Compared to the results for 2013, Poland saw a decrease in the percentage of companies from the two most specialised groups of companies export-wise. The significant increase in the share of start-up exporters (by 11 pp compared to the result for 2013) thus shows that some enterprises decreased their export intensity. It is interesting that the share of Polish companies which operate only on the domestic market decreases (by 4 pp compared to 2013). In addition, the percentage of such companies is lower more than twice than the EU average (17% against 36%).

The above data prove increased interest in international activity among young enterprises operating on the market for up to 3.5 years – the percentage of non-internationalised enterprises is decreasing and the percentage of small scale exporters is increasing. The decrease in the share of more experienced young enterprises with more than ¼ customers abroad is a matter of concern. Against this background, the situation of mature enterprises is positive: compared to the EU, this group includes much fewer companies not interested in exports at all and much more enterprises with extensive experience in exports (over 25% of customers outside Poland).

2.11. Intrapreneurship

Setting up a company is not the only form of entrepreneurship in GEM understanding. Within an existing company, a person can also be an organisational entrepreneur, ie. an intrapreneur. In its surveys GEM tries to raise the status of this form of entrepreneurship and equalise it with starting an individual activity based on the assumption that in some countries intrapreneurship is more effective than individual entrepreneurship and contributes to socio-economic development to a greater extent. In the case of developed economies, undertakings started in the framework of intrapreneurship are characterised by higher innovation level than those in the framework of individual entrepreneurship. Larger firms are also better developed and have greater access to resources. Of course, both these factors can also be disadvantages and their relative effectiveness depends on specific circumstances.

Surveys in this respect are optional in GEM, but in 2014, all countries participated in this part of the study, which means that data for 70 countries are available. Intrapreneurship is measured using four indicators that merge two criteria: leading role in intrapreneurship in the past three years and at present, the indicator in the population and in the employees. The table below presents the percentage of people involved in intrapreneurship in the leading role in the adult population and among employees in the past three years and at present.

Table 12. Comparison of the perception of intrapreneurship in the European countries covered by GEM and in the USA in 2014

Country	Leading role in organisational entrepreneurship (activity within the last 3 years) among the population	Leading role in organisational entrepreneurship (activity within the last 3 years) among employees	Leading role in organisational entrepreneurship (activity at present) among the population	Leading role in organisational entrepreneurship (activity at present) among employees
Factor-driven economies	1.3	4.5	1.1	3.6
Efficiency-driven economies	1.7	4.1	1.3	3.2
Innovation-driven economies	5.2	8.1	4.1	6.4
EU average	4.7	7.9	3.7	6.1
Austria	5.6	10.0	4.3	7.5
Belgium	5.4	8.5	4.0	6.3
Bosnia and Herzegovina	1.9	5.5	1.7	4.9
Croatia	3.6	8.4	3.0	6.9
Denmark	11.4	16.8	8.6	12.6
Estonia	3.6	5.4	2.9	4.3
Finland	4.5	6.4	3.7	5.3
France	3.8	6.3	2.6	4.4
Germany	4.5	6.6	3.5	5.1

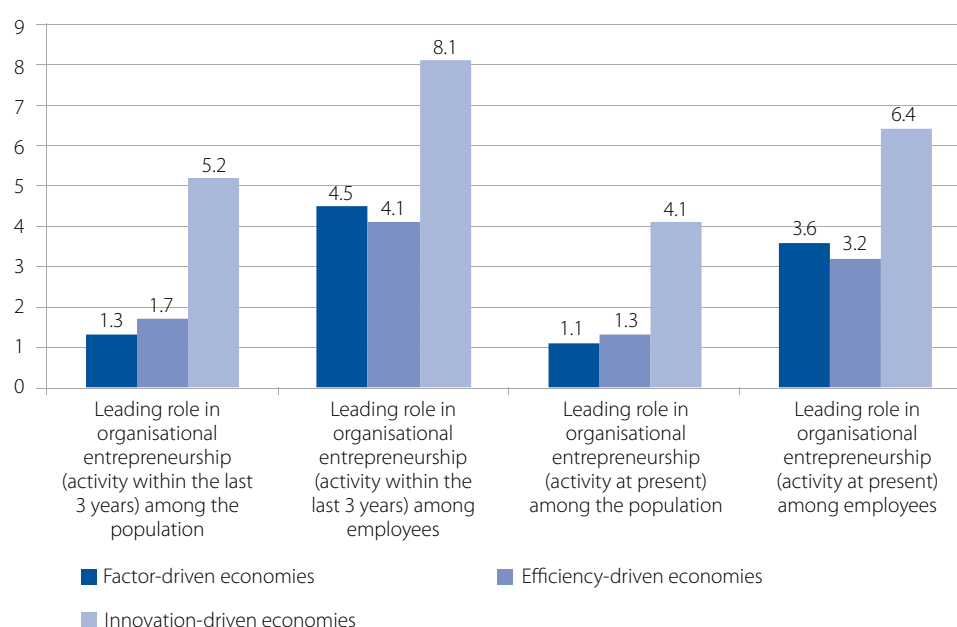
cont. Table 12

Greece	0.8	2.1	0.6	1.7
Hungary	2.8	5.8	1.8	3.8
Ireland	6.7	11.8	5.6	10.0
Italy	0.8	1.9	0.6	1.6
Lithuania	5.1	10.2	3.4	6.7
Luxembourg	7.3	10.7	5.1	7.5
Netherlands	7.0	9.4	5.2	7.0
Norway	7.9	9.9	5.4	6.7
Poland	3.4	6.6	2.3	4.4
Portugal	3.2	6.2	2.4	4.6
Romania	4.9	8.1	4.1	6.6
Russia	0.5	0.8	0.4	0.6
Slovakia	4.9	8.4	4.3	7.4
Slovenia	4.7	8.6	3.8	6.9
Spain	1.8	4.8	1.5	3.9
Sweden	5.8	8.1	4.7	6.6
Switzerland	6.1	9.4	4.9	7.6
United Kingdom	7.0	11.2	6.2	9.9
USA	6.5	10.5	5.0	8.1

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

The first striking phenomenon is that intrapreneurship increases along with the economic growth. This is true for all intrapreneurship indicators, but to varying extent. The highest level of organisational entrepreneurship is observed for all indicators in innovation-driven economies. In the case of a number of employees as the reference point, the difference is two-fold compared to the countries at the lower stage of economic development. The difference is three or four-fold for the percentage of the population. In factor-driven and efficiency-driven economies the differences go in two directions. Taking into account the percentage of the population, the level of intrapreneurship is higher in efficiency-driven economies while in terms of the percentage of the employees it is higher in factor-driven economies. This is due to higher unemployment, lower level of economic activity and higher level of individual entrepreneurship in factor-oriented economies, which results in the lower number of hired employees.

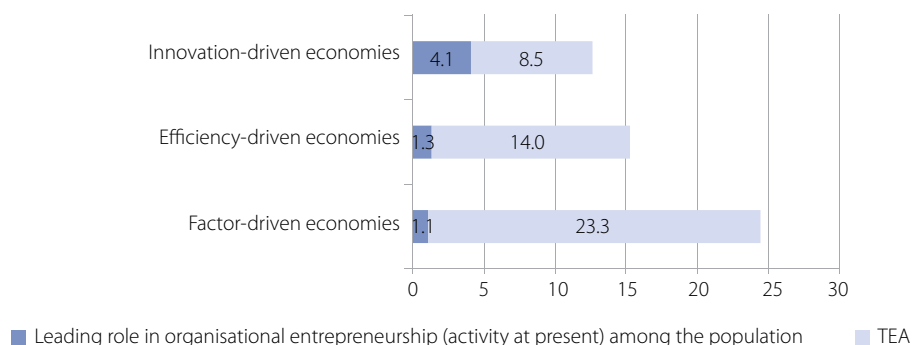
Diagram 9. Average level of intrapreneurship in three groups of countries in 2014



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

The results must be analysed taking into account the fact that the level of individual entrepreneurship decreases along with the economic development. Therefore, intrapreneurship may be treated as the supplement to individual entrepreneurship, which is more efficient in developed countries. In terms of aggregated level of entrepreneurship (TEA) and intrapreneurship, the percentage of the population involved in any form of early-stage entrepreneurship amounts to 24.4 in factor-driven economies, 15.3 in efficiency-driven economies and 10.6 in innovation-driven economies, but the figures do not include the owners of established enterprises.

Diagram 10. Intrapreneurship and individual entrepreneurship in three groups of countries in 2014



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

In Poland, the level of intrapreneurship is relatively high compared to other efficiency-driven economies. 3.4% of respondents played a leading role in organisational entrepreneurship within the last 3 years (6.6% among employees), while 2.3% of respondents played such a role at the time of research (4.4% among employees).

It must be emphasized that the group of efficiency-driven economies is very diversified and includes both the countries which used to be factor-driven economies and those which are close to "promotion" to the group of innovation-driven economies. Poland belongs to the latter group and should rather be compared with developed countries. In this comparison, the level of intrapreneurship in Poland is rather low and only several innovation-driven economies have even lower results. This may result from the structure of the Polish economy and be related to the "middle-income trap". The Polish economy is characterised by a very low innovation level which is related to intrapreneurship. New undertakings, even within the existing organisations, entail the allocation of resources which are unavailable when the innovation level is low. Enterprises invest less often in research and development and more frequently in the use of the existing potential.

Intrapreneurship is similar to opportunity-driven entrepreneurship. It may, therefore, be interesting to compare the variables for organisational entrepreneurship with the motivations to establish new undertakings.

Table 13. Correlation between selected variables

		Leading role in organisational entrepreneurship (activity within the last 3 years) among the population	Leading role in organisational entrepreneurship (activity within the last 3 years) among employees	Leading role in organisational entrepreneurship (activity at present) among the population	Leading role in organisational entrepreneurship (activity at present) among employees
Business opportunities	Pearson's correlation	.118	.175	.095	.160
	Significance	.331	.148	.436	.186
	N	70	70	70	70
Established enterprises	Pearson's correlation	-.175	-.093	-.140	-.031
	Significance	.146	.444	.248	.800
	N	70	70	70	70
TEA	Pearson's correlation	-.230	-.036	-.222	-.004
	Significance	.055	.765	.065	.971
	N	70	70	70	70

cont. Table 13

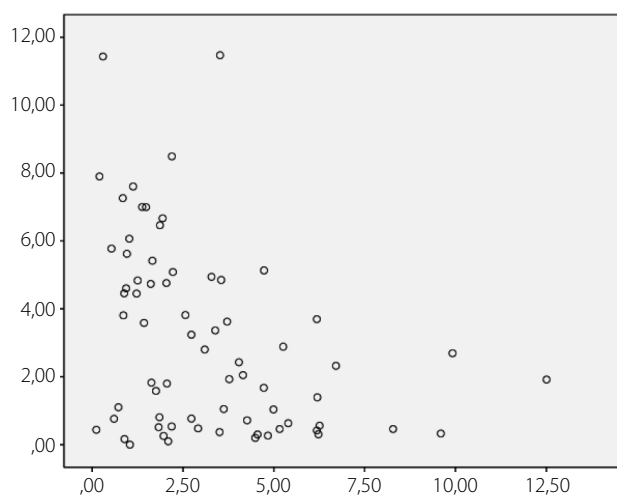
TEA opportunity (% of the population)	Pearson's correlation	-0.175	0.022	-0.162	0.061
	Significance	.148	.853	.180	.616
	N	70	70	70	70
TEA necessity (% of the population)	Pearson's correlation	-0.375**	-0.212	-0.374**	-0.194
	Significance	.001	.078	.001	.107
	N	70	70	70	70
TEA opportunity (% of TEA)	Pearson's correlation	0.355**	0.264*	0.362**	0.270*
	Significance	.003	.027	.002	.024
	N	70	70	70	70
TEA necessity (% of TEA)	Pearson's correlation	-0.347**	-0.269*	-0.355**	-0.274*
	Significance	.003	.024	.003	.022
	N	70	70	70	70

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

** p<0,01; * p<0,05

Statistically significant correlations are observed between intrapreneurship indicators for the population and necessity-driven and opportunity-driven entrepreneurship. They are positive in the first case and negative in the latter. There are no statistically significant correlations between intrapreneurship and perceived opportunities, the level of established enterprises and TEA.

