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Women's Entrepreneurial Attitudes when Facing Restructuring Processes - study results

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Abstract

The paper is theoretical and empirical in nature and presents an analysis of entrepreneurial attitudes among the employees of restructured companies. The first part, based on the literature on the subject, describes the interdependencies between the restructuring and entrepreneurial processes and the women's attitudes. These considerations were the basis of empirical research in which the above mentioned relationships were analysed. The quantitative research with the use of the CAPI method was conducted in 2019 and included female employees of restructured enterprises in the Zachodniopomorskie Voivodeship

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1. Introduction

The transformations of the Polish social and economic reality, initiated over 30 years ago, have brought about significant effects, the consequences of which are felt by entities operating on the market. Not only did the preferences of employees and employers change in terms of remuneration or working conditions, but also considerable restructuring processes took place, reflected in the structural and ownership changes in Polish economic entities. These processes have encompassed legal and organisational restructuring of companies, as well as adapting the physical and technological structure of the business operation and employment structure [1]. However, an vital element of the success of the above-mentioned restructuring processes is that the employees, in particular women who account for almost 50% of the total number of workers in Poland, demonstrate adequate entrepreneurial qualities necessary for mitigating negative effects of transformations and for achieving the set objectives [2], [3].

In view of the above dependencies, it is appropriate to carry out an in-depth analysis of the entrepreneurial attitudes of women, who are employees of companies that are being restructured. The general objective of this paper was achieved by presenting the results of empirical research on the subject under consideration. The results of the analysis helped diagnose the entrepreneurial attitudes of female employees of the restructured enterprises. The empirical considerations were preceded by an analysis of the research problem on the grounds of a literature review.

2. Restructuring and entrepreneurship

Restructuring most often refers to processes taking place within the enterprise which lead to improved efficiency of the organisational structure[4]. This is possible thanks to better shaping and more rational use of the company's prominent resources. Thus, it can be assumed that restructuring is a process of changing the basic resources of an economic entity. In this approach, there is quite a common view that the lack of restructuring measures in the area of human resources poses a major barrier to successful restructuring in general[5]. This is mainly due to the fact that the company employs people who are a vital component of any restructuring process. On the one hand, they are most affected by the consequences of restructuring, and on the other hand, they are the group which bears responsibility for implementing the whole restructuring process and for reaching its outcomes as planned [6].

When looking at the essence of the restructuring process in the context of employment, it should be borne in mind that this process is influenced by a number of both external and internal factors. The former include: economic determinants i.e.: general condition of the economy, rate and directions of development, degree of openness and integration with the global economy, changes in interest rates, tax rates and inflation; legal determinants i.e. labour law, trade regulations and all legal norms regulating the economic system; political determinants i.e. the State's market share and protectionism; technological determinants i.e. the scale and dynamics of civilisation progress, including the degree of innovation of the economy and the development of R&D; social determinants, i.e. demographic changes [7]. The internal conditions include: the structure of the organisation understood as the distribution of labour and the procedures existing inside the organisation, the type of business operation, leadership style, the needs of employees, the state of dissatisfaction resulting from the discrepancy between the reality and the its perception. These conditions not only determine the restructuring of employment, but also affect the restructuring process of the entire organization [8]. The positive or negative impact of these determinants on the restructuring process in a given company cannot be assessed explicitly, as it depends on the strength of many concurrent factors. Nevertheless, it should be stated that internal conditions determine first of all what attitude the company will adopt in the face of changes, to what extent internal stakeholders will support developments stimulating the company growth and eliminate constraints to the company performance [9]. The external determinants define the opportunities to change that emerge on a given market [10].

