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THE ROLE OF GENDER AS AN INDEPENDENT DETERMINANT OF ENTREPRENEURSHIP (EVIDENCE FROM POLAND)

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Purpose: The issue of gender in analyzes concerning entrepreneurship is part of numerous items, most of which focus on showing the worse situation of women, often equated with discrimination. Qualitative analyzes are often directly linked to a clear predominance of men in the population of entrepreneurs. This study is of a theoretical-cognitive nature. By emphasizing the prevailing gender discrimination, structural inequalities, and lack of consensus within the scientific community, the article contributes to the ongoing discussion on women's entrepreneurship and the challenges they face. The quantitative nature of the study aims to determine the ratio of women to men engaged in entrepreneurial activities during the social, economic, and political changes that have taken place in Poland over the past three decades. The research problem was embedded in the conception of natural differences between the number of women and men as entrepreneurs wherein the criteria of sustainable development, with convergent entrepreneurial intentions of both sexes.

Design/methodology/approach: The study is theoretical and cognitive in nature. The article uses statistical tools in benchmarking and regression to present a quantitative pattern of entrepreneurship in Poland. The quantitative analysis was preceded by a review of the literature. **Findings:** The obtained results indicate that the quantitative structure of the self-employed in terms of gender is quasi-constant. The dominance of men in the population of entrepreneurs does not change over time, and it remains in constant relative relation to the number of women entrepreneurs, regardless of changes in the external environment. Similar arrangements apply to entrepreneurs' decisions regarding liquidation, suspension, and resumption of economic activity.

Research limitations/implications: The completed study has limitations related to the adopted time limit of the public reporting system. Research limitations are also present in quantitative terms that ignore the context.

Practical implications: In practical terms, they constitute a considerable incentive to revise the formulated EU development strategies and the programs implemented as part of public policies that influence the Polish economy. he obtained results are part of the literature that undermines the effectiveness of interventionism, in this case related to the creation of preferences for women.

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Social implications: The gender issue in entrepreneurship is important. However, too often these issues are presented in public debate, where the arguments are belief, not science. The article is an important voice in current global discussions on inequality, including discrimination.

Originality/value: The obtained results are supplemented by quantitative research on entrepreneurship, considering the gender of the entrepreneur. The applied research approach in the area of quantitative material and statistical tools is innovative.

Keywords: Entrepreneurship, Gender, Small businesses, gender-balanced entrepreneurship, Self-employed, Business activity.

Category of the paper: Research paper, Literature review.

1. Introduction

By highlighting the need to reframe the concept of gender equality and questioning the effectiveness of existing solutions, the article contributes to the global discourse on promoting women's entrepreneurship and sustainable development. The article deals with the analysis of entrepreneurship in Poland, understood as taking up and running a business on one's account in the context of gender. The subject of the research is the number of self-employed people in the years 1992-2021 and the number of applications submitted to the Central Register and Information on Economic Activity (CEIDG) in the field of starting, suspending, resuming, and terminating business activity in the period June 2019 - January 2022. The adopted lengths of series time limits result from the limitations of public registers and allow capturing the identified relationships from the perspective of systemic changes. Thorough economic reforms initiated in Poland in 1989 had a relevant impact on the national economy. The transformations include the pre-accession period and then membership in the European Union. The background for the collected statistical material is the diverse external environment of enterprises.

Research issues linking gender with entrepreneurship are discussed in the extensive literature on the subject, focused mainly on the determinants of entrepreneurial attitudes and the participation of women in this area. The identified deficit of women running or managing business entities is a fact. Irrespective of the qualitative assessment of this state, the conducted analysis does not give grounds to claim that the share of sexes in the population of natural persons leading business activity changes significantly, and the totality of activities undertaken in this area is convergent in the population of women and men in the perspective the past three decades. Structural differences do not change despite the launch of numerous aid programs included in, among others, European funds, as well as public support launched in crises, such as the COVID-19 pandemic.

