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CHAPTER 10

Economic Growth and Self-Employment in Poland in Years 2009–2017

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Summary: The aim of the paper is to present the relationship between economic growth and self-employment in Poland. Economic growth indicators were selected, such as GDP growth, the increase in gross added value and the number of unemployed, and correlations between these indicators and the number of self-employed persons were examined. Since the self-employed group is very heterogeneous, these correlations were examined for a group of self-employed people in general, and for different, identifiable subgroups. In this way, it was

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researched whether all subgroups of self-employed workers exhibited similar behaviors in the face of cyclical fluctuations and studying trends in the labor market using the indicator related to self-employment in general (or the number of self-employed) is justified.

It was shown that there is a positive correlation between the improvement of the situation on the labor market in Poland and in business climate indicators and an increase in the number of self-employed (outside agriculture). This increase was stronger than the growth of employees in the total national economy and an increase in the number of hired employees.

Studies have shown that the commonly used indicator of the "number of self-employed" is insufficient for analyzing trends in the labor market, as it does not show the entire complexity of problems related to changes in this market.
Keywords: self-employed, growth, economy

1. Introduction

The role of self-employment in the global economy is increasing. Admittedly, studies show a decreasing share of self-employment in the economy of some countries, but this is mainly because individual farmers were included as self-employed (confer Hatfield 2015, Skrzek-Lubasińska 2017). Outside agriculture, the share of the self-employed in the total number of employees is undoubtedly growing. According to many scientists and practitioners of the economy, this trend will continue. Harari (2018, pp. 39; 53) claims that we cannot yet predict what the labor market will be in 2050, but it can be assumed that there will be more freelancer jobs: temporary, based on one-off orders. Labor market instability and individual career insecurity will increase. Man will have to compete for jobs with computers/technology (Adamczyk, Gródek-Szostak, Kulisa, 2020). Schwab (2018) also points out the aspect of permutability in the nature of work. He speaks of the "human cloud", i.e. independent, specialized, often technology-based service-providers, using i.e. online platforms. This cloud creates a highly competitive environment with higher productivity and lower operating costs. It is an environment of the self-employed, and not full-time employees with long-term employment contracts. This evolution in labor relations is already underway. Under such conditions, monitoring the current trends in the

labor market, including those related to self-employment, is very important. Self-employment is also important at the micro-level, in the context of changes in inter-organizational labor relations, as well as in the context of sole proprietorships. This is the important result of the implementation of public programs promoting entrepreneurship and self-employment (Gródek-Szostak et al., 2020).

The purpose of this article is to investigate the relationship between economic growth and the phenomenon of self-employment in Poland. Economic growth indicators such as GDP growth, increase in gross value added and the number of unemployed were selected for the analyzes. The correlations between these indicators and the number of the self-employed were examined. Since the group of the self-employed is very heterogeneous (confer Szaban, Skrzek-Lubasińska, 2018), these correlations were examined for the total group of self-employed, and different, identifiable subgroups. This allowed verifying whether, in the face of economic fluctuations, all subgroups of self-employed demonstrate similar behaviors, and therefore whether it is justified to study labor market trends using the indicator related to total self-employment (i.e. the number of sole proprietors). The obtained results may constitute a source of information for decision-makers to develop systemic instruments of public support and promotion of entrepreneurship and self-employment. Moreover, the growing importance of professional activity in the form of self-employment poses a significant challenge for all those involved in human capital management (whether on the micro-scale, i.e. a single organization, or on the macro-scale, i.e. the entire economy), especially in the context of the decreasing number of people in the working age.

2. Research Method

As follows the above goal, the following research steps were taken:

1. the subject literature on the relationship between self-employment, economic growth, and unemployment was reviewed;
2. data on self-employment in Poland in the years 2009–2017 were analysed;

3. the correlation between economic growth rates and the number of self-employed persons in selected groups in the years 2013–2017 was examined (Pearson's correlation coefficient).

For this purpose, information from the Social Insurance Institution and the Central Statistical Office was used. The total number of the self-employed, and its possible subgroups, as well as their importance for the economy, are presented. The relationship between economic growth and self-employment was analysed. The research sought answers to the following questions:

- does the number of self-employed depend on the level of economic growth? If so, how is the number of self-employed changing in a period of a significant improvement in the labour market situation?
- are there any differences between the different subgroups of the self-employed, or do all these subgroups show a similar change direction?

Finally, an analysis of labour market indicators is presented; whether those collected so far are sufficient and adequate to monitor economic changes on the labour market and the modern economy. The results of the analysis can constitute the foundations for creating institutional economic development conditions, including institutional changes in labour relations in Europe.

