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Report

Global Entrepreneurship Monitor – Poland

GEM

Why is GEM unique?

- **GEM collects primary data on entrepreneurship**. This distinguishes it from other indices.

- **GEM focuses on the individual entrepreneur**. Most businesses start with a single individual, or a team of individuals.

- **GEM's approach is the same throughout the world**, facilitating detailed international comparisons.

- **GEM recognizes entrepreneurship as a process**. Its measures capture all the different stages – from seeing an opportunity, making the first steps towards starting a business, nurturing a baby business and scaling it up.

- **GEM's historical global dataset is extremely comprehensive**, with well over 2 million observations across over a hundred economies. It is an invaluable resource for researchers and has made a significant academic contribution.

- **GEM is home to over 500 specialists in the field of entrepreneurship research** – an impressive global network of expertise.

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Report

Global Entrepreneurship Monitor – Poland

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Report on Global Entrepreneurship Monitor – Poland

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The report was prepared on the basis of data from the 2011–2016 GEM study, conducted by the Global Entrepreneurship Research Association in cooperation with national teams.

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Introduction

Dear Readers,

we hereby present you with the sixth edition of the Report *Global Entrepreneurship Monitor Poland*, prepared by the Polish Agency for Enterprise Development in cooperation with the University of Economics in Katowice, following the international GEM project methodology. The Report describes entrepreneurship in Poland in comparison to other countries, yet unlike other similar publications, it focuses on people and their environment rather than on registered business entities. Owing to this approach, the Report provides knowledge that allows readers to better understand the processes governing business activity in Poland.

What does the Report tell us about entrepreneurship in Poland? Undoubtedly, 2016 was the best of the last six years in terms of pro-entrepreneurial attitudes of Poles. The number of Poles declaring their willingness to set up a business is nearly twice as high as the EU average; in addition to that, more of us think that they have the relevant qualifications. 2016 saw a significant increase in the number of Poles considering their environment as business-friendly. In 2016, the slowdown in negative trends concerning the image of an entrepreneur in the Polish society was also confirmed, along with an improvement in the indicator reflecting the involvement of public media and Internet in communicating entrepreneurship-related content.

Consequently, the ratio of people starting their own business and running it for up to 3.5 years reached its record high of nearly 11% of adult Poles, whereas the EU average is slightly below 9%. For the first time since the beginning of GEM research, the percentage of people setting up new businesses in order to exploit the opportunities that running one's own business offers exceeded 50% (reaching 52%). The fact that this indicator is crucial for the quality of entrepreneurship is confirmed by its inclusion into the EIS innovation index.

What is especially interesting is the increasingly widespread phenomenon of a growing percentage of Polish women who see business opportunities in their

environment and that deem their skills sufficient to do business. Currently, 39% of Polish women think that there are opportunities to set up a business in their environment, whereas in 2015, this point of view was shared by 32% of them. Moreover, 54% of women believe that they are prepared to run their own business, whereas last year this number amounted to 48%.

The assessment of conditions for setting up and development of newly set-up businesses prepared by an expert group and presented in this Report is positive in terms of access to technical infrastructure. The experts believe that high market dynamics are also beneficial for the development of businesses. According to them, there is room for improvement especially in the areas of entrepreneurship-related education and administrative burden.

Since 2016, an improvement in the conditions for setting up and running business activity has been one of the priorities of the Polish government. 2017 saw the implementation of most elements of the “100 changes for business” package, e.g. under which the Code of Administrative Proceedings was amended. Another package of modifications, the “Constitution for Business”, adopted by the government in November 2017, creates favourable and stable conditions for running a business and reinforces guarantees of entrepreneurs’ freedoms and rights.

In the next years, the effects of these initiatives should be positively reflected in statistics and in society, entrepreneur and expert opinion surveys that we monitor under the Global Entrepreneurship Monitor project.

I strongly encourage you to read the Report.

Patrycja Klarecka

President of PARP

Executive summary

Entrepreneurship in Poland in key GEM indicators

Social perception of entrepreneurship in Poland – slowing down negative trends

Data acquired in the latest edition of the research carried out in 2016 in the project Global Entrepreneurship Monitor indicate that almost 62% of adult Poles think that having one's own business is a good career path. A slightly smaller part, i.e. 56%, believes that people who have successfully set up new business should enjoy high social respect. Compared to Poles, EU residents are less inclined to pursue their professional life by having their own business, and at the same time, more of them share the view that successful businessmen deserve their recognition (respectively 57% and 67%).

The data mentioned above are worse than those recorded in 2011, when GEM research in Poland was started. At the time, as many as 73% of Poles believed that having one's own business is a good career path, and 64% believed that successful entrepreneurs should enjoy respect and recognition. In this respect, the last two years clearly show a slowdown in this negative trend.

On the other hand, a positive change can be seen in the indicator of the social perception of the public media and Internet attention for entrepreneurship. In 2016, the percentage of Poles who saw in these sources the content of new companies that achieved success reached 58% and exceeded the average result for the EU (54%). In the previous year it stopped at 52%, which was an extremely low result in the last 6 years. Improvement in this area proves that the subject of entrepreneurship is now more often noticed by Polish society; therefore, it can be assumed that it is also more often present in public media or the Internet.

Entrepreneurial attitudes of Poles are gradually improving

Much more positive changes are visible in pro-entrepreneurial attitudes of Poles. According to the 2016 data, 21% of Poles declare that they will set up their own business by 2019, 40% see business opportunities in their environment, and 60% are convinced that they have relevant qualifications and skills needed to set up their own business. In all of these categories, the result is significantly better than the one observed among the EU residents (12% of them plan to set up their own business, 37% see business opportunities in their environment, and 44% see their qualifications as relevant for the role of an entrepreneur). What is more, comparing to the previous edition of the study, all indicators have increased. With an increase of 1 p.p., entrepreneurial intentions increased relatively the least; the other two indicators increased much more. The percentage of people positively assessing their entrepreneurial qualifications increased by 4 p.p. The greatest leap, however, was observed in the percentage of people who perceive their environment as a good place to start a business. In 2015, such people accounted for 33% of the population, which was 7 p.p. less than today. It is worth emphasizing that, in 2016 in Poland, the increase in the percentage of people noticing opportunities for setting their own business in their environment was so high that, for the first time since the beginning of the GEM research, we achieved a result better than the EU average.

The positive change in the latter category may be evidence of improving conditions for business or some stabilization in terms of reluctance to take the risks of moving to one's own enterprise. According to the data for 2016, the same as in the previous year, 48% of Poles saw business opportunities but did not choose to set up their own business due to fear of failure. Fear of failure in business remains the biggest obstacle in the development of entrepreneurship in our country. For comparison, among the EU residents who see business opportunities in their environment, 41% fear failure.

The level of entrepreneurship in Poland, especially the early-stage, still rises

In 2016, nearly 2.9 million Poles had set up their own businesses or had been running them for no longer than 3.5 years. These people create the TEA (Total Early-stage Entrepreneurial Activity) measure, a key indicator for early-stage enterprises in GEM, called young enterprises in this Report. Last year, it reached a record level of 10.7% of the adult population, while, in all previous years (2011––2015), it fluctuated around 9% (which accounted for approx. 2.4 million people). The share of established businesses, i.e. enterprises that have been in business for more than 3.5 years, is currently 7.1% of the adult population. Therefore, in comparison to the EU, entrepreneurship in Poland may definitely be called a young entrepreneurship. With a similar level of established enterprises (approx. 7% in the EU), the percentage of people setting up their businesses or running them for not longer than 3.5 years is higher in our country (in the EU this percentage is 8.6%).

2016 saw positive changes in areas other than early-stage enterprises. The percentage of the enterprises being on the market for 3 to 42 months has

almost doubled (from 3.5% to 6.1%), while the percentage of mature companies increased just slightly (by 1 p.p. compared with the previous year).

2016 saw a slight decrease of the percentage of people taking their first steps in business that is those who are on the market for less than 3 months – from almost 5.7% in 2015 to 4.6%. The percentage of those who have ceased doing business in the last 12 months has also increased – from 2.7% to 3.8% of the adult population. In the EU this percentage is 2.8%. Although we should not be worried by this situation, as the high exit rate from business is appropriate for countries characterized by a high percentage of people setting up businesses, which Poland undoubtedly is, another problem should be pointed out. In Poland, less than 20% of people who leave their businesses leave it in the hands of another owner, and the rest liquidate it (relation 1 to 5). In the EU, the relation is 1 to 3.

Motivation structure is improving

There are two types of motivation for setting up a business analysed in the GEM study: an *opportunity-driven* motivation, which means the willingness to take the opportunity offered by running one's own business in order to improve one's living standards by increasing personal income or gaining independence, and a *necessity-driven* motivation, which means lack of any other ways of earning a living. Currently, the opportunity prevails in Poland. 52% of people who run young enterprises admitted that they set up a business because of the desire to increase their standard of living, and 27% pointed out the necessity as a reason. In 2016, for the first time since the beginning of the GEM research in Poland, the percentage of entrepreneurs motivated by the opportunity reached a result equal to the EU average (52%), while the level of entrepreneurs who run the company due to lack of other possibilities is still higher than the EU average, which currently is 20%.

The structure of motivation characteristic of young entrepreneurs in a given country translates into the quality of enterprises. The enterprises whose owners are opportunity-motivated are more likely to create jobs, engage in more risky innovative ventures, and develop better than those whose owners have been forced to move to their own. That is why the changes registered in 2016 are considered so positive as compared to the previous year. The percentage of positively motivated young enterprises once again increased (from 46% to 52%), while the percentage of companies started out of necessity slightly decreased (from 28% to less than 27%).

More and more young enterprises in the B2B area

The structure of young companies in Poland is dominated by service enterprises. Currently, almost 70% of early-stage enterprises are service enterprises – 36% are business-to-customer service enterprises and 33% are business-to-business service enterprises. During the last year, the share of companies providing business-to-business services increased significantly (8 p.p.), while the share of companies providing business-to-customer services hasnot changed.

After services, the second most frequently chosen sector by people running young businesses is industrial production. Currently, almost 29% of young companies operate in this sector, which means a significant decrease compared to the 37% from the previous year. The smallest number of companies operates in the mining sector – 2.4%.

In the EU, the structure of enterprises is slightly different. B2B enterprises constitute 44% of young companies, and B2C enterprises constitute 26%. The percentage of companies operating in the industrial production sector is lower (23%), and there are more companies in the mining sector (6%).

Last year, as well as all six years of the GEM study in Poland, saw an increase in the importance of the service sector in the structure of young companies, especially B2B services (by nearly 60% in 2011–2016), and a decline in the industrial production sector (by 40%).

Young companies boldly about creating new jobs

Young entrepreneurs in Poland have higher growth aspirations than those in the EU. As much as 30% of Polish entrepreneurs declared wish to create at least 5 new jobs by 2021, while 25% of Polish entrepreneurs declared the creation of at least 10 new jobs with the employment growth by at least 50% in the same period. In the EU, respectively, 26% and 17% of entrepreneurs has such plans. Over the last six years, but also in the last year, the percentage of entrepreneurs with medium aspirations (minimum 5 jobs) has dropped. At the same time, 2016 saw the increase in the share of entrepreneurs with high aspirations in creating new jobs – by 5 p.p. y/y. As indicated by GEM data for 2016, together with Ireland, Slovenia, Croatia, Hungary, and Estonia, Poland has one of the six best (i.e. lowest) results in terms of the percentage of enterprises that do not plan to increase employment (41% of early-stage enterprises in Poland and 48% in the EU).

Young enterprises offer more innovative products and latest technologies

As well as the data from the previous edition of the Report, the data for 2016 show that latest technologies are used more often by young enterprises than the established ones. In Poland, 5% of young enterprises declare the use of technologies available on the market for a year, 23% – technologies present on the market for one to five years, and the most, 72% – technologies older than 5 years. Among established enterprises (present on the market for at least 3.5 years), the percentage is respectively: 0%, 10%, and 90%. Compared to the EU, Polish early-stage enterprises slightly more often use older technologies. In the EU, about 14% of early-stage enterprises use technologies not older than one year, which is almost three times more than in Poland. 21% of them use the technologies not older than five years, and 65% use the technologies older than 5 years. When it comes to established enterprises, those in the EU also have slightly better results than those in Poland: 5% of them use the latest

technologies, and the percentage of enterprises using the technologies not older than 5 years is the same as in Poland, and the percentage of those using the oldest technologies is lower by 5 p.p.

Young entrepreneurs in Poland more often than those in the EU believe that their offer is completely innovative. According to 16% of young enterprises in Poland, their products are innovative in nature for all customers, while 42% of them believe that their products to be innovative only for some customers. In the EU, on average, it is respectively 14% and 32%. A large group of entrepreneurs in our country still perceive their offer as well known to all customers. However, there are more of them among the early-stage enterprises in the EU (54%). Also in this respect, both in Poland and in the EU, established enterprises have worse results. 58% of established enterprises in Poland and 71% in the EU offer products that are well known for the customers.

Despite the fact that the majority of young companies in Poland believe that their offer is innovative, as much as 65% of them believe that they operate in the environment of strong competition. Only 5% believe that there are no enterprises with a similar offer in their environment, while the rest, 30%, believe that there are not many of them. The longer an enterprise is on the market, the stronger the threat from the competition. 82% of established enterprises in Poland see many companies with a similar offer in their environment. Both young and established Polish enterprises fear the competition more than those in the EU, where 9% of young and 4% of established enterprises declare the lack of competition and 53% of young and 68% of established enterprises see many companies with a similar offer in their environment.

Polish young enterprises become more and more internationalised

According to the data for 2016, the domestic market remains the only place of activity for 44% of young enterprises in Poland. Similarly, 43% of enterprises are medium scale exporters, and their foreign revenues account for 25% of their total revenues. There are much less advanced and very advanced exporters among the young companies. 6% of companies are those whose foreign revenues account for 25–75% of total revenues, and less than 8% are most advanced ones, whose foreign revenues account for more than 75% of total revenues.

This is, however, a much better situation than the one from the previous edition of the study. Currently, Polish young enterprises are more and more willing to cooperate with customers from abroad. The percentage of companies that operate only on the domestic market has decreased by one third (from almost 60% in 2015), and the percentage of medium-scale exporters has increased by one third (from 30%), and the percentage of those with over 75% revenues from abroad has more than doubled (3% in 2015). Only the percentage of very advanced exporters slightly decreased (by 1 p.p., less than 8% in 2015).

Currently, the majority (56%) of people who started their business in 2014 declare a minimum or higher level of internationalization, i.e. that their revenues from abroad constitute at least 1% of their annual revenues.

Even in the last year's Report, we pointed out that, in each of the surveyed groups of young companies, Poland had weaker results than the average for Europe. The latest data indicates a change in this situation. In the EU, there are, on average, fewer non-internationalized companies (which is 4 p.p. less than in Poland) and more highly and very highly internationalized companies (in the first of these groups 13%, i.e. twice as many as in Poland, in the second 9% – by 2 p.p. higher). For the first time in Poland, more companies have started exporting (43% against 38% in the EU).

Women more interested in the possibility of running their own business

Women are not much different from men when it comes to seeing their business opportunities – 39% of women and 40% of men see them in their environment. However, women more often than men experience fear of failure, and they are more critical when it comes to the self-assessment of their capabilities to run a business. 54% of women and 67% of men believe that they have sufficient skills to run their own business, while 62% of women and 55% of men experience fear of failure.

Entrepreneurial attitudes of women and men are similar in the EU. Despite this, compared to the women in the EU, Polish women more often see business opportunities in their environment (5 p.p. more than in the EU), and they are more convinced about having sufficient skills to run their own business (18 p.p. more than in the EU). However, they more often experience fear of failure (11 p.p. more than in the EU).

Data for 2016 indicate a slight decrease in these fears among women in our country (at the same time, in the case of men, this rate increased by 3 p.p. y/y). There was also an improvement in the percentage of women seeing business opportunities in their environment (increase from 32% to 39% in 2016), and, above all, in the self-evaluation of their entrepreneurial abilities. In 2015, 48% of women in Poland believed that their skills and qualifications were sufficient to run a business. Currently, 54% of Polish women believe so.

Willingness to set up their own business significantly increased among Polish women. In the 2016 study, over 19% of women in Poland declared their willingness to start a business within 3 years. It is 46%, i.e. 6 p.p. more than in 2014. For comparison, in the EU, 12% of women have such plans, which is similar to the level from 2 years ago.

Perhaps the so-called gender gap between the percentages of companies run by men and those run by women will be reduced when these plans come true. Currently, 8% of women set up or develop their own business for no more than 3.5 years, compared to the 13% of men. In the EU, 6% of women and 11% of men are engaged in entrepreneurship.

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

	2014		2015		2016	
Indicator	**Poland**	EU	**Poland**	Europe	**Poland**	EU
Entrepreneurship as desirable career choice (% of adults who believe that setting up one's own company is a good career path)	**63**	57	**61**	56	**62**	57
High status to successful entrepreneurs (% pf adults wo believe that successful entrepreneurs deserve recognition)	**56**	67	**56**	66	**56**	67
Media attention for entrepreneurship (% of adults who see the subject of entrepreneurship in the public media and the Internet)	**55**	53	**52**	55	**58**	54
Entrepreneurial intentions (% of adults who declare their intent to start a business in 3 years)	**16**	12,1	**20**	13	**21**	12
Perceived opportunities (% of adults who perceive business opportunities in their environment)	**31**	35	**33**	37	**40**	37
Entrepreneurial capabilities (self assessment) (% of adults who believe they have sufficient skills and knowledge to run a business)	**54**	42	**56**	43	**60**	44
Fear of failure (% of people who perceive business opportunities but fear of failure prevents them from starting a business)	**59**	41	**48**	39	**48**	41
TEA (people in the process of setting up a business or who have been running a business for up to 3.5 years as a % of adults)	**9.2**	7.8	**9.2**	7.8	**10.7**	8.6
Established enterprises (people who have been running a business for longer than 3.5 years as a % of adults)	**7.3**	6.7	**5.9**	6.6	**7.1**	6.8
Discontinuation of business (% of adults who discontinued business in the last 12 months)	**4.2**	2.6	**2.7**	2.6	**3.8**	2.8
Necessity-driven entrepreneurship (people who set up a business for lack of other employment opportunities as a % of TEA)	**37**	23	**28**	22	**27**	20
Innovation Driven Opportunity (people who set up a business wanting to make use of an opportunity to improve their standard of living by an increase in income or by achieving independence as a % of TEA)	**47**	48	**46**	48	**52**	52

Source: The authors' own calculations based on Global Entrepreneurship Monitor data.

* detailed description regarding individual indicators are available in Chapter 2.

Chapter 1

About the GEM study

Global Entrepreneurship Monitor has been dynamically developing since its inception in 1997. The first surveys were conducted in 1999, when around 10 countries took part in the project. In 2016, the surveys covered 65 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 individual interviews with experts in the field of entrepreneurship in a given country). 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 the 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. Two most important theoretical models are the model of economic relationships and the model of individual entrepreneurial process.

Interpretation of entrepreneurship in GEM

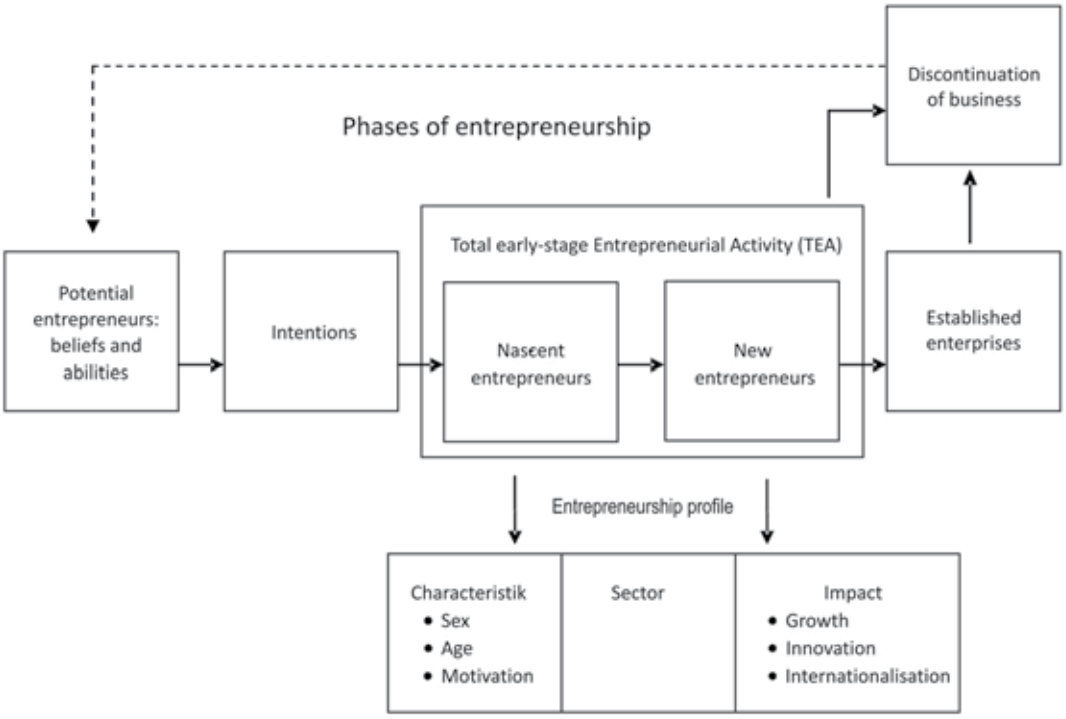
Entrepreneurship is a broad term with many different meanings. GEM operationalises this term as "any attempt at new business or new venture creation, such as self-employment, a new business organisation, or the expansion of an existing business, by an individual, a team of individuals, or an established business." While entrepreneurship is defined narrowly as a new business activity, it takes a broad view of what it recognizes as a business activity. This has its implications in measuring the level of entrepreneurship in GEM that is not limited to the registration of a new business activity. It is treated more in behavioural than institutional terms, and it includes both entrepreneurial activities aimed at the registration of new business entities, and entrepreneurial activities involved in the existing organisations.

Model of entrepreneurship process

In GEM, it is important to differentiate between the particular phases of a business activity (Figure 1). Moreover, the phases prior to formal registration are also subject to the analysis. The least attention is paid to the early-stage activity phases. It is one of the significant elements distinguishing GEM from other research projects on entrepreneurship, where registration of new entities is studied on the basis of data of national statistical offices, which fails to provide good insight into the nature of the new enterprises.

