ASSESSMENT OF THE EXIT OF ENTREPRENEURS FROM THEIR BUSINESS IN 2020 IN THE CONTEXT OF PANDEMIC: DIFFERENT COUNTRIES DATA

omação

Iuliia Pinkovetskaia 匝

Professor of Economics, Ulyanovsk State University, Department of Economic Analysis and State Management Contact: pinkovetskaia@gmail.com

Como citar: PINKOVETSKAIA, I. Assessment of the exit of entrepreneurs from their business in 2020 in the context of pandemic: different countries data. **Revista Formação** (**Online**), v. 54, n. 29, p. 387-402, 2022.

Revista Formação (Online) ISSN: 2178-7298. E-ISSN: 1517-543X

Recebido: 26/11/2022 Aceito: 01/04/2022 Data de publicação: 02/08/2022

Abstract

Due to the significant impact of the consequences of the Covid-19 pandemic on the exit of entrepreneurs from their businesses, it seems relevant to study the reasons for the termination of entrepreneurs' activities in various countries. The purpose of the study is to assess the current level of exit of entrepreneurs from their businesses in national economies in 2020. The opinions of entrepreneurs on the reasons for exit of business were studied. The initial data were the results of a survey of entrepreneurs in 39 countries during the work on the project "Global Monitoring of Entrepreneurship". We evaluated four indicators that characterize the positive and negative reasons for the termination of their activities by entrepreneurs. It is proved that the majority (56.3%) of all entrepreneurs who stopped their activities did so for negative reasons, but not related to the Covid-19 pandemic. It is proved that more than a quarter (almost 28%) of all entrepreneurs who left their businesses were forced to do so due to the negative consequences of the pandemic. It is shown that only one in six of these entrepreneurs had positive reasons for leaving their businesses in 2020. Since the data describing the exit of entrepreneurs from their businesses were considered, there were restrictions in 39 countries due to the lack of information for the rest of the countries. Further research may be related to the assessment of the consequences of the pandemic in 2021.

Keywords: Entrepreneurs. Termination of entrepreneurial activity. Pandemic. Global monitoring of entrepreneurship. Normal distribution function.

AVALIAÇÃO DA SAÍDA DE EMPREENDEDORES DE SEUS NEGÓCIOS EM 2020 EM MEIO A UMA PANDEMIA: DADOS DE DIFERENTES PAÍSES

Resumo

Devido ao impacto significativo dos efeitos da pandemia do Covid-19 na saída de empreendedores de seus negócios, parece relevante examinar as razões para a interrupção das atividades de empreendedores em vários países. O objetivo do estudo é avaliar a taxa atual de saída de empreendedores de seus negócios nas economias nacionais em 2020. As opiniões dos empresários sobre as razões para a saída dos negócios foram estudadas. Os dados iniciais foram os resultados de uma pesquisa com empresários em 39 países durante o trabalho no projeto Global Entrepreneurship Monitoring. Avaliamos quatro indicadores que caracterizam as razões positivas e negativas para os empreendedores interromperem suas atividades. Está provado que a maioria (56,3 %) de todos os empresários que pararam de operar o fizeram por razões negativas, mas não relacionadas à pandemia do Covid-19. Está provado que mais de um quarto (quase 28 %) de todos os empreendedores que deixaram seus negócios foram forçados a fazê-lo devido aos efeitos negativos da pandemia. Foi demonstrado que apenas um em cada seis desses empreendedores tinha razões positivas para deixar o negócio em 2020. Como os dados que descrevem a saída de empreendedores de seus negócios foram revisados, 39 países introduziram restrições devido à falta de informações sobre o restante dos países. Futuras pesquisas poderiam avaliar os efeitos da pandemia em 2021.

Palavras-chave: Empresários. Cessação das atividades empresariais. Pandemia. Monitoramento global do empreendedorismo. Funções de distribuição normal.