The further part of the article examines the relationship between the number of the self-employed from various groups: traditional (X1) and hybrid (X2), as well as employers (X3) and the self-employed (X4), and individual economic growth rates. Two groups of economic growth indicators were adopted:

- reflecting the labour market situation, measured with the following indexes:
    - the number of people working in the national economy;
    - the number of employees;
    - the number of unemployed.
- reflecting the general situation of the economy, measured with the following:
    - GDP growth rate;
    - the growth rate of added value in the economy.

The relationship between the above-mentioned indicators and the number of self-employed was determined using the Pearson correlation coefficient, according to the formula:

$$r\,(x,y)=\frac{C(x,y)}{s(x)s(y)} \quad (1)$$

wherein:

r (x, y) – the Pearson correlation coefficient between variables x and y;
C (x, y) – covariance between variables x and y;
s – standard deviation for variables x and y.

The strength of the relationship between the variables was determined according to the following criteria for | r |: (Ostasiewicz et al., 1997, pp. 226).

<0.2 – virtually no linear relationship between the variables,
0.2–0.4 – clear, but low linear relationship,
0.4–0.7 – moderate relationship,
0.7–0.9 – significant relationship,
>0.9 – very strong relationship.

3. The Essence of Self-Employment and its Role in National Economy: Research Overview

When analysing problems related to self-employment or sole proprietorship, authors use many terms that are often considered synonymous (e.g., Leighton, Wynn, 2011; Phillips, McKeown, 2014). Various publications have found the following terms for a self-employed person: freelancer, small business owner, micro-business owner, home-based business, contractor, sub-contractor, independent contractor, consultant, free agent, ipro ("individual professional", Leighton, 2015), solo-proprietor, solo-entrepreneur, solopreneur, entrepreneur.

The great freedom in using the terms presented, and the fact that these terms are not entirely synonymous even in the interpretation of researchers, hinders comprehensive analysis of the phenomenon of self-employment. It also impedes the result comparison and reference to the conclusions of other researchers (Gródek- Szostak et al., 2020). The situation is additionally complicated by the fact that also used

synonyms have their definitions, different from the definition of self-employment. For example, some researchers believe that the terms "self-employed" and "freelancer" are the same, while for others they are only partially overlapping categories (Skrzek-Lubasińska, Gródek-Szostak, 2019; Eadem, 2020). The same applies to the terms "entrepreneur" and "self-employed". For some, each self-employed person is an entrepreneur, and the level of entrepreneurship in a country can be estimated based on the percentage of the self-employed in total employment of a given economy, while others claim that this approach is erroneous (confer Szaban, Skrzek-Lubasińska, 2018). Meanwhile, in economic practice, it is also extremely important to recognize the essence of self-employment: whether it is more a manifestation of individual entrepreneurship, or rather a pathology of the labour market, i.e., bypassing labour law in hiring people and creating a new group of self-employed workers: dependent or false.

In the Europe 2020 Strategy, "entrepreneurship" and "self-employment" are treated almost as synonyms. Self-employment creates new jobs. Through self-employment and entrepreneurship, the European economy can achieve "smart, sustainable and inclusive growth". However, some researchers identify self-employment as a pathology of the labour market (e.g., Cranford et al., 2003; Muehlberger, 2007; Kalleberg et al., 2000). They point out that this is an extremely flexible, insecure kind of work, most often without social protection provided under the labour code. It is not a form of entrepreneurship, but a forced form of contract work (forced by circumstances, i.e., the inability to find a full-time job, or by the client, i.e., the pursuit to reduce labour costs).

To understand this dual nature of self-employment, it is necessary to take into account the theories related to the motivations of would-be entrepreneurs. Many researchers have studied these motivations, incl. Granger et al. (1995), Clark, Drinkwater (2000), Hughes (2003), Dawson, Henley, Latreille (2009), Kunasz (2013), and Fuchs-Schündeln (2009). In these studies, two types of criteria were distinguished:

1. pull factors such as preferences, a sense of independence, work flexibility, personal satisfaction, etc;
2. push factors such as the lack of other job opportunities, macroeconomic conditions forcing self-employment, including imposing it by a potential client, etc.

Therefore, self-employment can be viewed as voluntary versus necessity-driven. Forced self-employment appears to increase in times of economic recession, and to decline as the labour market improves. Voluntary self-employment grows in line with the economic recovery. An increase in demand favours new businesses and reduces the risk of new ventures. Therefore, monitoring the labour market should include an examination of the relationship between economic growth andthe unemployment rate, and between the number of self-employed and the share of self-employment in the total number of employees in the national economy.