In modelling the entrepreneurship process, GEM uses three stages of economic undertaking development. Depending on the phase an entrepreneur is in,

Figure1. GEM model of entrepreneurship process



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

they may be defined as a nascent entrepreneur, a new entrepreneur, or an established enterprise. In the GEM methodology:

- **Nascent entrepreneurs** are individuals actively involved in setting up a business they will own or co-own, as well as entrepreneurs under organisation, which have not paid salaries/payments to the owners for more than 3 months;
- **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 who have been operating on the market for the period longer than 42 months (3.5 years).

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 the research and analysis of individuals, not enterprises, is characteristic of GEM and provides better insight into the nature of the entrepreneurship process. It yields twofold results. It facilitates 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 given country, but also about their varied attitudes and characteristics in certain phases of running a business activity.

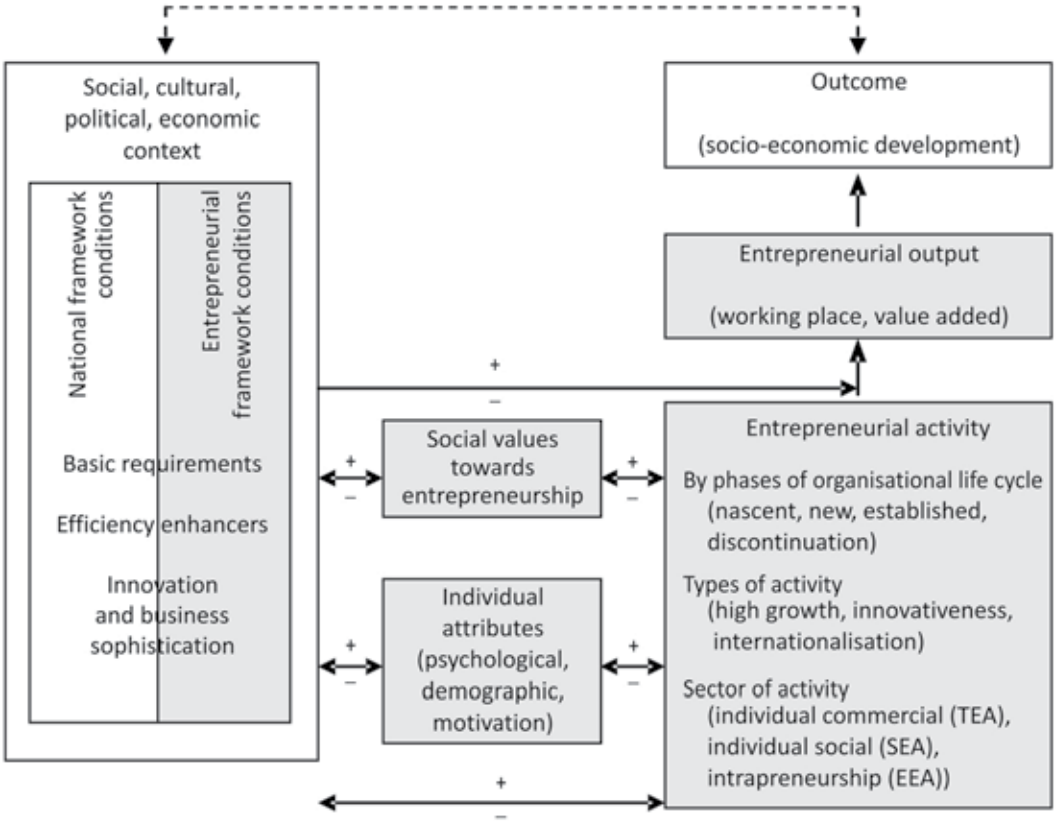
GEM model of economic development

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 temporary 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 a positive social perception of entrepreneurship. Finally, high-growth entrepreneurship is a key contributor to new employment in the economy, and competitiveness is stimulated by 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 entrepreneurial activity. The latter category comprises the phases of an enterprise's life cycle, the type of activity (high growth, innovativeness, internationalisation), and the type of activity which comprises *Total Early-stage Entrepreneurial Activity* (TEA) and *Employee Entrepreneurial Activity* (EEA).

Figure 2. GEM model of economic development



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

Phases of economic development

Countries are divided into three groups by phases of economic development: factor-driven, efficiency-driven, and innovation-driven[1] (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, and so are labour costs. Countries transforming into efficiency-driven economies, along with increasing

[1] M.E. Porter, J.J. Sachs, J. McArthur, *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.

labour costs, must create more efficient methods of production and increase the quality of products and services. On the other hand, countries transforming into innovation-driven economies are able to maintain a high level of wages and a high standard of living, only if enterprises are able to compete based on new and specialised products and other innovative solutions[2]. In 2014, similarly as in previous years, Poland was included in the efficiency-driven economies.

Figure 3. Three phases of economic development

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

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, and macroeconomic stability and provide the efficient health care system and primary education. In efficiency-driven economies,the government's focus should be on getting labour and capital markets working more efficiently, attracting foreign direct investments, and creating educational system to educate the workforce to adopt technologiessuccessfully. 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.

Total Early-stage Entrepreneurial Activity (TEA)

TEA is a central measure established in the GEM survey. It presents the percentage of working age population involved in establishing business activities or running a new enterprise, established 3.5 years ago. In the GEM entrepreneurship process model, total early-stage entrepreneurial activity includes nascent entrepreneurs and new entrepreneurs, but does not include the established companies. The methodology of calculation of TEA measure is relatively complex, and it is based on answers to several questions from the GEM survey questionnaire concerning intentions and actions taken in terms of

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

establishing and running a business activity. It has to be stated that TEA does not measure the share of people running business, but the share of people establishing and running business in its early stage among the adult population. In this context, it is a forward indicator, since it allows us to forecast the intensity of business activity in the society.

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 his/her own, but on behalf of their employer. This form of entrepreneurship is measured by EEA, which stands for the percentage of the population playing the leading role in organisational entrepreneurship.

1.3. Research within GEM

Research within the 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 collection of national experts' opinions on establishing and developing new companies in the country (NES).

APS

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

NES

The National Expert 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 the identification of framework conditions for entrepreneurship in a given country. In each country, the group of experts is selected in accordance to the same criteria. The main criteria are the following: the type of activity (scientist, manager, politician, etc.), and experience in running entrepreneurial activity (entrepreneur, non-entrepreneur).

Chapter 2

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

According to the approach adopted by the GEM, entrepreneurship and the related economic development level are the effects of human decisions. Putting an individual at the centre of the GEM model of entrepreneurship allows one to switch attention from areas that concern the operations of registered economic operators, usually monitored by statistical offices, to issues that determine making the decision to set up a business and run it. These include the following: social, cultural, political, and economic circles, as well as characteristics of the individual, e.g., the motivations to set up a business, the ability to identify business opportunities, self-assessment of entrepreneurial capabilities, and aspirations to develop a company.

This chapter presents the most recent data on entrepreneurial activity in Poland derived from a quantitative survey conducted on a representative sample of 2,000 adult Poles in mid–2016. The study yielded information on the social image of an entrepreneur in Poland, entrepreneurial attitudes of individual Poles, i.e. their inclination to set up businesses, which show the entrepreneurial potential of the Polish society. It also allows monitoring the level of entrepreneurship at individual stages of its development, i.e. from initial actions towards setting up a company, to its launch, to its development, to its decline when entrepreneurs withdraw from economic activity. It also provides information on the motivations to set up a business, and the development aspirations of entrepreneurs (through innovation, internationalisation, or hiring more employees). The study also enables the characterisation of entrepreneurs in terms of sex, age, and sectors of activity.

In this chapter, data on entrepreneurship in Poland for 2016 are compared with the results of five previous editions of the GEM quantitative study from 2011–2015, which allows presenting the developments of entrepreneurship in Poland and the observation of trends. Most recent data are also analysed

in comparison with data from the European Union[3] and individual groups of countries divided by economy advancement levels. These groups were selected in the GEM based on the classification of the World Economic Forum (WEF), namely, factor-driven economies, efficiency-driven economies, and innovation-driven economies. In the division into these three groups of countries, Poland belongs to efficiency-driven economies; and in a division into five groups, where countries also in transition between the groups are taken into account, we are included in the group of countries at the stage between efficiency and innovation.

The 2016 quantitative APS covered 65 countries worldwide. Detailed data on entrepreneurial activity in these countries are available in the GEM Global Report 2016/17[4].

2.1. Social perception of entrepreneurship in Poland

The key aspect of entrepreneurship culture is the perception of entrepreneurs and their activity by the society. This happens because people belong to their societies long before they start thinking of their future career. The circles people are in express their opinions on entrepreneurs and their activity. Each success story in business and each stigmatisation influences the selection and development of one's career path.

Therefore, let us look at the perceptions of entrepreneurs in the Polish society. Nearly 62% of adult Poles agree with a statement that the majority of people in Poland believe that running a business is a good career choice. It is much more than the average for the EU and for the highest-developed innovation-driven economies, where, on average, 57% of residents are of this opinion. However, the result for Poland is exactly at the level noted for factor-driven economies (where running a business is frequently the only way to work) and much below the average for efficiency-driven economies, which is the group to which Poland belongs. Thus, it can be said that we perceive each other as people who prefer their own business as a way to fulfil career-related dreams, and this result is relatively high in comparison to other nations. What is more, compared to the previous edition of the study (2015), the percentage of people of this opinion declined in all three groups of countries (factor-driven economies, efficiency-driven economies, and innovation-driven economies) by about 4–10 p.p.[5], and in the case of Poland, it remained the same and even increased slightly.

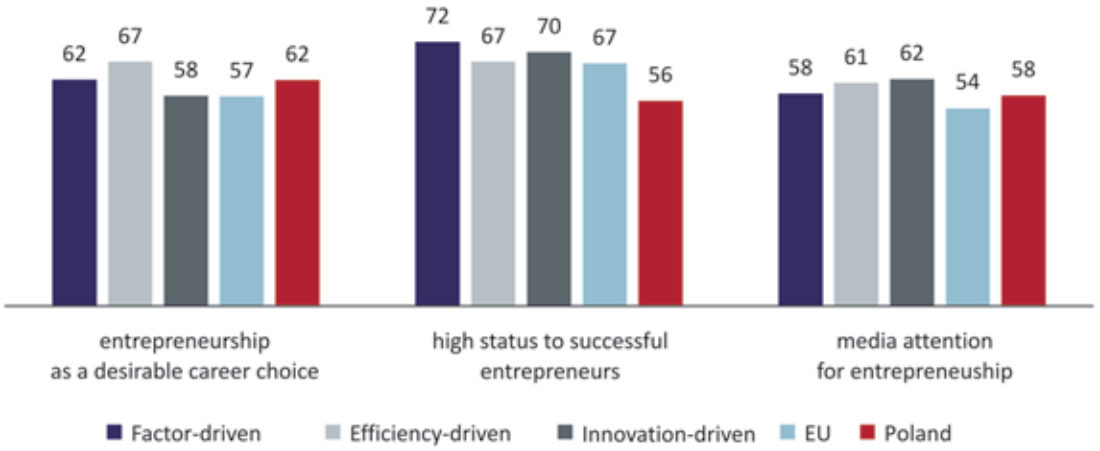
Against this background, data on the attitude of the Polish society towards entrepreneurs are quite surprising. Only slightly more than 56% of Poles believe that people who have set up successful businesses deserve recognition, while in EU countries, on average, as many as 67% of residents are of the same opinion. Poland's results are even poorer when compared

[3] In 2016, the quantitative study under the GEM project was conducted in 22 EU countries, but in some areas data for Austria are missing.

[4] M. Herrington, P. Kew *GEM 2016/17 Global Report*, Global Entrepreneurship Monitor. The report is available at the GEM website: www.gemconsortium.org and at the PARP website: http://badania.parp.gov.pl/global–entrepreneurship–monitor–gem.

[5] The average for factor-driven economies is 66%, for efficiency-driven economies it is 74%, and for innovation-driven economies it is 68%, for Europe: 56%, and for Poland it is 60.5%.

Diagram 1. Social perception of entrepreneurship in Poland compared with the EU and the group of factor-driven, efficiency-driven and innovation-driven economies in 2016 (% of adults)



Source: Global Entrepreneurship Monitor data.

with the average for innovation-driven and factor-driven economies. Results similar to those for Poland were achieved for efficiency-driven economies. It should be noted that in 2016, compared to the previous year, the percentage of adults who recognised successful entrepreneurs did not change in Poland, but it increased in the other groups of countries.

The above data seem to show a contradictory image of entrepreneurs in the eyes of Poles: on the one hand, they believe it is good to fulfil oneself by running a business, but, on the other hand, they are not inclined to recognise successful entrepreneurs. Perhaps this is a consequence of how we perceive ourselves. According to CBOS surveys, we are hardworking and resourceful, but, on the other hand, we have a tendency to complain and carp[6]. Because of such an attitude, entrepreneurs' success can be treated as natural, not the result of individual efforts. An unfavourable image of an entrepreneur is not a new phenomenon in Polish history. As pointed out by E. Cierniak-Szóstak, "economic activity was neither prestigious nor popular in Poland, there was a controversy throughout the 19th century (when the class of entrepreneurs emerged) whether this sphere of activity should be considered decent"[7]. The beginnings of economic transformation in 1989 were also not favourable to businessmen. Although the society soon gained access to a wide range of products, "the heritage of real socialism, when work for a state-owned enterprise was recognised and acknowledged, contrary to growing wealthy, which was a sign of greed; entrepreneurs ranked last among occupations with any prestige attached"[8] still prevailed. The image of an entrepreneur became somewhat better only in the 2003 survey by CBOS, where business owners

[6] According to CBOS 2015 surveys, Poles claimed to possess the following features: hard-working (25%), carping, complaining, pessimism, taking too much for granted (17%), cordiality (12%), and resourcefulness (10%). Source: *Autoportret Polaków i postrzegany dystans kulturowy wobec sąsiadów* [*Poles' Self-Portrait and Perceived Cultural Distance towards Neighbours*], Survey communication No 126/2015, CBOS, September 2015.

[7] J. Jedlicki 2002 in: E. Cierniak-Szóstak *Wizerunek polskiego przedsiębiorcy jako element społecznej legitymizacji/delegitymizacji nowego ładu* [*Image of a Polish Entrepreneur as an Element of Social Legitimisation/Delegitimisation of the New Order*], Book No 12 of the University of Rzeszów, pp. 397–408.

[8] E. Cierniak-Szóstak *Wizerunek polskiego przedsiębiorcy jako element społecznej legitymizacji/delegitymizacji nowego ładu* [*Image of a Polish Entrepreneur as an Element of Social Legitimisation/Delegitimisation of the New Order*], Book No 12 of the University of Rzeszów, p. 401.

were attributed some positive features. Over half of Poles were of the opinion that an entrepreneur was rich, frugal, and well educated. However, many negative characteristics were still attributed to entrepreneurs, and they were that entrepreneurs were patronising, flaunting their wealth, dishonest, cared solely for themselves and not for their employees, or even more brutally, lived off the work of others. The image of an entrepreneur was also affected by a conviction that companies established after 1989 were set up mainly by people who had contacts and connections with a variety of institutions[9].

The situation is slowly changing for the better, yet the duality of Poles' attitude towards businessmen remains in place. Surveys conducted in 2013[10] show that Polish people are aware of the role played by entrepreneurs in the economy (over 60% of respondents agreed that entrepreneurs generate the majority of the GDP, create most jobs, and build Poland's economic power in the world); moreover, they attribute some positive features to entrepreneurs, such as wealth, a contribution to the society, and education[11]. Yet, on the other hand, negative opinions were still present: They have been accused of underpaying their employees and having ties with politics[12]. In one of the most recent surveys, the March 2016 CBOS survey of reliability and honesty of individual professions, the view of private entrepreneurs by Poles remains unsatisfactory[13].

It may be encouraging that we are not the only EU society where entrepreneurs are perceived in a diverging way. As shown in Diagram 2, the perception of entrepreneurship as a good career path is usually not paired with recognition of entrepreneurs. In the Netherlands, there is the highest percentage of people who believe that running a business is a good way to live (78%), and the average percentage of people who recognise successful businessmen (about 60%) is similar to Cyprus and Portugal. In turn, the country with the lowest percentage of people who treat owning a business as a good career path is Finland, which also has the highest percentage of people who believe an entrepreneur is a prestigious profession (over 80%) among the EU countries. Still, Ireland has an equally high result in the latter category, and an inclination to choose running a business as a way of life is much more visible there than in Finland (56%). Among the EU countries, there are also states where both these indicators are at a similar level: Spain, Portugal, Greece, and Latvia. In terms of the percentage of adults who believe that entrepreneurship is a good career path, Poland ranks 7th among 21[14] surveyed EU countries and 19th in terms of the inclination to recognise successful entrepreneurs by a high social status.

The image of an entrepreneur is largely shaped by the media, which is also researched under the GEM project. Respondents are asked whether stories depicting new companies that have been operating for a short time and are

[9] Such a view was expressed by 54% of respondents. Ibid., p. 402.

[10] GfK Polonia commissioned by *Rzeczpospolita* in 2013; in: R. Trzeciakowski, Ł. Dąbroś *Wizerunek przedsiębiorcy. Raport Polskiej Rady Biznesu 2016* [*Image of an Entrepreneur. 2016 Polish Business Council Report*], prepared by the Civic Development Forum and the Polish Business Council, 2016.

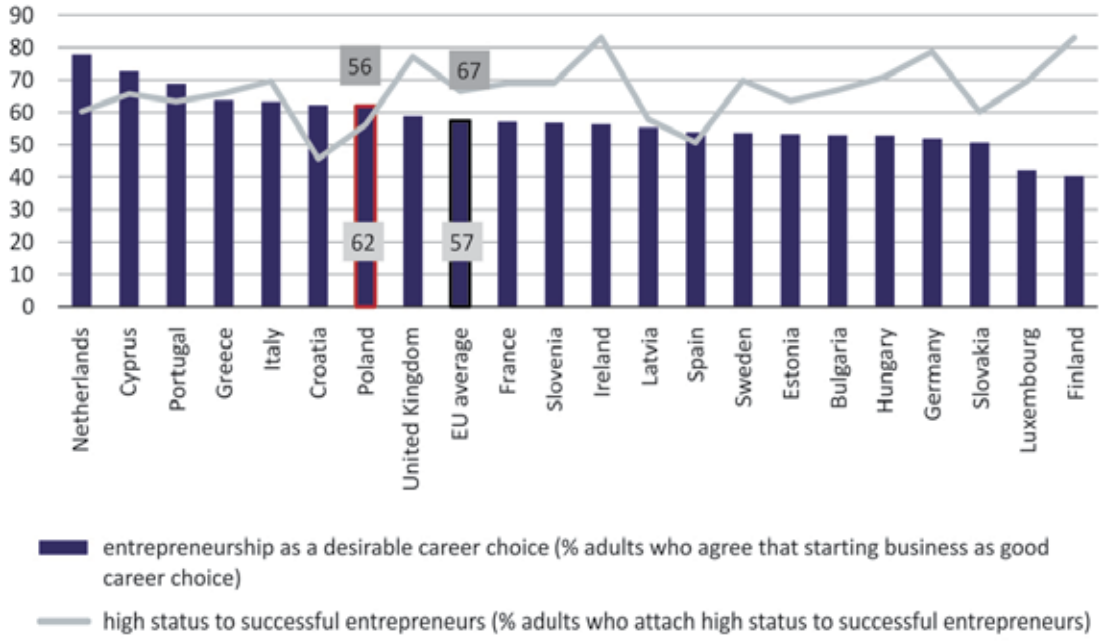
[11] Between 60% and 75% respondents chose each of these answers. Ibid.

[12] 75% and 40%, respectively. Ibid.

[13] Positive and negative opinions were balanced, and the average (on a 1 to 5 scale) was slightly less than 3. *Społeczne oceny uczciwości i rzetelności zawodowej* [*Social View of Honesty and Reliability of Professions*]. *Survey communication No 34/2016*, CBOS, March 2016.

[14] In the case of some areas data for Austria are missing.

Diagram 2. Entrepreneurial perceptions in Poland and in other EU countries in 2016



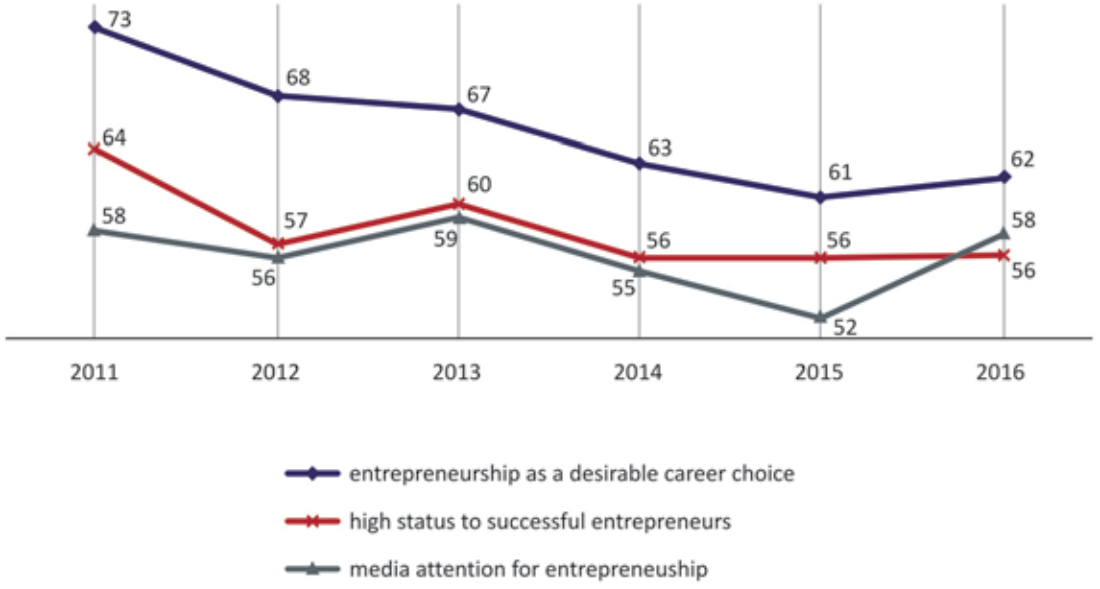
Source: Global Entrepreneurship Monitor data.

successful frequently appear on the public media and in the Internet. In these terms, the situation in Poland is currently slightly better than the EU average. Nearly 58% of Poles surveyed under the GEM study in 2016 agreed with the above statement. In the EU such content in public media was noticed by 54% of residents, while in efficiency-driven and innovation-driven economies, the figures were much higher (61–62%). Analysing the present data through the prism of 2015 data, it can be claimed that the efficiency of public media and of the Internet both in Poland and in innovation-driven economies (and in the least developed, factor-driven economies) increased (by 6 p.p., 3 p.p., and 5 p.p., respectively), which is a positive portent for entrepreneurship. Efficiency declined in the group of countries Poland belongs to, namely in efficiency-driven economies, by 6 p.p.

