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Entrepreneurship as an occupational choice

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Abstract

This article aims to consider the entrepreneurship as an occupational choice and to understand the flow among different forms of occupations. Professionally active people may decide to start their own business or find hired employment as an option of professional occupation, the main difference being the fact that an entrepreneur makes entrepreneurial profits with the risk of failure, while an employed person receives risk-free remuneration. The choice of the form of professional activity depends on the perception of attractiveness of both forms, people who perceive entrepreneurial profits as more beneficial than workers' wages more likely decide to become entrepreneurs than waged employees. However, in the presented paper, the choice is considered not only between entrepreneurship and employment but also concerns the scale of entrepreneurship. When starting one's own business, people also need to decide whether they will hire employees and become proper entrepreneurs or whether they will abandon the idea of hiring employees and become quasi-entrepreneurs, also known as solo entrepreneurs.

The issue of entrepreneurship as an occupational choice is presented empirically using the time series data for Poland on a quarterly basis in the years 2003–2018. The influence of the overall economic situation, which determines business opportunities and average salaries, on the choice between a proper entrepreneur, a quasi-entrepreneur and a hired worker is presented with the use of regression analysis. The results show that changes in the overall economic situation and in the level of average wages lead to flows between proper entrepreneurs and quasi-entrepreneurs, and thus, to changes in the employment structure. Improving market conditions encourage people to follow the path of proper entrepreneurship or to become hired workers, while abandoning quasi-entrepreneurship. The deterioration of business opportunities, in turn, is the reason for the reduction of entrepreneurship and employment downsizing, at the same time leading to an increase in the number of quasi-entrepreneurs.

Keywords: Entrepreneurship, occupational choice, proper entrepreneurs, quasi-entrepreneurs

Introduction

Occupational activity is one of the things that define modern people and their place in the society. The choice of its form is a long-term decision which influences the quality of life of people and, often, their relatives. The choice between occupational activity and passivity may be viewed from the perspective of a variety of sciences, including psychology, sociology, law or economics. From the economic point of view, the choice between an entrepreneur and a worker depends on the perceived benefits from both the forms of activity (e.g. the level of wages or profits, material benefits or social status) and the identified costs (e.g. the amount of work or financial resources necessary to be invested). If the benefits of being an entrepreneur outweigh those of being a wage worker, an individual's rational decision is to run a business as a form of occupational activity rather than become an employee.

1. The occupational choice theory in explaining the entrepreneurship

Literature review

Entrepreneurship is treated as one of the driven factors of economic development (Hopp, Martin, 2017) ^[10] and the way to make economy more sustainable (Dhahri *et al.*, 2021). Among different manners of understanding the entrepreneurship, the main schools combine its concept with innovation, risk taking or proactivity in exploring market opportunities (Freytag, Thurik, 2007; Grilo, Thurik, 2008) ^[11-12].

Understanding the entrepreneurship as innovation rooted in the works of Joseph Schumpeter, e.g., 1934), entrepreneurship as the willingness to take risks rooted in the works of Frank Knight (e.g. in: Emmett, 1999), while entrepreneurship as the discovery and exploitation of market opportunities-in the Austrian school of thoughts (e.g., Kirzner, 1997) ^[14].

In the narrow context, entrepreneurship is seen as a process of new company creation and development (Zapkau *et al.*, 2017; Szerb *et al.*, 2019) ^[15-16] as within the start-up process all features of entrepreneurship (innovativeness, risk-taking and pro- activity) are combined, while entrepreneurs are people who chosen to run own business as occupational choice.

One of the most important areas of a contemporary person's life is his or her occupational activity. When it comes to working age individuals, the logic of the approach of neoclassical economics requires making a choice between occupational activity and inactivity. Being occupationally active means being ready to take up a job, thus impacting the existing labour resource or labour supply. The decision to become occupationally active leads to taking another decision which refers to the form of occupational activity. One must distinguish between looking for employment (being unemployed), and being employed; while being employed-one must choose between hired employment and entrepreneurship.