According to Blanchflower (2000), self-employment is the simplest form of entrepreneurship. Researchers believe that self-employment can be treated as the smallest, but also the most vital part of entrepreneurship (Demirgüc-Kunt et al., 2007). But there are also contrary opinions. Henrekson & Sanandaji (2013), as well as Hurst and Pugsley (2010) even believe that researching the level of national entrepreneurship by studying the level of self-employment is misleading because most self-employment does not refer to entrepreneurship, as understood by Schumpeter. The self-employed are most often not the source of any innovations (even in the broad sense), and often their goal is not the company's growth (in market terms). Moreover, there are problems with the distinction between proper and dependent self-employment (Bjuggren et al., 2010). However, Faggio & Silva (2012) confirmed the existence of a positive correlation between the self-employment rate and the level of innovation in the region, based on research in Great Britain.

Subject literature offers studies on the correlation between economic growth and the level of economic development, and the increase in the number of the self-employed, or the share of self-employment in the total number of employees in the national economy.However, the results of these studies are inconclusive.

Blanchflower (2000, 2004) believes that there is no evidence as to a correlation, which would allow a conclusion that an increase in GDP entails an increase in the number of the self-employed. Sometimes the statistical data even shows the opposite relationship. Also, according to Blanchflower, the literature offers no convincing evidence that increasing the percentage of self-employed workers, or a high level of self-employment in the economy brings any positive

macroeconomic benefits. Gindling & Newhouse (2012) drawsimilar conclusions. They see the positive relationship between the GDP growth (especially per capita) and the abandonment of self-employment in favour of contract work.

Other researchers have observed significant differences in the relationship between GDP and self-employment in different countries with different levels of economic development. Stam and van Stel (2011) demonstrated, e.g., that entrepreneurship has no impact on economic growth in low-income countries, unlike transition and high-income countries. There, entrepreneurship, especially growth-oriented one, appears to be a strong contributor to macroeconomic growth (Stam, van Stel, 2011, pp. 8).

In conclusion, self-employment appears to be the domain of less developed countries. With the economic growth, the share of self-employment in the national economy decreases. The type of entrepreneurship also changes from "forced", i.e., resulting from the lack of other possibilities, to voluntary, innovative entrepreneurship.

As in the case of economic growth, numerous studies have also analysed the impact of the unemployment level on the level of self-employment. Bögenhold & Staber (1991) demonstrated that at the macroeconomic level, the level of self-employment increases when a country's unemployment level is high and economic growth is low. It drops, however, when the country's economic situation improves and the unemployment rate decreases. Similar conclusions were reached, among others, by Highfield and Smiley (1987). This effect (recession and an increase in the unemployment rate causing an increase in the number of the self-employed) was called "the refugee effect". However, contrary opinions can also be found in the literature (e.g., Evans, Leighton 1990; Thurik et al., 2008), i.e., that the number of the self-employed grows when the situation on the labour market improves, thus proving the entrepreneurial effect. Parker (2004) believes that both effects can be linked to the motivation that prompts self-employment. It may be a negative motivation pushing towards self-employment, or a positive one, attracting to run a business.

The above-mentioned studies on the impact of the economic situation on the level of self-employment were mainly based on international

labor market indicators, OECD and Eurostat. They did not take into account the differentiation of the self-employed group. Meanwhile, its heterogeneity was pointed out by numerous researchers (e.g. OECD 2017, Rapelli 2012). In the total number of self-employed workers, at least the following groups can be distinguished, to be analyzed separately (Skrzek-Lubasińska, Szaban, 2018):

1. dependent self-employed (running a business and providing services to a single client, working under their supervision and often under set conditions);
2. traditional self-employed – small sole entrepreneurs, running a traditional business often with the help of their family members (e.g., small shopkeepers, hairdressers, restaurateurs);
3. hybrid self-employed – combining business activity with contract work;
4. freelancers – providing services based on own skills and competences, on terms other than a traditional employment contract, freelancers.

Numerous studies have failed to answer the question of whether including the heterogeneity of self-employment will affect the results of studies on the impact of economic growth on the number of self-employed people in the economy.

4. Details of Research Results on Self-Employment and Economic Growth and Labour Market Indicators in Poland

The years 2009–2017 are the period of economic growth for Poland, although varied in individual years. First, the Polish economy grew at a rate of approx. 3% annually until 2012, when it slowed significantly (to approx. 1.5% for the next two years). At that time, domestic demand dropped, and net exports were the main driver of growth. In 2014, the economy started to pick up again. 2017 was a year of strong economic growth driven by domestic demand. Table 1 presents the values of economic growth indicators for the years 2009–2017.