Let us now look at the changes in the image of an entrepreneur in the last six years. It can be claimed that 2011 was the best, when 73% of Poles agreed with a statement that running a business was a good way for accomplishment of career plans, while 64% were of an opinion that people who set up a business and were successful should be acknowledged. In the next years, these indicators declined, and in the last two years, they stabilised at 62% and 56%, respectively.

Last year brought about a favourable change in the case of people who noticed content concerning new companies that operated for a short time and were successful on the public media and on the Internet. In 2016, it increased by 6 p.p. year-on-year to the highest level of 2011, namely 58%. In the previous year, the indicator fluctuated, following a mostly downward trend. The survey did not allow identification of the factors behind the change, yet it needs to be noticed that the media content devoted to the work of the Government and individual ministries on new solutions in the area of entrepreneurship in 2016

Diagram 3. Entrepreneurial perceptions in Poland in the years 2011–2016 (% of adults)



Source: Global Entrepreneurship Monitor data.

has increased. For instance, in January 2016, a supra-ministerial Innovation Council was set up. One of its initial tasks was to develop an Innovation White Paper as a point of departure for drafting a systemic Act on innovation, finally adopted in August 2016. The act introduced a system of tax concessions dedicated to entrepreneurs who want to cooperate with the science sector. In February, the Government adopted a Plan for Responsible Development that included a package for entrepreneurs and announced the creation of the Business Constitution and sectoral development programmes, and the Start-in Poland programme was launched. The media devoted considerable attention to work of the Government in the area of facilitations for companies, such as the amendment of the Act on the freedom of economic activity. In the beginning of June, the Ministry of Economic Development announced it would prepare a Package of 100 changes for companies, which was submitted to the Sejm in autumn. These are only few examples of Government actions which, as they were introduced, aroused a fair amount of discussions and comments in the media. As survey results show, they were noticed by the society.

2.2. Entrepreneurial attitudes of Poles

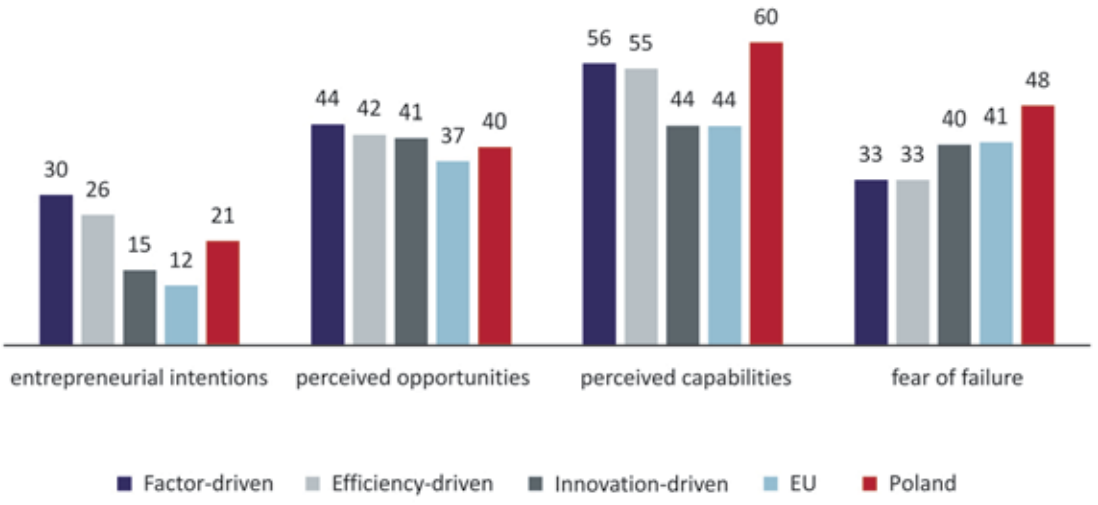
Knowing the image of an entrepreneur in the Polish society, let us take a look at how the society perceives itself in the role of a business owner. For that purpose, we will use the following four GEM indicators: entrepreneurial intentions, perceived opportunities, perceived entrepreneurial capabilities, and fear of failure.

As shown by the most recent GEM data for 2016, nearly 21% of adult Poles plan to set up a business in the next three years[15]. In terms of entrepreneurial intentions, we are currently the leader in the EU, where on average 12% of

[15] Percentage of the adult population (18–64 years of age, excluding people involved in setting up or running a business) – the people who plan to set up a company in the next three years.

residents plan to start their own company. We are also ahead of innovation-driven economies (15%), but behind efficiency-driven and factor-driven economies. These results confirm the rule observed in GEM for years, where the inclination to start a business is the highest in the least developed economies and weakens as economies reach higher development levels due to wider hired labour opportunities.

Diagram 4. Entrepreneurial attitudes in Poland compared with the EU and the group of factor-driven, efficiency-driven and innovation-driven economies in 2016 (% of adults)



Source: Global Entrepreneurship Monitor data.

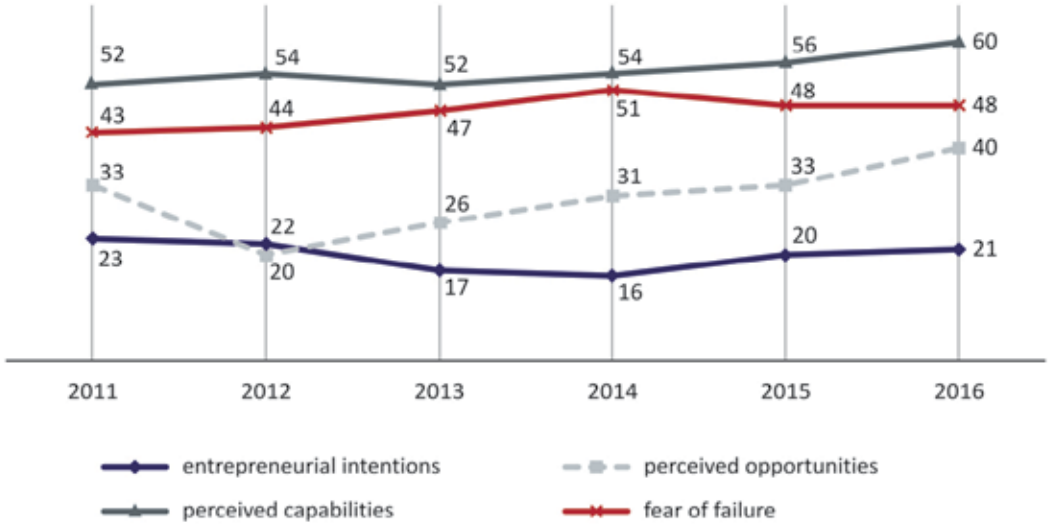
Apart from entrepreneurial intentions, the factors decisive of setting up a business are perceived opportunities and having the skills and knowledge necessary to run a company. In Poland, as many as nearly 40% of adults perceive opportunities for setting up a business in their environment. In this respect, we rank better (9th) than the average for the EU (where business opportunities in the environment are perceived by 37% of residents on average). However, we still rank lower than innovation-driven, efficiency-driven, and least-developed countries. We have nothing to worry about also in terms of self-assessment of our entrepreneurial capabilities. Poland's result at the level of 60% of adults who consider their skills and knowledge sufficient to run a business is 16 p.p. higher than the average for the EU and innovation-driven economies, and it is also higher than the indicators for the other groups of countries (Diagram 4).

The only factor that disturbs this optimistic image of Poles convinced of their readiness to become entrepreneurs is fear of failure. Currently, nearly a half (47.6%) of those who perceive business opportunities do not choose to set up their own business due to fear of failure. In the EU, there are 40% of such people, similar to innovation-driven economies, and, in efficiency-driven economies, to which Poland belongs, the figure is only 33%.

Nonetheless, data for 2011–2016 show that entrepreneurial attitudes among Poles are growing stronger. The percentage of people who plan to set up a business in the next three years has been increasing for two years, after

a downturn in the years 2011–2014. At present, it is at the level of 21%. The percentages of adult Poles who are convinced they have sufficient skills and qualifications to run a company have remained at a high level compared to the EU from the beginning of the GEM studies in Poland, i.e. from 2011. In the last year, it increased even more, i.e. from 56% in 2015 to 60% in 2016. Yet, the highest upward change is visible in the case of the percentage of people who perceive opportunities for setting up a business in their environment: The indicator has been increasing since 2013, and it increased the highest in the past year (from 33% in 2015 to nearly 40% in 2016).

Diagram 5. Entrepreneurial attitudes in Poland in the years 2011–2016 (% of adults)



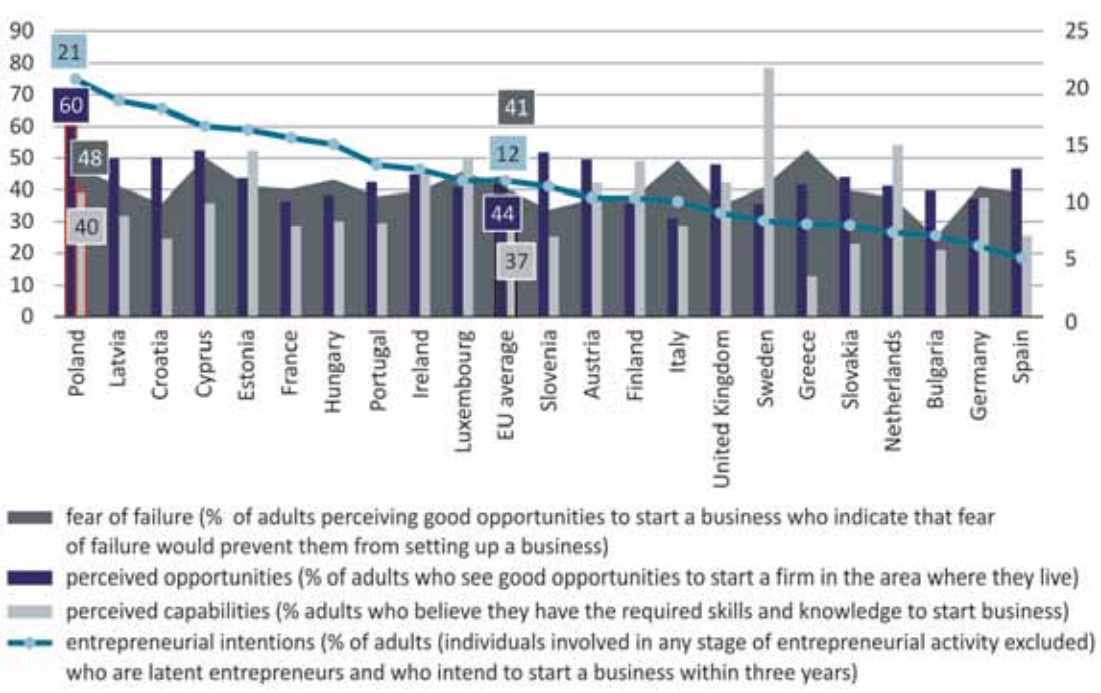
Source: Global Entrepreneurship Monitor data.

When it comes to the percentage of people who fear failure, data for 2016 are at the same level as the year before, i.e. 48%. The stabilisation of this indicator is a reason for moderate hope that the approach of the society to those who failed in business is changing slowly. Nonetheless, it is still quite high considering the pace of changes in the other indicators.

Analysing the set-up of all four parameters concerning entrepreneurial attitudes of the societies of individual EU countries, it is difficult to find a single pattern. In the majority of EU countries under analysis (13 out of 21), the percentage of residents convinced they have knowledge and skills sufficient to start a business is higher than the percentage of people who perceive business opportunities in their environment. The most residents who perceive business opportunities in their environment are in Sweden (78%) and in the Netherlands and Estonia (over 50%), while the least can be found in Greece (13%) and Bulgaria (21%). Poland ranks slightly above Germany (38%). In turn, the number of people who declare they want to set up a company in the next three years is the highest in Poland (21%), followed by Latvia (19%) and Croatia (18%), while the number is the lowest in Spain (5%) and in Germany (6%).

Among all EU countries, Spain, Germany, and Greece belong to the group where, per one resident who declares an intent to set up a business, there are the most

Diagram 6. Entrepreneurial attitudes of Poles and other EU nations in 2016 (entrepreneurial intentions – right axis, other indicators – left axis)



Source: Global Entrepreneurship Monitor data.

people who, despite perceiving business opportunities, would not decide to start a company due to fear of failure (8, 6, and 6, respectively). In these countries, self-assessment of entrepreneurial capabilities of the society is at a similar level. In Poland, slightly more than two people who despite perception of business opportunities do not decide to start a company for fear of failure per one person who declares intent to set up a business. The result is only seemingly good, as it is the effect of a high percentage of people who declare they intend to start a business. The rate of people who fear failure in Poland is one of the highest in the EU (following Greece: 53%, Cyprus: 50%, and Italy: 49%). The only country in the EU where there are less than two people who, despite perceiving business opportunities, do not decide to start a business per one person who plans to do so is Croatia where, with a high rate of entrepreneurial intentions, there is a relatively low number of people who fear failure. Therefore, entrepreneurial attitudes of the societies of individual countries are not a simple function of their prosperity, but the product of many more factors.

2.3. Level of entrepreneurship

Contrary to the majority of statistical research, where the condition of entrepreneurship in a given country is defined by the number of registered economic operators, the GEM focuses on individuals who make a 'yes' or 'no' decision when it comes to entering the path of pursuing a business. This approach results in the perception of economic activity as a process consisting of the stage of setting up a business, developing it, stabilisation, and the discontinuation of economic activity. The process is illustrated by indicators that

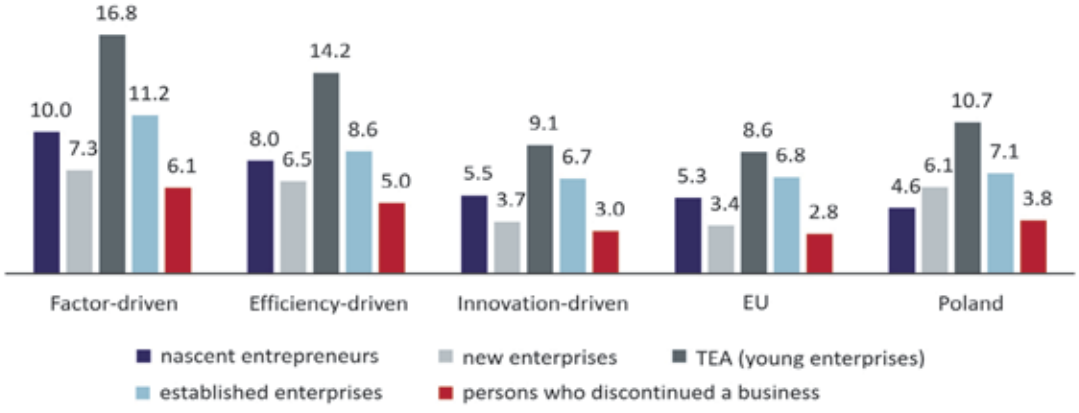
measure the share of people at a given stage of an entrepreneurial process in the adult population of a given country.

The first group are **nascent entrepreneurs**, i.e. people at the initial stage of the entrepreneurship process, who invested some money in their businesses, but they have not paid remunerations for more than 3 months (in other words, people in the process of setting up a company and those who have been running a company for more than 3 months). The other groups are **new enterprises** (companies that have been operating between 3 and 42 months), **established enterprises** (operating for more than 42 months), and **discontinuation of business** (companies sold and remaining on the market or liquidated within the last 12 months)[16].

Nascent entrepreneurs and new enterprises make up **TEA** (Total Early–stage Entrepreneurial Activity). TEA is GEM's key indicator. Its chief asset is that it takes into account the people who are at the stage of setting up a new company and thus allows projecting the intensity of economic activity in a society (more on the indicator in Chapter 1, section 1.1). **Apart from people in the process of setting up a company, the indicator includes people who have been running a business for up to 3.5 years.Further in this chapter we will call these young enterprises**.

According to the GEM theory, the young company indicator (TEA) is usually the highest in the least developed countries as its value decreases when countries move to groups with more advanced economies. This dependency is confirmed by the data presented in Diagram 7. In factor-based economies, the TEA is nearly 17%, while, in the most developed countries, it is only 9%. The percentage of nascent entrepreneurs or people at the initial stage of running a company, and of new enterprises is similar. In countries with the least developed economies, there are almost twice as many such people and enterprises than in innovation-driven economies. Moreover, the share of established enterprises in the population is much higher in the group of factor-driven economies (11% compared to less than 7% in innovation-driven economies).

Diagram 7. Level of entrepreneurial activity in Poland compared with the EU and the group of factor-driven, efficiency-driven, and innovation-driven economies in 2016 (% of adults)



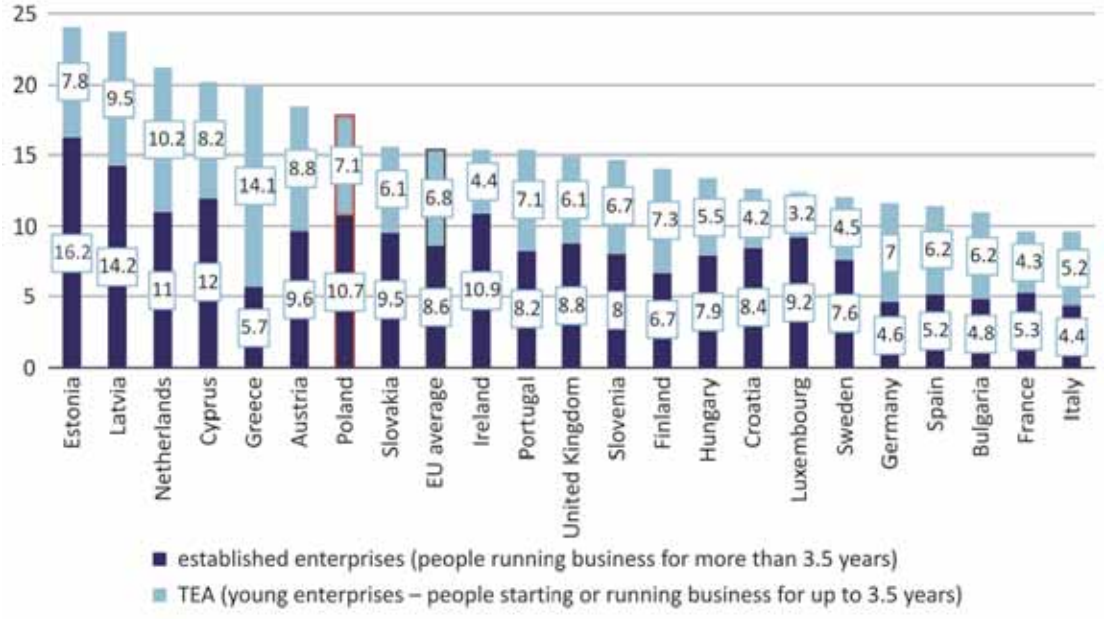
Source: Global Entrepreneurship Monitor data.

[16] Cf. the definitions on page 17.

Against this background, Polish entrepreneurship comes out well. The share of young companies (i.e. people at the initial stage of setting up a company and running a business for up to 3.5 years) in the population is nearly 11%. It is 2 p.p. more than the EU average, with a very similar share of established enterprises (about 7%). The above-mentioned higher share of young companies in the Polish economy is primarily the result of having nearly twice as high a percentage of companies operating for between 3 and 42 months (new enterprises) (6.1% compared to 3.4% in the EU).

In total in Poland, almost 18% of adults start or run economic activity. For comparison, in EU countries, there are, on average, slightly more than 15% of such people. Detailed data on saturation of the society with young and established enterprises are presented in Diagram 8. It appears that the most enterprising societies are Estonians and Latvians (about 24% of the population), while the least enterprising are the French and Italians (less than 10%).

Diagram 8. Level of entrepreneurship in EU countries in 2016 (percentage of people setting up and running a business for up to 3.5 years (young companies) and of people pursuing economic activity for over 3.5 years (established enterprises) in the adult population of a given country)

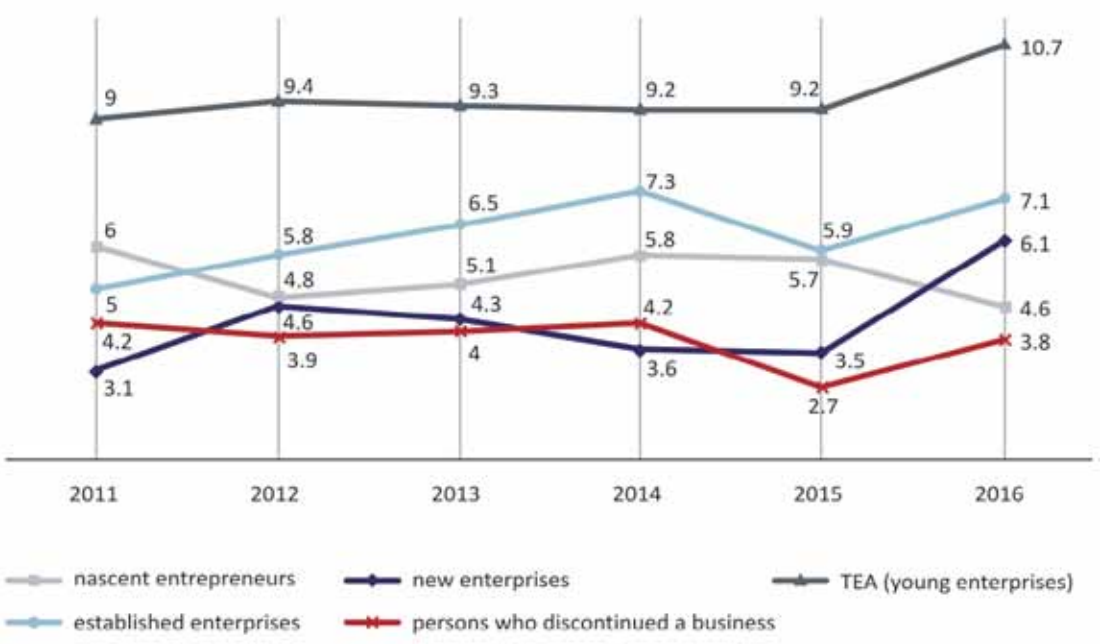


Source: Global Entrepreneurship Monitor data.