2. Factors determining the occupational choice

As self-employment exerts a positive influence on the economic wellbeing of local communities (Rupasingha, Goetz, 2013) ^[17], it is important to understand the factors impacting the occupational choice. There is no consensus about those factors and the list is quite extensive (Nikolaev, *et al.*, 2018) ^[18]. This list includes, for example, one's family situation, personality, education and experience as elements of human capital, nationality, ethnicity or health condition (Simoes *et al.*, 2016; Reissova *et al.*, 2020) ^[25-26], factors linked with the subjective feeling of well-being, the feelings of happiness and satisfaction in life (Crum, Chen, 2015) ^[29], the perceived instrumentality of wealth, the level of communitarianism, the need to feel accepted, the need for personal development, the need for escape and desire of independence, autonomy, wealth, challenge, etc. Summarising, three groups of factors can be distinguished: social-demographic factors, such as the age structure, share of men and women in the labour force, level of education; factors connected with the economic environment determining the levels of costs and profits involved in running one's own company; and finally, factors related to one's attitude towards entrepreneurship, showing one's readiness to become self-employed (Fritsch, Kritikos, Sorgner, 2015) ^[30].

The occupational choice theory, as the main search criterion compares the level of entrepreneurial profit and hired wages, but it also points to several basic factors moderating the decision. As the occupational choice theory assumes that entrepreneurial profit is burdened with a risk of failure while wages are risk-free, one's attitude to taking risk is considered a major decision impacting their choice of the form of employment. A risk-taker is more likely to choose to become an entrepreneur, while a risk averse person will tend to become a wage worker (Kihlstrom, Laffont, 1979; Banerjee, Newman, 1993) ^[13, 3].

Another group of determinants moderating the decision about the form of employment is access to financial capital (Reynolds, 2011) ^[19], as individuals with access to financial capital are more likely to become entrepreneurs. However, in practice, access to capital is a complex issue, including an individual's ability to make savings, the levels of credit rating or access to financial assets over a time horizon. The impact of access to capital on the occupational choice decision is shaped by moral hazard, which leads to individuals acting in a more risky way, with less responsibility taken for their actions (Hyytinen, Vaananen, 2006; Blumberg, Letterie, 2008; Paulson *et al.*, 2006) ^[20, 6, 21], and information asymmetry, construed as a different set of information in the hands of the company owner or potential investor (Blumberg, Letterie, 2008) ^[6]. Consequently, individuals with their own financial capital are much more likely to use it themselves rather than lend it to others.

Another very significant factor moderating the occupational choice is the situation on the labour market. Entrepreneurship attracts employees with less chances of finding more attractive employment and those in less developed labour markets (Fitzpatrick, 2017) ^[22]. The level of wages in the given industry and their comparison against entrepreneurial profits is another factor, as one decides to become an entrepreneur only when entrepreneurial profits are at least as high as wages.

Entrepreneurial motivation focuses on the factors and mechanisms through which an individual starts business activities. The literature provides two opposing theories of entrepreneurial motivation, the theories of entrepreneurial push and pull (Moulton, Scott, 2016; Dawson, Henley, Latreille, 2014; Angulo Guerrero *et al.*, 2017) ^[23, 27, 2]. Under the push theory, also known as necessity driven entrepreneurship, entrepreneurship is seen as an alternative allowing individuals to evade unemployment, psychological discomfort or some other adverse phenomena. The unemployed are more likely to start their own business activity than the employed (Andersson Joona, Wadensjo, 2013) ^[1]. The lack of job satisfaction is also regarded as one of the motivators pushing into entrepreneurship; however, research findings show that even though right after the formation of one's own business satisfaction levels soar fast, over time they begin to drop (Hanglberger, Merz, 2015; Georgellis, Yusuf, 2016) ^[27-28].

Under the pull theory, also known as opportunity driven entrepreneurship, starting one's own business results from the desire to make profits through realising one's own ideas. Under this theory, people become entrepreneurs as a result of positive motivation, such as the need for being independent, being one's own boss, the desire to fulfil one's own business ideas, the need for occupational challenges, which drives them to achieve a better professional and financial position.

Furthermore, Caceres and Caceres (2017) ^[9] have found gender differences in terms of entrepreneurial push and pull motivators, as wages is what pushes women to entrepreneurship stronger than men.