Both internal and external determinants conditioning the employment restructuring process have a direct impact on the occupational reconversion of employees [11]. The restructuring process specifically affects women, particularly in view of the existing gender inequality on the labour market. Thus the occupational reconversion of female workers is of great importance for both employees and employers, as it requires the former to anticipate the future conditions in which the company will operate and to take account of the social dimension in the companies undergoing restructuring. For female employees, the above is a condition for their flexibility and adaptation to new

reality in their workplace [12]. This approach is consistent with Theory of Work Adjustment, according to which professional reconversion is the process of achieving and maintaining employee satisfaction in the work environment. On the one hand, the organisation requires that the employee, using his or her knowledge and skills, performs the tasks entrusted to him or her in a proper manner [13]. On the other hand, the employee strives to satisfy their own needs. If there is balance between the preferences of both the company and the employee, then the employee remains in the organisation and works effectively. In case of imbalance, the employer should launch the adaptation measures should be started which include modified organisational requirements and organisational strengthening [14]. As far as female workers are concerned, it is important in this regard to ensure social and economic balance, including in particular the support provided for the effective fulfilment of their social roles both at work and outside the enterprise [15], [16], [17]. It can therefore be concluded that the smooth running of the restructuring process depends on having a strategic plan to introduce changes, the genuine involvement of all employees in the restructuring process and on effective communication. However, particularly in the case of female employees in restructured companies it is necessary to promote entrepreneurial attitude [18].

Nowadays, entrepreneurial attitudes are defined as the active behaviour of a human being reflected in their recognition and creation of new economic opportunities, in connection with the process of making decisions about allocating and using particular resources and factors that can be found in the environment [19]. In such an approach, the role of an entrepreneurial individual is to generate internal changes reflected in developing an entrepreneurial attitude, and external changes taking place in entrepreneurial processes that lead to the improved effectiveness and development of the environment in which they are operating, i.e. in the restructuring processes [20]. The above activities are conditioned by the "element of entrepreneurship" that each human possesses [21]. This element is nothing else than the human being's alertness to take advantage of the opportunities that arise. Thus, the watchfulness of an entrepreneurial individual is mainly based on their knowledge absorbed spontaneously, i.e. knowledge based on life experience [22]. This type of knowledge distinguishes a person from the rest of the society, thus creating their advantage over other actors operating on the market. However, one should not forget that entrepreneurial attitudes are not only determined by knowledge, but also by uncertainty and risk [23], [24]. This is caused by the environment, which is marked by a high degree of unpredictability. Uncertainty about the future may cause negative phenomena, both economic and social, the overcoming of which often forces corrective actions, i.e. restructuring efforts. Therefore, if entrepreneurial attitudes relate to the activity of an organisation which implements changes, thus triggering adjustment processes, then it is natural that entrepreneurial activity is a component of restructuring [25]. Thus, it is difficult to pursue the restructuring process without shaping entrepreneurial attitudes among employees [26], [4]. In this approach, the literature distinguishes the entrepreneurial qualities that condition entrepreneurial attitudes which hinder or facilitate the employees' professional reconversion in the course of restructuring the organisation. Qualities supporting the process of professional reconversion include: orientation towards achievement and success, risk-taking, mental resilience, creative skills, ingenuity, extraversion, ability to act in difficult situations, creative leadership, trust in others, leadership skills, ability to negotiate and mobilise others and, finally, the recognition of people's needs [27]. The obstructive qualities are for example: fears, aversion, and anxiety instead of self-reliance, difficulty in making decisions, uncertainty, lack of mental resilience, conformism, and algorithmic mode of action, introversion, difficulties in contact and cooperation, and the deficit of leadership skills [28].

Summarizing the considerations to date, it is clear that the motivation to take corrective actions, willingness to take risks, decisiveness, faith in success, resistance to failure, innovation and creativity, as well as the capacity to cooperate with team members - all of these contribute to the success of the professional reconversion of employees [29]. The absence of these attributes may impede the implementation of the restructuring process.

Although more than three decades have passed since the beginning of the process of economic system transformation, Polish businesses are still undergoing restructuring processes [30]. Therefore, the forming of entrepreneurial attitudes becomes, on the one hand, a necessary condition for eliminating the negative effects of restructuring and, on the other hand, it determines an effective and rational process for adapting to the free market reality [31], [32], [33], [34]. Importantly, the development of entrepreneurship as a social element, encompassing, e.g. better access to employment through generating new jobs in the existing enterprises or in the start-ups, contributes to the sustainable growth of the Polish economy [35].

Bearing in mind the above, it is reasonable to verify in an empirical way how entrepreneurial attitudes of the employees of the restructured companies are formed.