Labour market analysis usually include labour statistics(number of employed persons, employers, unemployment rate, etc. in various breakdowns and configurations). Information on the level oflabour market flexibility is included less frequently.

Table 1. Economic growth indicators in Poland in the years 2009–2017

Year	GDP growth (in %)	Increase in gross value added (in %)	Increase in domestic demand (in constant prices, %)
2009	2.8	3.1	-0.2
2010	3.6	3.5	4.2
2011	5	5	4.2
2012	1.6	1.7	-0.5
2013	1.4	1.5	-0.6
2014	3.3	3.3	4.7
2015	3.8	3.7	3.3
2016	3	2.9	2.2
2017	4.6	4.4	4.7

Source: Central Statistical Office (GUS), 2018

In Poland, the situation on the labour market has changed significantly since 2009. First of all, after the financial crisis of 2008, the unemployment rate increased until 2012, when it reached the value of 10.1%[5]. Then the trend reversed, and the unemployment rate began to decline. In late 2017, it reached the value of 4.5%, which some economists consider to be close to natural unemployment. The number of employees in the national economy increased by 6.71% in the years 2009–2017 (from 15.37 to 16.4 million). The number of the self-employed did not change significantly at the time – only by 1%, while the number of employers increased by 11.09%. Based on these data, it can be concluded that the improvement of the labour market situation resulted in an increased number of business owners, which increased labour demand and, as a result, the number of contract employees and officers. Otherwise, the labour market remained fairly stable. Detailed data on the labour market in Poland in the years 2009–2017 are presented in Table 2.

The analysis of the above data shows that the available official statistical data do not fully reflect the trends in the contemporary

5 Data from the BAEL survey (Labor Force Survey) conducted by the Central Statistical Office. See: "Economic activity of the population of Poland, Q4 2017" Central Statistical Office, Warsaw, 2018

labour market in Poland. The total number of employed in the national economy increased, but not evenly across various groups of employees.

In the years 2009–2017, the number of employees increased by 9.65%. Among the self-employed, several groups can be distinguished: (1) individual farmers, (2) self-employed non-agricultural workers who are not employers (self-employed), (3) hybrid self-employed (contract employees who collaterally run a business). The number of individual farmers in the discussed period decreased significantly, by as much as 28.19%. The number of entrepreneurs for whom business activity is a primary source of income increased by 23.3%, and the number of self-employed hybrid workers by 14.46%. It is clear that the indicator based on the total number of self-employed workers does not reflect the actual changes taking place in the Polish labour market.

Table 2. The situation on the labor market in Poland in the years 2009–2017

Year	Employed in the national economy (in thousand)	Contract employees (in thousand)	Unemployed (in thousand)	Self-employed (in thousand)	Employers (in thousand)	Individual farmers (in thousand)
2009	15.373	11.929.6	1.424.6	2.906	631	1.919
2010	15.557	12.001	1.597	2.970	642	1.862
2011	15.613	12.074	1.682	2.969	651	1.808
2012	15.636	12.189	1.757	2.898	659	1.752
2013	15.713	12.334	1.700	2.879	659	1.699
2014	16.018	12.612	1.410	2.972	645	1.683
2015	16.280	12.861	1.210	2.959	643	1.672
2016	16.328	12.974	958	2.934	672	1.498
2017	16.404	13.081	769	2.935	701	1.378
growth in the years 2009–2017	6.71%	9.65%	-46.02%	1.00%	11.09%	-28,19%

Source: GUS, BAEL, 2018

It should be emphasized that along with the improvement in the labour market situation in Poland, the demand for labour increased. However, it was satisfied in various ways. The increase in the number of people engaged in economic activity outside agriculture was greater than the increase in the number of contract employees.

In 2017, 7.6% of all persons working in the national economy were self-employed, while in 2009 the ratio was only 5.8%. This was most likely not an increase in false, or "forced" self-employment, as finding employment was not a problem in times of prosperity. The increase in the popularity of self-employment may therefore result from the changes in the nature of work, as described above.

The analysis used data provided by the Social Insurance Institution and the Central Statistical Office for the years 2013–2017 (in each case, data as per the end of December of a given year).

A very strong or strong (significant) positive correlation was demonstrated between the number of self-employed from various groups (traditional and hybrid) and employers, and the economic growth rates and a negative correlation was found between these indicators and the number of the unemployed. It can therefore be concluded that the increase in the GDP level or the decrease in the unemployment rate in Poland in 2013–2017[6] was associated with an increase in the number of self-employed, traditional and hybrid, as well as employers. Based on the above, the authors propose that in the analysed period in Poland the situation was attracting (pulling) to self-employment rather than forcing (pushing) to it and that the increase in the number of self-employed was related more to a voluntary rather than forced decision. However, due to the short observation period, this conclusion constitutes more of a hypothesis for further research than the ultimate conclusion on the nature of self-employment in Poland.