Research findings do not make it clear which of the types of entrepreneurial motivation plays a more important role in economic practice. Very often positive and negative factors mix with each other, jointly impacting the choice of the form of occupational activity. Findings show certain differences in activity levels after starting one's own

business, depending on the individual's previous employment state. For instance, individuals who entered into entrepreneurship from the state of unemployment are more likely to close down their businesses than those who used to be employed (Millan, Congregado, Roman, 2012) [31]. Individuals previously employed as wage workers with relatively high amounts of remuneration are more liable to establish legal partnerships. Taken as a separate group, they fare better in rankings of newly started companies in terms of the turnover and number of employees (Andersson Joona, Wadensjo, 2013) [1]. However, these differences might result from the previously acquired knowledge, experience and network of business connections rather than from motivation to enter into entrepreneurship. Starting one's own business, i.e. entering into entrepreneurship, often entails hiring employees and becoming an employer. The literature often differentiates between entrepreneurs-employers, known also as proper entrepreneurs, and the self-employed, known also as solo-entrepreneurs or quasi entrepreneurs (Bennett, Rablen, 2015) [5], saying that one only becomes an actual entrepreneur when giving employment to other people.

3. Research assumption: entrepreneurship as a choice of the form of occupational activity

The assumption of understanding the entrepreneurship as a form of occupational choice, alternative to employment, lead to formulating the research hypotheses on factors impacting this decisions. However, instead of limit the choice to entrepreneurship and employment, the presented research enlarges it by implementing two forms of entrepreneurship: quasi-entrepreneurship, meaning self-employed people without any employee, and proper entrepreneurship, being both entrepreneurs and employers. The overall economic situation reflects the market opportunities impacting entrepreneurship. According to Austrian school of thoughts, an opportunity means a gap in the market, and the discovery and exploration of market opportunities (Kirzner, 1997) [14] are made by the entrepreneurs through scanning the market for such unexploited opportunities (Hansen, Shrader, Monllor, 2011)

Table 1: Descriptive statistics of the rates of entrepreneurs and wage workers

Rates	Average value	Minimum value	Maximum value	Standard deviation
Rate of proper entrepreneurs in labour force (RPE)	3.65	2.98	4.07	0.28
Rate of quasi-entrepreneurs in labour force (RQE)	13.45	12.73	14.64	0.44
Rate of hired employees in labour force (RHE)	72.52	62.13	79.05	4.77

Source: Author's own estimation in *Statistica*.

As the data in Table 1 shows, in the years 2003-2018 the average share of proper entrepreneurs in the labour force was 3.65%, quasi-entrepreneurs-about 13.45%, and wage workers-72.5%. The rate of proper entrepreneurs oscillated between 2.98% and 4.07%, with standard deviation of 0.28. The rate of quasi entrepreneurs varied between 12.73% and 14.64%, with standard deviation of 0.44. Finally, the rate of wage workers was between 62.13% and 79.05%, with standard deviation of 4.77.

The independent variables are GDP in PLN (Polish currency) corrected with the Consumer Price Index (CPI) and average gross wages in the economy.

In order to linearise the connections between the variables, and in order to interpret the connections in terms of their flexibility, all variables were turned into natural logarithms.

[32]. The existence of such possibilities and their profitability in implementing them in running own business, but it also impact the possibility to employ workers. The average level of salaries available on the market is another determinant of the occupational choice, as it shows the attractiveness of waged employment comparing to entrepreneurship, however, the same time, average salaries are labour costs for entrepreneurs impacting their willingness to employ workers or not. These reflections lead to formulate two research questions:

RQ1: How changes in overall economic situation do measured by GDP impact the flow among occupational choices of proper entrepreneurship, quasi entrepreneurship and hired employment?

RQ2: How do changes in average wages impact the flow among occupational choices of proper entrepreneurship, quasi entrepreneurship and hired employment?

In order to refer to the above formulated research questions from the empirical perspective, empirical research was conducted on the basis of changes reported in Poland quarter by quarter between 2003 and 2018. The basis of the research was the data published by the Central Statistical Office in Poland in the form of time series. The data on entrepreneurship and unemployment was taken from "Labour Force Survey in Poland".