The inclusion of gender equality in the SDGs is a motivation for research on female entrepreneurship (Fuentes et al., 2019; Fernández-Guadaño, Martín-López, 2023). However, sustainability cannot be equivalent to strictly quantitative equality. It is significant to capture gender disproportions and look at them in a dynamic system. This perspective allows us to look at the share of women in the population of self-employed people in terms of (or) the assumed effectiveness of implemented public programs based on the assumption of the existing discriminatory inequality.

The conducted analysis proves that despite a sharp quantitative disproportion between the number of women and men starting a business activity, relations in other decisions related to the formal status of the enterprise show a significant strong positive correlation. Those means that the intensity of individual entrepreneurial activities over time is gender neutrality.

2. Literature review

Entrepreneurship is the driving force behind economic growth in any country. The article uses a classic approach to entrepreneurship. In this approach, entrepreneurship is an entrepreneur, i.e., a person who, using appropriate features, is the creator of economic activity (Say, 1960). One of the attributes of entrepreneurship is the creation of new business entities, with micro-enterprises being of particular importance (Iaroslav et al., 2021; Sutter et al., 2019; Si et al., 2020; Gupta et al., 2020). Entrepreneurship is as discovery and exploiting profitable opportunities (Shane, Venkataraman, 2000) in the domain of small enterprises (Kassicieh et al., 2002; Katila et al., 2012).

The gender perspective has been present in the scientific literature of entrepreneurship for many years. One of the most frequently discussed issues is the functioning of enterprises managed by women and the motives for entrepreneurial activities (Corrêa et al., 2022; Kumar, Das, 2019; Ramadani et al., 2022; Sarwar et al., 2021; Sitaridis, Kitsios, 2017; Villanueva-Flores et al., 2021; Welsh et al., 2021). In all the available studies, one can notice a clear dominance of the perspective of gender discrimination in the context of the relatively worse situation of women compared to economically active men. A key issue is the lack of balance in the number of businesses run by women and men. The overrepresentation of men in the population of entrepreneurs is identified by many researchers as a problem of structural inequalities with a strong connotation of unsustainable development and discrimination (Achtzehn et al., 2023; Chatterjee et al., 2022; Halilem et al., 2022; Setyaningrum et al., 2022). Researchers of this trend point to "an entrepreneurial identity gap." The gap includes numerous stereotypes limiting women's activity in self-employment through persistent gender norms in entrepreneurship. (Crane, 2022; Elliott et al., 2022; Siivonen et al., 2022). On the other hand, researchers indicate that quantitative disproportions are natural differences, and structural

inequality is inscribed in the external environment and does not have to be related to discrimination (Mandel, Rotman, 2021; 2022). The lack of scientific consensus indicates a cognitive niche. Scientists prove the exact opposite hypotheses. While some point to similar entrepreneurial intentions of women and men (Avnimelech, Rechter, 2022), the same development aspirations and no differences between the intrinsic motivation of male and female entrepreneurs (Meyer et al., 2022), others argue that they are different (Ramadani et al., 2022). At the same time, there is a lack of research focusing on women's motivation for entrepreneurship and determining whether women who decide to launch a business have different profiles (Llados-Masllorens, Ruiz-Dotras, 2022). Researchers relying on quantitative and qualitative analyzes indicate a problem in confronting the assumption of incomparable sets (women entrepreneurs vs. men entrepreneurs), which may lead to incorrect conclusions (Halilem et al., 2022; Henry, Levis, 2023).

In Poland and other European Union countries, the Gender Mainstreaming policy was actively promoted and adopted by the European Commission in 1997. This strategy assumes the need to take actions aimed at reducing discrimination between women and men in the labor market, assigning the same social value, equal rights, and equal access to financial resources to both sexes, creating opportunities to choose a life path without the limitations of gender stereotypes, recognizing the differences between the lives of women and men resulting from different needs, experience, and gender priorities. In this sense, the overrepresentation of men in the population of people forming the ownership bodies of enterprises results from multifaceted discrimination against women, including numerous barriers to entry into entrepreneurship. In this sense, the overrepresentation of men in the population of people forming the ownership bodies of enterprises results from multifaceted discrimination against women, including numerous barriers to entry into entrepreneurship.