3. Study Results

In order to carry out the primary research objective, which was to diagnose the entrepreneurial attitudes of employees of the restructured companies, a decision was made to hold questionnaire-based interviews. The quantitative research was conducted at the turn of 2018/2019 using the CAPI method. The interviews were conducted with the use of a structured electronic questionnaire, which contained standardised questions about the problem under investigation, arranged in an appropriate order and grouped into thematic blocks. The research covered 53 employees from 12 manufacturing companies in the Zachodniopomorskie Voivodeship, which had undergone the restructuring process over the previous 5 years. It should be pointed out here that diagnostic questions concerning the restructuring process played an essential role in determining the type of companies under study. Those questions were formed on the basis of theoretical considerations, which were presented in the first part of this study.

According to the findings of the survey, more than half of the respondents (52%) had higher education; every third person (36%) had secondary education, while 12% had vocational and primary education. The majority of women worked in the same company for up to 5 years (45%), while 31% worked there for more than 5 years. The longest service in one company was 42 years and the shortest - one month. Moreover, the majority of women were employed in service companies (58%) and retail companies (22%), while the remaining part, i.e. 20% of women participating in the survey, worked in manufacturing companies.

With a view to achieving the objective, in the first stage of the research process, employees were asked a question about the aspect of their jobs they value most. The respondents could mark more than one answer in this question. In the majority of cases the respondents chose job security (54%) as having the greatest value. The second popular answer was decent wages (42%), followed by skills upgrading and professional development opportunities (38%), atmosphere at work (37%), respect for their rights (32%) and finally the employer's flexible approach (31%).

In the next stage of the survey, respondents were asked to identify the least valued aspects of their jobs. According to 89% of the respondents, the least desirable was to be in charge of all kinds of changes, both of organisational and investment nature, as well as to suffer disrespect for their rights (73%). 44% of female employees chose bad atmosphere at work, 11% indicated an autocratic style of team management, while 9% indicated a lack of promotion prospects.

When assessing the respondents' entrepreneurial capacity, the survey results showed that 87% of the respondents described themselves as entrepreneurial, 2% were of the opposite opinion, and every tenth respondent (11%) was not able to determine their potential. The next part of the questionnaire was aimed at determining the entrepreneurial attitude of the women under survey. The best developed entrepreneurial qualities that the employees of the restructured enterprises had were diligence (62%), conscientiousness (59%), honesty (56%), persistence (47%), loyalty (43%), and responsibility (39%). Next, the respondents indicated readiness to take risks (32%) and creativity (27%).

The research also identified the entrepreneurial qualities which, according to the respondents, help accept the effects of restructuring in the company. In order to make it easier to interpret the results, the relevance of the responses was analysed using the Likert scale and average ranks on a scale from 1 (minor quality) to 5 (major quality). According to the obtained results it is clear that the majority of employees listed creativity (4.44), readiness to take risks (4.19) and persistence (4.07) among the entrepreneurial qualities helping them adapt to the ongoing changes. Further, the respondents indicated responsibility (3.82), conscientiousness (3.82), diligence (3.21) honesty (3.14) and loyalty (3.02). While performing the analysis according to particular criteria, by which the examined community was divided, it should be noted that the greatest differences were found in the group of employees selected by education. The employees with vocational and primary education chose honesty and diligence as the qualities that make adaptation to changes the easiest. The respondents with secondary education indicated responsibility and creativity, while those with higher education pointed to readiness to take risks and persistence.

It is interesting that those entrepreneurial qualities which the women surveyed declared as being their weakest point were actually regarded by them as the most helpful in the process of adaptation to changes. The observed discrepancies are presented in the Figure 1 below.