The dependent variables in the research are entrepreneurs divided into two groups: proper entrepreneurs (i.e. entrepreneurs hiring employees, entrepreneurship players, RPE) and quasi-entrepreneurs (i.e. self-employed, RQE). As the choice of occupational activity can also concern wage labour and entrepreneurship, hired workers (RHE) are taken as another dependent variable, allowing for making comparisons between the groups. In order to obtain data comparability, the author determined the rate of proper entrepreneurs, the rate of quasi-entrepreneurs and the rate of wage workers in the labour force construed as the total of the employed and the unemployed. Table 1 shows the rates of entrepreneurs and hired workers in the years 2003–2018.

Then, correlations between the variables were determined and regression functions were set. The data showing the values of the coefficients of correlation between natural logarithms of dependent and independent variables is presented in Table 2.

Table 2: Parameters of the correlation between natural logarithms of dependent and independent variables

Variables	LnREP	lnRQE	lnRHE	lnRGDP	lnAW
lnREP	1.000				
lnRQE	-0.654	1.000			
lnRHE	0.839	-0.651	1.000		
lnRGDP	0.756	-0.759	0.899	1.000	
lnAW	0.749	-0.736	0.921	0.982	1.000

Source: Author's own estimation in *Statistica*.

The next step is to determine the parameters of the regression function along with estimating its fitting with the rates of entrepreneurs as dependent variable s, GDP and average wages as independent variables by applying the OLS (Ordinary least squares) method. The overall form of the regression equation is as follows:

$$\ln ROct = \beta_0 + \beta \ln IVt \tag{1}$$

Where

$\ln ROct$ - natural logarithm of the rates of occupational choice over time t, substituted with $\ln RPE$ (rate of proper entrepreneurship), $\ln RQE$ (rate of quasi- entrepreneurship) and $\ln RHE$ (rate of hired employment) $\ln IVt$ -natural logarithm of independent variables over time t, substituted with $\ln R$ GDP and $\ln AW$ β_0, β -regression function parameters.

The results of the estimation of regression function parameters in accordance with the overall equation (1) are presented in Table 3, with functions (2),

Table 3: Results of regression function estimation

Variable	$\ln R GDP$ Referred to RQ1	$\ln AW$ Referred to RQ2
Rate of Proper Entrepreneurs hip		
No. of regression function	$\ln RPEt = \beta_0 + \beta \ln R GDPt$	$\ln RPEt = \beta_0 + \beta \ln AWt$
β_0 (constant)	-0.352 (p = 0.056)	-0.861 (p = 0.001)
B	0.202 (p = 0.000)	0.266 (p = 0.000)
Model fitting information	R = 0.756	R = 0.749
	R2 = 0.571	R2 = 0.561
	Adj. R2 = 0.565	Adj. R2 = 0.553
	F(1.62) = 82.668	F(1.62) = 79.075
Rate of Quasi- Entrepreneurship		
No. of regression function	$\ln RQEt = \beta_0 + \beta \ln R GDPt$	$\ln RQEt = \beta_0 + \beta \ln AWt$
β_0 (constant)	3.276 (p = 0.000)	3.467 (p = 0.000)
B	-0.083 (p = 0.000)	-0.107 (p = 0.000)
Model fitting information	R = 0.759	R = 0.736
	R2 = 0.575	R2 = 0.542
	Adj. R2 = 0.569	Adj. R2 = 0.534
	F(1.62) = 84.051	F(1.62) = 73.333
Rate of Hired Employment		
No. of regression function	$\ln RHEt = \beta_0 + \beta \ln R GDPt$	$\ln RHEt = \beta_0 + \beta \ln AWt$
β_0 (constant)	2.608 (p = 0.000)	2.016 (p = 0.000)
B	0.205 (p = 0.000)	0.280 (p = 0.000)
Model fitting information	R = 0.899	R = 0.921
	R2 = 0.809	R2 = 0.848
	Adj. R2 = 0.805	Adj. R2 = 0.846
	F(1.62) = 261.87	F(1.62) = 346.01

Source: Author’s own estimation in *Statistica*

(4) and (6) aiming to answer research question RQ1, while functions (3), (5) and (7)-research question RQ2.