It should be underscored that such a high (11%) share of young companies in the Polish society was noted in 2016 for the first time since the beginning of this study in Poland in 2011. In all the previous years, the indicator remained at the level of around 9%. An even greater change in the past year is visible in the case of the measure concerning new companies that operate on the market between 3 months and 3.5 years. Their share increased almost twofold (from 3.5% of the adult Poles population in 2015 to 6.1% in 2016). Moreover, the saturation of the population with established enterprises, represented by people who have been running their business for longer than 3.5 years, increased slightly (from nearly 6% to 7%).

According to the most recent data, a quite stable situation was upset, when it comes to people taking steps aimed at setting up their own business or running a company for up to 3 months (nascent entrepreneurs), observed between 2011 and 2015, since the share of such people and entrepreneurs was reduced from 5.7% of the adult Poles population in 2015 to 4.6% in 2016. However, this change is still on the verge of statistical error. At the same time, the percentage of people who discontinued economic activity in the previous year increased in 2016 to 3.8% of the adult population. For comparison, in 2015, the percentage of such people was 2.7%, which, in the light of data for 2011–2016, seems a one-off fluctuation as the most recent data show a return to the level from the previous years of about 4%.

Diagram 9. Level of entrepreneurship in Poland in the years 2011–2016 (% of the adult population)



Source: Global Entrepreneurship Monitor data.

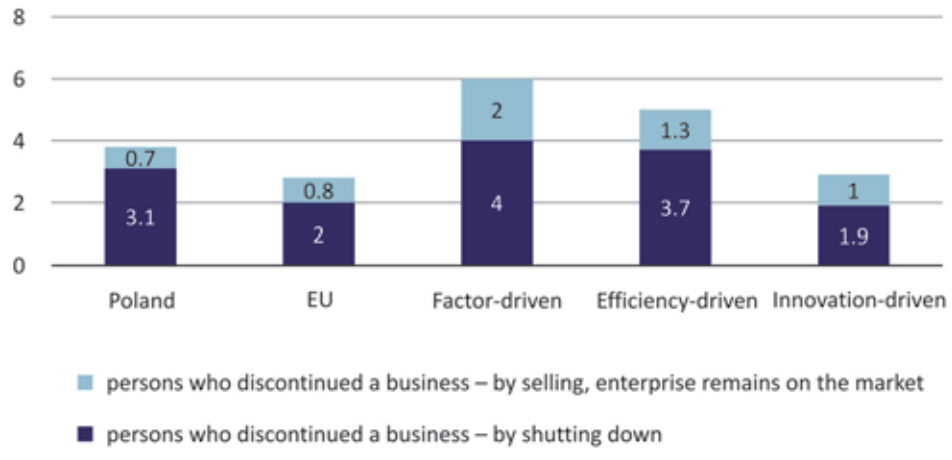
The above changes are difficult to explain. The increase in the share of new companies between 2015 and 2016 is partially the effect of an increase in the share of nascent entrepreneurs, or people who started their adventure with entrepreneurship between 2013 and 2015, in the population, since some of them survived in the market and operate as new enterprises. The increase in the number of young, usually smaller, enterprises is also visible in public statistics: According to the most recent data of the Central Statistical Office (GUS) in 2016 the number of microenterprises exceeded 2 million, the year before it was 1.9 million, and in 2013, the figure was 1.7 million[17]. The increasing share of new and established enterprises in the society is probably the effect of a favourable macroeconomic situation of Poland's major trade partners. However, the primary cause is probably the good situation in Poland and an improvement in the competitiveness of its economy, which brings us closer to innovation-

[17] The authors' own calculations based on: *Działalność przedsiębiorstw niefinansowych w 2015 r.*, Central Statistical Office, December 2016; and *Działalność gospodarcza przedsiębiorstw o liczbie pracujących do 9 osób w 2016 roku*, Central Statistical Office, October 2017.

driven economies. It is confirmed, for instance, by data from the most recent *Global Competitiveness Report* according to which, in 2017, Poland ranked 39th among 137 countries under analysis. In the area of our competitiveness, the greatest increases as compared to the 2015 report were recorded in the quality of research and development units (a shift from rank 63rd in 2015 to 49th in 2017), R&D outlays of enterprises (from 84th to 60th), and government procurement of technologically advanced products (from 91st to 89th). Moreover, a change in Polish consumers' expectations is visible. When it comes to buyer sophistication, we jumped from 87th in 2015 to 70th in 2017. The availability of new technologies improved (a shift from 72nd in 2015 to 64th in 2017) as well as the availability of venture capital financing, which is important from the point of view of start-ups (from 96th to 72nd in 2017). All this means that the operating conditions of young and established enterprises in Poland are getting better, which also results in higher qualitative competition between companies. However, there are still areas that require intensified streamlining measures, such as cooperation between science and business, e.g., in 2015 in the above-mentioned global ranking, Poland ranked 73rd, we ranked 85th last year, and we are presently 89th. According to the study, Poland's innovation potential does not increase (both two years ago and currently we ranked 72nd in these terms).

Let us return to the last GEM indicator that refers to the level of entrepreneurship, namely, the people who discontinued economic activity in the last 12 months, which would be the time when the GEM study was conducted in Poland, and that would be the second half of 2015 and the first half of 2016. The share of such people in the adult population is currently 3.8% against 2.7% in 2015. It should be noted that, in 2015, the percentage declined by nearly a half when compared to 2014, which, from the perspective of the recent results and compared to the last six years, seems incidental. When it comes to the reasons for discontinuation of activity, in 2016, these were mainly the following: the emergence of another job or business opportunity, the non-profitability of business, and family or personal reasons. Contrary to the previous year, many more people discontinued their business for family and personal reasons and because

Diagram 10. Discontinuation of business activity – people who claimed in the 2016 study that they discontinued a business in the last 12 months (% of the adult population)



Source: Global Entrepreneurship Monitor data.

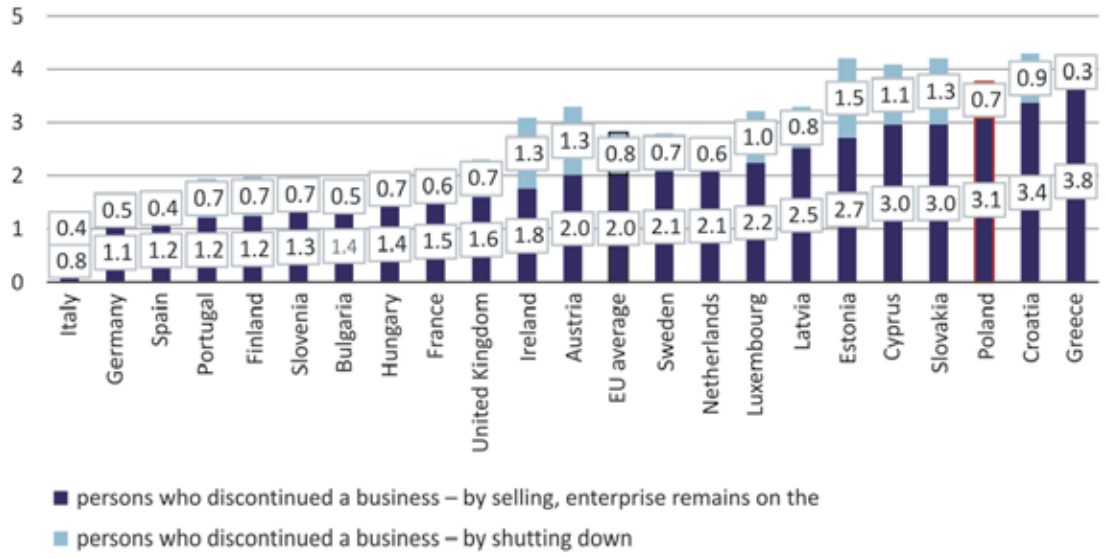
they found another job or took advantage of another business opportunity. At the same time, many fewer people discontinued a business due to government policy/taxes or bureaucracy.

For comparison, in 2016 in the EU, there were 2.8% of people who discontinued economic activity in the last 12 months on average, and the situation was similar in innovation-driven economies. In the group of efficiency-driven economies, to which Poland belongs, the indicator was much higher (5%), while it was 6%in the least developed countries where the highest numbers of enterprises are set up.

The GEM study allows one to look at the process of withdrawing from running a business through the question on whether discontinuation stood for enterprise closure or the company remained on the market (in somebody else's hands). Regardless of the development level, visibly more people simply close a company. In Poland in 2016, there were 3.1% of those who withdrew from running a business, and in the EU, the figure was 2%. Only 0.7% of Poles leave a company on the market when they end their activity (it is similar in the EU: 0.8% of discontinuations).

As appears from the diagram below, among the EU countries, the highest share of people who, in the most recent 2016 study, claimed they discontinued economic activity in the previous year was found in Croatia (4.2%), followed by Estonia, Slovakia, and Greece. The lowest share was recorded in Italy (1.2%) and Germany (1.6%). The countries where the highest number of people leave a company on the market after discontinuation of activity are Estonia (1.5% of discontinuations), Ireland, and Austria (1.3% each), while the lowest figures are for Greece, Italy, and Spain (0.3–0.4% of discontinuations).

Diagram 11. Discontinuation of business activity in the EU – people who claimed in the 2016 study that they discontinued a business in the previous 12 months (% of the adult population)



Source: Global Entrepreneurship Monitor data.

2.4. Motivations to start a business activity

The answers to the questions on the motivations driving people who decide to set up their own business is one of the key elements that allows one to understand the essence and quality of entrepreneurship in a given country. As proven by numerous studies, people with positive motivations, i.e. those who want to take advantage of the opportunities offered by running a business (such as the opportunity for self-fulfilment, putting one's talents to good use, independence, recognition, or simply higher income), achieve higher growth parameters than people driven by negative motivations, i.e. forced to start a company because of absence of opportunities to find a satisfactory job. For instance, entrepreneurs driven by a desire for independence are more inclined to get involved in innovative undertakings[18]. In turn, those motivated by higher income have growth aspirations, inter alia, through increasing sales and employment[19]. They are also more often inclined to undertake export activities[20].

One of the reasons for this state of affairs is the fact that opportunity driven entrepreneurs typically originate among persons who have the experience of having a full time job. On the other hand, entrepreneurs who become ones because of absence of other options to generate income are often persons who have been out of work before taking such decision with poorer education. At the same time, these are persons identified more frequently in regions with a lower development level, with a poorer availability of workforce with relevant qualifications, external financing, and technological resources[21]. Therefore, it is believed that the former have time to think about and choose an effective development strategy, while the latter do not have this advantage, so they go for cost strategies that are less conducive to development more frequently. As a result, the opportunity-driven entrepreneurs who take advantage of better or more profitable business opportunities than those driven by necessity[22]. The former, in a much lesser extent than the latter, depend on macroeconomic conditions, and they are able to choose, thus to realise individual needs, so they also achieve much higher indicators of survival in the market[23]. Similar observations result from a PARP's study carried out on small and medium enterprises recording dynamic growth. They demonstrate that, in the case of owners of these companies, the key facts that helped them decided about starting businesses included the following: the will to be one's own boss, the need for self-realisation, having an idea for a product, and the need for change[24].

The GEM study also monitors reasons for which people get involved in running their own business. The following primary indicators are used for the purpose:

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[18] J. Corman, B. Perles, P. Vancini *Motivational factors influencing high-technology entrepreneurship,* Journal of Small Business Management, 26 (1), pp. 36–42, 1998.

[19] M.H. Morris et.al. (2006) and Casaar (2007) in J. Hessels, M. van Gelderen, R. Thurik *Entrepreneurial aspirations, motivations and their drivers*, Small Business Economics, 31:323–339, 2008.

[20] J. Hessels, M. van Gelderen, R. Thurik *Entrepreneurial aspirations, motivations and their drivers*, Small Business Economics, 31:323–339, 2008.

[21] Ibidem.

[22] J.H. Block, M. Wagner *Necessity and Opportunity Entrepreneurs in Germany: Characteristics and Earnings Differentials* Schmalenbach Business Review, Vol. 62, pp. 154–174, April 2010.

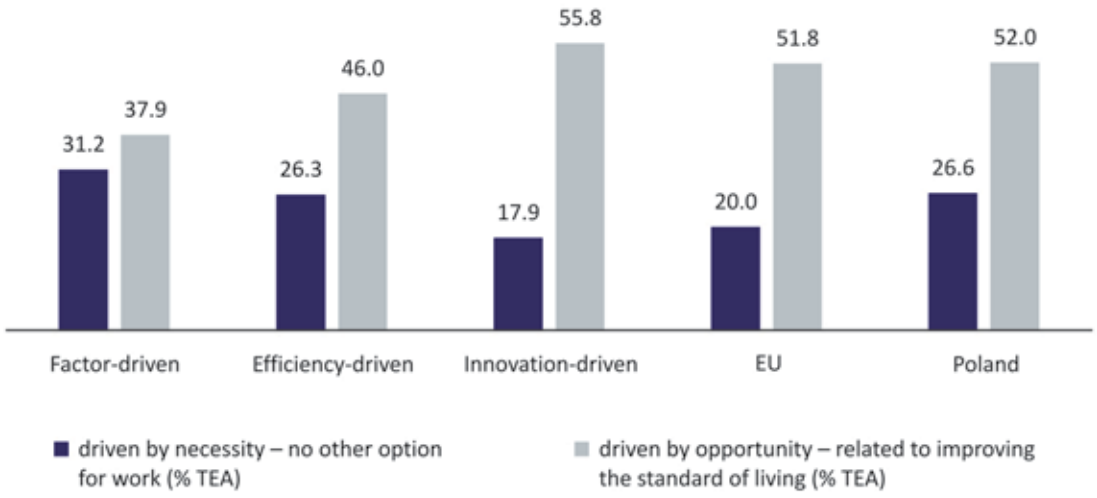
[23] F. Liñán, J. Fernández-Serrano, I. Romero *Necessity and Opportunity Entrepreneurship: The Mediating Effect of Culture,* Revista de Economia mundial 33, pp. 21–47, 2013.

[24] M. Nieć, R. Zakrzewski *Firmy szybkiego wzrostu*, PARP 2017.

- **Improvement driven opportunity** (IDO), i.e. the share of young entrepreneurs (TEA), who are motivated by the will to take advantage of the opportunity provided by running one's own business, through increasing personal income or obtaining independence, and
- **Necessity, i.e.** the share of young entrepreneurs (TEA) who got involved in business because of the absence of any other alternative to generate income[25].

As the authors of GEM Global Report 2016/17 write, "Presently, it is the will to use the opportunity offered by starting a business that is the globally dominating factor inclining people to do so – on average it pertains to 3/4 of the population. Moreover, the share of opportunity-driven entrepreneurs' increases together with the transition to a higher level of economic development." According to the latest data for 2016, in a group of countries with factors of production based economies, there are only 1.2 opportunity driven companies per one company established out of necessity. In countries with effective economies, to which we belong, this ratio is 1:2.3, while in innovative countries, it is as much as 1:3.9.

Diagram 12. The structure of motivations to start a business in Poland, EU and groups of countries of the world by level of development in 2016 (% of young enterprises – TEA)



Source: Global Entrepreneurship Monitor data.

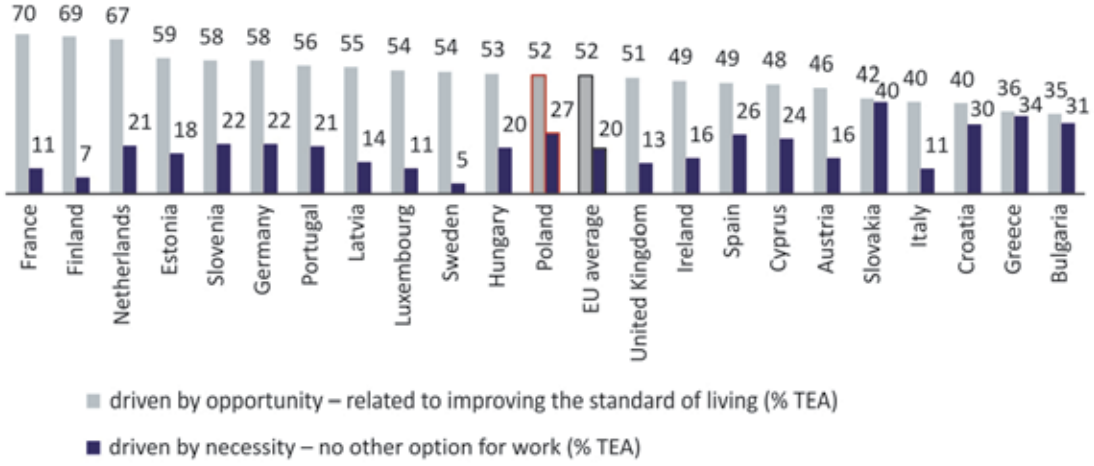
The will to take advantage of the opportunity to improve the living standard is currently the dominating motivation for people to start their own businesses. Companies of this type represent more than a half (52%) of young entities. Companies established out of necessity caused by the absence of a possibility to find hired work represent less than 27% of young enterprises. The structure of motivations is slightly better in the EU; with the same share of opportunity driven companies as in Poland, there are fewer companies established because of the absence of an alternative (only 20%). The fact that Poles establish companies primarily because of the will to obtain independence is a certain peculiarity. In the study carried out in 2016, there were twice as many young entrepreneurs

[25] The sum of the share of TEA established out of necessity and the share of those established due to an opportunity does not always sum up to give 100% because some respondents – when asked about their motivation – indicate mixed motivations or other reasons.

pointing to this motivation than those who indicated the will to increase their personal incomes. In the EU, only Estonians have recorded more persons pursuing independence (the share of TEA established for this reason amounts to 64%).

As Diagram 13 shows, Poland, with the result of 52% of companies being opportunity driven, is in the middle of the ranking of all EU countries covered by the GEM study in 2016. The largest numbers of companies of this type operate in France, Finland, and the Netherlands (they represent nearly 70% of young enterprises, while the lowest number in Greece and Bulgaria (ca. 35%). Unfortunately, the same cannot be said about the necessity driven entrepreneurship,where the higher share of this type of enterprises is recorded only by Slovaks (40% – the highest and at the same time the poorest result in the EU), Greeks, Bulgarians, and Croats (ca. 30–34%). The lowest values of the indicators of necessity driven entrepreneurship is the attribute of highly developed countries, i.e. Sweden and Finland (5–7%).

Diagram 13. Levels of opportunity- and necessity-driven entrepreneurship in the EU countries in 2016



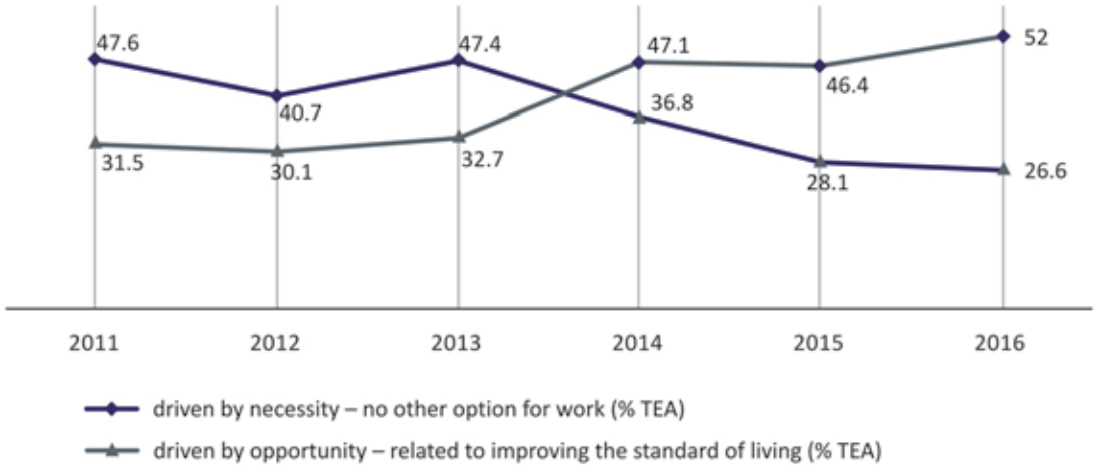
Source: Global Entrepreneurship Monitor data.

Undoubtedly, the relatively high level of necessity driven entrepreneurship is a challenge for the Polish economy and its institutions. However, as the analysis of the structure of motivations in 2011–2016 indicates, one could say that it is now more favourable than it was six years ago. As we have written in previous editions of this Report, until 2013 it was necessity that was the dominating factor that made Poles engage in entrepreneurship. This unfavourable trend turned around in 2014 and has been systematically increasing since that time. Particularly strong changes are visible in the case of the share of persons getting involved in business for positive reasons, e.g., in 2013, they represented 33% of TEA, in 2015 – 46%, and in the recent 2016 – 52%. It is clear that the share of positively motivated companies increase by near 6 p.p. y/y in only the last year.

The changes in the area of necessity driven entrepreneurship are also positive, though less spectacular in the past two years. Still in 2013, 47% of young companies in Poland were established out of necessity; in 2015, there were 28% such companies, while in 2016, the percentage was only 26%. At this point, it needs to be emphasised that the above data are strongly dependent on the labour

market. Until the breakthrough in 2013, the number of the unemployed registered in Poland had been growing. In the middle of the year, when the study is carried out, it had amounted to 2.1 million persons, and, at the same time, it was higher by 145 thousand persons in comparison with the same period of the preceding year. In 2014, the number of the unemployed began to decrease.In June, it amounted to less than 1.4 million persons (and it decreased by 230 thousand persons in comparison to June 2015). Therefore, it is visible that the improving situation in the labour market is accompanies by an improvement in the structure of motivations – more persons see an opportunity for development in their own business, and less are forced into this, because they can also find employment.

Diagram 14. Levels of opportunity- and necessity-driven entrepreneurship in Poland in 2011–2016 (% TEA)



Source: Global Entrepreneurship Monitor data.

2.5. Business activity by sectors

The GEM model identifies four categories of sectors of business activity: extraction, production (processing), business-to-business (B2B) services, and business-to-customer services (B2C).