ESTIMACIÓN DEL ABANDONO DE NEGOCIOS DE EMPRESARIOS EN 2020 EN MEDIO DE UNA PANDEMIA: DATOS DE DIFERENTES PAÍSES

Resumen

Debido al impacto significativo de los efectos de la pandemia de Covid-19 sobre el abandono de negocios por parte de empresarios, parece oportuno estudiar las razones del cese de las actividades de los empresarios en varios países. El objetivo del estudio es evaluar la tasa actual de abandono de negocios de propiedad de empresarios en las economías nacionales en 2020. Se examinaron las razones de abandono de los negocios a partir de las propias las opiniones de los empresarios . Los datos de referencia fueron resultado de una encuesta realizada a empresarios de 39 países, durante el proyecto de monitoreo global de la iniciativa empresarial. Evaluamos cuatro indicadores que caracterizan las razones positivas y negativas por las cuales los empresarios interrumpieron sus actividades . Está comprobado que la mayoría (56,3 %) de todos los empresarios que dejaron de operar lo hicieron por razones negativas, pero no relacionadas con la pandemia de Covid-19. Se ha demostrado que más de una cuarta parte (casi el 28 %) de todos los empresarios que abandonaron sus negocios se vieron obligados a hacerlo debido a los efectos negativos de la pandemia. También fue desmostado que solo uno de cada seis de estos empresarios tenía razones positivas para abandonar el negocio en 2020. Debido a que se revisaron los datos que describen la salida de los

empresarios de sus negocios, se impusieron restricciones en 39 países debido a la falta de información sobre el resto de los países. Estudios futuros podrían evaluar de los efectos de la pandemia en 2021.

Palabras clave: Empresarios. Cese de actividades empresariales. Pandemia. Monitoreo global del emprendimiento. Funciones de distribución normal.

INTRODUCTION

A distinctive feature of entrepreneurial activity in 2020 was the problems that arose in this sector of the economy in the absolute majority of countries due to coronavirus infection (Covid-19), declared a global pandemic by the World Health Organization (CUCINOTTA; VANELLI, 2020). The pandemic has had a significant impact not only on people's health, but also caused a multifaceted shock in their social and economic life. The negative consequences of the pandemic are associated with a sharp decline in domestic consumption in most economically developed and developing countries, due to limited mobility of the population. In addition, there is a significant decrease in investment, as the pandemic has caused a decrease in optimistic views on the business activity of entrepreneurs in the future. Accordingly, the aggregate demand decreased, which reduced the need for goods produced by entrepreneurs and services provided by them. All this predetermined the violation of industrial and economic relations (KRUKOWSKI; DETIENNE, 2021; MARTIN *et al.*, 2020; MURAKAMI *et al.*, 2021). The importance of these links for the normal operation of the economy is noted in many works.

According to the scientific research carried out, entrepreneurs working in industries related to personal contacts, as well as complex logistics, have suffered the most from the consequences of the pandemic (DE LA FUENTE, 2021; NICOLA *et al.*, 2020; SICHE, 2020; AMANKWAH-AMOAH *et al.*, 2021; BUHEJI *et al.*, 2020). These industries include retail trade in industrial goods, transport, tourism, public catering, personal services, and recreation. Entrepreneurs specializing in these types of activities found a sharp drop in income while maintaining most expenses, which led to a significant deterioration in their financial situation. It should be noted that the negative consequences also affected the suppliers and customers of the most affected entrepreneurs. That is, there were serious failures in the production and distribution chains. This was especially evident in the globalized sectors of the economy, since along with the above reasons, a certain impact on these sectors was caused by a decrease in the level of accessibility of a number of countries and regions due to the restrictions imposed.

Currently, there is limited information on how the pandemic and related policy decisions affect the closure of businesses. Taking this into account, our article examines the impact of the

Covid-19 pandemic on the exit of entrepreneurs from their activity in different countries. We are responding to calls (ADAM; ALARIFI, 2021; LELAND *et al.*, 2021; VITENU-SACKEY; BARFI, 2021) to reduce the existing uncertainty and to obtain objective and reliable information about the current situation with the exit of entrepreneurs from business for various reasons, including the impact of the Covid-19 pandemic. The availability of such information is required for the preparation of justifications and the development of measures to reduce the negative impacts of the consequences of the pandemic.