As the results in Table 3 show, p value with all independent variables is below the significance threshold, i.e. these variables turned out to be significant from the statistical point of view in accounting for the changes in the rates of entrepreneurs and the rate of wage workers. The fitting of the regression function is also acceptable as the adjusted R2 is above (0.5) for the functions describing the rates of entrepreneurs, and over (0.8) for the rate of wage workers.

Answering RQ1 based on regression function (2), it can be seen that the directly proportional impact of the overall economic situation, measured with GDP, leads to a change in the rate of proper entrepreneurs. As its results show, the parameter value for the regression function is (0.202), i.e. having obtained a positive parameter value, we can allow for a directly proportional correlation between the variables. Logarithmising primary data allows interpreting research findings as flexible, which proves that a one-off change in GDP leads to a change in the rate of proper entrepreneurs by 0.2.

Answering RQ2 on the basis of regression function (3), and assessing the parameter value of the regression function

amounting to (0.266), we can assume that a one-off change in average wages leads to a directly proportional change in the rate of proper entrepreneurs by 0.27.

A comparison of the regression function estimation of the rate of proper entrepreneurs suggests that changes in the overall economic situation and average wages are those factors which exert a positive impact on the choice to enter into proper entrepreneurship. An improvement (deterioration) of market potential causes an increase (decrease) in the rate of proper entrepreneurs.

An analysis of another group of regression functions allows referring to the rates of quasi-entrepreneurs. Regression function (4) shows that changes in GDP impact in an inversely proportional way the changes in the rates of quasi-entrepreneurs, thus giving the answer to RQ1. This is certified by a negative parameter value (-0.083), which means that a one off change in GDP influences a change in the rate of quasi-entrepreneurs by 0.083. Thus, it shows that the activity reaction impact of quasi entrepreneurs is much smaller than that of proper entrepreneurs. Another regression function (5) allows answer RQ2. The value of regression function parameter (-0.107) suggests that a change in average wages leads to an inversely proportional

change in the rate of quasi entrepreneurs. As regards this function, like in the case of the abovementioned function, the reaction impact of quasi entrepreneurs is also smaller than that of proper entrepreneurs.

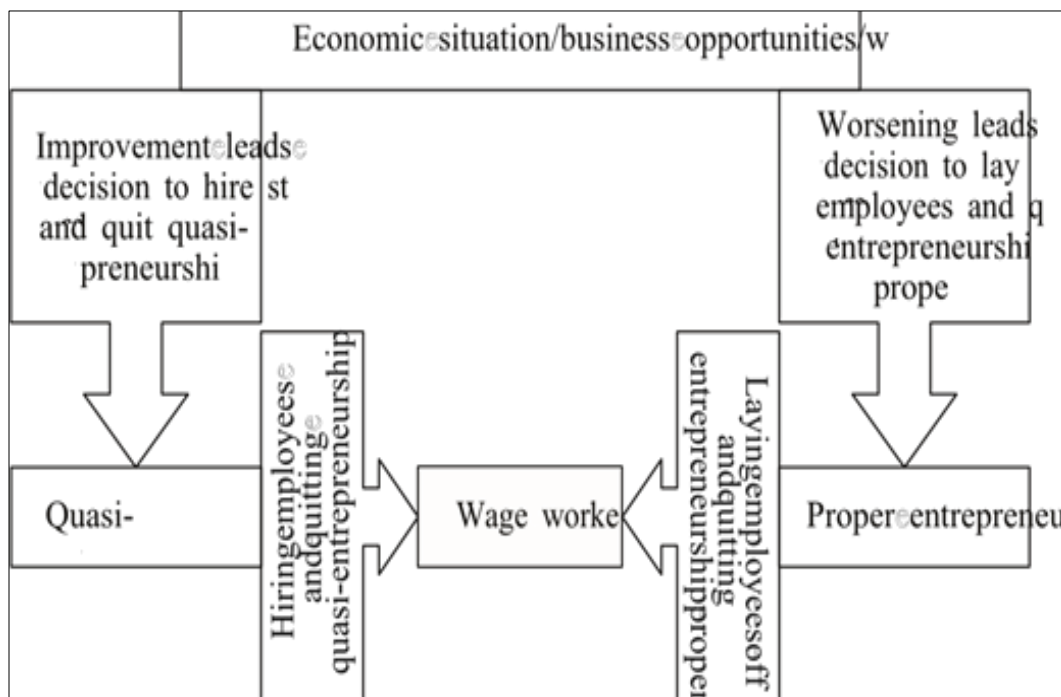
To sum up, the overall economic situation and the levels of average wages are those factors which in an inversely proportional way impact the activity of quasi-entrepreneurs. An improvement (deterioration) of market potential results in an increase (decrease) in the rate of proper entrepreneurs.