The diagram below presents the sectoral structure of young companies in three groups of countries at different levels of economic development, EU and Poland. As seen, irrespective of the economic level, services for customers are the sector enjoying the highest interest of young entrepreneurs. The largest number of companies of this type is found in the group of effectiveness driven countries – nearly 60%, slightly lower in factors of production based economies – 52%, while in innovative countries, it amounts to 47%.

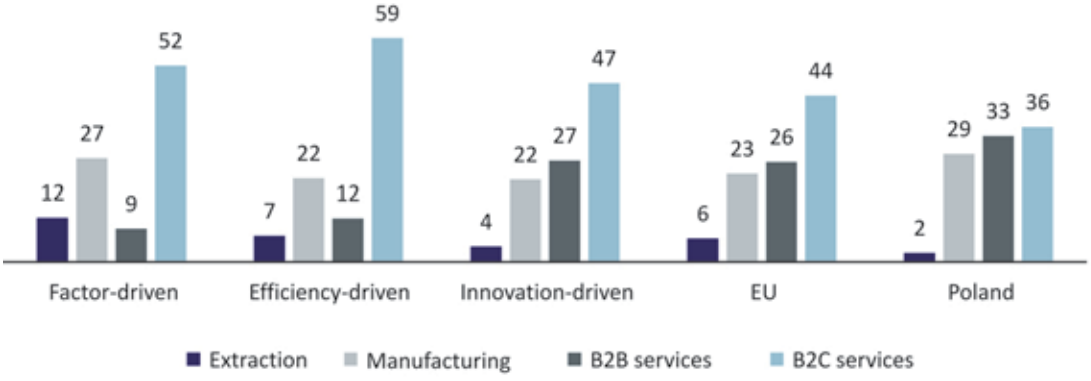
B2B services, as an activity often requiring larger financial inputs and more specialised knowledge than B2C services, are primarily the domain of innovative countries (27%), but also of Poland. In our country, 33% of companies operating for up to 3.5 years are involved in this type of activities. For the sake of comparison, in the EU, companies from the B2B sector represent 26% of young companies, while only less than 12% in the group of effectiveness oriented countries. This indicator, among others, is evidence of the fact that our economy, although now

at the stage of transition from an effective to an innovative one, is much closer to achieving this highest level of development.

Industrial production is the third important sector for young companies. In Poland, almost 29% of young companies carry out this type of activity, and it is the highest percentage against the backdrop of all analysed groups of countries and the EU, where there are 23% of such companies.

The extraction sector is the least popular sector among young enterprises. In Poland, only 2% of young companies are active in this domain. In the EU, there are three times as many, while in the less developed countries, there are 6 times as many as in Poland.

Diagram 15. The sectoral structure of young companies in Poland compared with the EU and the group of factor-driven, efficiency-driven, and innovation-driven economies in 2016 (% TEA)



Source: Global Entrepreneurship Monitor data.

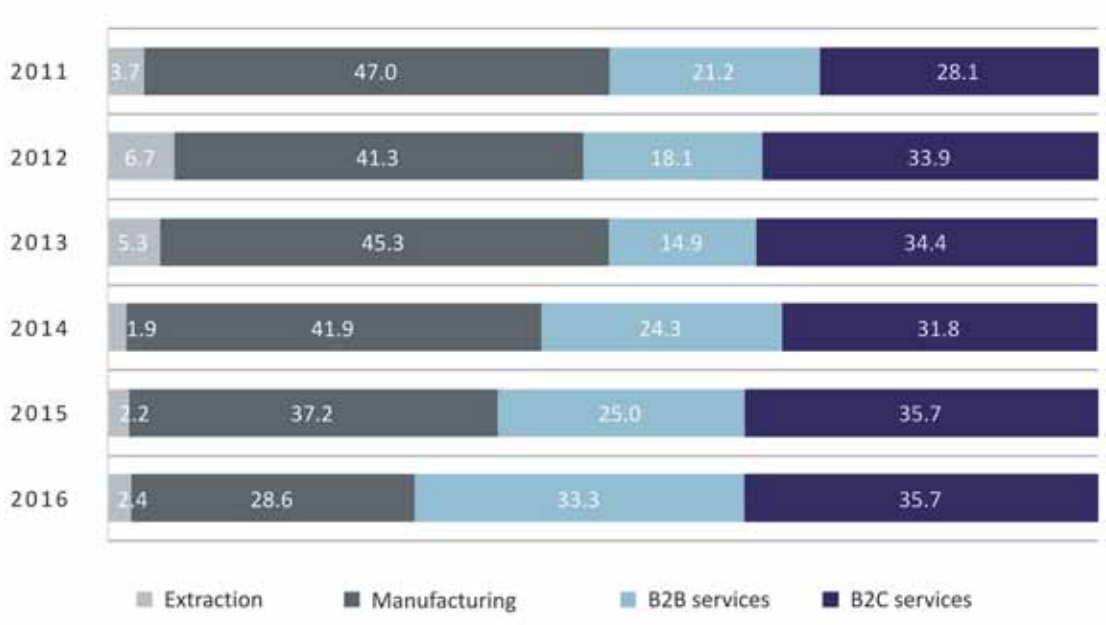
In 2016, in comparison with the previous edition of the study, the sectoral structure of young companies remained relatively stable in effectiveness and innovation driven countries, and the parameters did not changed significantly for the EU either. In the group of countries with factor driven economies, there was a strong decrease of the share of companies active in the mining sector (from 18% in 2015 to 12% in 2016) and a slightly lower increase of the share of companies in the production sector (from 23 to 27%) and B2B services sector (from 6 to 9%). The recent year brought two substantial changes in the sectoral structure of young companies in Poland as well. The share of operators active in the production sector decreased (from 37% in 2015 to less than 29% in 2016), while the share of companies providing B2B services increased (from 25% to 33%).

According to the recent data for 2016, already 69% of young companies in Poland provide services, while in 2011, when we were starting with GEM studies in our countries, it was 49%. It is thus clear that, over these six years, the interest of entrepreneurs in the sector of services has significantly increased (the share of companies offering services increased by 41%). At the same time, the share of young companies in the extraction and production sectors has decreased (also by 40% in each of them).

At this point, it is worth stopping at services for a while. In the last years of the GEM Poland report, we wrote that, in 2011–2015, the significance of the B2C sector

had increased much more than that of B2B. The latest data have brought the strong increase of the share of companies active in the B2B sector, which resulted in a situation where, in the longer period of 2011–2016, the share of companies providing services for business increased stronger than the share of companies in B2C services. Moreover, the first sign of the change in choices of persons starting and operating businesses for up to 3.5 years was recorded in 2014. At the time, the share of companies involved in B2B had increased by 60% y/y (from less than 15% TEA in 2013 to 24% in 2014). The subsequent substantial change in this area took place last year. The share of companies active in B2B increased by 32% y/y from 25% to 33% TEA. At the same time, the recent study has shown that the interest of young entrepreneurs in the sector of B2C services remained at the same level in 2016, following a strong increase in 2015 y/y. Such a strong increase of the share of companies active in B2B since 2014 may be connected with the reversal of the structure of motivations in our country and the beginning of the period of the domination of positive motivations, including the will of obtaining independence, which, as previously mentioned, is necessary for the development of innovation needed in the B2B sector.

Diagram 16. Sectoral structure of young enterprises in Poland in 2011–2016 (% of TEA)



Source: Global Entrepreneurship Monitor data.

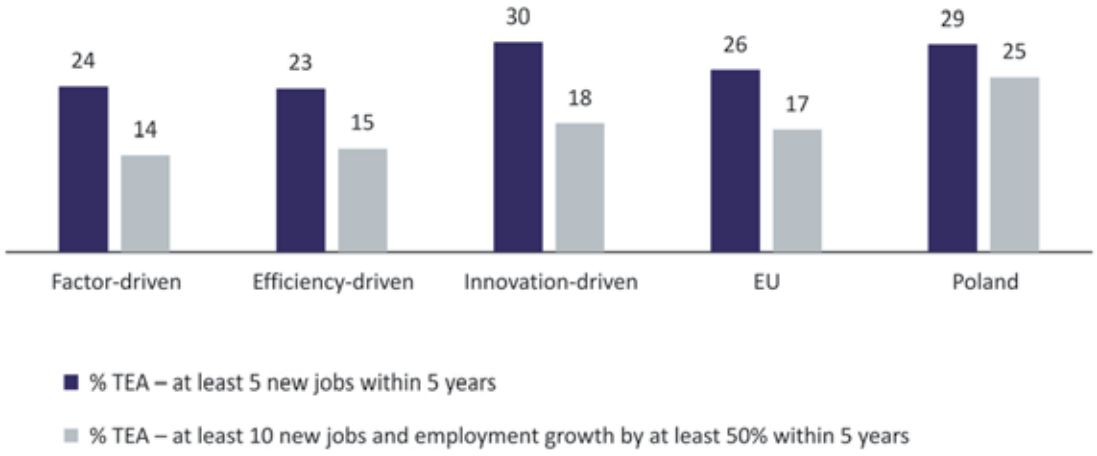
2.6. Growth aspirations

This part of the Report takes us to the area of indicators defining the growth potential of entrepreneurship in Poland. The potential comprises growth aspirations, innovativeness, and internationalisation. In the case of GEM, growth aspirations are plans declared by persons under research in the scope of job creation. They are expressed through two variables, expressed by the *percentage of entrepreneurs with medium aspirations* who declared the wish to create at least 5 new jobs over the next five years and the percentage of entrepreneurs with high aspirations who declared the wish to create at least 10 new jobs with the employment growth by at least 50% over the next 5 years, i.e. by 2021.

As seen in Diagram 17, from among three main groups of countries categorised according to the level of development, the greatest aspirations in the area of increasing the number of employees are recorded in the group of innovative countries, where 30% of young companies plan to create at least 5 new jobs in the next 5 years, while 18% – 10 jobs, with simultaneous increase of employment by half at the minimum. In the remaining two groups of countries ca. ¼ of entrepreneurs have medium employment growth aspirations, while ca. 15% have high aspirations.

Against this background, Polish entrepreneurs seem to have bold plans when it comes to the growth of their companies. 29% of them declare the will to create the minimum 5 jobs by 2021, and as many 25% – the minimum of 10 jobs and increasing employment by at least 50% over the same period. As seen, the rate of entrepreneurs with medium aspirations in Poland is at the level of the average for the most developed countries, while the rate of those with high aspirations is higher than averages for all global groups under analysis, including the EU.

Diagram 17. Growth aspirations of young companies in Poland compared with the EU and the group of factor-driven, efficiency-driven, and innovation-driven economies in 2016 (% TEA)

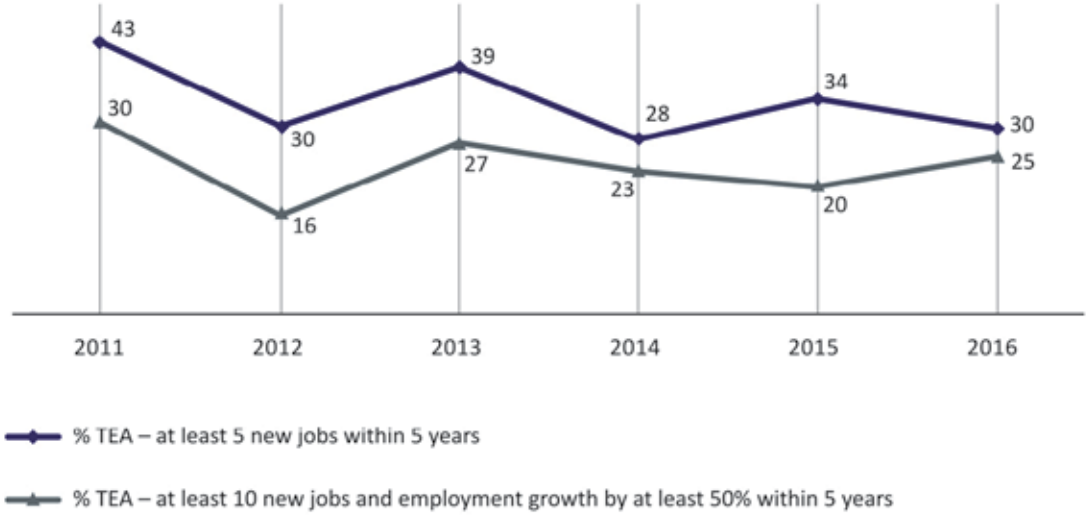


Source: Global Entrepreneurship Monitor data.

The past year brought only slight changes when it comes to the growth aspirations of entrepreneurs through the creation of jobs in individual groups of countries. The largest changes pertain to the group of innovative countries, where the share of entrepreneurs with medium aspirations increased by 5 p.p. in comparison to the preceding year.

On the other hand, in Poland, 2016 brought a decrease of the share of companies planning to create a minimum of 5 jobs within 5 years, i.e. by 2021. In 2015, there were 34% of entrepreneurs among young companies, now the figure is 30%. At the same time, the share of entrepreneurs declaring the creation of at least 10 jobs and employment growth of at least 50% by 2021 increased from 20 to 25% in the past year. In the long term, as the diagram below indicates, despite a substantial variability of both indicators, there was a certain flattening of the amplitude of changes in the past two years – when it comes to entrepreneurs with high and medium aspirations, and in the case of the latter – even over a longer period, in the past 4 years.

Diagram 18. Growth aspirations of young enterprises in Poland in 2011–2016 (% TEA)

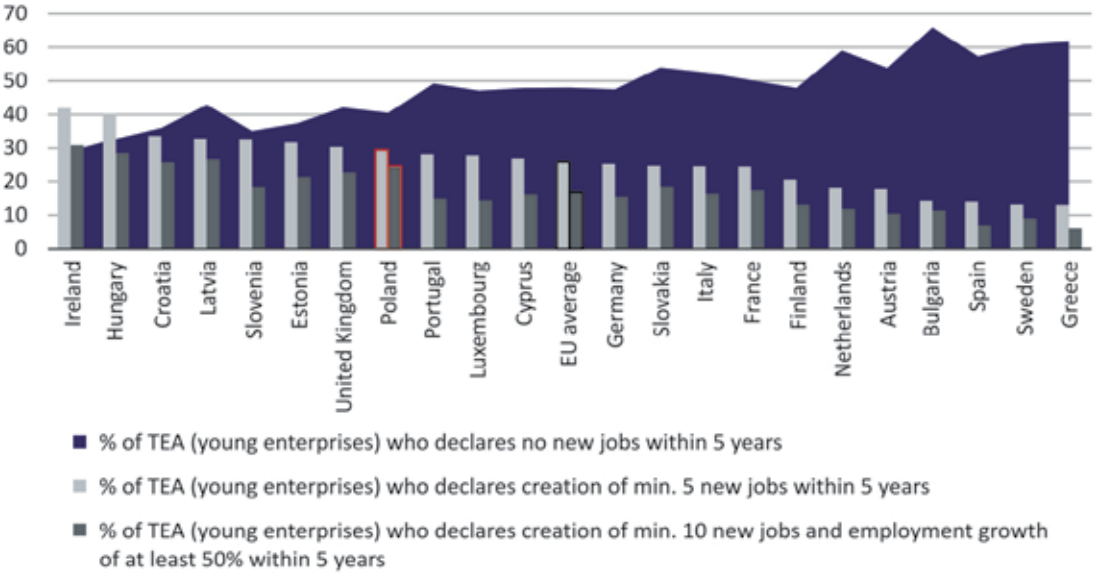


Source: Global Entrepreneurship Monitor data.

Although a comparison of extreme values for 2011–2016 lead to the conclusion that the aspirations of persons in the early stage of economic activity have substantially decreased (from 43% to 30% when it comes to the share of companies with medium growth aspirations, and from 30% to 25% in the case of companies with high aspirations), according to the latest available data, the results for Poland are still better than the EU average.

Moreover, as demonstrated by Diagram 19 and Table 1, both containing data on growth aspirations of young companies in individual EU countries, Polish operators belong to the top of the ranking when it comes to the share of entrepreneurs with high aspirations – 5th place, behind Ireland, Hungary, Latvia, and Slovakia. We have also recorded one of the lowest shares of young

Diagram 19. Growth aspirations of young enterprises in EU countries in 2016 (% TEA)



Source: Global Entrepreneurship Monitor data.

companies that do not plan to create any jobs at all by 2021. With the result at the level of the EU average (41%), we hold 6th place, behind Ireland (29%), Hungary (33%), Slovenia (35%), Croatia (36%), and Estonia (37%). At the same time, in 13 out of 22 researched countries, the share of this type of entrepreneurs oscillates between 48% and 66% (the largest numbers of persons wanting to remain solo-entrepreneurs are found in Bulgaria, Greece, and Sweden). When it comes to the share of companies with medium aspirations, the results in the EU range from 13% (Greece and Sweden) and 42% (Ireland). Poland is in 9th place among the countries with highest shares of ambitious companies.

Table 1. Growth aspirations of young enterprises in EU countries in 2016 (% TEA)

Country	Percentage of young enterprises: 0 jobs within 5 years	Percentage of young enterprises: the minimum of 5 jobs within 5 years	Percentage of young enterprises: the minimum of 10 jobs within 5 years and employment growth of at least 50% within 5 years
Austria	54	18	10
Bulgaria	66	14	11
Croatia	36	34	26
Cyprus	48	27	16
Estonia	37	32	21
Finland	48	21	13
France	50	25	18
Greece	62	13	6
Spain	57	14	7
The Netherlands	59	18	12
Ireland	29	42	31
Luxembourg	47	28	15
Latwia	43	33	27
Germany	48	25	16
Poland	**41**	**29**	**25**
Portugal	49	28	15
Slowakia	54	25	19
Slovenia	35	33	18
Sweden	61	13	9
Hungary	33	40	28
United Kingdom	42	30	23
Italy	53	25	17
EU average	48	26	17

Source: Global Entrepreneurship Monitor data.

Still, one needs to remember that growth aspiration described in this part of the chapter refers to declared values. They can be influenced by overestimations of one's own possibilities due to being overly optimistic about the future, which is a natural attribute of entrepreneurs. Moreover, the respondents are persons at the stage of starting a business and those operating for a rather short time, i.e. up to 3.5 years. However, the same approach has been applied to all countries participating in GEM; therefore, one can assume that possible discrepancies with other studies are similar in each country. Thus, what we still need to emphasise is the fact that growth aspirations of young companies in Poland are rather high, but there are still countries in the EU, where even better results are recorded. Ireland is one example, which stands out with the lowest in the

EU share of companies wishing to remain solo entrepreneurs and the highest shares of companies wanting to create new jobs.

2.7. Internationalisation

GEM assesses the level of internationalisation of young enterprises (TEA) with the measure of the share of revenues from foreign customers in their annual revenues[26]. Four groups of entrepreneurs can be identified depending on the size of this share:

- *Operating solely in the domestic market:* enterprises that declare no revenues from international clients,
- *Moderately internationalised:* enterprises with revenues from international clients at the level of 1–25% of annual revenues,
- *Highly internationalised:* enterprises with revenues from international clients at the level of 25–75% of annual revenues; and
- *Very highly internationalised:* enterprises with revenues from international clients at the level of 75–100% of annual revenues.

For the majority of young entrepreneurs, taking what they have to offer beyond the domestic market is a difficult decision, which requires opening up to expectations of customers with preferences different to those of domestic clients, often facing stronger competition, and other operating conditions, typically different from domestic ones. Most of the time, it requires gaining additional knowledge and education (e.g., command of a foreign language), getting to know the culture of a foreign market, but also having a product/service that has a chance of making it beyond the domestic market. Therefore, as GEM data demonstrate, the level of internationalisation of enterprises increases with transition to higher levels of economic development, where access to education, modern tools facilitating acquisition of information, as well as the system of institutional support are all much more effective.

In least developed countries, three quarters of young companies focus exclusively on their domestic markets, while one fifth obtain moderate revenues from abroad. In the other hand, in most developed countries, these proportions seemed to be exactly reversed, i.e. there are substantially more companies that have clients abroad than those operating solely in domestic markets. Innovative countries are also able to boast the highest share of very highly internationalised companies, which comprise 11% of young companies. For comparison, in the group of countries with efficiency driven economies, there are half as many such companies, while in the group of countries with factor driven economies,

[26] In 2015 the text of the question on enterprises' export activity in the questionnaire of the quantitative study was changed from "What percentage of your customers within this project live abroad?" to "What share of your annual revenues from sales comes from foreign customers (customers from abroad)?" There are two reasons for the change. First, export as percentage of sales may provide more useful data than export as percentage of customers living abroad. Secondly, entrepreneurs may find the question about revenues easier to answer than the question about customers. In addition, it solves the problem of the cases in which entrepreneur has only one foreign customer, which generates a large share of revenues, but entrepreneur, when answering the question in the survey, states that he/she has few customers who live abroad, while in reality export accounts for majority of his/her sales. Both questions underwent pre-tests, which did not show any significant differences when it comes to the structure of answers.

only 1% of persons running a business for up to 3.5 years achieve such high international revenues.

Table 2. Intensity of export activities of young entrepreneurs in Poland compared with the EU and the group of factor-driven, efficiency-driven and innovation-driven economies in 2016 (% TEA)

	Operating solely in the domestic market (0% of revenues from international clients)	**Moderately internationalised** (1–25% of revenues from international clients)	**Highly internationalised** (25–75% of revenues from international clients)	**Very highly internationalised** (75–100% of revenues from international clients)
Factor-driven economies	75.4	20.1	3.3	1.2
Efficiency-driven economies	62.0	22.6	10.3	5.1
Innovation-driven economies	37.7	37.0	14.3	11.0
EU	39.7	37.9	13.3	9.1
Poland	**43.7**	**42.5**	**6.3**	**7.5**

Source: Global Entrepreneurship Monitor data.