Women in the population of entrepreneurs require rethinking about a consequence, redefining the concept of gender equality, which too often is identified with equality having only a mathematical dimension. Paradoxically, the times of uncertainty that the COVID-19 pandemic is part of may contribute to the verification of concepts promoted over the years and solutions introduced on their basis in public policies (Afshan et al., 2021; Ayatakshi-Endow, Steele, 2021; Stephens et al., 2022). The issue of gender inequality in entrepreneurship, combined with the unnatural overrepresentation of men in the population of entrepreneurs, is still clearly present in science, the media, and politics. That, in turn, is associated with the identified ineffectiveness of many solutions used in this area, including financing new companies from the non-repayable and repayable public and private funds (Chhatoi, 2022; Costa, Pita, 2020) and the search for new solutions in this area (Clayton, 2023).

Systematically conducted quantitative analyzes of entrepreneurship over the years allowed us to build new theories and patterns. The period of uncertainty creates fundamentally new conditions for starting and running a business. Academic literature indicates the fear factor as an essential indicator limiting the entrepreneurial activity of potential and newly established

entrepreneurs (Li, 2011; Morgan, Sisak, 2016). The new field of research fits into the cognitive problem of identifying differences or lack thereof in the entrepreneurial intentions of men and women. A permanent monitoring of the quantitative structure of entities of the national economy, considering the relational analysis, is necessary from the perspective of each country (Jegorow et al., 2021). Creating patterns and identifying emerging deviations in the structure of the population of enterprises, apart from the scientific and cognitive dimensions, is significant from the perspective of the entrepreneurial states concept.

3. Methods and data

Quantitative data necessary for the conducted analysis come from public registers. The reference system is data on the number of self-employed people from 1992 to 2021, divided by gender. The reference system of the analysis is data on the number of self-employed people in the years 1992-2021, broken down by gender. The subject of detailed analysis is a time series covering the number of applications submitted to CEIDG from June 2019 to January 2022. The adopted conditional time limit is the publication of data in public registers. The analyzed applications have four categories: establishment, resumption, suspension, and liquidation of an enterprise. An acceptable generalization of this research is the assumption that the subject of the research concerns micro-enterprises.

In the population of natural persons conducting business activity in Poland in January 2023, 99.07% (2022: 99.03%) were entities employing up to 9 persons, i.e., meeting the definition of a micro-enterprise (2023: 3.53 million out of 3.56 entities; 2022: 3.41 million out of 3.45 million entities). The share of micro-enterprises in total domestic private business entities is 97.38% (2022: 98.65%). In turn, natural persons conducting business in all domestic enterprises constitute 71.21% of entities (2022: 71.27%), of which in the general population of micro-entity they account for 72.94% (2022: 73.08%). The main research problem focuses on the answer to the question: Does the propensity to register new companies, suspend operations, resume, and finally liquidate, regardless of the differences between the sexes, show relatively constant proportions over time? This approach is based on incremental analysis unrelated to the motivation inherent in entrepreneurship, treated as a separate scientific discipline. It also meets the criterion of a strictly economic approach (Smith et al., 2021). The following hypotheses serve to achieve the research objective:

H1: The change in the number of self-employed people over time is similar in the population of women and men, with a relatively constant difference.

H2: The number of enterprises operating on the market and those newly registered is not related to the sex of the entrepreneur.

- H2_1: The difference between the number of enterprises registered by women and men is relatively constant.
- H2_2: The difference between the number of business activities suspended by women and men is relatively constant.
- H2_3: The difference between the number of resumed business activities by women and men is relatively constant.
- H2_4: The difference between the number of enterprises deregistered by women and men is relatively constant.
- H3: The COVID-19 pandemic has a similar impact on the entrepreneurial decisions of women and men.
- H3_1: The COVID-19 pandemic significantly slowed down the registration of new enterprises in the category of both sexes in the initial phase, and this process was not permanent.
- H3_2: The COVID-19 pandemic in the initial phase significantly increased the number of suspended business activities in the category of both sexes, and this process was not permanent.