The purpose of the study is to assess the current level of exit of entrepreneurs from their businesses in national economies in 2020. The article makes the following contributions to scientific publications. The article provides an assessment of the distribution by country of three main reasons for the termination of their activities by entrepreneurs. Shares of the total number of entrepreneurs who have left their businesses are estimated for the termination of activities due to positive reasons, negative reasons unrelated to the pandemic and negative reasons due to Covid-19. Thus, along with the study of the traditional reasons for the termination of entrepreneurs' activities, the article provides fundamentally new information about the impact of the pandemic on the exit of entrepreneurs from their businesses in 39 countries that are geographically located in Europe, Asia, Africa, Latin and North America.

The article is organized as follows. The second section presents the methodology, initial data and design of the study. Third section shows the results of a computational experiment (building models), and their discussion, as well as a comparison of indicators for Russia and other countries. The last section contains the conclusions obtained from the results of the study.

METHODS AND MATERIALS

In the article by Shane; Venkataraman (2000), entrepreneurs are considered as people who create new enterprises and organizations, or own existing businesses. At the same time, entrepreneurs should participate in the current work, make decisions and take into account the level of risk associated with the functioning of their company. Rebuilding resources in a new way, entrepreneurs are engaged in creative activities.

The problem of entrepreneurs' exit from previously created businesses, considered in our article, is, according to a number of authors (BOBELYN *et al.*, 2021; DE TIENNE, 2010) the least studied problem in the theory of modern entrepreneurship. At the same time, some aspects of this problem have been considered in a number of publications. In particular, the article (PINKOVETSKAIA *et al.*, 2020; JANSEN, 2020) studied the exit of entrepreneurs from

their businesses by selling, that is, receiving money. Often, this method is used by entrepreneurs working in niche markets, from which competing firms try to acquire a business even with a significant premium (RIAR *et al.*, 2021). The sale of a business is especially relevant for entrepreneurs who want to minimize their risk in the future. The sale of a business allows an entrepreneur to turn the costs of his labor and intelligence into specific income (WENNBERG; DE TIENNE, 2014; SARASON, 2018). According to Kumming (2008), the sale of a business seems to be a fairly profitable option for the entrepreneur to terminate his activity. In the works Luzzi; Sasson (2016), Marjanski; Sulkowski (2019), Doern *et al.* (2018), such a variant of entrepreneurs' exit from their businesses as transferring them to family members (often children) is investigated. Both the sale of their business and the transfer to family members are associated with the so-called positive reasons for the termination of entrepreneurs' activities. The retirement of entrepreneurs can also be attributed to this option, as indicated in the study (MORRIS; SOLEIMANOF, 2020).

At the same time, there is a significant number of entrepreneurs who leave their business for negative reasons. These reasons are divided into external and internal. External causes are caused by global and local crisis phenomena in the economies (EGELN, 2010), changes in the institutional sphere, as well as problems in the sales markets of goods and services produced by entrepreneurs (KOLADKIEWICZ; WOJTYRA, 2016; ALDRICH, 2015). The main internal reasons for the exit of entrepreneurs from their businesses, according to researchers, are the difficulties of implementing the set goals (HSU *et al.*, 2016), difficulties in managing production processes (PARASTUTY *et al.*, 2016; CARDON *et al.*, 2011), lack of financial resources (WALSH; CUNNINGHAM, 2016), as well as low production efficiency (UCBASARAN *et al.*, 2012).

The types of economic activities that have been most affected by the effects of Covid-19 are arts and entertainment, personal services, restaurants and bars, tourism. Accordingly, as indicated in the article (BARTIK; BERTRAND; CULLEN; GLAESER; LUCA, 2020), entrepreneurs related to these types of activities have mostly stopped their business due to the pandemic.