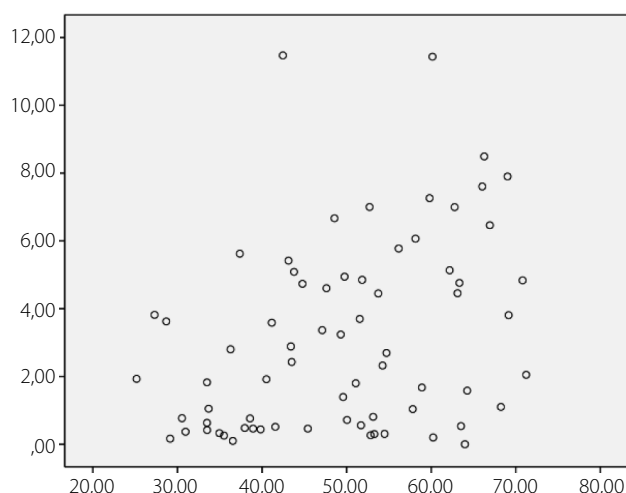
Diagram 11. The relationship between necessity-driven entrepreneurship (axis x) and the leading role in organisational entrepreneurship (activity within the last 3 years) among the population (axis y).



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

The level of intrapreneurship declines along with the increase in individual necessity-driven entrepreneurship. This means that in the countries where many people must start business activity because of no other option, there is a deficit of business opportunities which are also used in organisational entrepreneurship. The phenomenon may also be due to the fact that the share of necessity-driven entrepreneurship is high in the countries characterised by low economic development level, which is also related to high unemployment. In those countries the level of intrapreneurship is low.

Diagram 12. The relationship between opportunity-driven entrepreneurship (axis x) and the leading role in organisational entrepreneurship (activity within the last 3 years) among the population (axis y).



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

Opportunity-driven entrepreneurship co-exists with intrapreneurship. This points to a certain complementarity (opposite to competition) of using the opportunities in individual entrepreneurship and their implementation in organisational entrepreneurship. It should be noted, however, that the opportunity-driven entrepreneurship rate, in this case, refers to the percentage of entrepreneurs already included in TEA.

2.12. Entrepreneurship of young people

The APS data to a certain extent enable the analyses by age, which allows to identify the specificity of entrepreneurship of young people. Unfortunately, for many variables the sample size is too small to perform a reliable analysis.

In the United States, the Millennials, i.e. twenty and thirty-year-olds entering or about to enter the labour market (persons born between 1980 and 2000) are the latest frenzy. Various studies¹⁶ emphasize that this group varies significantly from the previous generations, although is not homogenous. It comprises persons moulded by modern technologies who value highly the sense of belonging to a group and creativity at work. They want their work and all they do in their private and professional life to have a meaning, i.e. to contribute to common good, e.g. by means of social entrepreneurship, social innovations or impact investment.

The identification of this age group is very interesting due to its otherness, but it also became important, since the group accounts for approximately one-third of the US population. Books are being written on how to manage employees from this age group and how to fully use their potential.

But is this age group in Poland that significant in the context of the economic development of the country? People born between 1980 and 2005 account for approximately 35% of our society, i.e. similarly to the USA. Unfortunately, the involvement of young persons in voluntary or charity work is as low as in the entire population. Young people in Poland do not stand out also in the case of such values as care for nature and environment or importance of creativity.¹⁷ It is difficult to confirm that this new generation exists in Poland.

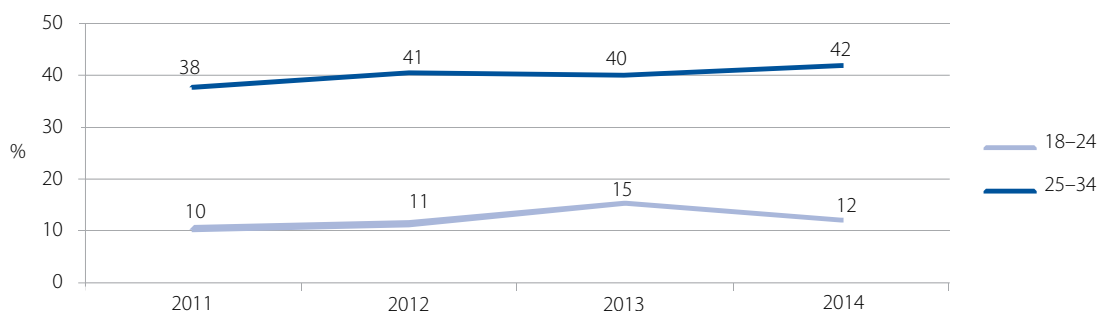
However, recently there has been a lot of energy, activity, but also productivity in the startup community, demonstrated by the creation of new technology companies, but also the initiatives for startups, such as Startup Poland, Academic Business Incubators or Mam Startup. They are usually created by young people. Unfortunately, this phenomenon is so new that specific statistical data concerning it are difficult to find.

The GEM research shows first the following: in the years 2011-2014 the share of persons aged 25-34 among new entrepreneurs (TEA) increased by 4 pp while the share of persons aged 18-24 grew by 2 pp (Diagram 13).

¹⁶ Zydel R., *Young people in a distorting mirror*, October 2010, Harvard Business Review Poland.

¹⁷ On the basis of the results of European Social Survey 2012.

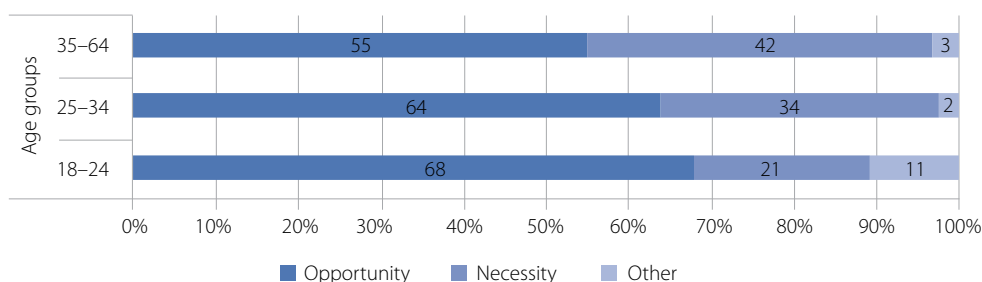
Diagram 13. Share of young people among new entrepreneurs in Poland (share of 18-24 and 25-34 age groups in TEA)



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2011-2014.

Young people are more often opportunity-driven than necessity-driven when establishing a business. In the 18-24 age group, 21% of new entrepreneurs (TEA) were necessity-driven, while among 35-64-year-olds the percentage was twice higher (42%). Among 18-24-year-olds 68% were opportunity-driven, while in the 25-34 age group the percentage was 64% and in the 35-64 group – 55% (Diagram 14).

Diagram 14. Motivation to start a business among new entrepreneurs (TEA) in Poland in 2014

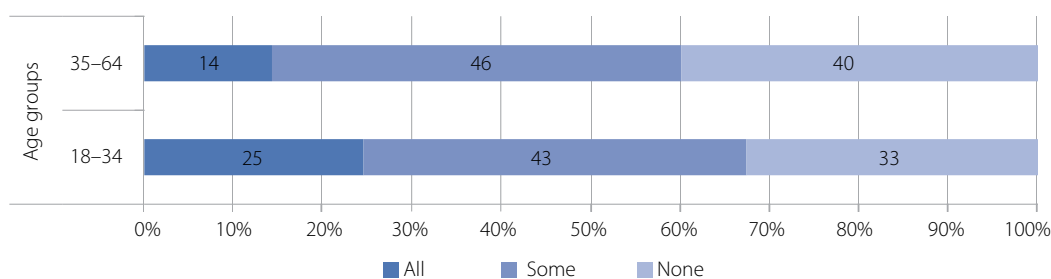


N=212

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

Furthermore, one-fourth of the new entrepreneurs aged 18-34 offers a product that is new for all customers. In the 35-64 age group, the percentage is lower by as many as 11 pp. This proves that young people are more innovative.

Diagram 15. The innovation of product among new entrepreneurs (TEA), by age group, in Poland in 2014: How many customers consider the product to be new or unknown?



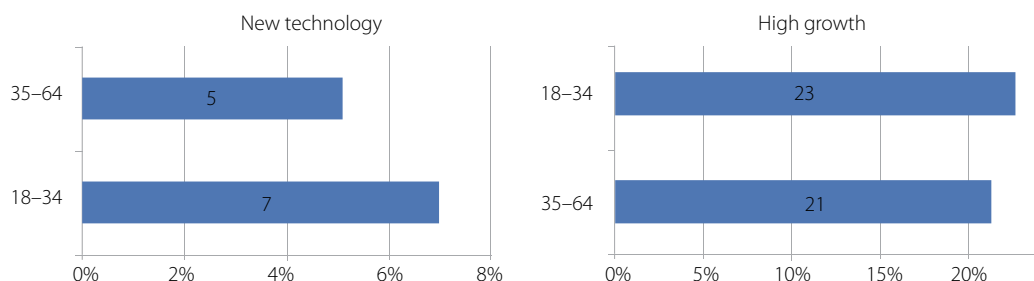
N=212 - due to their small size, the 18-24 and 25-34 age groups were aggregated.

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

Moreover, the percentage of new entrepreneurs (TEA) using new technologies is higher by 2 pp among 18-34-year-olds than among 35-64-year-olds. In addition, in the 18-34 age group, the percentage of enterprises with high growth expectations is 2 pp higher than in the 35-64 age group (Diagram 16). The differences in terms of those two indicators are not so pronounced as those described above.

Summing up, the above data show that entrepreneurship of young people is more positive, ambitious and dynamic than that of the remaining part of the population.

Diagram 16. Share of new entrepreneurs (TEA) using new technologies and having high growth expectations, by age group, in Poland in 2014 (%)

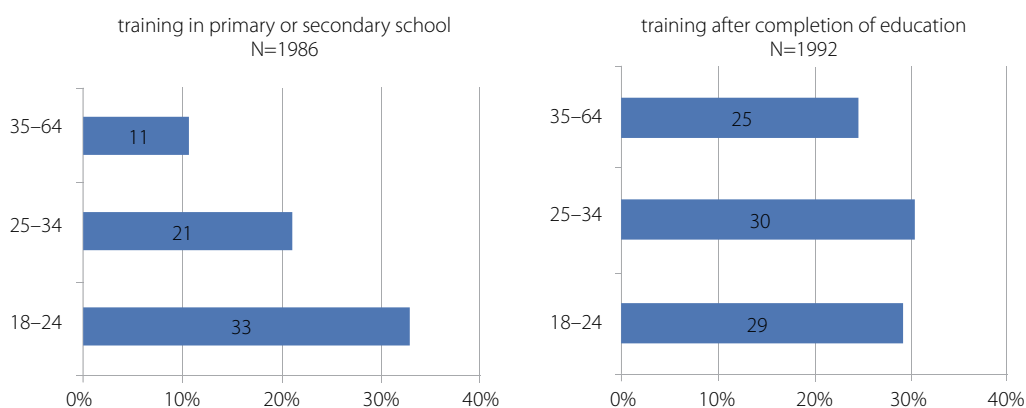


N=212 - due to their small size, the 18-24 and 25-34 age groups were aggregated.

Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

The studies of the Polish Agency for Enterprise Development from 2009 show that the willingness of young people to start own business activity is partly affected by training in running a business, and in particular by entrepreneurship classes at the secondary school and the university¹⁸.

Diagram 17. The share of persons who took part in a training on starting a business at primary school, lower or upper secondary school (left) and who took part in training on starting a business after completion of their education (right), by age group, in Poland in 2014 (%)



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor 2014 data.

Among persons aged 18-24, only 33% declare that they had classes on starting a business at school. This is a surprising and at the same time alarming result, since entrepreneurship classes have been on the obligatory subject at secondary schools from 2002¹⁹. This may mean that the knowledge in this regard had been provided in such a way that 67% of young persons forgot about it. For the sake of comparison, in the 2009 study, approximately 22% of young people (aged 18-25) admitted that they had not had any entrepreneurship classes at the secondary school. However, only 28% of them considered such classes to be helpful in starting and running a business²⁰. The percentage of persons aged 25-34 who confirm that they have such classes is even lower (21%), although a part of this age group was also subject to obligatory entrepreneurship classes at the secondary school. Among persons aged 35-64, the percentage amounted to 11%.

Among people aged 18-24 and 25-34, the percentage of persons who took part in the training on starting a business after they completed their education amounted to approximately 30%, while in the 35-64 age group to 25%.

¹⁸ Węclawska D., Zadura-Lichota P., *Impact of education on entrepreneurial attitudes and preparing young Poles to perform business activity* in Wilmańska A. (ed.), *Report on the condition of small and medium-sized enterprise sector in Poland in 2008-2009*.

¹⁹ "(...) Schools did not have to introduce this subject already at the first year of education. Furthermore, in some schools the entrepreneurship was included in other subjects (e.g. Social studies)", quoted from Węclawska D., Zadura-Lichota P., op. cit.

²⁰ Ibidem.

3. Attributes of entrepreneurs – analysis of data for the years 2012-2014

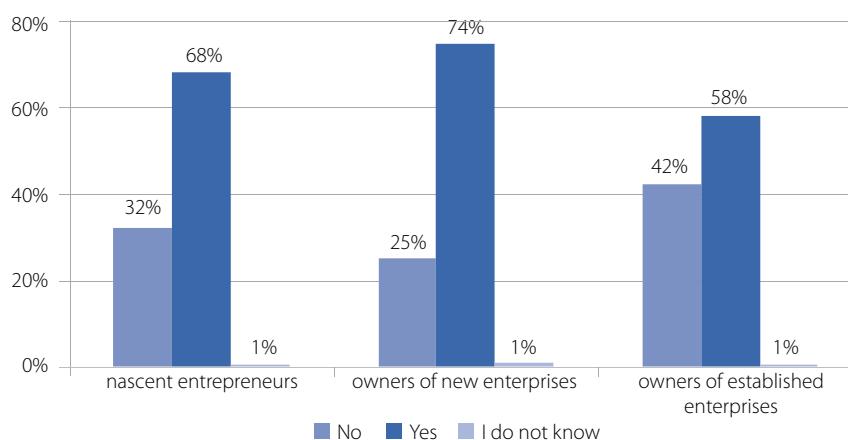
The cyclical research in the framework of Global Entrepreneurship Monitor allows to track the dynamics of the analysed phenomena. Another advantage is the possibility to aggregate the data for several periods and to perform the analysis on a larger sample. This procedure is based on the assumption that the conditions of starting and running a business do not change considerably and thus sample pooling is possible. The procedure may be applied for example to persons starting a business activity or running an early-stage activity, i.e. nascent entrepreneurs. If the studies are conducted on a sample of 2000 respondents in one year, the number of these entrepreneurs in the sample is approximately 100 and the analyses on such a small sample are impossible. As a result of the aggregation of the sample from three research periods, there are 321 nascent entrepreneurs in the sample, which may reveal several important phenomena and relationships. A similar technique may be applied to new business owners and established businesses. There are 246 and 496 of such persons, respectively, in pooled samples. The aggregated data were for the years 2012-2014, which means that they were collected in the course of two years (GEM research is conducted at a specific point in time, in the middle of the year). Below you will find the results of analyses of individual groups of entrepreneurs in terms of:

- knowledge of other entrepreneurs;
- perceived business opportunities;
- entrepreneurial capabilities;
- fear of failure;
- sector of activity;
- aspirations of entrepreneurs with regard to the creation of new markets, use of new technologies and creation of new jobs.

3.1. Main attributes

The main attributes analysed by GEM include knowledge of other entrepreneurs, perceived business opportunities, self-assessment of entrepreneurial capabilities and potentially destructive impact of the fear of failure.

Diagram 1. Knowledge of other entrepreneurs, by stage of activity

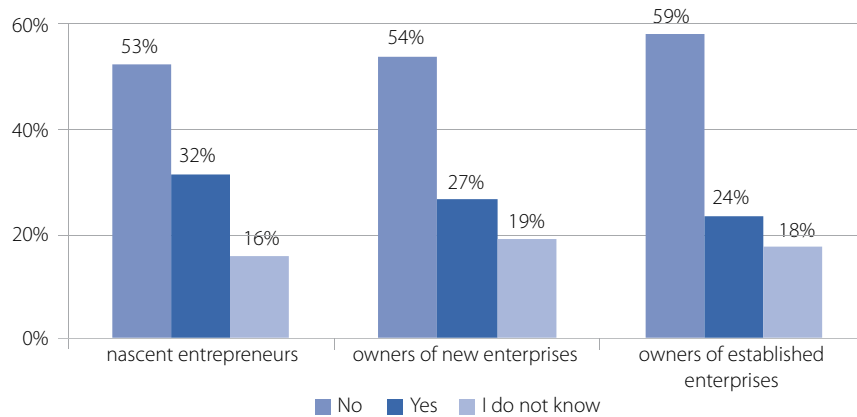


Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

The majority of nascent entrepreneurs know some other entrepreneur (68%). This is relatively important since it allows to use the experience of other individuals running a business and is also an indicator of the entrepreneur's social capital. Therefore, it is interesting that almost one-third of entrepreneurs starting a business activity do not know another entrepreneur. This means that entrepreneurs relatively seldom use the opportunity to build a network of business connections (Diagram 1).

It may also be compared to another phenomenon, i.e. 8% of nascent entrepreneurs believe they have no knowledge, skills or experience necessary to run a business. This means that some entrepreneurs are unprepared for business activity and start a business due to external circumstances. It also shows that only one-third of nascent entrepreneurs perceive opportunities for starting a business (Diagram 2). This is a striking contradiction which definitely points to the existence of external factors, such as unemployment or low qualifications that do not match the labour market needs, forcing individuals to start the business activity. Furthermore, fear of failure is high even among entrepreneurs who just begin their business activity. More than two persons in five believe that such fear may prevent them from running a business (Diagram 4).

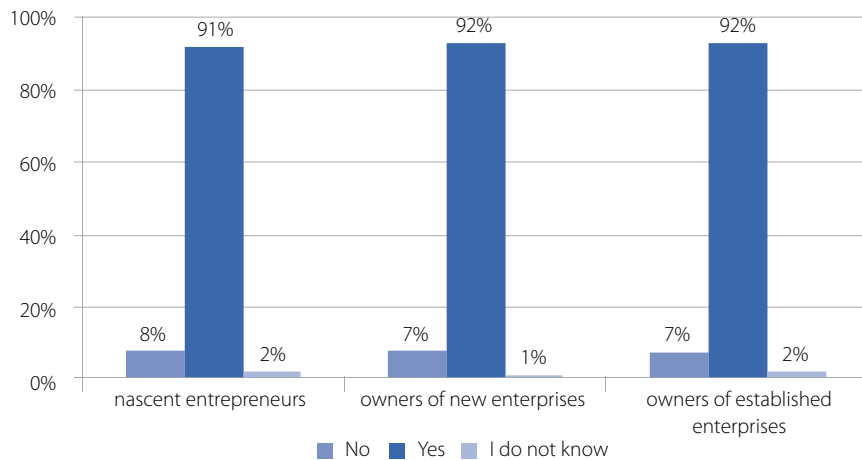
Diagram 2. Perceived business opportunities, by stage of activity



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

As expected, the longer the owners of business run their enterprises, the higher percentage of them know other entrepreneurs (by 6 pp). However, perceived opportunities of individuals running a business change for the worse (difference of 5 pp), which is counterintuitive. It may mean that entrepreneurs do not perceive opportunities for development of their business or for diversification of activity, which may considerably limit the actual development of newly established enterprises. Fear of failure increases along with the development of activity, and although the growth is small, it is statistically significant. Self-assessment of entrepreneurial capabilities remains unchanged.

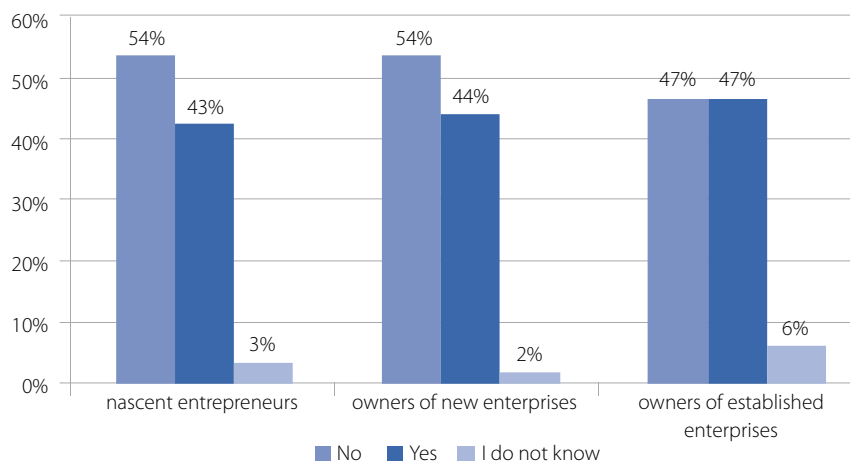
Diagram 3. Self-assessment of entrepreneurial capabilities, by stage of activity



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

It seems somewhat alarming that the knowledge of other entrepreneurs among the owners of established enterprises (operating for more than 3.5 years) is even lower than among the nascent ones (58%). This may mean that entrepreneurs do not build a network of business relations, but decide on running their business in isolation. In the longer perspective, it may reduce their growth aspirations and ability to implement innovation. Other unfavourable phenomena include the lack of perceived business opportunities and the growing fear of failure. It must be pointed out that Poland ranks second in the European Union, after Greece, in terms of the highest fear of failure. This results from the combination of the current economic situation and cultural determinants, which signify that Poles show a very high preference for avoiding uncertainty.