The analytical tools of this study are limited to a set of those that allow the identification of statistically significant differences in the accepted categories of entrepreneurial activity undertaken by women and men based on the number of applications submitted to CEIDG in monthly periods (t-test). Regression and correlation were used in the comparison by gender.

4. Results and discussion

Increasing the number of women numerous in the self-employed population is one of the main goals of the political strategy of Gender Mainstreaming adopted by the European Commission in 1997. With Poland's accession to the EU, Poland implemented numerous subsidy programs to eliminate defined development differences, including the promotion of individual entrepreneurship and support for women recognized as a disadvantaged group in the labor market. The actions taken included, among others: projects addressed to women planning to start a business. At the same time, numerous other programs and social campaigns addressing the issue of discrimination against women in the labor market were implemented, aimed at eliminating the existing differences and barriers. Meanwhile, science provides evidence that the entrepreneurship of women and men is a subject that is exploited unilaterally and used as an element of political struggle, to the detriment of the activity of both. This situation leads to the enforcement of specific legal solutions and the promotion of behavior that would meet the criterion of so-called political correctness (Szczepankiewicz, 2006).

Gender equality is a fundamental right of EU Member States and a prerequisite for achieving sustainable and inclusive growth. This issue is a recognized area of policy action enshrined in the EU Treaties and the EU Charter of Fundamental Rights. The EU is gradually

integrating gender equality policy into all other EU policies. Encouraging women to start a business with the support of public funds and the so-called European Funds are implemented in successive long-term financial programs. The Gender Mainstreaming concept is currently in the Gender Equality Strategy 2020–2025. Transferring this political approach to the next decades with ensuring public funding requires evaluating the programs implemented. In this context, it should be considered whether the differences in the number of self-employed women and men need to be changed and whether the existing disparities should be linked to discrimination. It should also be considered whether the support intended to increase the participation of women entrepreneurs in the economy in the forms implemented so far is appropriate. At this point, attention should also be paid to the low effectiveness, regardless of gender, of many subsidy programs implemented. The failure of interventions financed from public funds has been empirically verified in scientific analysis (Jegorow, Przyłuska-Schmitt, 2022).

4.1. Self-employed in the working population in 1992-2021

The data presented by the Central Statistical Office indicate that the number of self-employed people has decreased over the last three decades (by 14.3%) (Figure 1). In the case of men, the decrease was 2.1%, while in the case of women, the change reached 32.5%. The changes in the last decade of the 20th century (men) and the first decade of the 21st century (men and women) had a powerful effect on the values of these indicators. However, while in the case of men, their share among the self-employed increased slightly in the first two decades of the 21st century, in the case of women the trend was reversed and there was a decrease of 22.2%.

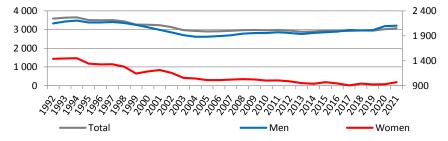


Figure 1. Self-employed in thousands.

Source: own study.

The analysis of the dependence of the number of self-employed women and men for the shortened time series (2001-2021) shows a little negative correlation coefficient, which is statistically insignificant (Pearson Correlation -0.238; p=0.299; N=21). Statistically significant, however, is the relationship covering the entire time series 1992-2021 (Pearson Correlation 0.752; p<.001; N=30). A clear and positive correlation between the number of self-employed women and men indicates a relatively constant relationship between these measures over the past three decades. At the same time, the statistics recorded in the last decade of the 20th century have a significant impact.