Taking into account the above, our study considered three reasons for entrepreneurs to exit their businesses. Our study was based on the assessment of the following indicators that characterize three possible reasons for entrepreneurs to stop their activities in different countries, as well as an indicator that characterizes the ratio of the shares of entrepreneurs who left the business for reasons related to the pandemic and not related to it:

- the share of entrepreneurs who stopped their activities for positive reasons;

- the share of entrepreneurs who stopped their activities for negative reasons not related to the pandemic;

- the share of entrepreneurs who stopped their activities for negative reasons due to the Covid-19 pandemic;

- the ratio of the shares of entrepreneurs who stopped their activities due to negative reasons caused by the Covid-19 pandemic and not related to this pandemic.

The initial data were the results of surveys of entrepreneurs in 39 countries about the reasons for their exit from their businesses. The results of the surveys were presented in the report on the Global Entrepreneurship Monitoring Project (2021). List of these countries, for which data was collected, is below: Cyprus, Germany, Greece, Italy, Latvia, Luxembourg, Netherlands, Norway, Poland, Russian Federation, Slovak, Slovenia, Spain, Sweden, Switzerland, United Kingdom (Europe), India, Iran, Israel, Kazakhstan, Kuwait, Oman, Qatar, Republic of Korea, Saudi Arabia, Taiwan, United Arab Emirates (Asia), Angola, Burkina Faso, Morocco, Togo (Africa), Brazil, Chile, Colombia, Guatemala, Panama, Uruguay (Latin America), Canada, United States of America (North America). In total, a survey of 140 thousand people was conducted, and at least two thousand respondents participated in each of the countries. Each of them, expressed their opinion about what was the reason for his exit from the business.

The study consisted of five stages. The first stage was associated with the formation of empirical data describing the opinion of entrepreneurs about the reasons for leaving their businesses. At the second stage, the values of the four above-mentioned indicators were evaluated. The third stage was aimed at determining the average values for the countries under consideration for each of the indicators and establishing the ranges in which the values of the indicators characteristic of most countries were located. The fourth stage was associated with a comparative analysis, which made it possible to identify countries with minimum and maximum values of indicators. The fifth stage allowed us to compare the values of indicators for Russia and other countries.

The conducted research included testing of three hypotheses:

- the first hypothesis is that the pandemic caused by Covid-19 was one of the main reasons for the exit of entrepreneurs from their businesses;

- the second hypothesis is that there are significant differences in the values of each of the four indicators under consideration for different countries;

- the third hypothesis is that the geographical location of states does not significantly affect the maximum and minimum values of indicators;

- the fourth hypothesis is that the income of the population in the states does not significantly affect the maximum and minimum values of the indicators.

In the course of the research, economic and mathematical modeling of the initial empirical information was carried out. As such models, we use the density functions of the normal distribution (PINKOVETSKAIA, 2015; PINKOVETSKAIA *et al.*, 2021).

The general form of the density function of the normal distribution is as follows:

$$y(x) = \frac{A}{\sigma \times \sqrt{2\pi}} \cdot e^{\frac{-(x-m)^2}{2 \times \sigma \times \sigma}},$$
(1)

where x - the indicator whose distribution we are studying;

m - the average value of the indicator for all observed objects;

 σ - the mean square (standard) deviation.

The obtained functions allow us to estimate not only the average values of indicators describing the share of the number of entrepreneurs who left their businesses for various reasons in the countries under consideration, but also the values of standard deviations. It should be noted that the specified values are used to calculate the boundaries of the ranges in which the values of indicators characteristic of the majority (68%) of states are located. At the same time, the characteristics of the lower limits of the ranges in terms of indicators are equal to the difference between their average values and standard deviations, and their sum corresponds to the upper limit of the range.