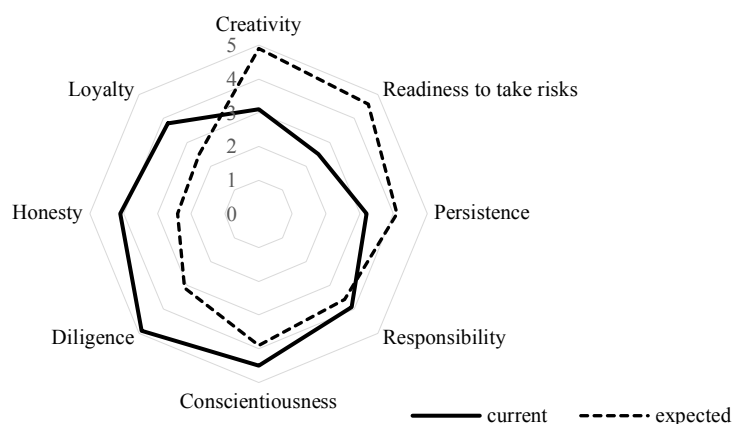


Fig. 1 Profile of key entrepreneurial qualities of employees of restructured companies.
Source: Own study based on the questionnaire-based survey

The study results show that the majority of qualities differ significantly. Only the responsibility and conscientiousness of the employees were approached most closely the level they possessed and desired. This may indicate that employees are not properly prepared to face changes. For this reason, there is a need to teach the employees to be constantly ready to make creative and risky decisions which are burdened with uncertainty. It is also necessary for the employees to be responsible and persistent when pursuing their goals.

The analysis showed that the women respondents valued most their job security and the absence of changes in their work environment. The majority considered themselves as entrepreneurial, although they did not have sufficiently developed skills to support the restructuring processes. It seems therefore reasonable to diagnose the effects of restructuring. For most of the employees, restructuring was associated with staff reductions (83%), lower wages (82%), more workload (73%) and the introduction of flexible forms of employment (64%). Significant differences in responses could be seen when we examine them according to the criterion of the length of service. The majority of women with up to 5 years' seniority replied that the restructuring in the company was mainly related to wage reductions and additional workload. For employees working for more than 5 years, restructuring clearly meant redundancies. These findings may indicate that employees with a prolonged length of service, being a group most exposed to the effects of restructuring, clearly equated any changes in the company with job cuts. Those who had been working for no more than 5 years felt less threatened by redundancy but were more afraid of losing part of their wages and of having to take on new responsibilities. It may be surprising that workers generally did not associate restructuring with flexible forms of employment. Perhaps this was due to the fact that Polish employers are rather reluctant to introduce flexible forms of work. However, the study clearly shows that the implementation of such forms of employment help eliminate the adverse effects of restructuring by, inter alia, reducing labour costs, optimising the state and structure of employment, increasing productivity and employment efficiency, reducing the risk and costs of terminating permanent employment contracts, or limiting the scope of employee benefits.

The above findings can be complemented by the pattern of answers to the question about changes caused by restructuring that had been experienced by the respondents over the past 5 years. The respondents could mark the maximum of five answers. They most often chose the following options: the redundancies (71%), changes to their workload (62%), changed procedures at the workplace (58%) and lower wages (57%). Therefore, if the staff

reduction was one of the most frequently pointed out changes related to the restructuring process the respondents had experienced, it seems interesting to look at the study findings concerning the sense of threat to be made redundant within the following 2 years. The study revealed that more than two thirds of women, 68%, felt such anxiety, while one in three respondents (32%) was of the opposite opinion.

In view of the fact that the restructuring is equated with staff reduction, and that employees are afraid of further layoffs, it was reasonable to analyse the measures taken by women to mitigate the negative effects of restructuring. On the basis of the empirical material obtained in the course of the study, it was found that 63% of the respondents took entrepreneurial initiatives, while 37% did not see such a need. It is therefore worth finding out what kind of initiatives are taken by women who feel at risk of losing their jobs (Fig 2)