The comparison of data for 2016 with the previous edition of the study points to the stability of results pertaining to the structure of young companies according to the level of their internationalisation in individual groups of world countries and in the EU. Only in the case of Poland are changes visible, and they undoubtedly can be termed favourable. The share of young companies focusing exclusively on the domestic market has dropped substantially (by 1/3), while the share of entrepreneurs with a moderate level of internationalisation increased (also by 1/3), as did the share of those highly internationalised – almost doubled. Nevertheless, a substantial part of young companies (43%) continues to have revenues at the lowest level (between 1 and 25%) of annual revenues. Only 6% of entrepreneurs declare international revenues to be at the level between 25 and 75% of total revenues, and 8% at the level of a minimum of 75%. Thus, one could say that the majority of persons who started their adventure with business in 2014 presently declare their revenue from international clients at the level of a minimum of 1% of annual revenues. Definitely this increased interest of young entrepreneurs in foreign markets was influenced by the improvement of the economic situation in the Eurozone, or rather its stabilisation taking place in 2014–2016, as well as low prices of raw material, including oil, in 2015–2016. In spite of this, year on year change, although very positive, does not evidence a long term trend. 2016, its second half in particular, was an exceptionally difficult time when it comes to investments of enterprises. Therefore, we will have to wait for newer data to see the conformation of whether this favourable situation in terms of the presence of Polish companies in international markets shall last.

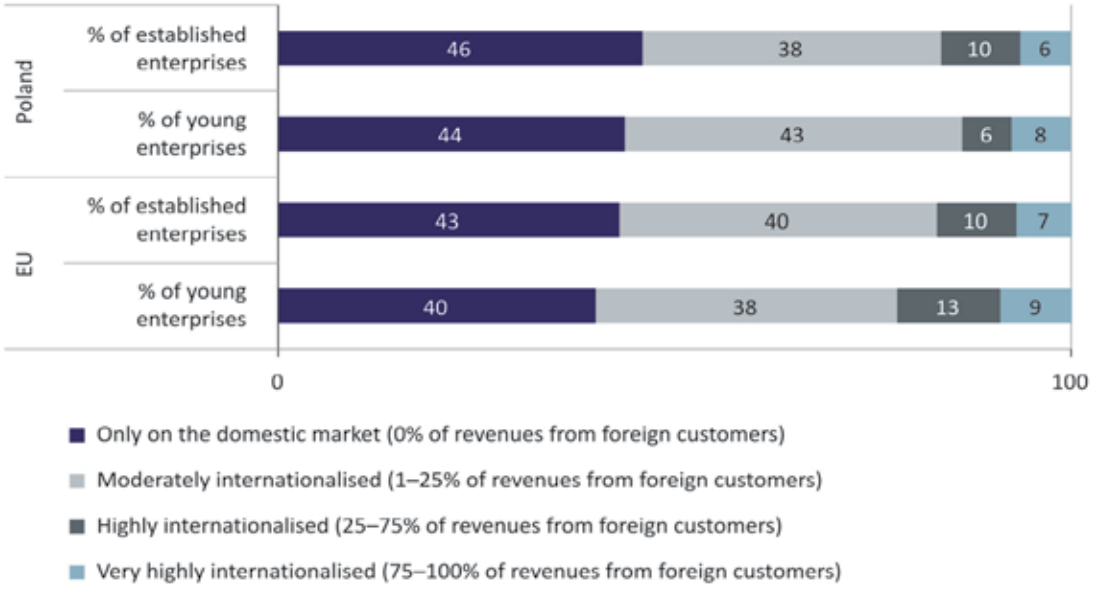
Table 3. Intensity of export activities of young enterprises in Poland in 2015–2016 (% of TEA)

	Operating solely in the domestic market (0% of revenues from international clients)	Moderately internationalised (1–25% of revenues from international clients)	Highly internationalised (25–75% of revenues from international clients)	Very highly internationalised (75–100% of revenues from international clients)
2015	59.8	29.7	7.6	2.9
2016	43.7	42.5	6.3	7.5

Source: Global Entrepreneurship Monitor data.

A slightly side-line thread, although interesting from the perspective of the inclination of entrepreneurs to take their activities beyond the domestic market, is the comparison of the level of internationalisation of companies in Poland according to their experienced measured by the time they have operated in the market, i.e. the threshold of 3.5 years adopted in GEM, as well as referring these data to average results for the EU. It turns out that Polish young enterprises are more and more willing to cooperate with foreign partners. Although it cannot be conclusively stated that they are more internationalised than established operators, their advantage is visible in the case of the group of enterprises that start their activities outside of the national borders (there are 5 p.p. more enterprises with international revenues between 1 and 25% of total revenues among young companies than among established once) and in the case of the very highly internationalised group (there are 2 p.p. more young companies declaring the minimum of 75% share of revenues from abroad in total revenues than established ones). As a result, there are slightly fewer young companies than established ones (by 2 p.p.), if we take into account companies operating exclusively in the domestic market. Established companies are doing slightly better than young ones (by 4 p.p.) only in the category

Diagram 20. Intensity of export activities of young and established enterprises in Poland and the UE in 2016 (% of young enterprises – TEA and % of established enterprises)



Source: Global Entrepreneurship Monitor data.

of highly internationalised companies by achieving international revenues at the level of 25–75% of total revenues.

Young companies operating in Poland, as well as established ones, are less internationalised than EU companies (the difference for young companies operating exclusively in the domestic market amounts to 4 p.p. and for established ones to 3 p.p.). Still, when it comes to young companies declaring any revenues from abroad, according to latest GEM data in Poland, in comparison to the EU average, there are more such companies only among moderately internationalised operators by 5 p.p. (with international revenues between 1 and 25% of all revenues). In the case of a high level of internationalisation, Polish young companies are doing twice as poorly as young EU companies. In the group of very highly internationalised companies, the results for young companies from Poland and the EU are similar. In the case of established companies in Poland, the intensity of export activities at high and very high levels is equal to the EU average.

In the last year's edition of the Report, we quoted the words of Professor M. Gorynia, who, when analysing the data for 1990–2010, stated that Poland still had a significant potential for internationalisation[27]. Are the data for 2016 presented above the fulfilment of this forecast? They are definitely a confirmation of a positive change in the area of young companies' opening to international markets; however, in order to be sure whether this change is here to stay, we might have to wait for subsequent data.

2.8. Innovativeness of enterprises

After viewing growth aspirations through employment and internationalisation, the time has come to look at the ambitions of entrepreneurs through the lens of innovation. GEM takes on this topic through three fundamental questions related to the use of modern technologies in business, the level of novelty of offered products from the perspective of consumers, and the level of competition in the market, measured by the level of propagation of proposed solutions in the market. This approach stems from the assumption that innovation is more than developing new products or services. Innovation needs implementation, which calls for identification of market niches, as well as the drafting of a plan to launch this product/service in the market (including distribution channels or promotion). This in turn requires awareness of operating in the conditions of competition, as well as the knowledge and skills of facing it.

In the analysis below, similarly to two previous editions of the Report, we present the results for innovativeness in two perspectives: in a breakdown by young companies (TEA) and established companies (operating in the market for more than 3.5 years) and by the location of their operations, i.e. Poland and the EU.

The level of innovativeness of technologies/methods of work in enterprises

Results of studies carried out under this project in 2014 and 2015 indicate that "these are rather younger enterprises that offer more innovative products and

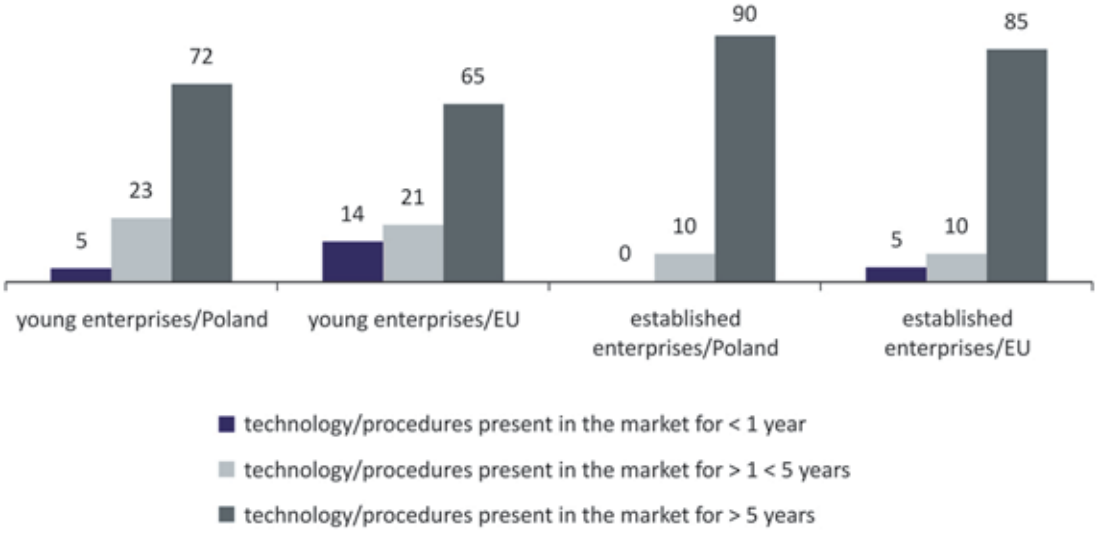
[27] M. Gorynia, *Eksport szansą dla Polski*, Rzeczpospolita, 13 July 2012, http://mariangorynia.pl/prasa/RZ_Eksport_Gorynia_13_07_12.pdf, accessed: 01.04.2016.

latest technologies rather than more established companies. This regularity is true for Poland, but also in innovation driven countries, to which our country aspires"[28].

Already the first diagram in this part of the Chapter indicates that this rule observed in previous years continues to hold true. In terms of the novelty of applied technologies and methods of work, young entrepreneurs are in the lead both in Poland and the EU. It may partly be due to the fact that, as relatively young people, because the majority of people involved in their own businesses for not longer than 3.5 years are aged no more than 34 (55%, of whom 14% are persons aged 18–24), they are looking for the latest solutions. Nevertheless, the differences are substantial. In Poland, 5% of young entities declare using technologies present in the market for no longer than a year, while such declarations have not been made at all in the group of established enterprises. Technologies that have been available in the market between 1 and 5 years are used in Poland by 23% of young companies and only 10% of established enterprises. Slightly lower disparities divide the two groups, when it comes to the share of companies employing the oldest technologies, which are older than 5 years (72% of young and 90% of established companies).

Polish companies, both the young and established ones, are less technologically advanced than the EU enterprises, as though most of entrepreneurs in the EU, similarly to Poland, operate on the basis of technologies or methods of work, which are older than 5 years, these percentages are lower than in Poland. Moreover, almost 3 times as many young EU enterprises as Polish ones employ the latest technologies. We fare slightly better in comparison to the EU average only when it comes to using moderately old technologies (1–5 years), and, in Poland, 23% companies confirm the fact, while in the EU – the average of 21%. In the case of established enterprises operating on the basis of technologies up to 5 years old, their share is identical in Poland and in the EU – 10%.

Diagram 21. How long technologies or methods of work used in companies have been present in the market (%)



Source: Global Entrepreneurship Monitor data.

[28] *GEM Poland*, PARP 2016.

In comparison with the data from 2015, in 2015, in Poland, the share of young companies using the latest technologies and those operating on the basis of the oldest technologies decreased (both categories have recorded a decrease by 3 p.p.) On the other hand, the share of companies using methods that have been present in the market for 1 to 5 years increased (by 7 p.p.). Similar decreases have been recorded among established enterprises, where the share of companies using both the latest and oldest technologies decreased (by 2 p.p. in both cases).

The degree of novelty of a product

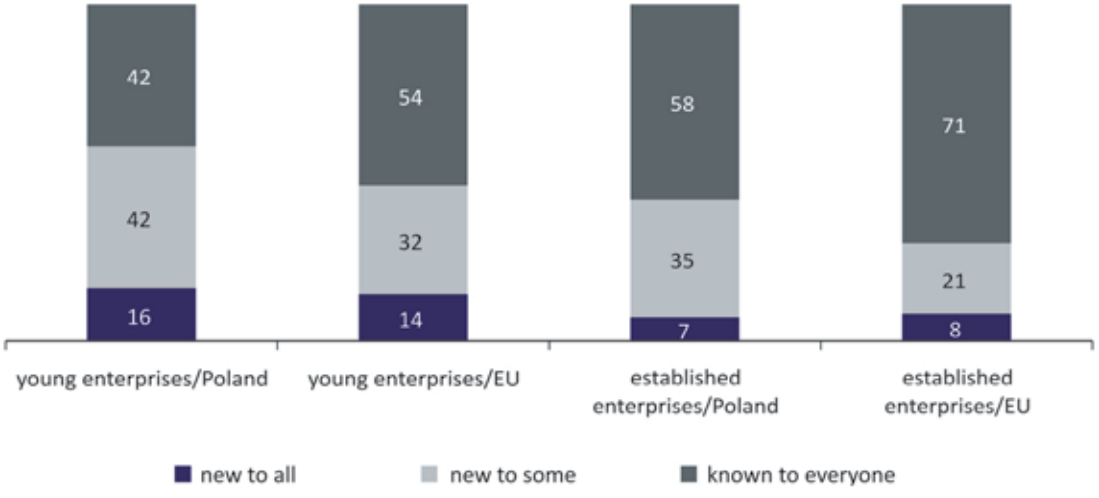
Similarly to last year's edition of the Report, also now young companies from Poland declare more often than young companies from the EU, or established companies from Poland and the EU, that their product/service is new to customers. In the category "a product new to all," there were 16% of young companies from Poland, which is more than all other analysed groups (in the EU 14% and twice as good as established enterprises from Poland and the EU).

As many as 42% as young companies from Poland deemed their products to be "new to some of customers", while 32% of entities in the EU were of a similar opinion. There are also more established Polish companies that declared this degree of novelty than established enterprises in the EU (35% and 21%, respectively).

The largest number of non-innovative companies offering products known to everyone is found among established companies in the EU (71%). In Poland, 58% of established enterprises admit that they have such offers. The lowest share of companies offering products known to everyone characterises young Polish companies (42%). On average, in the EU, there are more than 50% of young enterprises of this type (54%).

In comparison to data from last year, the capacity of established companies in Poland to offer new products/services has deteriorated slightly,since the percentage of enterprises declaring products known to all has increased (from 50 to 58%), while the share of companies offering products new to all clients decreased by half. The remaining indicators have not changed significantly.

Diagram 22. The degree of novelty of products for customers in 2016 (%)



Source: Global Entrepreneurship Monitor data.

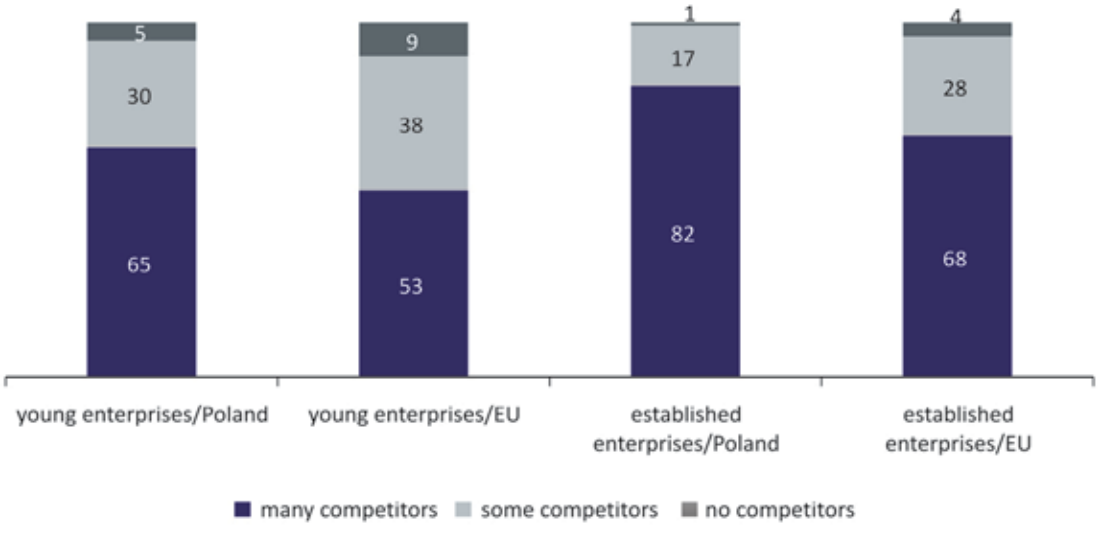
The above data indicate that, although there are fewer young companies in Poland than in the EU that operate on the basis of new technologies or methods of work that have been present in the market for less than 5 years (the ratio of 28% to 35%), more of them generate solutions that are new to clients (all or part of them). Polish companies are assisted by the high dynamics of the Polish market, which has been identified for years by experts assessing conditions for starting and running of a business under this research project, including the young age of entrepreneurs belonging to TEA (in the EU, with the share of owners of young companies aged 18–24 similar to that in Poland, there are 30% of companies, owners of which are in the age range of 25–34, while in Poland there are 41%). Moreover, the sectoral structure of young companies, including their growing interest in the market of services for the business, which is a demanding market in terms of the level of novelty of solutions offered and their quality, translate into the good results of Polish enterprises.

Competition in the market

Diagram 23 illustrates the competition of young and established enterprises. The group that is most affected by competition are established companies from Poland (82%) and the EU (68%). There are fewer entrepreneurs who believe that they are surrounded by many companies offering the same products, but taking into account the data on novelty of products presented above, there is still quite a lot. The majority, (65%) of young entrepreneurs from Poland believe that there are many competing companies; while in the EU, 53% of owners of young enterprises believe the same. There are fewer Polish young companies than the EU average that operate in the conditions of moderate competition (30% in Poland and 38% in the EU) and less established companies (PL – 17%, EU 28%). Only 5% of young companies and 1% of established ones in Poland declare total absence of competition (9% and 4%, respectively, in the EU).

The above data pertaining to young companies from Poland are similar to those from the previous edition of the Report, and only in the case of established

Diagram 23. How many competitors offering the same products you do are there? (%)



Source: Global Entrepreneurship Monitor data.

companies has the situation deteriorated. The percentage of companies pointing to very strong competition has increased (by 6 p.p.), the share of companies operating under moderate competitive pressure has decreased (by 4 p.p.), as has that of companies claiming having no competition (by 2 p.p.).

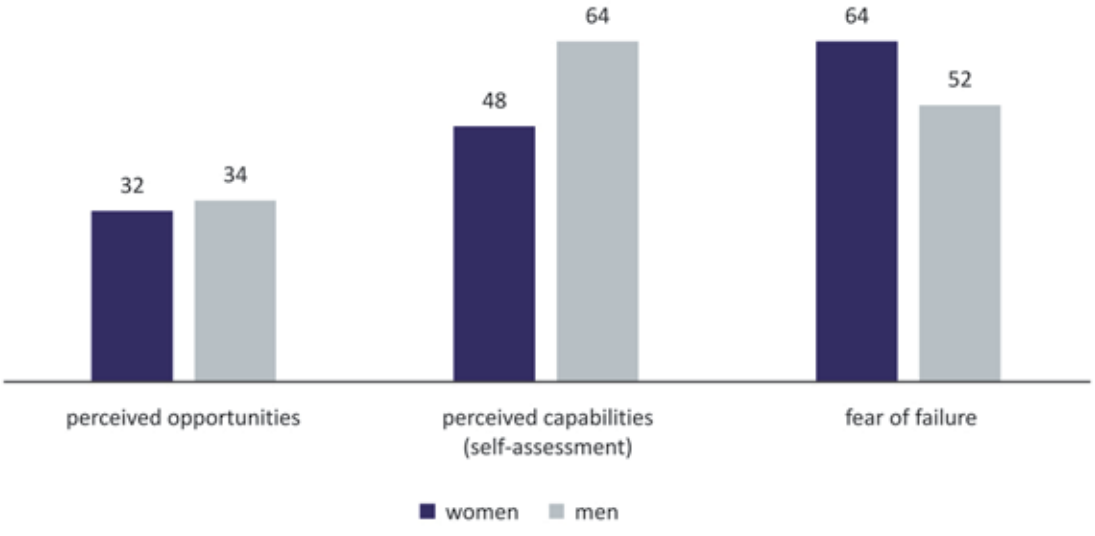
The above data confirm that young enterprises are more innovative than established ones, both in Poland and in the EU. However, innovativeness of young companies is not clear-cut, because these entrepreneurs try to use relatively new technologies and methods of work in their activities, and most of them believe they offer new products/services to their customers. Nevertheless, they still perceive their environment as highly competitive, with many entities offering similar products. The following questions remain: What does novelty of a product mean? How do entrepreneurs perceive it? Is it about a product/service itself or the way it is supplied/offered, or maybe it is about divergent understanding of a customer (in a narrower dimension) and competition (in a broader one), or maybe about insufficient knowledge of the market? Unfortunately, these questions go beyond the scope of the GEM survey.

2.9. Entrepreneurship of women and men

The data from the last three editions of the GEM survey show that there is no significant difference between men and women when it comes to the perception of market opportunities. In 2016, two in five women and the same number of men saw positive market signals. In the case ofwomen, it is worth emphasising a 7 p.p. increase in indications in comparison to the survey from 2015, while in the case of men, the increase amounted to 6 p.p.

However, the values of subsequent indicators show large differences between the two groups. More than half of women assess their capacity to start a business positively; while, as many as 67% of men are of a similar opinion. Last year brought a significant increase of this indicator in comparison to 2015, both

Diagram 24. Entrepreneurial attitudes among women and men in Poland in 2016 (%)



Source: Global Entrepreneurship Monitor data.

in the case of women and men (respective increase of responses by 6 p.p. and 3 p.p.). Women, much more often than men, are afraid of failure. This approach is declared by more than 6 in 10 women and more than half of men[29]. However, the data for the past year point to decreased fear of failure among women and an increase among men, thus decreasing the difference between genders existing so far (7 p.p.).

Table 4. Entrepreneurial attitudes of women and men in Poland in 2011–2016 (%)

	2011	2012	2013	2014	2015	2016
Women						
Perceived business opportunities	31	23	29	33	32	39
Perceived capabilities	40	43	40	39	48	54
Fear of failure*	47	64	60	62	64	62
Men						
Perceived business opportunities	35	18	23	30	34	40
Perceived capabilities	64	65	64	70	64	67
Fear of failure*	60	53	54	55	52	55

Source: Global Entrepreneurship Monitor data.

* see footnote 29.

If we look at the data in the breakdown by gender in cross-sections by different groups of economies, it turns out that, in principle, everywhere women tend to perceive opportunities in the market to a lesser degree, they do not recognise their capabilities as much as men do, and they are more afraid of failure. The differences are significant, when it comes to perceived capabilities and the fear of failure, while they are quite small regarding the perception of opportunities, which should belong to the group of strongest drivers in thinking about owning a business.