Diagram 4. Fear of failure by stage of activity



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

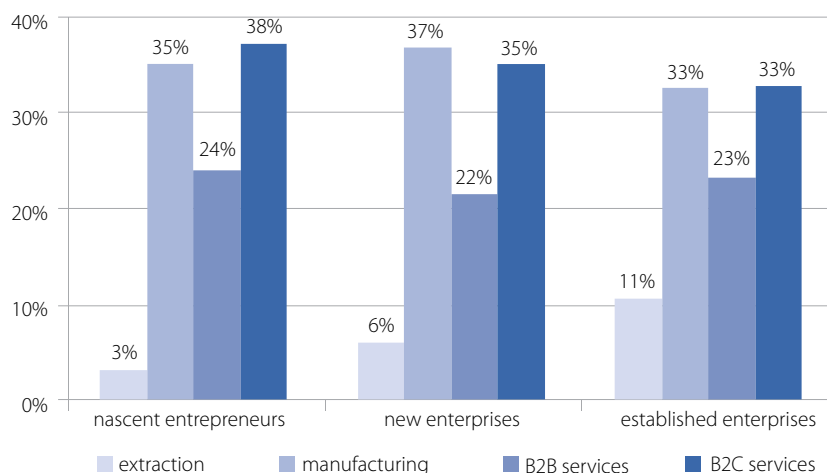
Summing up, networking of enterprises declines along with their age. This confirms the findings of the report from two years ago when a separate chapter was devoted to collaboration. One of its conclusions was that once the entrepreneurs consolidate their market position, they lose motivation to seek new business contacts because they treat it as "necessary evil". Moreover, the percentage of entrepreneurs perceiving business opportunities falls with the age of the company. Fear of failure increases slightly. But self-assessment remains unchanged.

3.2. Business activity by sector and stage

Aggregation of data from three time periods also allows analysing the sectors where activity is set up and conducted. Comparison of enterprises at various stages of activity shows that the share of enterprises in the raw materials extraction sector increases and in the sector of services for individual customers it decreases with age. It provides some insight into the survival indicator for companies with various profiles of activity. Analysis by 12 sectors of economic activity provides more information on this subject.

Among 12 sectors, there are those whose representation increases with the time for which activity is pursued and those whose share decreases. This may result from two phenomena. Firstly, it may prove a changing structure of economic activity. Secondly, it may point to a lower or higher survival rate of companies in various sectors. An increasing share may show that in a given sector the survival rate is higher than average. This is the case in agriculture, forestry, fisheries, and manufacturing. There are also sectors where the situation is the opposite, which may stand for a survival rate lower than the average. It concerns mining and construction, wholesale trade, retail trade, hotels and restaurants, administrative services, and service activity support.

Diagram 5. Activity by sectors and activity stages



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

Table 1. Activity by sectors and activity stages

	nascent entrepreneurs	new enterprises	established enterprises
agriculture, forestry, fisheries	3.2%	6.0%	10.5%
mining, construction	16.2%	14.9%	14.0%
manufacturing	7.2%	8.9%	9.9%
transportation, storage, disposal	7.2%	8.1%	7.0%
wholesale trade	5.4%	5.5%	2.9%
retail trade, hotels, restaurants	23.5%	20.0%	18.9%
information and communication	5.1%	3.4%	4.3%
financial intermediation, real estate agency	4.3%	4.7%	4.3%
professional services	10.5%	9.4%	12.5%
administrative services	4.3%	4.3%	2.3%
public administration, health care, education, social services	10.5%	12.8%	12.3%
service activity support	2.5%	2.1%	1.2%

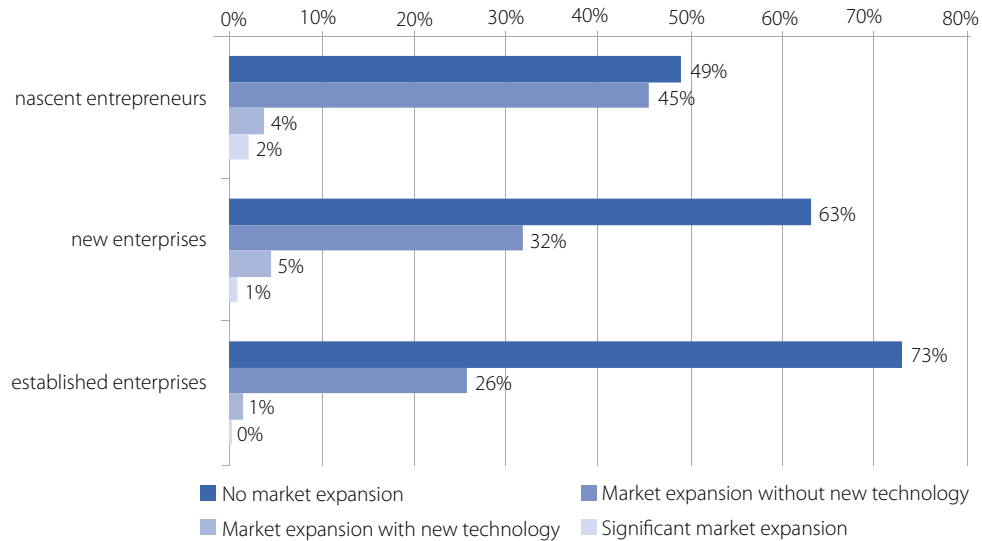
Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

3.3. Aspirations of entrepreneurs – new products, markets, technologies; creation of new jobs and exports

Apart from entrepreneurial attitudes and entrepreneurial activity, also aspirations of entrepreneurs are a subject important to GEM. They concern several areas: innovation (introduction of new products), the creation of new markets, application of new technologies, exports, and the creation of new jobs.

One of the indicators of entrepreneurs' aspirations is market expansion (Diagram 6). It is a combination of new market creation and application of a new technology. Analysis of planned and carried out expansion at various stages of activity shows that entrepreneurs are frequently too optimistic about their business plans and they are not implemented. No market expansion is declared by less than half entrepreneurs at an early stage while among owners of established companies it is nearly three-fourths of respondents. The considerable market expansion is declared by one in 50 nascent entrepreneurs and only one in 500 experienced company owner. Aside from overt optimism of nascent entrepreneurs that is modified in the course of operations, this may be the effect of stagnation of companies at later stages of activity.

Diagram 6. Market expansion at various stages of activity

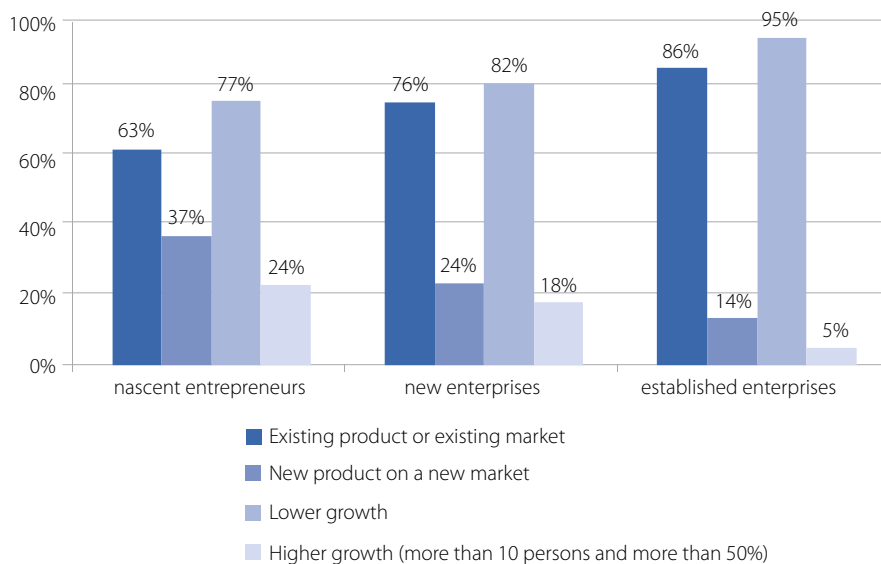


Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

Similar phenomena can be observed in the case of creating new products, creating new jobs, and international orientation. The introduction of new products to new markets called radical entrepreneurship, declared by entrepreneurs, occurs in the case of 37% of nascent entrepreneurs and only 14% owners of established companies. Similar as in the previous case, this may result from developmental stagnation or overt optimism at the beginning of the activity.

But the results concerning new job the creation are the most alarming. High growth indicator (meaning creation of at least 10 jobs in the next five years and employment expansion by at least 50%) is declared by almost one in four nascent entrepreneurs and only one in twenty owners of mature companies. It must, of course, be noted that in the latter case creation of 10 new jobs may stand for employment increase by less than 50%, but such low growth declarations may mean a barrier to the development of small and medium-sized enterprises (Diagram 7).

Diagram 7. New products, markets, and new job creation at various stages of activity

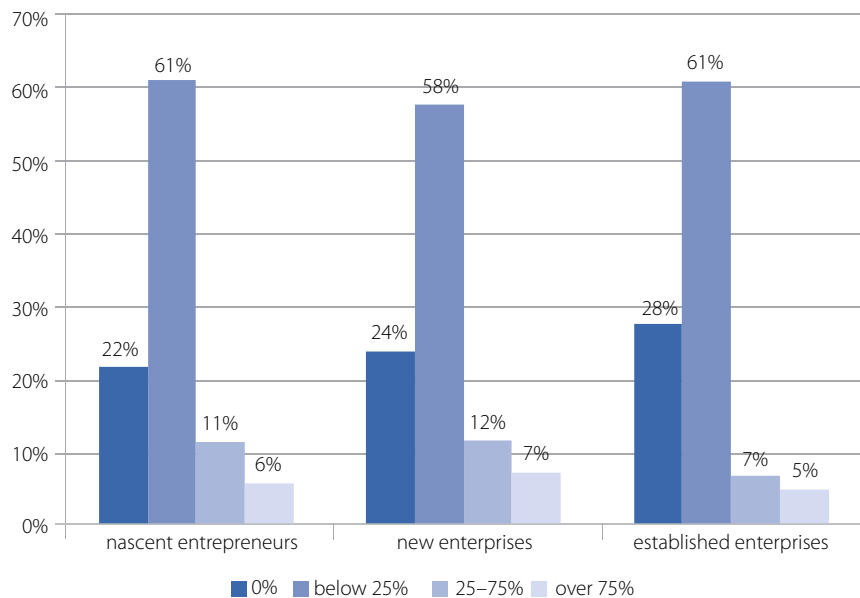


Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

Reduction of aspirations along with the time of conducting economic activity concerns also international orientation, or declaration of the percentage of customers who live or will live abroad (Diagram 8). The most visible is the increase in the share of companies (from 22% among nascent entrepreneurs to 28% among established companies) that do not intend to export or do not export. Strong international orientation (in excess of 25% of customers living abroad) declines from 17% among nascent entrepreneurs to 12% among owners of established companies, although it increases to 19% among new companies.

Generally, it can be said that aspirations of owners decrease along with the development of a company. On the one hand, this phenomenon is disturbing, but quite natural on the other hand. In the literature on the subject overconfidence of entrepreneurs is emphasised frequently. It is a threat to activity on the one hand, but its precondition on the other.