In 1992, the population of self-employed men was 49% larger than that of women. Currently, this ratio is 117%. Three decades ago, women accounted for more than 40% of self-employed people, but now they are less than 32%. This relationship is downward, determined by a linear trend, which results from linear regression, where the independent variable is time (Table 1). The projected decrease in the share of women in the self-employed population is at the level of 0.3 p.p. y/y (B) (in absolute terms, a statistically acceptable linear regression model indicates a decrease exceeding 18,000 y/y). The correlation is negative and very high: -0.973 (Beta). At the same time, changes in the share of women in the population of entrepreneurs show slight volatility over time: 7.526% (CV).

Table 1.Summary of Regression Model – women in the group of self-employed people^{a,b}

I. Model Summary	R	R Square	Adjusted R Square	Std. An error in the Estimate	Durbin- Watson
	0.973	0.946	0.944	0.638	1.473
II.ANOVA	NOVA Sum of Squares Df		Mean Square	F	Sig.
Regression	201.494	1	201.494	494.291	0.000
Residual	11.414	28	0.408		
Total	212.908	29			
III. Coefficients	Unstandar	rdized	Standardized	4	Sig.
	В	Std. Error	Beta	t	
Constant	635.812	27.023		23.529	0.000
Year	-0.299	0.013	-0.973	-22.233	0.000
IV. Residuals Statistics	Minimum	Maximum	Mean	Std. Deviation	Coefficient of Variation
Predicted Value	30.683	39.366	35.025	2.636	7.526%

Note. a. Dependent Variable: Woman; b. Predictors: (Constant), Year.

Source: own study.

The population of self-employed people among working people is not the same as the number of entrepreneurs active on the market. Comparing data on the number of entities of the national economy by legal form from January 2012 and 2022, respectively, it turns out that although the total number increased by almost 25%, it was with clearly different intensity in individual legal categories. The increase in self-employed people in the general population reached 20% in the last decade. At the same time, the number of companies increased by almost 50%, with the most significant increase in the category of commercial companies, i.e., by over 85%.

At the same time, the number of companies increased by almost 50%, with the most significant increase in the category of commercial companies, i.e., by over 85%. The most significant increase, reaching 136%, took place in the case of foundations. In the case of associations and social organizations, the increase amounted to almost 30%. The decrease took place in two categories: state-owned enterprises and cooperatives. The presented statistics are

justified by the changes in the Polish economy, in the natural search for solutions leading to the reduction of fixed costs of running a business.

4.2. Self-employed by gender - comparative analysis (June 2019 - January 2022)

The definite advantage of men in the self-employed population directly translates into a clear advantage in all categories listed in CEIDG (Table 2). On average, men set up over 80% more enterprises per month than women, while the liquidation rate is 60% higher in the case of the analyzed relationship. These indicators combined with the fact of almost 117%. The predominance of the number of enterprises run by men compared to women is not a good prognostic of all activities aimed at increasing women's entrepreneurship. The quantitative predominance of registrations of new entities combined with a relatively lower share of liquidations of existing enterprises to their total number indicates a higher survival rate of enterprises run by men.

Table 2. *Group Statistics*

	Sex	Mean	Std. Deviation	Coefficient of Variation [in %]	Std. Error Mean
Sugnancian	Men	16,001	5,199	32	919
Suspension	Women	8,812	3,283	37	580
Dogumntion	Men	8,093	2,216	27	392
Resumption	Women	4,263	1,862	44	329
Termination	Men	8,507	2,935	35	519
Termination	Women	5,302	1,956	37	346
Aggumntion	Men	15,086	2,284	15	404
Assumption	Women	8,369	1,377	16	244

Source: own study.

Differences in the individual four analyzed self-employed activities, divided by gender, should be considered a direct consequence of more than twice as many men running a business. These differences are statistically significant (Table 3).

Table 3. *Independent Samples t-Test*

	Levene's Test for Equality of Variances		t-test for Equality of Means (Equal variances assumed)				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Suspension	2.838	0.097**	6.614	62	0.000^{*}	7,189	1,087
Resumption	0.510	0.478**	7.486	62	0.000^{*}	3,830	512
Termination	2.117	0.151**	5.140	62	0.000^{*}	3,204	623
Assumption	5.208	0.026**	14.244	62	0.000^{*}	6,717	472

Note. ** The criterion of equality of variances is met for Sig.>0.05; *Test is significant at the Sig.<0.001 level (2-tailed).