RESULTS

In the process of economic and mathematical modeling based on empirical data was built functions (y), describing the density of the normal distribution of each of the four considered parameters (x):

- the share of entrepreneurs, ceased operations on positive reasons

$$y_1(x_1) = \frac{234.08}{8.93 \times \sqrt{2\pi}} \cdot e^{\frac{-(x_1 - 15.65)^2}{2 \times 8.93 \times 8.93}};$$
(2)

- the share of entrepreneurs, ceased operations on negative reasons not related to the pandemic

$$y_2(x_2) = \frac{390.04}{16.49 \times \sqrt{2\pi}} \cdot e^{\frac{-(x_2 - 56.33)^2}{2 \times 16.49 \times 16.49}};$$
(3)

393

- the share of entrepreneurs, ceased operations on negative reasons due to the pandemic, Covid-19

$$y_3(x_3) = \frac{417.86}{17.87 \times \sqrt{2\pi}} \cdot e^{\frac{-(x_3 - 27.85)^2}{2 \times 17.87 \times 17.87}};$$
(4)

- the ratio of the shares of entrepreneurs who stopped their activities due to the reasons caused by the Covid-19 pandemic and not related to this pandemic

$$y_4(x_4) = \frac{13.65}{0.45 \times \sqrt{2\pi}} \cdot e^{\frac{-(x_4 - 0.54)^2}{2 \times 0.45 \times 0.45}}.$$
 (5)

The quality control of functions (2)-(5) based on the Shapiro-Wilk, Pearson and Kolmogorov-Smirnov criteria showed that all these functions approximate the empirical data well.

The constructed functions allowed us to determine the values of indicators describing various reasons for entrepreneurs to exit their businesses in 39 countries. These indicators are summarized in Table 1. Its second column shows the average values for countries, and the third column shows the ranges in which the values of indicators for most countries are located.

-		• •
Indicators	Average values	Values for most countries
1	2	3
the share of entrepreneurs, ceased operations on positive reasons, %	15.65	6.72-24.58
the share of entrepreneurs, ceased operations on negative reasons not related to the pandemic, %	56.33	39.84-72.82
the share of entrepreneurs, ceased operations on negative reasons due to the pandemic, Covid-19, %	27.85	9.98-45.72
the ratio of the shares of entrepreneurs who stopped their activities due to the reasons caused by the Covid-19 pandemic and not related to this pandemic	0.54	0.09-0.99

Table 1 - Values of indicators characterizing the reasons for the termination of their activities by entrepreneurs

Source: Calculated by authors using functions (2)-(5).

The data shown in the table shows that a relatively small proportion (slightly less than 16%) of entrepreneurs who left their businesses did so for positive reasons. That is, about one in six entrepreneurs stopped their activities in connection with the sale of the business, its transfer to family members or retirement. The absolute majority (more than 84%) of

entrepreneurs left their businesses for negative reasons. Accordingly, five out of every six entrepreneurs indicated the negative nature of the reasons that led to the termination of their activities. At the same time, more than 56% of all entrepreneurs who left their businesses did not connect their decisions with the Covid-19 pandemic. At the same time, more than a quarter of all entrepreneurs (almost 28%) who stopped their activities in 2020 cited the consequences of the global economic crisis caused by the consequences of the pandemic as the main reason for this. Thus, the first hypothesis that the pandemic was one of the main reasons for the exit of entrepreneurs from their businesses, was confirmed.

To test the second hypothesis about the differentiation of indicators by state, an analysis of the scope of variation of each of the indicators presented in Table 2 was carried out. The variation indices for each of the indicators are given below:

- the share of entrepreneurs who stopped their activities for positive reasons -57%;

- the share of entrepreneurs who stopped their activities for negative reasons not related to the pandemic – 29%;

- the share of entrepreneurs who stopped their activities for negative reasons due to the Covid-19 pandemic – 64%;

- the ratio of the shares of entrepreneurs who stopped their activities due to the reasons caused by the Covid-19 pandemic and not related to this pandemic -83%.

The values of the variation indices showed the presence of a significant differentiation across the countries of all four indicators. Therefore, the third hypothesis was confirmed.