Diagram 8. International orientation at various stages of activity



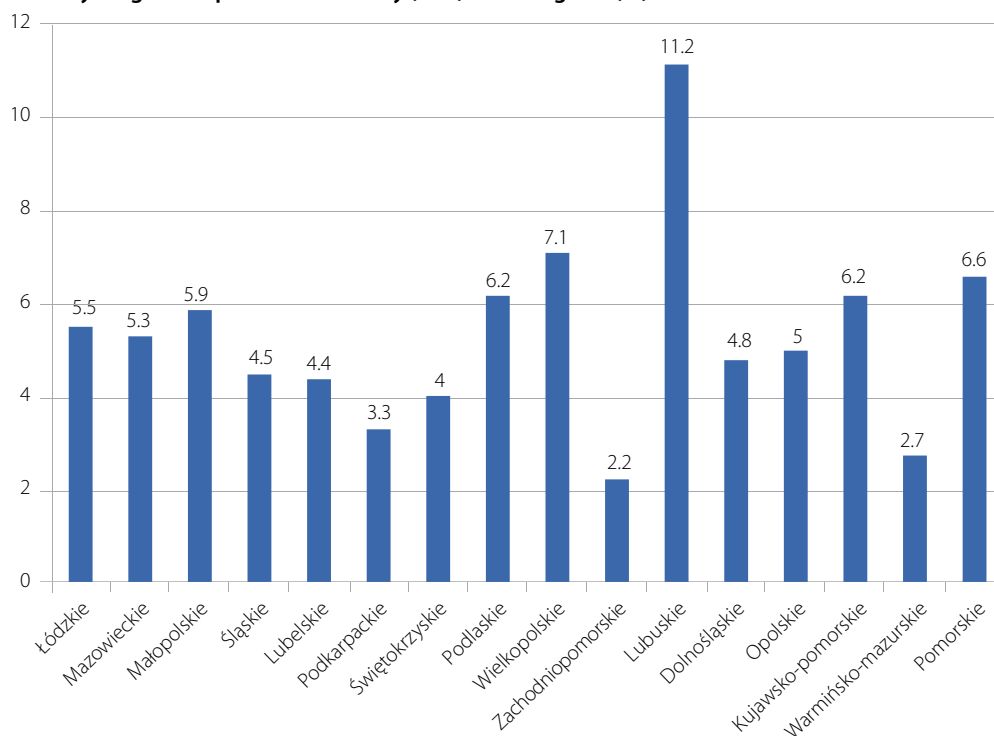
Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

4. Regional differences in entrepreneurship

Aggregation of samples also enables comparisons between the regions. Such comparisons are impossible in annual terms since the number of respondents in less populous regions is too small. After aggregation of data for three research periods, the least numerous groups of respondents were obtained for Lubuskie and Opolskie voivodeships (162 persons in both). The sample was the largest in Mazowieckie (814) and Śląskie (730) voivodeships. Therefore, research results must be treated with a dose of caution, since their statistical error may be significant.

Considerable differences between the regions occur in terms of early-stage entrepreneurship. The indicator is the lowest in Zachodniopomorskie Voivodeship (2.2%) and the highest in Lubuskie Voivodeship (11.2%). The average TEA level in Poland in 2014 amounted to 9.2%. The analysis of regional differences in the level of entrepreneurship is a very complex and multifaceted task since the differences result from economic, cultural and historical factors, as well as the proximity of borders, or distance from the capital city, and from infrastructure. However, differences in terms of starting a business may be compared to perceived business opportunities in the regions.

Diagram 1. Total early-stage Entrepreneurial Activity (TEA) in the regions (%)



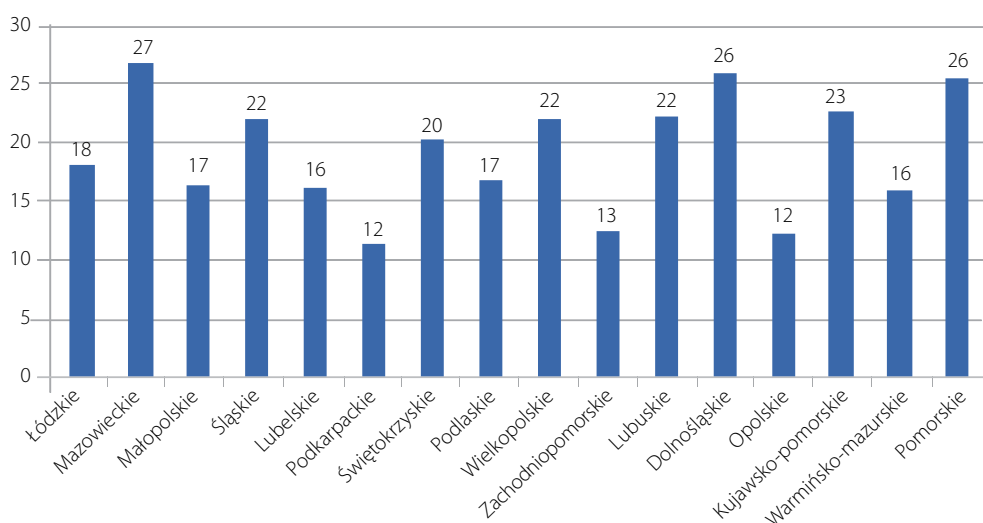
Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

Differences in perceived business opportunities are also significant between the regions. Four groups of voivodeships with similar level of perceived opportunities may be distinguished, namely:

- (1) Podkarpackie, Opolskie, Zachodniopomorskie (11.5%-12.5%);
- (2) Warmińsko-Mazurskie, Lubelskie, Małopolskie, Podlaskie, Łódzkie (16%-18.2%);
- (3) Świętokrzyskie, Śląskie, Wielkopolskie, Lubuskie, Kujawsko-Pomorskie (20.4%-22.8%),
- (4) Pomorskie, Dolnośląskie, Mazowieckie (25.5%-26.8%).

The level of perceived business opportunities depends of course on the current development level of the region, but the comparison of perceived opportunities and the level of early-stage entrepreneurship may bring interesting results. On the one hand, there are regions where, despite the low level of perceived opportunities, the level of entrepreneurship is high (Opolskie, Lubuskie). On the other hand, there are voivodeships where the level of perceived opportunities exceeds the level of early-stage entrepreneurship. They include Mazowieckie, Śląskie, Zachodniopomorskie, Dolnośląskie and Warmińsko-Mazurskie. It may be expected that necessity-driven entrepreneurship will prevail in the first group while perceived business opportunities will be the main driver of establishing new businesses in the second group.

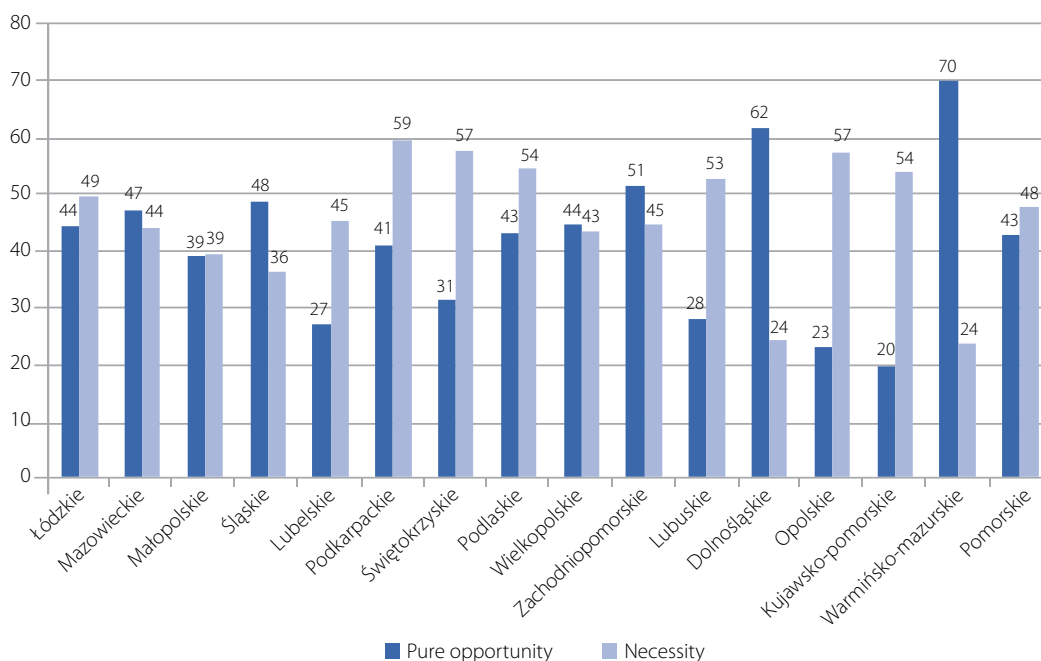
Diagram 2. Perceived business opportunities in the regions (figures represent the percentage of positive answers in all answers, including "I don't know") (%)



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

The analysis of relations between opportunity-driven and necessity-driven entrepreneurship confirms the earlier conjectures. In the regions where the level of perceived opportunities is high and the level of entrepreneurship low, opportunity-driven entrepreneurship prevails, while necessity-driven entrepreneurship dominates in the regions where those levels take opposite values. Extreme cases include Dolnośląskie and Warmińsko-Mazurskie voivodeships, on the one hand, and Opolskie and Kujawsko-Pomorskie voivodeships, on the other hand. However, it should be noted that the above analysis was performed on a small sample of TEA entrepreneurs identified in some regions.

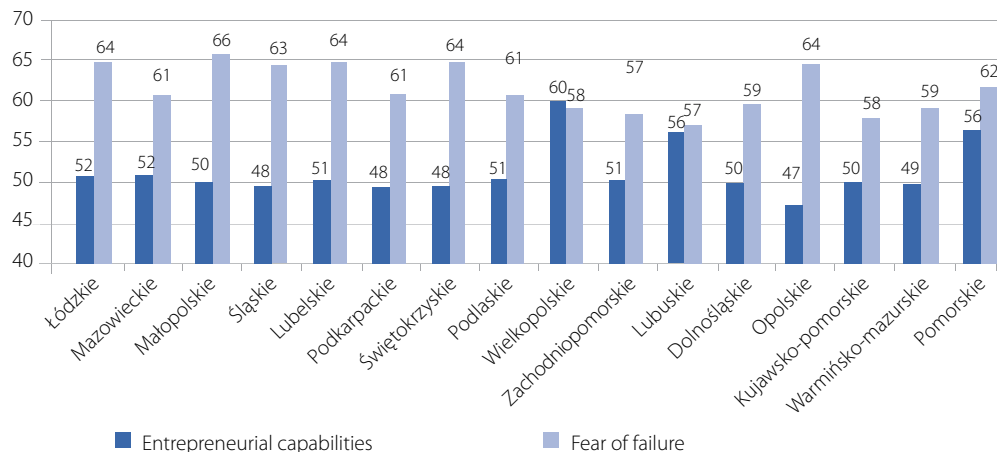
Diagram 3. Opportunity- and necessity-driven entrepreneurship in the regions (%)



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

Differences in self-assessment of entrepreneurial capabilities and fear of failure are also recorded between voivodeships, but they are less significant than in the case of perceived opportunities. Self-assessment of entrepreneurial capabilities is significantly higher than the average in Wielkopolskie Voivodeship (Diagram 4), as well as in Lubuskie and Pomorskie voivodeships while fear of failure is particularly high in Małopolskie, Lubelskie, Świętokrzyskie and Opolskie voivodeships. The resulting division of the country into North-West and South-East has been found also in other comparisons.