On the other hand, the indicator designed to analyse independent work (i.e. the total number of self-employed) shows practically no correlation with economic growth indicators. This is most likely due to the way this indicator is constructed and how different subgroups of employed persons are assigned to the group of self-employed, especially individual farmers.

It should be emphasized that the group of self-employed includes business owners (entrepreneurs) who provide services to a single client. They should be treated as employees, and are defined as dependent or false self-employed. On the other hand, this group does not include freelancers who work at their own risk and are independent, if they have

6 Limiting the period of this analysis to the years 2013-2017 was due to the availability of data from the Social Insurance Institution.

signed a short-term contract for a specific task, or a mandate contract (covered by the provisions of the Labour Code). This means that the group of the self-employed may be underestimated.

Table 3. Correlation values between the number of self-employed from selected groups and the indicators of the situation on the labor market and selected indicators of economic growth

Category	Traditional self-employed X1	Hybrid self-employed X2	Employers X3	Self-employed X4
Total of the employed in the national economy	0.97	0.85	0.65	0.25
Contract employees	0.95	0.86	0.68	0.15
Unemployed	-0.8	-0.85	-0.62	-0.19
Gross domestic product (constant prices)	0.97	0.89	0.8	0.12
Gross value added (constant prices)	0.97	0.89	0.79	0.11

Source: Central Statistical Office (GUS), 2018

5. Conclusion

The article examines the relationship between the indicators of economic growth and the phenomenon of self-employment in Poland in the years 2013–2017. In the analyzed period, the number of self-employed increased, and this growth was more significant than the growth of the employed in the national economy in general and the increase in the number of contract workers.

A very strong or strong (significant) positive correlation was demonstrated between the number of self-employed from various groups (traditional and hybrid) and employers, and the economic growth rates and a negative correlation was found between these indicators and the number of the unemployed. Thus, the opposite relationship was demonstrated to that in Gindling and Newhouse

(2012), who demonstrated that GDP growth facilitates the abandonment of self-employment in favour of contract labour, or in Bögenhold and Staber (1991), who showed that at the macroeconomic level, the level of self-employment decreases when the economic situation the country is improving and the unemployment rate is declining. Based on the analysis, it can be assumed that the increase in the number of self-employed in Poland in the years 2013–2017 was not due to the increase in the number of dependent self-employed workers and was not related to "forcing out" into self-employment. In times of prosperity, with the unemployment rate close to the natural unemployment, finding a contract job was not a problem. The increase in the popularity of self-employment may, therefore, result from the change in the nature of work and the increased importance of independent, flexible work, which is riskier, but also more satisfying than contract work. Therefore, the economic conditions in Poland in the discussed period were rather attracting self-employment than forcing into it.

Research has also shown that the commonly used index, "the number of self-employed", is not sufficient to analyse trends in the labour market as it fails to showcase the complexity of problems related to changes in this market. Thus, the initial hypothesis was verified negatively. The group of the self-employed is very diverse. It covers very different fields and forms of work, which show different trends and should be considered separately. The article takes into account the groups that can now be classified according to formal factors: individual farmers, traditional and hybrid self-employed farmers, employers. However, this classification does not seem to be sufficient. The group of traditional self-employed workers currently includes, e.g., traditional service providers (hairdressers, tailors), freelancers who work via internet platforms, or the so-called liberal professions: doctors and lawyers. As observed, this group is very diverse in terms of the required skills and investments, as well as productivity and development opportunities. It is necessary to discuss new divisions of the professionally active, and new indicators should be developed to more adequately identify changes in the labour market.

Regardless of whether the changes related to self-employment will be considered as inherent in the very nature of work (Palacios-Huerta, 2013), or as a historically natural phenomenon involving marginal activities, remaining outside the mainstream of contract work (Arum,

Muller 2004), monitoring them seems necessary to understand all interdependencies occurring in the labour market as the phenomenon becomes less and less marginal.

Although the analysis of time series and their dynamics covered the years 2009–2017, the correlation coefficients were determined based on a relatively small number of data (the correlation study for 2013–2017). For this reason, the conclusions of the research can be treated as hypotheses for further research, and not as ultimate conclusions, foundational for key economic decisions and determining the nature of self-employment in Poland. The tests should be repeated for longer periods.

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