The final two regression functions allow referring to the impact of the market situation and average wages on the changes in the activity of wage workers. An analysis of regression function estimation (6) lead to answer RQ1. The value of the regression function parameter is (0.205), which can be interpreted as a positive impact of the change in overall GDP measured economic situation on the changes in the rates of wage workers. The last of the estimated regression functions (7) refers to RQ2. The value of the regression function parameter (0.28) implies that the impact of changes in average wages in a directly proportional way results in changes in wage labour by 0.28.

Thus, considering regression functions for the rate of wage workers, it can be argued that changes in the overall

economic situation and average wages exert a positive impact on the decision to enter into wage labour. An improvement (Deterioration) of market potential results in an increase (decrease) in the rate of wage workers.

A comparison of all the estimated regression functions reveals that changes in the market situation exert a positive influence on the decision to enter into proper entrepreneurship and wage labour, while a negative influence with regard to quasi-entrepreneurship. This suggests that more beneficial business opportunities encourage entrepreneurs to tap on them by, among other things, hiring a bigger number of wage workers. Thus, quasi-entrepreneurs join the now growing group of proper entrepreneurs, at the same time leading to an increase in the strength of wage workers. Reversely, when the market is experiencing a downturn, some proper entrepreneurs reduce their business activity and lay off wage workers. Thus, they move to the group of quasi-entrepreneurs, which now is growing, with a drop in the overall numbers of wage labour. Shifts in the employment of wage workers seem to exert a moderating impact on the changes in entrepreneurship rates in terms of the occupational choice. The above shifts are shown in Fig 1.



Source: Author's own elaboration

Fig 1: Shifts among proper entrepreneurs, quasi-entrepreneurs and wage workers

A comparison of the absolute values of regression function parameters and the degree of function fitting suggests that wage workers react more strongly than entrepreneurs to changes in the market situation. This can be accounted for with the costs and barriers of entering and going out of the market that entrepreneurs would have to incur in order to adjust to the improving or worsening market opportunities.

To sum up, it can be found that the adopted research method and the data used support the research hypotheses, which cannot be rejected. Thus, research findings suggest that, depending on the changes in the market situation, individuals make their occupational choices between entrepreneurship and wage labour. Furthermore, through the decisions to either hire or lay off staff there occur shifts

between the groups of quasi-entrepreneurs and proper entrepreneurs.

Conclusions

The occupational choice between being an entrepreneur and a worker is a long-term decision which can be analyzed in the light of the potential benefits and costs obtained and involves seeking rationality. If an individual can recognize that the benefits of being entrepreneur outweigh those of being a wage worker, they will choose to run their own business as a form of occupational activity rather than become hired employees. The novelty of the presented attitude is that the choice is considered not only between entrepreneurship and employment but also the scale of

entrepreneurship, distinguishing between proper entrepreneurs (Entrepreneurs-employers) and quasi-entrepreneurs (self-employed). When starting one's own business, people also need to decide whether they will hire employees and become proper entrepreneurs or whether they will abandon the idea of hiring employees and become quasi-entrepreneurs.

The research questions ask the influence of the overall economic situation, which determines business opportunities and average salaries, on the choice between a proper entrepreneur, a quasi-entrepreneur and a hired worker. Based on the time series data for Poland on a quarterly basis in the years 2003-2018, the flows between the forms of occupational choices are analyzed. The flows between proper entrepreneurs and quasi-entrepreneurs connected with decisions to either hire or lay off staff are crucial to moderate the occupational choice, and thus, to changes in the employment structure. The recovery of the market situation encourages people to follow the path of proper entrepreneurship or to become hired workers, while abandoning quasi-entrepreneurship. The recession of business opportunities, in turn, is the reason for the reduction of proper entrepreneurs and employment downsizing, at the same time leading to an increase in the number of quasi-entrepreneurs.

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