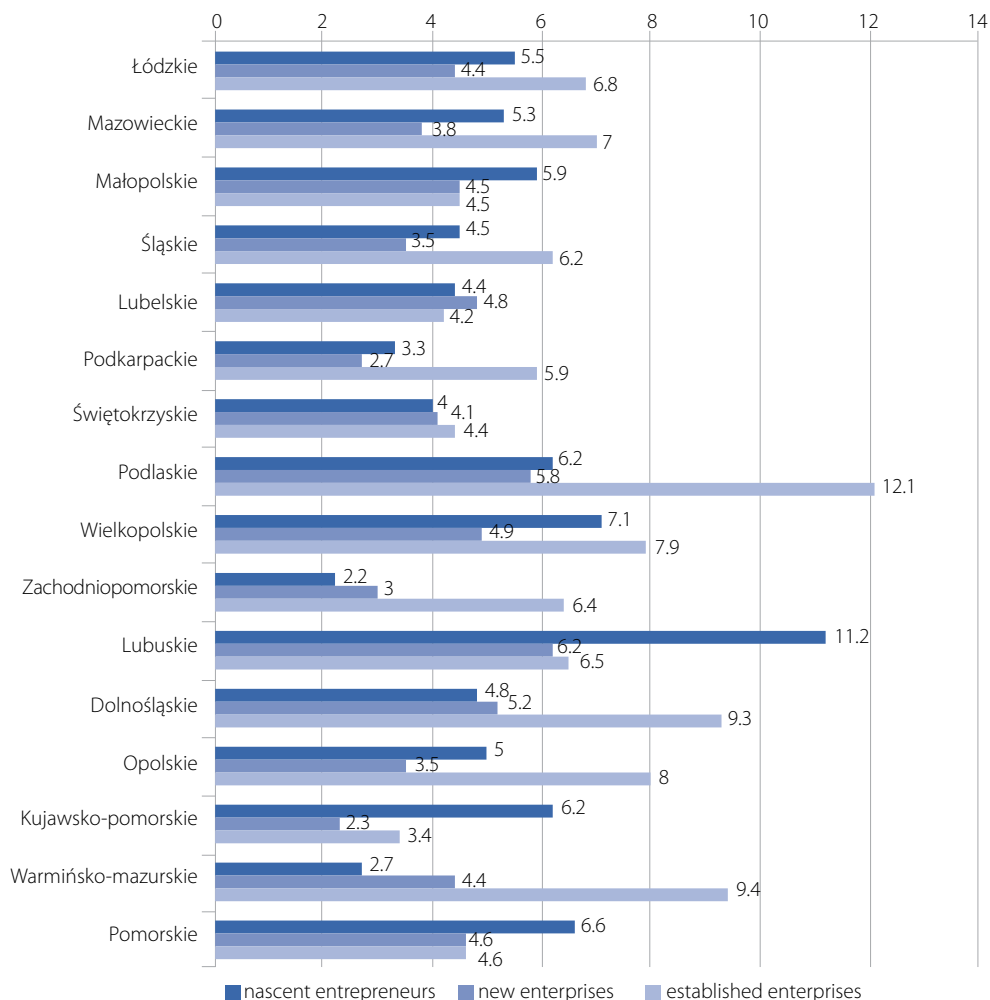
Diagram 4. Entrepreneurial knowledge, capabilities and experience, as well as fear of failure in the regions (in the case of capabilities the figures represent the percentage of positive answers in all answers, including "I don't know") (%)



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

Regional data on early-stage entrepreneurship, new and established enterprises allow to draw conclusions on the viability of companies. In some voivodeships, the number of early-stage enterprises exceeds the number of businesses at a later stage of activity. Those voivodeships include Małopolskie, Lubuskie and Kujawsko-Pomorskie. The opposite happens in other regions, where established enterprises prevail which may point to their higher survival rate in the region. Such situation is reported in Podkarpackie, Podlaskie, Zachodniopomorskie, Dolnośląskie and Warmińsko-Mazurskie voivodeships.

Diagram 5. Early-stage and established enterprises in the regions (%)



Source: the authors' own elaboration on the basis of Global Entrepreneurship Monitor data for 2012-2014.

5. Determinants of entrepreneurship development – results of national experts survey (NES)

5.1. Introduction – about the study and technical remarks

The results of a national experts survey on entrepreneurship include assessment of the determinants for the emergence and development of entrepreneurship in Poland. The assessment was carried out with the use of a qualitative survey (national experts survey – NES). Altogether 36 experts from Poland participated in this survey. The task of each expert was to assess the statements relating to 12 areas²¹.

Each area covered 5-6 statements on the subject on which the expert was to give his/her opinion, using the following scale: completely true – 5 points, somewhat true – 4 points, neither true nor false – 3 points, somewhat false – 2 points, completely false – 1 point. Because all statements were positive, i.e. they reported that a given aspect has a positive impact on entrepreneurship in Poland. Also, the more points were attributed to a given area, the better the situation was assessed. Then, averages of answers of all experts were calculated for given statements²². The higher the value of the average, the better assessment of a given aspect. Then, the respective statements were aggregated to areas specified above and averages were calculated for them as well. This analysis used both average results for the respective statements and the averages for the respective groups – depending on context and possibility of interesting presentation of the problem.

In addition, results for Poland were compared with average results for innovation-driven economies even though Poland is among the group of efficiency-driven economies. Such a comparison has its consequences: it should be borne in mind that entrepreneurship, understood in particular as the number of new entities, in innovation-driven economies is at a lower level than in other groups (efficiency-driven economies or factor-driven economies).

In view of the multitude of areas covered by the NES survey, it was decided to group them into four blocks (Diagram 1) representing the more extensive categories of determinants for the development of entrepreneurship, i.e.:

- **Start-up opportunities:** entrepreneurship education – primary and secondary level and the level of higher education institutions and continuing vocational training; skills and knowledge necessary for starting up business activity; market openness – dynamics and burdens; availability of financing; commercial, service, and technical infrastructure;
- **Government policy and programmes:** priorities and support for entrepreneurship as well as burdens related to taxes and administrative regulations; government (public) entrepreneurship support programmes;
- **Research and development:** research and development, technology transfer;
- **Social and cultural norms:** value systems and social norms.

A detailed description of individual areas of the NES survey has been presented in the Global Entrepreneurship Monitor – Poland 2011 report.

5.2. Current status

According to the experts involved in the NES survey, in 2014 the conditions for the creation and development of enterprises in Poland were average. Still experts' assessments were in the majority of areas slightly better than in the previous year and 2011 when we have started to collect data within GEM project.

²¹ Access to finance, government policy towards entrepreneurship, public entrepreneurship support programmes, primary and secondary education, higher education and professional training, research & development and technology transfer, business commercial environment, the stability of the market situation and legal obstacles to entry into the market, physical infrastructure, value systems and social norms.

²² The authors of the study are aware of the consequences of applying the average for the Likert scale; however, such solution was recognised the optimum for comparison between so many countries in so many areas at a time.

5.2.1. Start-up opportunities

Analysing the opportunities for starting a new enterprise, one must consider a number of important aspects that determine setting up or developing its activity. Undoubtedly in this process the basic aspect is the proper preparation, meaning acquiring entrepreneurship education and training. Another factor is the market and, therefore, market entry opportunities and related costs. The third issue concerns the availability of funding of an entrepreneurial activity, especially at the initial stage of business development. Development and growth of entities also depend on their access to developed technical infrastructure and commercial support in the area of banking services, professional consultants, lawyers, suppliers and subcontractors.

Education

Thus, what is the process of education of future entrepreneurs according to experts? At a first glance, one can think that it looks quite well because Poland is one of few European countries where classes in entrepreneurship are obligatory at the level of a secondary school. In the case of primary and lower secondary schools, the situation is different – there the subject of entrepreneurship is not directly present in school curricula. It rather depends on creativity and awareness of teachers on how important is the grasp of the principles of entrepreneurial activity and the factors that shape it. This approach results in limited opportunities for developing entrepreneurial attributes (such as creativity, solving problems, planning, or group work) at an early stage of child development.

With such an approach to teaching entrepreneurship, the result of the experts' assessment in terms of assessment of entrepreneurship at the primary and secondary level is not surprising: 1.75 points, which constitutes only 80% of the result for innovation-driven economies. In the opinion of experts, education and training in entrepreneurship at the level of vocational schools and universities do slightly better, especially vocational education, professional courses, and continuing vocational training – 2.54 points, but still comparing this result to the result of innovation-driven economies it is 12% lower.

Market openness

Apart from the primary barrier in the form of poor educational preparation in the area of entrepreneurship, there are significant obstacles (2.75 points) connected with bearing the costs of market entry, the economy of scale, diversity of competitors' products, or demand for capital. In addition, companies already operating on these markets create illegal barriers due to which new and developing companies are unable to enter new markets easily.

Although assessments of experts prove considerable barriers connected with the entry of new enterprises onto the market, they do not diverge considerably from average assessments of experts from innovation-driven economies (the average was 2.78 points).

Despite barriers to entry from the point of view of new and developing companies, in the opinion of experts, the Polish market belongs to dynamically changing markets (in general, this area was assessed at 4.04 points). Experts were asked to refer to two issues: market dynamics in terms of goods and services, and market dynamics in terms of B2B services. In both cases experts considered these markets significantly changing (4.11 and 3.97 points, respectively). Compared to countries with innovation-driven economies, the dynamics of the Polish market was assessed higher (138%). It is particularly worth to underline the dynamics of the market of consumer goods and services (138% of the value for innovation-driven economies) and changes on the market of B2B goods and services (138%).

Financing enterprise operations

Many factors are significant in the process of establishing and developing a company. Capital is another one. Without involvement of sufficient funds, it is impossible to develop a company or to maintain its competitive position on the market. Capital conditions and determines operation of every enterprise, at every development stage. Several factors decide on what sources of financing, whether, and to what extent enterprises can use. The factors include primarily the size of a company, development stage, investment needs, or availability of capital.

Let us take a closer look at individual forms of financing whose occurrence in Poland was assessed by the national experts. In sum, experts assessed six types of financing: equity funding, debt financing, public support, funds provided by private individuals, risk capital funds (e.g. venture capital), funds available in the form of initial public offerings (IPO), in terms of their availability to new and developing companies.

Generally, average experts' assessment of the block concerning the availability of various forms of financing dedicated to new and developing companies is quite low (2.77 points), but it slightly exceeds the average assessment of experts from countries with innovation-driven economies (101%). The experts assessed access to debt financing best (3.2 points), which may confirm that the number of institutions involved in financial support for start-ups is increasing.

Equity funding ranks second in terms of assessment of the possibility of financing the operation of new and developing companies (3.06 points). Interestingly, assessments of equity and debt financing by Polish experts are higher than assessments of experts from innovation-driven economies (108%). In the case of young companies equity financing is of utmost importance – on the one hand, an entrepreneur can quickly obtain the capital necessary for company development (which usually entails the transfer of a part of shares to an investor), and, on the other hand, the entrepreneur can obtain knowledge and experience contributed by the investor. Poland is an attractive market for private equity and venture capital funds, accounting for almost half of such investments in Central and Eastern Europe. However, compared to the European average, the involvement of funds in relation to GDP in Poland is two and a half times lower. Sectors related to IT and the Internet, health protection and services are considered prospective.

In the opinion of experts, in 2014, the public support for new and developing enterprises was insufficient (2.76 points), which resulted in a lower mark than the year before. This is mostly due to the fact that funds for such initiatives under the 2007-2013 perspectives are running out. Calls for proposals for the new funds under the 2014-2020 programming period have not been announced yet at the time of the research.