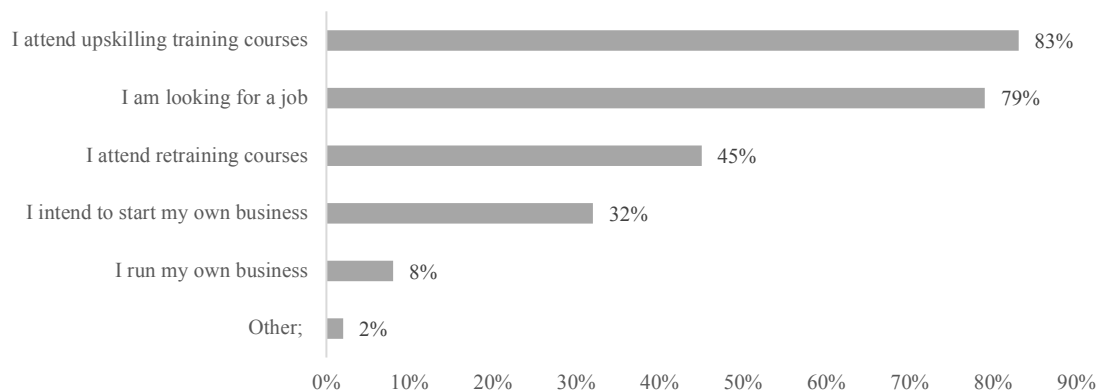


Fig.2. Entrepreneurial initiatives in the face of staff restructuring in the eyes of women employees

Source: Own study based on the questionnaire-based survey

According to the data of Graph 2, 83% of female employees participated in training courses improving their professional qualifications, almost the same number of respondents (79%) were job seekers. Subsequently, women attended retraining courses in order to change their career path (45%) and every third of them planned to start their own business. Only 8% owned a business and believed that this was the right alternative to losing their current job. In the category of Other, women respondents specified the following answers: I want to move to another city in Poland, I want to go abroad, I choose old age pension.

Employees who were not taking action related to the effect of the restructuring process were asked a question about their strategy to deal with the situation if such a threat would become real. A vast majority of female employees (78%) replied that they would look for and find another job, 62% would join an upskilling course, while 56% of the respondents would retrain to another profession. Every third employee would consider starting a business whose field of operation would not be related to her previous job, and every seventh would go on a prolonged sick leave.

The last stage of the research process was to establish stochastic relations between the entrepreneurial qualities of employees and their activities aimed at reducing the negative effects of company restructuring. In order to verify the relationship between the variables, Cramer's V coefficient was applied. Cramer's V measures the strength of the relationship between the variables whose measurements are expressed on nominal scales. To test the relevance of these relationships, an independence test was chosen, which allows to check whether the two features tested are independent. For this purpose, an independence table was drawn up, which, when filled in, gives the empirical abundance matrix. Onto this table, a theoretical matrix was superimposed that had been calculated on the assumption of the independence of the features, and then the two matrices were compared by means of statistics. That provided

an answer as to whether the hypothesis of trait independence could be rejected as a result of too large differences in empirical and theoretical counts.

On the basis of the estimations it was established that creative employees were more likely than others to take entrepreneurial initiatives aimed at eliminating negative effects of the restructuring process, which was confirmed by both the test (51,22) and Cramer's V coefficient (0.45). Moreover, the study also revealed that there was a stochastic correlation between readiness to take risks and the entrepreneurial behaviour. Those conclusions were also confirmed by the coefficient of determination (41.28), calculated for the above relation, and Cramer's V coefficient (0.41). As regards other entrepreneurial qualities, it was found on the basis of statistical estimates that there was a relationship between the determination to accomplish the desired goals and the entrepreneurial behaviour. The strength of that relationship was at 0.37, which means that this particular quality determines efforts to mitigate the negative effects of the employment restructuring process. It is also worth noting that there was a stochastic relationship between the responsibility and entrepreneurial behaviour of employees. The value of Cramer's V coefficient (0.28) showed a moderate, strong and significant correlation.

Using the independence test to seek a link between employees' conscientiousness and their entrepreneurial attitude, it was established that there was a link between the two variables. The strength of the stochastic relationship, analysed on the basis of Cramer's V coefficient for relevant relationships, showed a noticeable (0.18)

4. Discussion and conclusions

To recapitulate, basing on the results of the survey, the relationship between the entrepreneurial behaviour of employees and the restructuring process was diagnosed. The majority of respondents clearly equated restructuring processes with redundancies. In addition, the surveyed employees considered themselves to be entrepreneurial, but they did not have sufficiently developed entrepreneurial qualities that could help them overcome the disadvantageous effects of the ongoing changes. In this respect, it was found that people with entrepreneurial capacity undertake measures aimed at mitigating the negative effects of employment reconversion more often than other respondents.