The fourth stage was associated with the identification of groups of countries that were characterized by the minimum and maximum values of each of the indicators. At the same time, the maximum and minimum values are those, respectively, exceeding the upper limits of the ranges shown in the third column (Table 1) and less than the lower limits of the ranges. The results of this analysis are shown in Table 2. Along with the lists of countries, this table also presents a division of the identified countries by their geographical location and income level of the population.

Indicators	Countries	Geographical location	Income of the population	
1	2	3	4	
the share of	With the maximum values of indicators			
	Norway - 30,00%	Europe	High	
	Netherlands-31.37%	Europe	High	
	Sweden-35.48%	Europe	High	
	Slovenia - 37.50%	Europe	High	
	Luxembourg - 53.85%	Europe	High	
	Canada -26.74%	North America	High	
entrepreneurs, ceased	Germany – 25.00%	Europe	High	
operations on positive	With minimal values of indicators			
reasons, %	India - 4.26%	Asia	Low	
	Panama - 4.65%	Latin America	High	
	Kazakhstan - 4.79%	Asia	Average	
	Morocco - 5.00%	Africa	Low	
	Togo - 5.38%	Africa	Low	
	Kuwait - 5.65%	Asia	High	
	Guatemala – 6.25%	Latin America	Average	
	With the maximum values of indicators			
	Morocco-73.33%	Africa	Low	
	Taiwan-73.33%	Asia	High	
	Burkina Faso - 78.57%	Africa	Low	
	Italy - 80.00%	Europe	High	
the share of entrepreneurs, ceased operations on negative reasons not related to the pandemic, %	Iran - 82.93%	Asia	Low	
	Kazakhstan - 80.84%	Asia	Average	
	Israel - 82.93%	Asia	High	
	Republic of Korea-86.49%	Asia	High	
	With the minimum values of indicators			
	Saudi Arabia - 25.00%	Asia	High	
	Poland - 29.41%	Europe	High	
	Panama - 31.78%	Latin America	High	
	Kuwait - 33.87%	Asia	High	
	Luxembourg - 34.62%	Europe	High	
	Chile - 35.63%	Latin America	High	

Table 2 Champatamistics	of the countries	whoma the meaning	and minimum ind	inotona wana motod
Table 2 - Characteristics	s of the countries	where the maximum	and minimum ind	licators were noted

	Colombia-35.63%	Latin America	Average	
	India - 36.17%	Asia	Low	
	With the maximum values of indicators			
	Colombia-45.98%	Latin America	Average	
	Togo - 49.46%	Africa	Low	
	Poland - 50.00%	Europe	High	
	Chile - 57.47%	Latin America	High	
share of entrepreneurs,	Kuwait - 59.68%	Asia	High	
ceased operations on	Saudi Arabia - 60.87%	Asia	High	
negative reasons due to	India - 61.70%	Asia	Low	
he pandemic, Covid-19,	Panama - 63.57%	Latin America	High	
%	With the minimum values of indicators			
	Iran - 5.00%	Asia	Low	
	Israel - 4.88%	Asia	High	
	Norway - 5.00%	Europe	High	
	Taiwan - 6.67%	Asia	High	
	Republic of Korea - 8.11%	Asia	High	
	Sweden - 9.68%	Europe	High	
	With the maximum values of indicators			
	Cyprus - 1.08	Europe	High	
	Colombia - 1.29	Latin America	Average	
	Chile - 1.61	Latin America	High	
the ratio of the shares of	Poland - 1.70	Europe	High	
entrepreneurs who	India - 1.71	Asia	Low	
stopped their activities	Kuwait - 1.76	Asia	High	
lue to the reasons caused	Panama - 2.00	Latin America	High	
by the Covid-19	Saudi Arabia - 2.43	Asia	High	
pandemic and not related	With minim	nal values of indicators		
to this pandemic	Iran - 0.05	Asia	Low	
	Israel - 0.06	Asia	High	
	Norway - 0.07	Europe	High	
	Taiwan - 0.08	Asia	High	
	Republic of Korea - 0.08	Asia	High	

Source: Generated by the authors using data from Table 1.