Table 5. Entrepreneurial attitudes among women and men in Poland and selected groups of countries in 2016 (%)

Country	Perceived opportunities – men	Perceived opportunities – women	Perceived capabilities (self-assessment of men)	Perceived capabilities (self-assessment of women)	Fear of failure – men*	Fear of failure – women*
Poland	40	39	67	54	55	62
European Union	39	34	51	36	42	51
Factor-driven economies	46	43	61	50	31	35
Efficiency-driven economies	45	40	61	49	35	42
Innovation-driven economies	44	39	51	36	40	47

Source: Global Entrepreneurship Monitor data.

* see footnote 29.

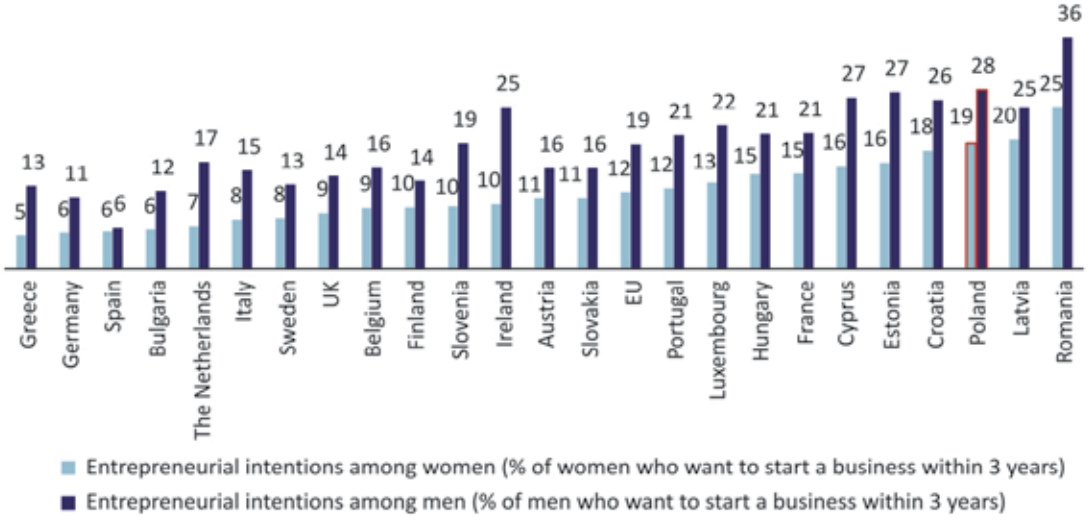
[29] The value of the indicator refers to the entire population of adult: women and men respectively. Chapter 2.2 describes the indicator, where the fear of failure refers to adults, who see opportunities to start a business. The share of adults afraid of failure among all adults amounted to 47.6% in 2016.

Women and men differ in terms of the will to start one's own business. On average in the EU, for 10 men planning to start their own business within the next 3 years, there shall be 6 women with similar plans. This indicator has the lowest value in Greece, where there is only 4 women declaring wanting to be their own boss per 10 men, while it is highest in Spain, amounting 9 in 10.

Against the backdrop of the EU, Poland is doing well. For each 10 men planning to start their own company in the next 3 years, we have 7 women with similar intentions. At the same time, the percentage of women wishing to start doing their own business amounts to 19%, which puts us at 3rd place among the EU countries, behind Romania and Latvia. In turn, the percentage of men ready to start their own business (28%) is the second best result in the EU (also behind Romania).

The appetites of Polish women for becoming entrepreneurs are increasing. Over the period 2014–2016, the share of women declaring plans of starting their own business increased by 46% in Poland, and this was the third largest increase in the EU – only Estonia and Ireland recorded higher increases (by 116% and 61% respectively). In the EU, this indicator increased, on average, by less than 8%, in some countries women's entrepreneurial intentions have decreased over the past 3 years (Greece – 46% decrease, the Netherlands – 25%).

Diagram 25. Entrepreneurial intentions of women and men in Poland and EU countries in 2016



Source: Global Entrepreneurship Monitor data.

Generally in all types of economies, women own companies less often than men. In Poland, in the past year, the difference in the area of entrepreneurship of women and men slightly decreased in favour of women. In the case of established enterprises, the difference is slightly larger to the detriment of women, but at the same time, the level of entrepreneurial activity continues to systematically increase both among men and women.

Table 6. Level of entrepreneurship among women and men in 2016 (averages in %)

	TEA men	TEA women
Factor-driven economies	19	14
Efficiency-driven economies	16	12
Innovation-driven economies	11	7
EU countries	11	6
Poland	13	8

Source: Global Entrepreneurship Monitor data.

Table 7. Level of entrepreneurship among women and men in 2016 (averages in %)

	2011	2012	2013	2014	2015	2016
TEA men	13.1	12.6	12.3	12.5	12.5	13.3
TEA women	5.1	6.2	6.2	5.9	6	8.1
Established enterprises – men	7.1	8.5	9.2	10	8.2	9.3
Established enterprises – women	2.9	3.2	3.8	4.6	3.7	4.9

Source: Global Entrepreneurship Monitor data.

The gender gap

Therefore, the above data indicate that the gender gap (measured as the difference in the share of men- and women-owned companies) shall be higher than in the remaining groups of countries. The smallest gender gap is recorded in factor-driven economies, where both men and women have limited opportunities of hired work. It is interesting that, outside of factor-driven economies, the gender gap decreases (very clearly in Poland) in the case of established enterprises, which would indicate that women close their businesses less often than men.

Table 8. The gender gap in the case of young enterprises (% TEA)

	TEA – gender gap
Factor-driven economies	4.3
Efficiency-driven economies	4.5
Innovation-driven economies	4.6
Europe	4.7
Poland	5.2

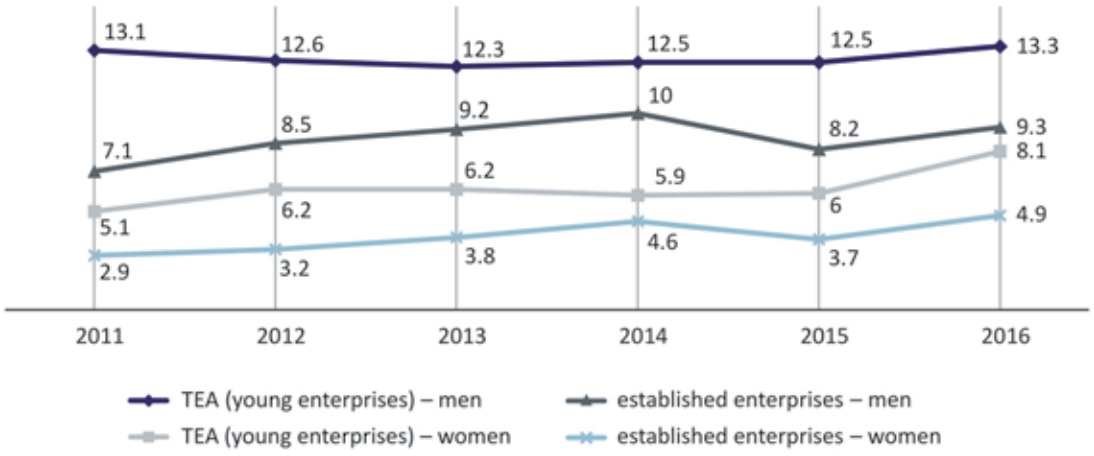
Source: Global Entrepreneurship Monitor data.

Table 9. The gender gap for TEA and established enterprises in Poland in 2011–2016 (%)

	2011	2012	2013	2014	2015	2016
gender gap – TEA	8.8	6.4	6.1	6.6	6.5	5.2
gender gap – established enterprises	4.2	5.2	5.4	5.4	4.5	4.4

Source: Global Entrepreneurship Monitor data.

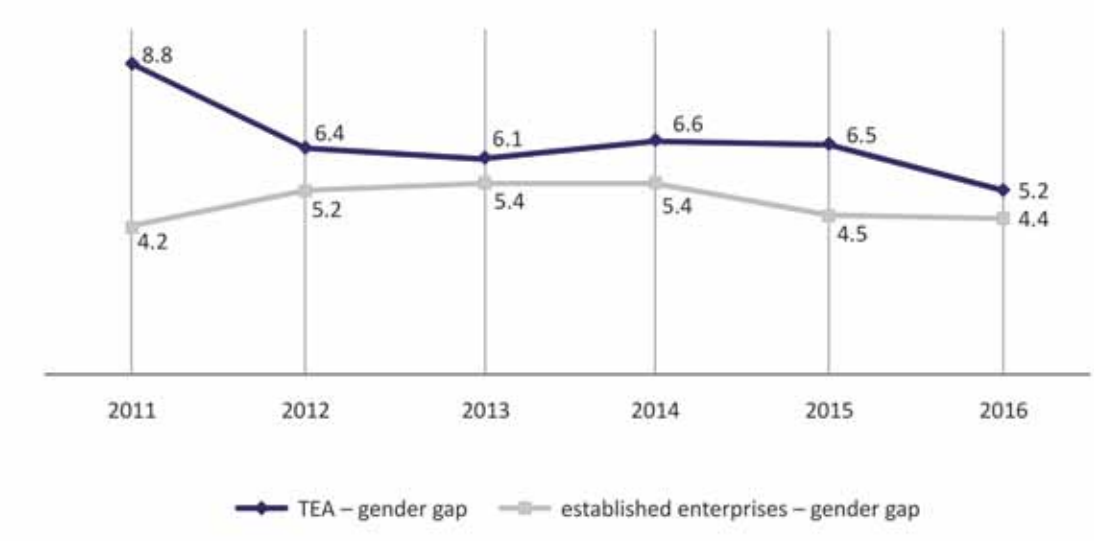
Diagram 26. Level of entrepreneurship among women and men in Poland in 2011–2016 (% of adult women/men)



Source: Global Entrepreneurship Monitor data.

The high value of the gender gap persisting for many years in Poland indicates the complexity of factors that contribute to this situation. One of them is the problem of an unsatisfactory care infrastructure in Poland pointed to in the previous edition of the Report, which continues to be very real and particularly painful in smaller city agglomerations and in rural areas, which – as we know from studies – is an important barrier for women wanting to start professional careers. Another one is the support under the 500+ Programme, which may translate into increased interest of women in having children and – which is connected – hired work, because of the conditions of social security.

Diagram 27. The gender gap for TEA and established enterprises in Poland in 2011–2016 (% of adults)



Source: Global Entrepreneurship Monitor data.

Motivations of women and men

According to the GEM data, the differences in motivation driving women and men taking decisions on setting up businesses depend on the degree of economic

advancement of the country in which they reside. However, irrespective of the level of economic development, men start companies more often than women, because they want to make use of opportunities provided by running a business, while women do so, because they have no better chance of employment. As a result, irrespective of the type of motivation, the largest difference between the share of young enterprises established by women and men is recorded in poorest countries, and this is to the disadvantage of women. In efficiency-driven economies, the differences between the share of women and men deciding to start businesses because of the opportunity, as well as those driven by necessity, are lower by half in comparison with results for innovative countries.

In Poland, almost 67% of women running a company for a period shorter than 3.5 years established it because of seeing an opportunity provided by running own business, while 32% established it as a result of having no alternative in the form of hired work. Similarly to other countries, more women decide to have their own business out of necessity, in comparison to men (32% of women against 23% of men), than with a hope for a positive change (67% against 74%). In this respect, we are not far from the average for the group of efficiency-driven economies and EU countries. We are a certain distance away though from the results of innovation-driven economies. This pertains, in particular, to the situation of women: In Poland, 67% of companies are established on opportunity, in the most developed countries this number is 79.5%. Even worse is the situation of women motivated by necessity. In Poland, 32% of companies are established for this reason, while this number is 19.5% in innovative countries.

Table 10. Motivations of women and men running young enterprises (% TEA men/women)

	Men – opportunity	**Women – opportunity**	**Men – necessity**	**Women – necessity**
Factor-driven economies	66.8	63.1	29.6	32.3
Efficiency-driven economies	72.2	67.8	24.2	29.3
Innovation-driven economies	79.5	77.7	16.9	19.5
EU countries	78.8	73.8	18.2	23.1
Poland	**73.8**	**66.7**	**23.4**	**31.8**
Italy	82.4	91.3	13.9	5.9
Netherlands	91.5	55.9	7.8	41.7

Source: Global Entrepreneurship Monitor data.

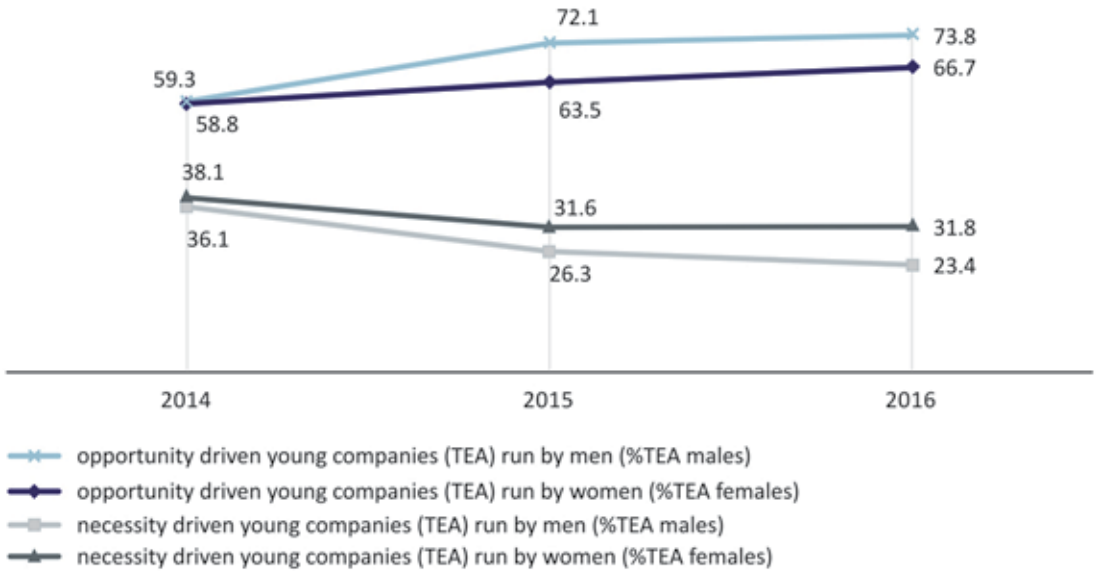
There are quite significant differences between individual EU countries in the motivations of women and men starting companies. The comparison of differences in the area of negative and positive motivations between young enterprises established by men and women in European countries leads to interesting observations. The structure of motivations most favourable to women prevails in Italy[30] (the difference in starting companies on opportunity amounts to nearly 9 p.p. in favour of women, and on necessity 8 p.p. in favour of women), while it is most unfavourable in the Netherlands[31] (36 p.p. to the

[30] Respectively: 8 p.p., – 9, p.p.
[31] Respectively: – 34 p.p.; 36 p.p.

disadvantage of women on opportunity and 34 p.p. to the disadvantage of women on necessity). In Poland, the motivation structure in terms of gender is moderately unfavourable: 7 p.p. fewer companies belonging to women than belonging to men are established because of an opportunity, and by over 8 p.p. morebecause of the absence of an alternative to hired work.

With the continuing inclination of women and men in our country to establish companies in the past two years, bigger changes – and the positive ones – pertain to the motivation structure of Polish men, rather than women. In 2016, in comparison with 2015, the share of young female entrepreneurs motivated positively increased more. In the area of motivations of entrepreneurs stemming from the absence of a possibility to find satisfactory hired employment, the indicator for men has slightly decreased in comparison to 2015, while it has remain almost at the same level for women.

Diagram 28. Motivations to start a business in a breakdown by gender in 2014–2016



Source: Global Entrepreneurship Monitor data.

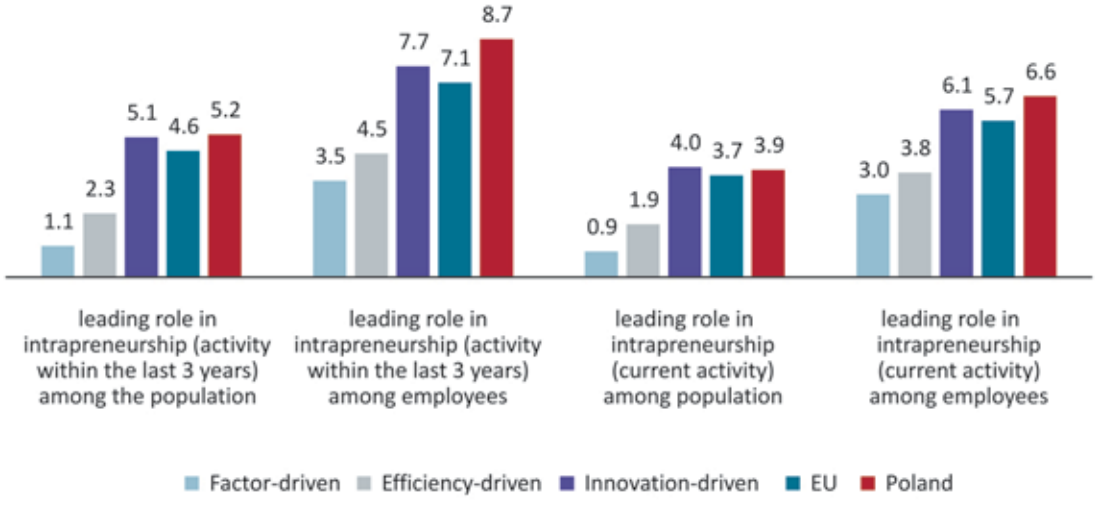
2.10. Intrapreneurship

Individual entrepreneurship is only one of the forms of generating new business undertakings. For several decades now, intrapreneurship has been observed in practice and described in literature, also referred to as organisational or corporate entrepreneurship, which is also on the radar of the Global Entrepreneurship Monitor. It consists in starting new undertakings for an employer, rather than on one's own. Intrapreneurship is a new way to manage enterprises, and it is able to ensure a competitive advantage, particularly in sectors with intensified competition and strong dynamics of changes. In its approach, GEM attempts to recognise intrapreneurship and show it as a component of a more general phenomenon of entrepreneurship. Moreover, it points to the fact that, in some countries, it is a form of entrepreneurship, which more effective and to a greater extent contributes to social and economic development. The studies

of intrapreneurship in GEM are carried out in two aspects: entrepreneurial activity at present and in the past three years, as well as the share of active entrepreneurs among the entire populations of adults and among employed persons. This results in four indicators on entrepreneurial activity.

The average values of these indicators for three groups of countries, averages for European countries, and the results for Poland, are presented below. Moreover, in some parts, the text describes the results of an analysis that takes into account one more group in terms of economic development – countries in transition to be innovation-driven. The analysis of the values of indicators for four groups of countries has its justification. Traditionally, the division into three of five groups of countries with varying levels of economic development is applied. In the classification for the three groups of countries, these are factor-driven economies, efficiency-driven economies, and innovation-driveneconomies. In the division into five groups, countries in transition from stage one to stage two, as well as from stage two to stage three are also added. However, when presenting the results, the specificity of GEM needs to be taken into account, particularly its dynamics in terms of countries participating in the survey. In 2016, 6 factor-driven, 32 efficiency-driven, and 27 innovation-driven countries participated. Each of the three groups is obviously heterogeneous, due to differences in the level development and individual conditions. In the first group, there are three countries, which are not in transition to the higher group (India, Burkina Faso, and Cameroon) and three countries in transition (Russia, Iran, and Kazakhstan). However, this is the smallest group, and it is not expedient to further divide it. This group has been reduced in GEM due to the completion of external financing of research in certain countries, particularly in Africa. The most developed group is also heterogeneous, since it includes countries like Cyprus and Slovenia, but at the same time, Israel, Qatar, and the US; however, it is not possible to separate internal sub-groups. When it comes to efficiency-driven countries, these could be divided into countries that are in this group and those in transition to a higher group. The first group comprises 18 countries

Diagram 29. Percentage share of the population/employees involved in intrapreneurship within the last 3 years and in 2016 in selected groups of countries and in Poland



Source: Global Entrepreneurship Monitor data.

covered by the GEM study (e.g., Republic of South Africa, Brazil, China, Bulgaria, Georgia) and the second consists of 14 countries (e.g., Poland, Hungary, Mexico, Turkey, and Saudi Arabia). Selected results of the intrapreneurship analysis will be presented as broken down into these four groups.

Intrapreneurship increases with economic development. This phenomenon is described in the theory of entrepreneurship. It stems from the higher number of large enterprises in more developed countries. Such enterprises are more technologically advanced, invest in innovation more often, and hold satisfactory resources for entrepreneurial activity of their employees. The competition is also higher in more developed countries, and the competing methods used in the country at a lower development level cannot be applied. Intrapreneurship is an effective method of competing in the countries characterised by the highest level of technological and economic development. Along with the increase of the economic development level, individual entrepreneurship is somehow "converted" into organisational entrepreneurship, which is a more desirable solution, for example, from the point of view of the labour law, but may also be a more effective catalyst of innovativeness. In more developed countries, people more often look for jobs with an employment contract due to protection of employee rights, and the development of undertakings within the existing corporations may be more effective due to the faster and wider availability of resources.

It is worth noting that, in terms of intrapreneurship among the general population, its level in efficiency-driven economies is higher than in factor-driven countries. However, the analysis of intrapreneurship among the employed reveals that its level declines along with the transition from a factor-driven to an efficiency-driven economy. This is related to an increase in employment, but also points to an interesting phenomenon, i.e. it seems that there is a certain, low, but natural level of intrapreneurship that is independent from the level of economic development. Along with the transfer to a slightly higher development level, the intrapreneurship level among employees seems to drop, but in absolute terms, it increases slightly or remains at the same level. A clear and employment-independent growth of intrapreneurship is observed only among the countries aspiring to be innovation-driven, and it increases significantly (among the population) and less intensely (among employees) with the transfer to innovation-driven economies, which again points to employment increase.

The separate analysis of countries that remain efficiency-driven and those aspiring to be innovation-driven allows us to cast a new light on intrapreneurship level in Europe and in Poland. Depending on the indicator, the intrapreneurship level in the European Union countries stands between the level of innovation-driven economies and those in transition to this group (among the population) or at the level of the latter group (among the employed). This is due to the fact that the European Union countries are partly efficiency-driven (one country), at the stage of transition (5 countries), or are innovation-driven (16 countries). The higher number of innovation-driven economies allows one to assume that the level of indicators in Europe should be closer to the level for this group, but this is not so. This indicates that the most developed European countries record lower intrapreneurship rates that the most developed non-European countries. However, a more thorough analysis reveals significant differences in intrapreneurship in those countries, with the following countries at the

extremes: Greece (a leading role in organisational entrepreneurship (activity within the last 3 years) among employees – 3.4), Italy (4.4) and Portugal (4.1) at the one end, and the Netherlands (10.4), Austria (10.9) and Luxembourg (10.1) at the other end.