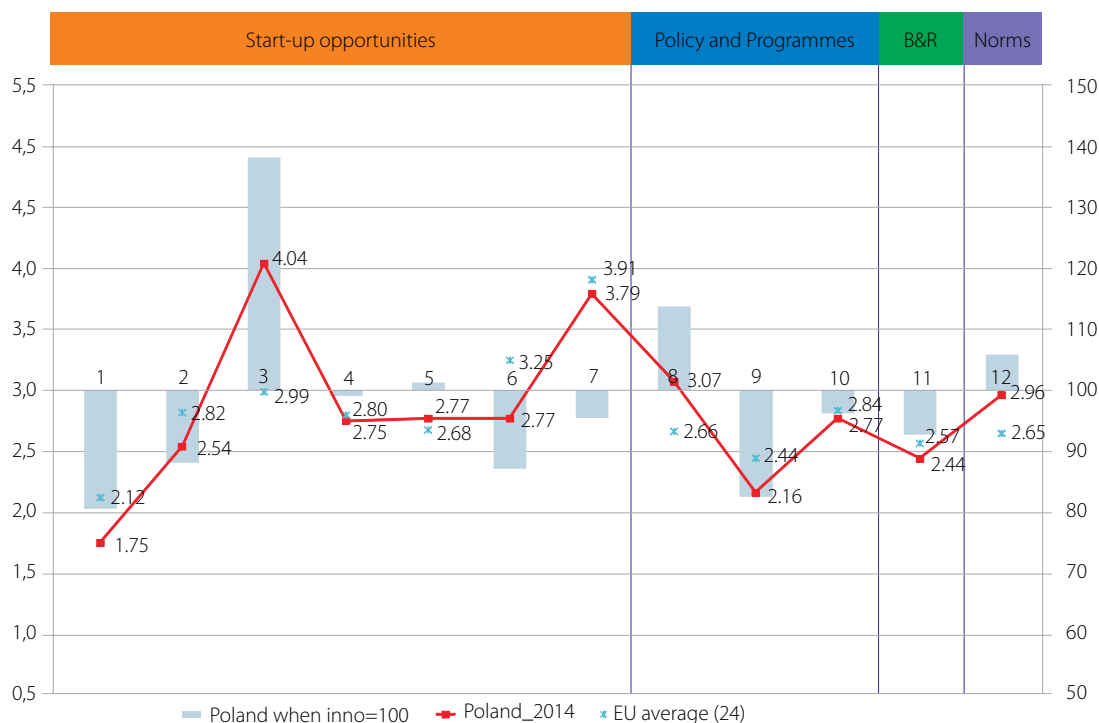
The worst result, but still better than in the previous year, was recorded for the possibility to finance new and developing enterprises by private individuals (2.52 points) and venture capital (2.58 points). Poland ranks below the average for innovation-driven economies in this regard.

The figure for Poland for funds obtained through IPO was lower than the year before, but still assessed better (2.65 points) than the average for innovation-driven economies (2.49 points).

Commercial, service and technical infrastructure

Entrepreneurship develops where there is a well-thought-out and consistent policy for enterprise development, aimed at ensuring favourable infrastructure and services facilitating conducting and developing business activity. Therefore, important components of the economy include technical elements, such as roads, utilities, telecommunications services, etc. as well as services of contractors and subcontractors of business environment activities (legal, banking and accounting services).

Diagram 1. Determinants of entrepreneurship development: Poland, average for the EU countries (24)* vs. innovation-driven economies



1. Education and training – primary and secondary level, 2. Education and training – entrepreneurship, vocational training, higher education institutions; 3. Market openness – dynamics, 4. Market openness – burdens; 5. Financing, 6. Commercial and service infrastructure; 7. Commercial, service and technical infrastructure; 8. Priorities and support for entrepreneurship; 9. Burdens related to taxes and administrative regulations, 10. Government (public) entrepreneurship support programmes, 11. Research and development, technology transfer; 12. Social and cultural norms: value systems and social norms.

* Austria, Belgium, Croatia, Denmark, Estonia, Finland, France, Greece, Spain, Netherlands, Ireland, Lithuania, Luxembourg, Latvia, Germany, Poland, Portugal, Romania, Slovakia, Slovenia, Sweden, Hungary, United Kingdom, Italy.

Source: the authors' own elaboration based on the results of the Global Entrepreneurship Monitor – National Expert Survey 2011-2014.

Technical infrastructure received relatively high marks (3.79 points) while the average assessment of commercial and service infrastructure was much worse (2.77 points). Experts regularly give technical infrastructure increasing marks and its average assessment is approaching the average for innovation-driven economies (3.97). This means that the efforts aimed at developing this area are effective.

The availability of telecommunications services (telephone, the Internet) received the highest score (4.41 points). According to experts, the cost of access to those services is not too high (3.95 points). The costs of basic utilities (gas, water, electricity, water supply) are not excessive (3.97 points) and do not constitute a problem for new and developing companies. The time for fulfilling all formalities related to getting access to utilities (gas, electricity, water, water supply) was assessed slightly worse, but still for over 3 points (3.47 points). According to experts, it is difficult to obtain access to those utilities within a month. The condition of roads, utilities, transport, waste management as elements supporting new and developing companies is assessed the most unfavourably in the context of technical infrastructure (3.17 points).

Compared to technical infrastructure, the Polish experts assess commercial and service infrastructure much worse both in terms of a general score of individual categories and compared to the experts of innovation-driven economies. Scores exceeding 3 points were attributed to categories relating to good banking services (3.89 points) and to the general statement that there is a sufficient number of subcontractors, suppliers and consultants to ensure the growth of new and developing companies (3.29 points). In the opinion of experts, new and developing enterprises cannot afford costs related to employing subcontractors or consultants (2.03 points), and it is not easy to find good subcontractors (2.35 points) or professional lawyers or accountants (2.57 points).

5.2.2. Government policy and programmes

Government policy and programmes constituted the second thematic block analysed. It consists of three areas where the assessed statements concern activities addressed to new and developing enterprises. The first area regards the overall approach of authorities, at both national and regional level, to entrepreneurship development, which in practice relates to the question whether new and developing enterprises have an important place in the state policy at various governance levels (country, region). The average assessment was 3.07 points. The second thematic area concerns fiscal and administrative burdens related to running a business activity (2.16 points), while the third area comprises the assessment of specific government entrepreneurship development programmes (the experts' assessment is 2.77 points).

In general, Polish experts more favourably assessed the approach of government and regional policy than the experts from innovation-driven economies, in particular in terms of public procurement (127%), support for new and developing companies at the central level (101%) and at the regional level (117%).

From among 13 statements on government policy and programmes assessed by experts, only two were assessed higher than 3 points. This means that apart from regional policy for supporting new and developing enterprises (3.41 points) and activity of science parks and incubators (3.17 points), government policy and programmes are not favourable for new enterprises.

Compared to average assessments of innovation-driven economies, the statements on taxes and other regulations for new and developing companies received the lowest rates (76% and 84% of the average of innovation-driven economies). The experts pointed out that the policy in this regard is unpredictable and disharmonious (76% of the average assessment for innovation-driven economies). The experts assessed particularly negatively the possibility to obtain required permits and licences within approximately a week (2.12 points) and also did not agree that public bureaucracy, regulations and licence requirements were not difficult for new and developing companies (2.14 points). The assessment of government policy and programmes was very negative with experts noting that the policy does not provide incentives to establish new businesses.

The experts were also of a rather negative opinion about the government actions in the area of aid and support for new and developing companies. The worst assessed aspect was the access to appropriate government programmes for new and developing businesses, adjusted to their needs (2.51) and the lack of support in the form of contact with a single public institution (2.56). The dispersion of information (and thus the necessity to apply for support to various institutions) results in the lack of the experts' opinion on whether the number of government programmes for new and developing companies is sufficient (3.0) and on whether those programmes are effective (2.76). Furthermore, the experts assessed negatively the employees of public institutions whom they considered insufficiently competent and inefficient in supporting new and developing companies (2.67). Only one statement in this thematic block was assessed positively by experts, namely, the activities of science parks and business incubators as the part of the innovation system which may have a positive impact on new and developing companies (3.14). The experts' assessments of government programmes were significantly below the average for innovation-driven economies.

5.2.3. Transfer of research and development

In general, the experts assessed the elements of this thematic block related to cooperation between science and business, access to research results or support for technology transfer at the level of 2.44 points which accounts for almost 93% of the average for innovation-driven economies. This figure results from well-assessed support programmes (including grants) for the acquisition of new technologies by new and developing companies (3.68 points) – the value stands out also when compared to innovation-driven economies, representing 143% of the average for those countries. The experts evaluated the possibilities of supporting commercialisation of the ideas of engineers and scientists by new and developing companies not so well, but still above 3 points.

Despite highly assessed opportunities for commercialisation of ideas, according to experts the weakest link in technological development of companies and acquiring knowledge is lack of effective transfer of knowledge from public universities and research centres to new and developing companies (1.57 points, which constitutes only 62% of the average number of points for innovation-driven economies). At the same time, new and developing companies do not have equal access to new research or technologies, compared to large companies that have been operating longer (1.76 points). Experts also highlighted the problem of new and developing companies which are unable to afford the acquisition of state-of-the-art technologies (1.95 points). Experts evaluated the research and technology resources supporting the creation of world class new undertakings based on technology in at least one area at 2.67 points, i.e. better than last year, but much lower than in innovation-driven economies (83%).

In recent years much attention is paid to cooperation between science and business, there is a number of initiatives promoting such actions, *inter alia* EU subsidies. Yet, as shown by experts' assessments, despite such initiatives the effects are either insufficient or still too weak and not consolidated.

5.2.4. Culture and society

The last block under analysis concerns cultural and social norms that influence the entrepreneurial and innovative attitude of Poles. The thesis on cultural roots of social actions leads to a conclusion that not only adequate regulations and access to technologies and funds are sufficient for a society to be entrepreneurial. An appropriate cultural ground is necessary that will allow people to make use of business opportunities. Cultural factors, although changing, are more permanent than legal and economic circumstances. It may turn out that in the long run they will constitute an important barrier to entrepreneurship development (or a factor driving it). Therefore, a question arises whether we are dealing with such foundations in Poland?²³

The average assessment of this block concerning cultural and social determinants of entrepreneurship by experts was 2.96 points: it was higher than last year and also higher than the average for innovation-driven economies (106%). In individual statements, the experts were to assess whether cultural and social norms support and contribute to individual successes, self-sufficiency, independence, own initiative, and risk capacity. Similar to the average block assessment, the results for individual statements fluctuate around 3 points, which means that experts found it difficult to assess the influence of cultural and social norms on the above behaviour. Such a result is also confirmed by Professor Glinka's study which says that cultural determinants of entrepreneurship in Poland are difficult to describe, frequently incoherent, sometimes full of paradoxes²⁴.

5.3. Changes compared to the previous years

In recent years, expert assessments of enterprise activity determinants have been dynamic and are some kind of reflection of perception of actions in the area of policy or governance that are to contribute, encourage, promote, and support all sorts of facilitations for new or developing companies.

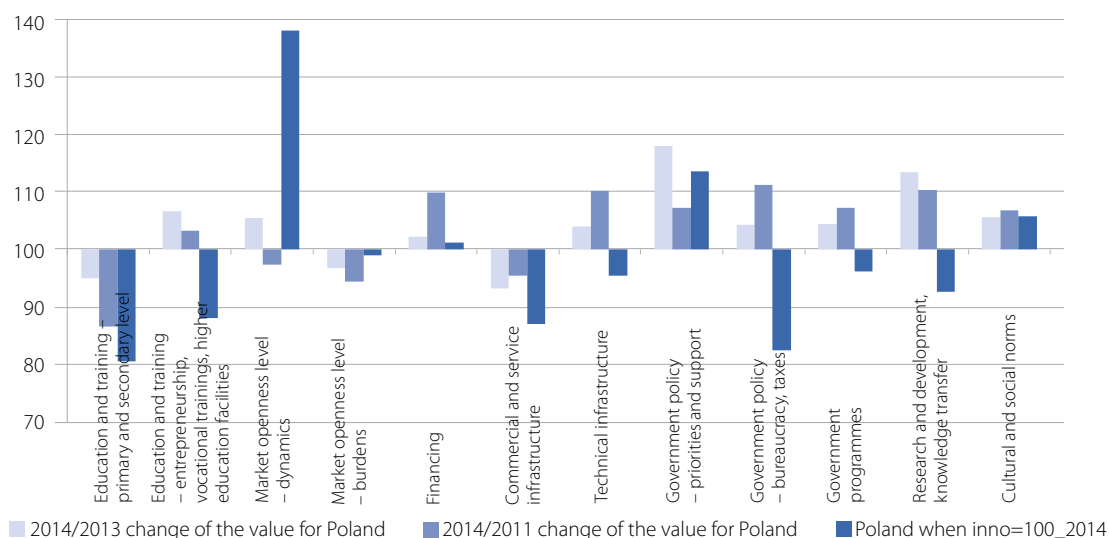
A simple analysis of changes in the assessment of entrepreneurship determinants carried out in 2014 compared to the previous year yields a positive result as more categories were assessed better than in 2013 (9 areas against 3). The three categories with worse assessments than last year are in the 'start-up opportunities' block, in the following areas: education and training at the primary and secondary level, in terms of the burdens connected with entering the market as well as commercial and service infrastructure.