Source: own study.

The results of the correlation analysis based on four pairs of activity categories of the selfemployed, considering the sex of entrepreneurs, indicate a very strong positive statistical relationship (Table 4).

Table 4. Estimated correlation coefficients among sex (N = 32; Jun-19 - Jan-22)

CC	Suspension	Resumption	Termination	Assumption
a.	0.882**(.000)	0.948**(.000)	0.997**(.000)	0.884**(.000)
b.	0.665**(.000)	0.730**(.000)	0.842**(.000)	0.540**(.000)
c.	0.819**(.000)	0.885**(.000)	0.954**(.000)	0.716**(.000)

Note. CC - Correlation Coefficient, a. Pearson Correlation, b. Kendall's tau_b, c. Spearman's rho. **. Correlation is significant at the 0.01 level (2-tailed).

Source: own study.

The graphical presentation of the time series of the four characteristics, broken down by the sex of entrepreneurs, confirms a very strong statistical relationship and a relatively constant difference in individual reporting categories (Figure 2). The identified dependence combines a quasi-permanent relation of the number of decisions related to making, running, and liquidating economic activity, broken down by gender.

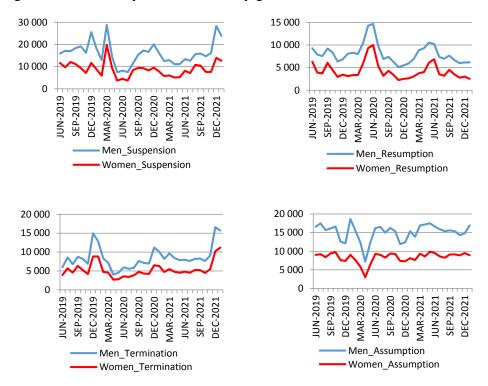


Figure 2. Self-employed in thousands.

Source: own study.

In Poland, only one in three sole proprietorships lead by a woman. The identified convergence in the intensity of entrepreneurial decisions in the four analyzed categories monthly, broken down by gender, was not disturbed by the outbreak of the COVID-19 pandemic. Although self-employed people made decisions different from the pattern built based

on data from periods characterized by a relatively stable external environment of enterprises (Jegorow et al., 2021; Jegorow, Przyłuska-Schmitt, 2022), these changes had the same return and similar intensity in the case of women and men. Other researchers analyzing the issue of women's entrepreneurship in the same period, but in the qualitative dimension, also did not identify gender differences (Kogut, Mejri, 2022).

In March 2020, entrepreneurs submitted the largest number of applications for suspension of business activity. The fewest applications for registration of new enterprises were in 2012-2021. On the other hand, in May and June 2020, the largest number of applications for the resumption of economic activity was submitted. These anomalies were incidental in nature and were not postponed to subsequent months as in previous years. The quantitative dimension of the population of self-employed entrepreneurs during the COVID-19 pandemic has not changed in a way that indicates the negative effects of the pandemic. Entrepreneurs' decisions did not differ by gender. However, it should be emphasized that the quantitative analysis does not exhaust the research field but also indicates problem areas. The number of active enterprises cannot be directly related to their financial condition. Therefore, the obtained results do not negate the findings of other researchers that the relative calmness of undertaking entrepreneurial activity and running companies has been seriously disturbed by the COVID-19 pandemic, especially in the case of the smallest enterprises (Parnell et al., 2020); Ratten, 2020; Cucculelli, Peruzzi, 2020; Endris, Kasssegn, 2022; Liguori, Pittz, 2020; Nasar et al., 2021). At this point, one should consider the numerous, diverse national aid programs that quite strongly inscribe contemporary entrepreneurship into public policies, and thus the requirement of great caution in generalizing conclusions.