Poland has a relatively high level of intrapreneurship. A rather significant difference in comparison to the previous year is observed, as described further. The level of organisational entrepreneurship in Poland is higher than the European average. It is the same as in the innovation-driven economies among the population and higher than in those countries among the employed persons. This indicates a still slightly higher unemployment rate in Poland than in innovation-driven economies, but also to a very strong innovation impulse observed in Poland in 2016. The results also provide an argument for including Poland among the innovation-driven economies.

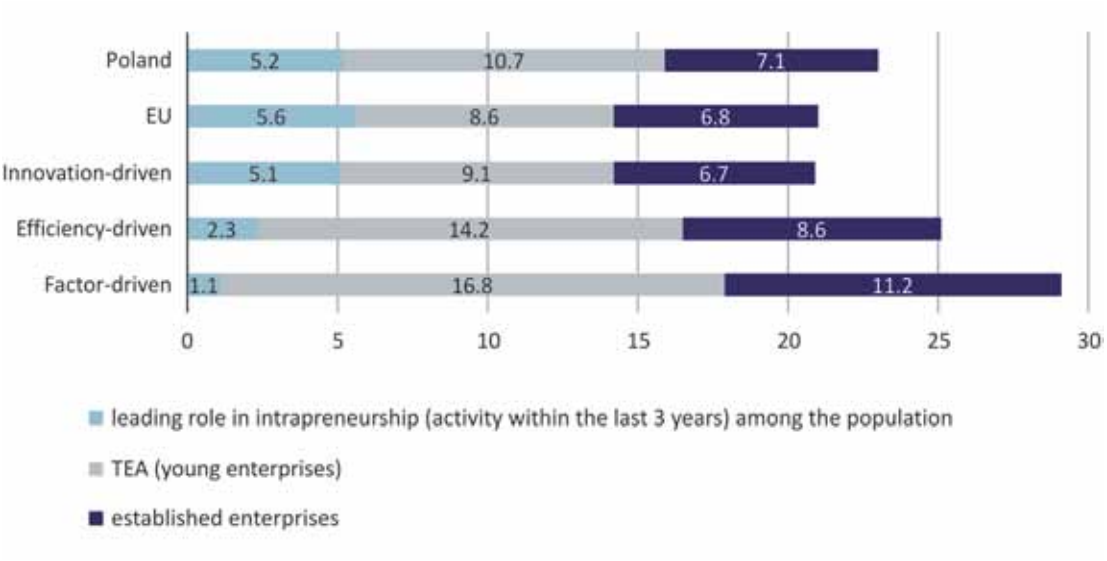
The highest overall intrapreneurship indicator was recorded in Australia (leading role in organisational entrepreneurship (activity within the last 3 years) among employees – 13.4), and the lowest in Panama (0.37), Malaysia (0.72), and Russia (1.17). The last case also points to the structure of the economy which is dominated by large commodity companies, where there is no room for intrapreneurship. A similar phenomenon in certain aspects is observed in Korea, which has recently been proclaimed the world leader in R&D expenditure as a percentage of GDP (4.23%). It may be claimed that the high share of R&D expenditure among the companies is a positive indicator for intrapreneurship. In Korea, only one in 25 employees (3.94%) was involved in intrapreneurship within the last three years. For the sake of comparison, in Israel, which has a similar share of R&D expenditure, it is one in nine employees (10.67%). This is due to the fact that the Korean economy is dominated by several large corporations (chaebols) that are innovative, but because of their size, they reduce the domestic innovation space.

As mentioned before, intrapreneurship is often perceived as an alternative to individual entrepreneurship. The aggregation of intrapreneurship in four groups of countries, Europe, and Poland is presented below.

In the case of individual entrepreneurship, there is an opposite phenomenon that, in the case of intrapreneurship, the intensity of which increases along with the economic development. In factor-driven economies, more than every fourth adult citizen is an entrepreneur (28%). In efficiency-driven economies, this indicator drops to 20%, and in innovation-driven economies the indicator drops to 16%. Real results may be slightly lower due to the fact that there is a group of entrepreneurs who are classified in both groups of individual entrepreneurship: entrepreneurs at an early stage of activity and owners of established enterprises.

The lower level of individual entrepreneurship is compensated by increased organisational entrepreneurship. Thus, the aggregated indicator of three types of entrepreneurship equals almost 30% in factor-driven economies, over 24% in efficiency-driven economies, and nearly 21% in innovation-driven economies. The results for the European Union are very close to the results for innovation-driven economies, while the results for Poland are similar to the averages for countries in transition to innovation-oriented economies, with a difference that,

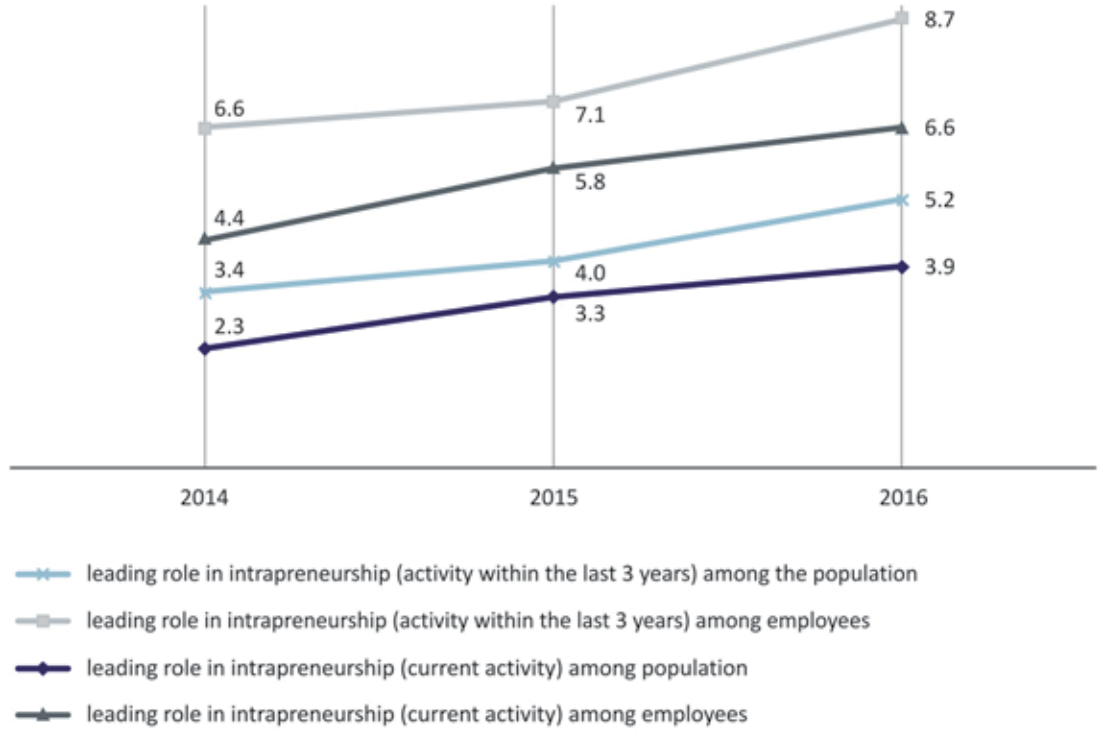
Diagram 30. Intrapreneurship and individual entrepreneurship in three groups of countries, the EU and Poland in 2016



Source: Global Entrepreneurship Monitor data.

in Poland, the indicators of individual entrepreneurship are slightly lower, and the intrapreneurship indicator significantly higher. The aggregated indicator of all types of entrepreneurship has substantially improved in Poland compared to 2014 and 2015. This resulted from the improvement of all three indicators. The aggregated entrepreneurship indicator (which is subject to a certain error, as mentioned before) amounted to 19% in 2015, and grew to 23% in 2016, which

Diagram 31. Intrapreneurship in Poland in the years 2014–2016



Source: Global Entrepreneurship Monitor data.

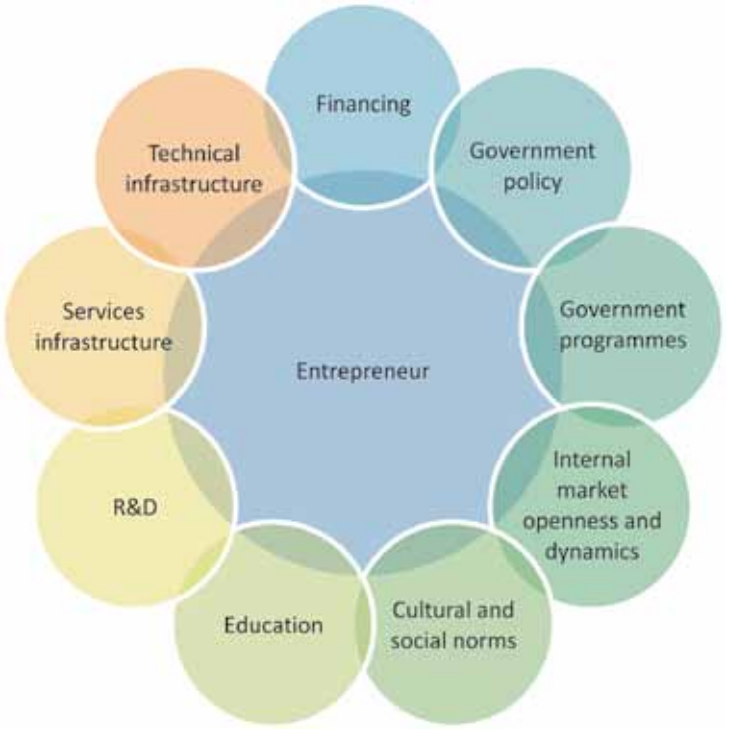
is a significant improvement in such a short time. The level of entrepreneurship in Poland in the years 2014–2016 is presented below.

In 2016, all intrapreneurship indicators in Poland continued to grow. The only negative development may be the finding that the indicators of intrapreneurship grew slightly faster within the last three years than the current intrapreneurship indicators, which may point to the accumulation of growth from the last three years. However, within such a short time, the intrapreneurship indicators increased significantly and reached high figures allowing us to make positive forecasts concerning the increase of the innovativeness of the Polish economy in future. They should be analysed along with the markedly increasing share of research and development expenditure in GDP, which exceeded 1%, according to the data of the OECD and the Central Statistical Office for 2015.

Chapter 3

Determinants of entrepreneurship

One of the GEM project components is to investigate the impact of the environment on the functioning of enterprises in Poland. The analysis is based on an expert survey on determinants of entrepreneurship (National Expert Survey – NES) conducted among 36 national experts[32]. The survey included 9 areas constituting national determinants of entrepreneurship, the impact of which on newly established and developing enterprises was evaluated by the experts.



[32] Each area included 3–8 statements on the subject on which the expert was to give his/her opinion, using the following scale: 9 points – completely true, 8 – true, 7 – moderately true, 6 – somewhat true, 5 – neither true nor false, 4 – somewhat false, 3 – moderately false, 2 – false, 1 – completely false. In previous years the results of NES were presented on a five degree scale. Because all statements were positive, i.e. they reported that a given aspect in Poland has a positive impact on entrepreneurship, the more points were attributed

This chapter sums up the survey conducted in 2016. It describes only the areas that are most striking in terms of changes over time, as well as in comparison with innovation-driven economies participating in the GEM project.

Infrastructure

In the opinion of experts, technical infrastructure is the area most conducive to new and developing entrepreneurs. From 2011, when Poland first participated in the GEM studies, a systematic improvement has been recorded in this area, and Poland has already caught up with innovation-driven economies.

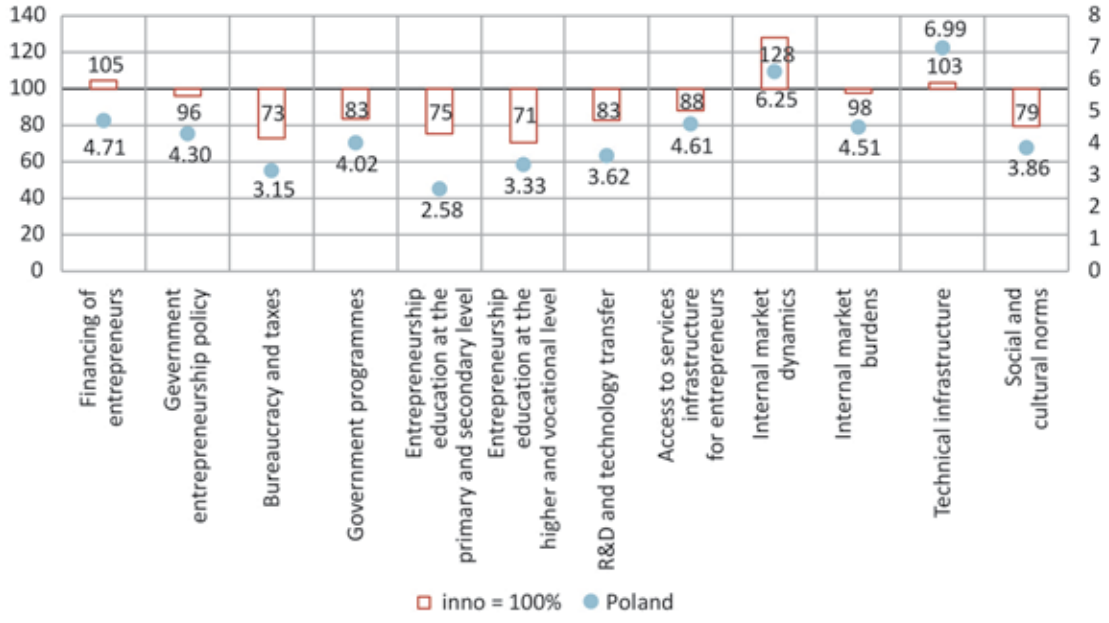
Market dynamics

High dynamics of the domestic market, although it deteriorated compared to 2011, still acts for the benefit of new and developing entrepreneurs.

Cultural and social norms

Cultural and social determinants were less favourable for new and developing companies than in the previous years. In the opinion of experts, since the beginning of the GEM expert survey in Poland, i.e. from 2011, the social appreciation of individual success and risk-taking by entrepreneurs declined the

Diagram 32. Determinants of entrepreneurship in 2016 in Poland in comparison to innovation-driven economies (inno = 100)[33]



Source: Global Entrepreneurship Monitor data.

to a given area, the better the situation was assessed. Then, average answers of all experts were calculated for given statements. The higher the value of the average, the better is the 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. In all analyses in this chapter, the situation in Poland has been presented against the background of the situation in innovation-driven economies.

[33] 9 degree scale.

most. The assessment of social support for innovativeness and creativity has also deteriorated.

Bureaucracy and taxes

In 2016, the area which, according to experts, was only slightly conducive to new enterprises included bureaucracy and taxes. The situation in Poland was particularly negatively assessed against the background of innovation-driven economies (it was the second worst assessed area from among all areas compared to innovation-driven economies). According to experts, taxes and other administrative regulations were not applied in a coherent and predictable way. They also created additional burdens for this group of entrepreneurs.

Government programmes

Government programmes form a separate area, which is closely related to government policy. The assessment of the impact of this area on new entrepreneurs deteriorated compared to 2015. In 2016, according to experts, new entrepreneurs encountered problems, particularly with obtaining assistance or information from a single source, e.g., from one public institution. The efficiency of support for science parks and incubators was also assessed as low; although, it is unclear whether the assessment results from a change of financial priorities for the years 2014–2020 or from a negative assessment of the support granted in the years 2007–2013. The assessment of this area has declined significantly between 2011 and 2015.

Education

As in the previous year, education remains the Achilles heel of the Polish system of institutional support for entrepreneurship. Its role is rather specific, since it does not affect the current, but rather the future and potential entrepreneurs. It also strongly translates into the social perception of entrepreneurship. Education at the primary and secondary level received the lowest marks from among all areas. Such low assessment of the area was mostly due to its failure to provide satisfactory knowledge on the functioning of the economy and entrepreneurship. However, it is worth noting that the assessment of education at the primary and secondary level has improved slightly compared to 2015. However, the assessment of higher and vocational education deteriorated considerably in comparison with 2015. This was largely due to the low assessment of the aspect concerning business and management courses in terms of their efficiency in preparing their participants to start and develop a company.

According to the experts, the impact of other areas on starting and developing companies has not been so clear. Most of the time, the answers of the experts oscillated around the value of 5, which is the answer “neither true, nor false.”

Table 11 presents two indices: the first one shows the changes of the summary value of all indicators in the survey compared to the previous year. A positive value means improvement, and a negative value means the deterioration of the

situation. According to the expert survey conducted in 2016, the value of the index is currently the lowest from among all years covered by the survey. This means that, in 2016, the overall assessment of determinants of entrepreneurship by experts recorded the largest declines year by year within the period covered by the study, i.e. 2011–2016.

The second index shows the distance between the situation in Poland and innovation-driven economies. The lower the value, the worse the position of Poland compared to innovation-driven economies. In 2016, the value of the index was similar to that in 2012. This means that, after four years of a consistent reduction of the distance to innovation-driven economies in terms of summary assessment of entrepreneurship determinants, the year 2016 brought a significant deterioration of the assessment, increasing our distance to innovation-driven economies to the level from 2011.

Table 11. General picture of determinants of entrepreneurship in Poland in comparison to innovation-driven economies (X_t) and in comparison to the previous year (Y_t)[34]

Year	Summary index of y/y changes in determinants of entrepreneurship in Poland (Y_t)*	Summary index comparing situation in Poland to innovation-driven economies (X_t)**
2016	–4.91	–4.75
2015	–2.72	–1.03
2014	4.80	–1.64
2013	4.85	–2.71
2012	–3.63	–4.76

Source: Global Entrepreneurship Monitor data.

* The index shows differences in values in a given year and the preceding years. Positive value means improvement, negative value – deterioration of the situation.

** The index shows the situation in Poland in comparison to innovation-driven economies.

Summary

According to experts, determinants of entrepreneurship have not improved in 2016. Compared to 2015, experts expressed significantly worse opinions on the ecosystem of entrepreneurship, with fewer areas assessed positively. In comparison to innovation-driven economies, a regression to the level of 2011 was also recorded.

[34]
$$X_t = \sum_{i=1}^{n}\left(\frac{PL_i^t}{inno_i^t}\right)$$

$$Y_t = \sum_{i=1}^{n}\left(PL_i^t - PL_i^{t-1}\right)$$

where:

- i – subsequent questions in the questionnaire;
- PL_i^t – the average from answers of experts for question i in Poland in period t;
- $inno_i^t$ – the average for innovation-driven economies for question i in Poland in individual countries in period t;
- t – subsequent years of GEM surveys;
- X_t – summary index comparing situation in Poland to innovation-driven economies;
- Y_t – summary index of changes in determinants of entrepreneurship in Poland.

It is also worth noting that, compared to 2015, the problems shifted to other areas, i.e. particularly negative assessments were recorded in other areas than in the previous years. For example, R&D and technology transfer has always been one of the three lowest ranked areas since 2011. In 2016, this area is still ranked at a similarly low level. However, when compared to other areas, e.g., bureaucracy and taxes or education, the assessment of R&D is not as negative as in the previous years.

Bibliography

Autoportret Polaków i postrzegany dystans kulturowy wobec sąsiadów, Komunikat z badań nr 126/2015, CBOS, wrzesień 2015.

Block J.H., Wagner M., *Necessity and Opportunity Entrepreneurs in Germany: Characteristics and Earnings Differentials* Schmalenbach Business Review, Vol. 62, pp. 154–174, April 2010.

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

Corman J., Perles B., Vancini P., *Motivational factors influencing high-technology entrepreneurship,* Journal of Small Business Management, 26 (1), 1998.

Cierniak-Szóstak E., *Wizerunek polskiego przedsiębiorcy jako element społecznej legitymizacji/delegitymizacji nowego ładu*, Zeszyt nr 12 Uniwersytetu Rzeszowskiego, 2008.

Działalność gospodarcza przedsiębiorstw o liczbie pracujących do 9 osób w 2016 roku, GUS, październik 2017.

Działalność przedsiębiorstw niefinansowych w 2015 r., GUS, grudzień 2016.

Herrington M., Kew P., *2016/17 Global Report*, Global Entrepreneurship Monitor, 2017.

Hessels J., van Gelderen M., Thurik R., *Entrepreneurial aspirations, motivations and their drivers*, Small Business Economics, 31:323-339, 2008.

Gorynia M., *Eksport szansą dla Polski*, Rzeczpospolita, 13 lipca 2012.

Kelley D.J., Baumer B.S., Brush C., Greene P.G., Mahdavi M., Majbouri M., Cole M., Dean M., Heavlow R., *Women's Entreprenurship 2016/2017 Report*, GEM 2017.

Liñán F., Fernández-Serrano J., Romero I., *Necessity and Opportunity Entrepreneurship: The Mediating Effect of Culture,* Revista de Economia mundial 33, pp. 21–47, 2013.

Morris M.H. et.al. (2006) oraz Casaar G. (2007), w J. Hessels, M. van Gelderen, R. Thurik, *Entrepreneurial aspirations, motivations and their drivers*, Small Business Economics, 31:323-339, 2008.

Nieć M., Zakrzewski R., *Firmy szybkiego wzrostu*, PARP 2017.

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

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

Tarnawa A., Węcławska D., Zadura-Lichota P., Zbierowski P., *Raport z badań GEM – Polska 2015*, PARP 2016.

Trzeciakowski R., Dąbroś Ł., *Wizerunek przedsiębiorcy. Raport Polskiej Rady Biznesu 2016*, przygotowany przez Forum Obywatelskiego Rozwoju i Polską Radę Biznesu, 2016.

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Poland joined GEM in 2011 and has been represented since then by National Team that consists of the Polish Agency for Enterprise Development and the University of Economics in Katowice. Data on Polish entrepreneurship have been presented in GEM Global Reports and special topic reports since 2012

The Polish GEM Team:

- is responsible for Adult Population Survey and National Experts Survey for Poland,
- prepares GEM Poland Report, where entrepreneurship in Poland is compared to the situation in the EU and other groups of countries. Since the beginning (2012) the Report has been available in Polish and English,
- presents GEM data on various conferences and events devoted to entrepreneurship,
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