If we consider a longer time range and changes in experts' assessments in individual categories in the years 2014/2011, the result is less favourable than if we compared only 2013 assessments. To the three above categories that were assessed lower also market dynamics should be added. Nonetheless, the balance of assessments is still positive.

²³ *Kulturowe uwarunkowania przedsiębiorczości [Cultural determinants of entrepreneurship]*, a seminar speech by Beata Glinka, http://webcache.googleusercontent.com/search?q=cache:3F_5ln-INkMJ:kkliinc.blox.pl/resource/SeminariumReferatGlinka.doc+&cd=3&hl=pl&ct=clnk&gl=pl.

²⁴ Ibidem.

Diagram 2. Determinants of entrepreneurship development in Poland (percentage deviations in 2014 against 2013 and 2011 and percentage deviations for Poland against countries with innovation-driven economies in 2014)



Source: the authors' own elaboration based on the results of the Global Entrepreneurship Monitor – National Expert Survey 2011-2014.

The greatest positive changes, measured by an increase in average experts' assessments in the years 2014/2011, happened in the area of government policy: bureaucracy, taxes – the increase in average assessment for the entire area exceeded 11% and resulted mainly from better assessment of public procurement policy and the possibility of obtaining the majority of required permits and licenced within a week. Some success, but only in terms of an increase in average assessment values, was achieved in reducing the bureaucratic and tax burden. All statements in this area had higher average values in 2014 than in the first year of the study in Poland, namely in 2011.

Subsequent positive changes and thus higher assessment of experts concerned the area of research and knowledge transfer – there we observe over 10% increase in the average assessment, mainly thanks to adequate support programmes (also grants) for acquisition of new technologies by new and developing companies and good support for commercialisation of the ideas by engineers and scientists.

Also the assessments in the area of technical infrastructure and financing improved by about 10% compared to 2011. Several changes in access to equity finance, debt financing, private financing, and risk capital are particularly welcome. Higher assessments of technical infrastructure are the result of considerable funds spent on road building, improvement of communication, as well as universality and accessibility of the Internet.

Also cultural and social norms were assessed better through appreciation of self-sufficiency, independence, and own initiative of the Polish society, risk-taking by entrepreneurs, creativity and innovation, and personal responsibility in managing one's own life.

Among four categories assessed worse than in 2011, particular attention should be paid to the category that concerns education and training at the primary and secondary school level. In the case of this area, the past four years saw a decline in assessment by about 14%, which proves a need for changes in the current approach to teaching entrepreneurship, the more so as compared with average results for innovation-driven economies the assessment of the Polish system is much lower.

Slight negative changes in experts' opinions on availability and quality of commercial and service infrastructure in the years 2014/2011 show how many difficulties young companies face at the initial stage of development, when they need knowledge on manufacturing or conducting the activity, but their experience is still insufficient. Although technical infrastructure contributes to the development of entrepreneurship, as proven by good assessments, it is not sufficient for the development of a healthy entrepreneurship ecosystem. One needs to remember that it is much more difficult (because it requires time and outlays) to educate a sufficient number of professional lawyers or accountants than to build roads or a broadband connection.

The final areas with lower experts' assessments concern market openness – its dynamics and burdens resulting from the entry onto new markets. Slightly lower assessments in the area of market dynamics do not constitute serious warning signs, the more so as compared to assessments of experts from innovation-driven economies this is assessed much better (140%). Barriers and burdens connected with entry onto new markets are more disturbing.

6. Summary

The approach to entrepreneurship adopted in the GEM model is based on two assumptions. Economic activity is not a heroic act of a man taking place regardless of the environment in which it is conducted. It is a result of an interaction between the skill of a given person that consists in perceiving an opportunity, possibilities of making use of it (understood as that person's motivations and aspirations), and conditions in the environment of that person.

Hence, what does the above relation look like in our case? It would be difficult to call the environment understood as Polish society's attitude towards entrepreneurs as conducive to the establishment of new entities. The percentage of people who believe that owning a company is a good career choice has been declining for four years, but it is still higher than in the EU.²⁵ The status of an entrepreneur, low compared to the EU average, has been deteriorating. Currently, slightly more than half of Poland's population think highly of successful entrepreneurs while in the EU almost 70% of the society have high esteem for enterprises. Over 50% of Poles see the role of the media in promoting entrepreneurship, which is the result similar to the EU average.

Now, let us take a look at Poles in terms of perceived business opportunities. Almost one-third of Poles believe that there are favourable conditions for establishing business activity in their environment while the view is shared by 35% of the EU population. Poles think they have sufficient knowledge and capabilities to run a business (54% of them believe so, compared to the EU average of 42%). This translates into a large percentage (compared to the EU average) of Poles (16%) who plan to start a business within the next three years.

On the other hand, there are factors which adversely affect the level of entrepreneurship. Poles have one of the highest figures in the EU in terms of fear of failure, with as many as 58% of them not starting a business for this very reason. The situation has not changed for four years. Entrepreneurial intentions of Poles are also on the decline – in 2011 23 in 100 Poles wanted to start a business, while at present the figure decreased by 7 persons per hundred. On the other hand, the indicator of perceived opportunities is improving. High self-assessment of perceived entrepreneurial capabilities continues. The hope is that the drop in the percentage of persons planning to do business results from an improvement on the hired labour market and Poland's promotion to the higher stage of development characteristic for innovation-driven economies.

This claim is supported by the change in the structure of motivations of people starting a business in Poland. Until 2013, the majority of early-stage companies (TEA) had been established out of necessity, i.e. due to the lack of an alternative in the form of hired labour. From 2014, an increasing number of businesses in Poland has been established due to opportunity for independence or increase of income (47%) than to necessity (37%). And although in comparison with the EU (47% opportunity-driven, 23% necessity-driven) a growing number of enterprises in Poland results from the lack of choice, the situation has improved dramatically. In terms of growth aspirations, Poland is also becoming more similar to innovation-driven economies. Compared to 2013, the plans of early-stage enterprises concerning an increase in employment have declined.²⁶ Currently 28% of Polish companies plan to create at least 5 new jobs in the next five years, while almost 23% of enterprises wish to create at least 10 jobs and increase employment by a minimum of 50% during that time. This is still a better result than the EU average, which proves that Polish companies have still high, although declining, growth ambitions.

Ambitions of enterprises include also conquering foreign markets. The structure of early-stage enterprises in Poland is currently dominated by the companies having less than one-fourth of their customers abroad – they account for almost 70%. The figure is significantly higher than the EU average (41% of TEA). The number of early-stage enterprises that are not internationalised is relatively small (17% compared to the EU average of 36%). Furthermore, the year 2014 saw a growth of interest in international activity among newly established companies in Poland. The percentage of enterprises having up to one-fourth of customers abroad increased by 13 pp (the highest growth in the EU), while the percentage of companies focusing on the domestic market declined (by 4 pp).

Positive changes have been recorded also in the sectoral structure of TEA. The share of enterprises providing business-to-business services is increasing – from 15% to 24% of TEA in 2014. And although the production sector prevails among early-stage enterprises, over half of such companies provide services for customers and businesses.

²⁵ 63% of adult population in Poland compared to 57% in the EU.

²⁶ The percentage of TEA with medium aspirations fell by 11 pp, while of those with high aspirations by 4 pp.

As regards entrepreneurial attitudes of women and men in Poland, the latest data for 2014 point to a deepening divide. Still more women than men perceive opportunities to start a business. However, women fear failure more than men and less often than men assess their entrepreneurial capabilities as sufficient to run a business. In Poland, as in the EU, women run a business on average two times less often than men. However, the data for 2011-2014 point to an increasing interest of women in own business, which is more often out of necessity than in the case of men. As a result, the number of enterprises (TEA) established by women is growing faster than the number of companies set up by men. Nevertheless, the increase in established companies run by women is still lower compared to those run by men, which demonstrates difficulties experienced by women in maintaining their business on the market. Differences between women and men in terms of motivations are slight – women equally often as men start a business due to perceived opportunities (59% of women and men) while slightly more of them establish a company out of necessity (36% of men and 38 of women).

The level of intrapreneurship is relatively high, although lower than in other European Union countries. Entrepreneurship of young people is also positively assessed. It is characterised by high dynamism and ambition to introduce novelties and to develop.

What is, therefore, the result of the above interaction? The level of entrepreneurship in Poland is quite good compared to the EU. From 2011, the level of early-stage companies –operating for up to 3.5 years - has been high (approx. 9%) and the rate of enterprises which discontinue their operations and leave the market has been stable (approx. 4%). From 2012, the share of nascent companies (up to 3 months of activity; currently 5.8%) and established enterprises (7%) has been increasing. At the same time, the percentage of new enterprises (operating for 3 to 42 months) is declining. The entrepreneurial activity of Poles was and still is high. Its quality is also improving: there are more opportunity-driven enterprises, more internationalised companies and more firms operating on the market longer. Aspirations of Polish entrepreneurs remain high as well.

The analysis of owners of business at various age revealed that networking of companies declines with their age. The percentage of entrepreneurs perceiving business opportunities also falls, while fear of failure increases. Aspirations of owners decrease along with the development of a company.

The national experts survey (NES) provides additional data. The assessments of individual areas by national experts presented in this report demonstrate that the conditions for establishment and development of entrepreneurship should be analysed in terms of numerous aspects. Starting from cultural determinants, it can be said that Poland is not a land of dreams where entrepreneurship or its elements receive special support. This does not mean, however, that the Polish society lacks such characteristics as self-reliance, independence, own initiative or risk appetite which constitute the foundations of entrepreneurship. At the same time, in Poland – to a greater extent than in innovation-driven economies – cultural and social norms emphasize personal responsibility for managing one's own life which is of utmost importance in running a business.

Social and cultural conditions evolve with time, but also as a result of actions of the government. Policy determines new directions of action which have an indirect or direct impact on the macro environment of the existing or future entrepreneurs. Regional policy supporting new and developing companies, as well as activities of science parks and incubators for new and developing companies, are the main areas of positive changes in the national innovation system according to Polish experts. The possibilities to finance the operations of enterprises, though still far from perfect, are improving every year, despite the fluctuations of some sources of funding, such as the EU funds. Technical infrastructure is improving, largely thanks to the EU funds, but the commercial infrastructure is still deficient – the number of contractors, subcontractors, professional lawyers and accountants is still insufficient. Poland's location and its relatively stable economy result in the internal market growth year by year.

Of course, still a lot of barriers remain. The experts very negatively evaluated the applications of research and research commercialisation. Education of children and young people in terms of knowledge and skills necessary to run a business must be reinforced and changed, mainly at the level of primary school, vocational schools and higher education. On the other hand support programmes for the acquisition of new technologies by new and developing companies are assessed positively.