The overrepresentation of male entrepreneurs is a feature that characterizes economies around the globe. However, this does not mean that "business and entrepreneurship are certainly a monopoly on men" (Crane, 2022; Setyaningrum et al., 2022). Over the last three decades, the share of women among the self-employed in Poland has been systematically decreasing. This happened regardless of the economic, social, political, and cultural transformation, the implementation of numerous subsidy programs, including those financed from EU funds, and dedicated exclusively to women interested in starting their businesses. A lack of a quantitative increase in the share of women in the population of entrepreneurs, in the context of the state aid granted, should be associated with an incorrect diagnosis based on recognizing quantitative disproportions as a discriminatory problem.

The European Parliament resolution of 3 May 2022 on achieving economic independence for women through entrepreneurship and self-employment (2021/2080(INI)) indicates that starting and running a business in the EU is a complex issue due to different bureaucratic requirements and procedures and administrative. However, these problems are different for men and women. Barriers to women's entrepreneurial activity include gender stereotypes that indicate gender segregation. On this basis, numerous calls were formulated to support women interested in starting a business, ultimately striving for quantitative sustainability.

5. Conclusions and reflections

Differences in the number of female and male entrepreneurs in Poland are quasi-constant, regardless of economic, social, political, and cultural changes determined by the perspective of the past three decades. In the post-transformation period in Poland, the number of self-employed people decreased, including a higher decrease in the population of women. The identified proportions should therefore be seen as natural.

The conducted analysis proves that the share of individual activities in starting, running, and liquidating businesses is similar in the population of women and men. That happens although the presence of women in business is much smaller. Decisions regarding the functioning of enterprises change clearly over time monthly, but these changes have a very similar intensity in the case of both sexes. Thus, we conclude that the decisions taken are not related to the gender of the entrepreneur. The positive verification of this hypothesis was confirmed by the results obtained during the COVID-19 pandemic. This context also creates added value as evidence of the lack of a noticeable impact of the pandemic on the quantitative structure of the population of self-employed people.

The obtained results are supplemented by quantitative research on entrepreneurship, considering the gender of the entrepreneur. The completed study has limitations related to the adopted time limit of the public reporting system. This fact indicates a relatively new field of knowledge in the Polish socio-economic space. Research limitations are also present in quantitative terms that ignore the context. The combination of these two areas opens an important and needed research field. The research concept is new, determined by access to source data. When indicating prognosis, and desirable research directions, it is necessary to consider extending the study to other economies to generalize the results obtained or to indicate that entrepreneurship has national borders. It is also worth considering the latest statistics in subsequent analyses, including global instability identified with time.

Based on the EU's public policy guidelines, it is desirable to apply to balance the number of female and male entrepreneurs, even though the gender of Schumpeter's entrepreneur does not matter in the contribution to economic growth. This analysis does not confirm that the number of female entrepreneurs in Poland increased after the accession to the EU, despite many projects already implemented, financed, or co-financed from public funds. The EU's new financial perspective for 2021-2027 re-implements the implementation of many assistance programs for women interested in starting a business. It is worth considering whether their above-average support paradoxically leads to discrimination against men. The efficiency of public spending is also becoming a problem.

After the outbreak of the COVID-19 pandemic, 2022 brought another shock - a military conflict between Russia and Ukraine, which shook the global economic system. Unimaginable for most societies of the civilized world, the humanitarian drama is a disgraceful example of the weaknesses of the systems, alliances, and agreements created over the years. Parallel to strictly military activities, there is an economic war in international trade and

internationalization, in which Poland plays quite a heavy role. Individual negative entrepreneurial consequences in this situation are inevitable. The extent of these effects will be possible to estimate in subsequent studies, including those using the quantitative structure of enterprises, considering the gender of owners. However, today, the time of war verified the approach to women's and men's treatment of the traditional approach to gender. Concepts of equality gave way to a need to involve men in the war, to secure women with their children and other dependents, as was the case, for example, with on the territory of Poland.

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