In the opinion of the respondents, creativity, readiness to take risks, persistence and responsibility determine to the greatest extent their acceptance of the changes that have occurred. Thus, these specific qualities are conducive to the employees' initiation of entrepreneurial processes represented by their decision to continue their professional activity.

In the face of the ongoing restructuring processes of Polish enterprises, it should undoubtedly be stated that the entrepreneurial attitudes promoted among women will condition the accomplishment of the restructuring objectives in individual enterprises. Thus, encouraging entrepreneurial behaviour will contribute to the creation of structural conditions for sustaining and strengthening the restructured businesses, thereby ensuring secure and stable jobs.

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References

- [1] Rachwał, Tomasz. (2011) "Industrial restructuring in Poland and other European Union states in the era of economic globalization." *Procedia-Social and Behavioral Sciences* **19**: 1-10.
- [2] Manowska, Anna, Katarzyna Tobór Osadnik, and Małgorzata Wyganowska. (2017) "Economic and social aspects of restructuring Polish coal mining: Focusing on Poland and the EU." *Resources Policy* **52** : 192-200.
- [3] Bernaciak, Magdalena, Anil Duman, and Vera Ščepanović. (2011) "Employee welfare and restructuring in the public sector: Evidence from Poland and Serbia." *European Journal of Industrial Relations* **17** (4) : 365-380.

- [4] Maksimovic, Vojislav, Gordon Phillips, and Nagpurnanand R. Prabhala. (2011) "Post-merger restructuring and the boundaries of the firm." *Journal of Financial Economics* **102** (2) : 317-343.
- [5] Nicolopoulou, Katerina. "Social entrepreneurship between cross-currents: toward a framework for theoretical restructuring of the field." *Journal of Small Business Management* **52** (4) : 678-702.
- [6] Legomsky, Stephen H. (201) "Restructuring Immigration Adjudication." *Duke Law Journal* **59**, 1635-1721.
- [7] Flecker, Jörg, and Pamela Meil. (2010) "Organisational restructuring and emerging service value chains: implications for work and employment." *Work, Employment and Society* **24** (4) : 680-698.
- [8] Howell, Chris. (2016) "Regulating class in the neoliberal era: the role of the state in the restructuring of work and employment relations." *Work, employment and society* **30** (4): 573-589.
- [9] Ko, Jyh-Jer Roger, and Ying-Jung Yvonne Yeh. (2013) "Worker satisfaction following employment restructuring: Effects of nonstandard workers and downsizing on job satisfaction in Taiwan." *Social indicators research* **110** (2) : 453-467.
- [10] Weinstein, Amanda. (2014) "Local labor market restructuring in the shale boom." *Journal of Regional Analysis & Policy* **44** (1) : 71-92.
- [11] Gao, Jinlong, and Feng Yuan. (2017) "Economic transition, firm dynamics, and restructuring of manufacturing spaces in urban China: Empirical evidence from Nanjing." *The Professional Geographer* **69** (3) : 504-519.
- [12] Lewis, Suzan. (201) "Restructuring workplace cultures: the ultimate work-family challenge?." *Gender in management: an International Journal* **16** (1): 21-29.
- [13] Kennedy, Elizabeth J. (2010) "The invisible corner: Expanding workplace rights for female day laborers." *Berkeley J. Emp. & Lab. L.* **31** : 126.
- [14] Kirton, Gill, and Cécile Guillaume. (2017) "Work, employment and engagement conditions in a female-dominated public service occupation after restructuring/outsourcing." *Industrial Relations Journal* **48** (5-6) : 482-499.
- [15] Fakh, Ali, and Pascal L. Ghazalian. (2015) "Female employment in MENA's manufacturing sector: the implications of firm-related and national factors." *Economic Change and Restructuring* **48** (1): 37-69.
- [16] Erkan, Ayça Ülker. (2018) "Reinterpreting History and Restructuring Female Identities in Caryl Churchill's Top Girls and Timberlake Wertenbaker's Our Country's Good." *Kastamonu Education Journal* **26** (3): 721-728.
- [17] Foa, Edna B., and Sheila AM Rauch. (2014) "Cognitive changes during prolonged exposure versus prolonged exposure plus cognitive restructuring in female assault survivors with posttraumatic stress disorder." *Journal of consulting and clinical psychology* **72** (5) : 879.
- [18] Atef, Tamer Mohamed, and Masooma Al-Balushi. (2015) "Entrepreneurship as a means for restructuring employment patterns." *Tourism and Hospitality Research* **15** (2) : 73-90.
- [19] Wenyng, Fu. (2016) "Local Entrepreneurship and Cluster Restructuring: An Integrative Theoretical Perspective." *Scientia Geographica Sinica* **36** (5) : 715-723.
- [20] Dawson, Christopher and Henley, Andrew. (2012) "Push versus pull entrepreneurship: An ambiguous distinction? *International Journal of Entrepreneurial Behaviour & Research* **18** (6): 697-719.
- [21] Hessels, Jolanda, van Gelderen, Marco, Thurik Roy. (2008) "Entrepreneurial aspirations, motivations and their drivers". *Small Business Economics* **31**(3): 323-339.
- [22] Koe, Wei Loon, Sa'ari, Juan Rizal and Majid, Izaidin Abdul. (2012) "Determinants of entrepreneurial intention among millennial generation". *Procedia-Social and Behavioral Sciences* **40** : 197-208
- [23] Estrin, Saul, and Tomasz Mickiewicz. (2011) "Institutions and female entrepreneurship." *Small business economics* **37** (4) : 397.
- [24] Noguera, Maria, Claudia Alvarez, and David Urbano. (2013) "Socio-cultural factors and female entrepreneurship." *International Entrepreneurship and Management Journal* **9** (2) : 183-197.
- [25] Poggesi, Sara, Michela Mari, and Luisa De Vita. (2016) "What's new in female entrepreneurship research? Answers from the literature." *International Entrepreneurship and Management Journal* **12** (3) : 735-764.
- [26] Qian, Haifeng, and Zoltan J. Acs. (2013) "An absorptive capacity theory of knowledge spillover entrepreneurship." *Small Business Economics* **40** (2) : 185-197.
- [27] Roh, James Jungbae, Hokey Min, and Paul Hong. (2011) "A co-ordination theory approach to restructuring the supply chain: An empirical study from the focal company perspective." *International Journal of Production Research* **49** (15): 4517-4541.
- [28] Wei, YH Dennis, and Ingo Liefner. (2012) "Globalization, industrial restructuring, and regional development in China." *Applied geography* **32** (1) : 102-105.
- [29] Suutari, Tuomas. (2013) "Socio-economic restructuring of a peripheral mining community in the Russian North." *Polar Geography* **36** (4) : 323-347.
- [30] Marcińczak, Szymon, and Iwona Sagan. (2011) "The socio-spatial restructuring of Łódź, Poland." *Urban Studies* **48** (9) : 1789-1809.
- [31] Rantanen, Teemu, Agnieszka Pawlak, and Timo Toikko. (2015) "The Significance of Social Welfare Attitudes in Young People's Entrepreneurial Intentions." *Entrepreneurial Business and Economics Review* **3** (1): 43.
- [32] Bagheri, Afsaneh, and Zaidatol Akmaliah Lope Pihie. (2010) "Entrepreneurial leadership learning: In search of missing links." *Procedia-Social and Behavioral Sciences* **7** : 470-479.
- [33] Wątróbski, Jarosław., Sałabun, Wojciech., Karczmarczyk, Artur., Wolski, Waldemar, (2017). Sustainable decision-making using the comet method: An empirical study of the ammonium nitrate transport management, in: 2017 *Federated Conference on Computer Science and Information Systems (FedCSIS)*, IEEE : 949-958.
- [34] Wątróbski, Jarosław and Sałabun, Wojciech., (2016). The characteristic objects method: A new intelligent decision support tool for sustainable manufacturing, in: *International Conference on Sustainable Design and Manufacturing*, Springer: 349-359.
- [35] Wątróbski, Jarosław., Jankowski, Jarosław., Ziemia, Paweł, Karczmarczyk, Artur and Ziolo, Magdalena., 2019b. Generalised framework for multi-criteria method selection: Rule set database and exemplary decision support system implementation blueprints. *Data in brief* **22**, 639