Table 2 provides information on the territorial location of countries with the maximum (column 2) and minimum (column 3) values of each of the four indicators evaluated in our study. The analysis of this information showed that the countries with the maximum and minimum values of indicators are located in different parts of the world and are characterized by different values of income of the population. The only exception is the group of countries with the highest values of the exit rate from business for positive reasons. Consequently, the third hypothesis was fully confirmed, and the fourth hypothesis was partially confirmed.

It should be noted that based on the geographical location of the countries listed in Table 2, it can be concluded that, with the exception of two groups of countries, they are geographically located in different parts of the world. The exception is the countries with the highest values of the indicator of positive termination of business activity, which are located in Europe and North America. In addition, the countries with the lowest values of the business termination indicator for negative reasons due to the Covid-19 pandemic are located in Europe and Asia.

CONCLUSIONS

The paper presents the results of a study of the reasons for the exit of entrepreneurs from their businesses in 39 countries in 2020. The purpose of the study, which was to assess the reasons for the termination of entrepreneurs' activities in modern national economies, was achieved. The authors contribution, which has scientific novelty and originality, is as follows:

1. A methodological approach is proposed and implemented to assess the distribution of the values of four indicators across countries that characterize various reasons for entrepreneurs leaving their businesses using the density functions of the normal distribution.

2. It is proved that the majority (56.3%) of all entrepreneurs, ended its activity, did it for negative reasons, however, not related to the pandemic Covid-19.

3. It is proved that more than a quarter (nearly 28%) of all released from their businesses entrepreneurs were forced to do this due to the negative consequences of the pandemic.

4. It is shown that only one in six of these entrepreneurs had positive reasons for leaving their businesses in 2020.

5. It is shown that the values of each of the four indicators had significant differences across countries.

6. For each of the indicators, countries with maximum and minimum values of indicators are identified.

7. It is shown that the countries with the maximum and minimum values of indicators are located in different parts of the world and are characterized by different amounts of income of the population.

Similar conclusions follow from previously published scientific studies (FAIRLIE, 2020; METZGER, 2010).

The results of our work have a certain theoretical and practical significance for governments, entrepreneurs and the economically active population. The methodological approach presented in the article can be used to assess the impact of the Covid-19 pandemic on the indicators of entrepreneurs 'termination of their activities in 2021.

Since the data describing the exit of entrepreneurs from their businesses in 39 countries were considered, there were restrictions associated with the lack of information for the rest of the countries.

Further research may be related to the assessment of the consequences of the pandemic in 2021.

REFERENCES

ADAM, N.; ALARIFI, G. Innovation practices for survival of small and medium enterprises (SMEs) in the COVID-19 times: the role of external support. **Journal of Innovation and Entrepreneurship**, Berlin, v. 10, n. 15, p. 1-22, may 2021.

ALDRICH, H. Perpetually on the Eve of Destruction? Understanding Exits in Capitalist Societies at Multiple Levels of Analysis. In: DETIENNE, D. R.; WENNBERG, K. **Research Handbook of Entrepreneurial Exit**. Northampton: Edward Elgar Publishing, 2015. p. 11-41.

AMANKWAH-AMOAH, J.; KHAN, Z.; WOOD, G. COVID-19 and business failures: The paradoxes of experience, scale, and scope for theory and practice. **European Management Journal**, London, v. 39, n. 2, p. 179-184, 30 march 2021.

BARTIK, A.; BERTRAND, M.; CULLEN, Z.; GLAESER, E.; LUCA, M. **Proceedings of the National Academy of Sciences PNAS**, Washington, v. 117, n. 30, p. 17656-17666, july 2020.

BOBELYN, A.; CLARYSE, B.; WRIGHT, M. Entrepreneurial exit by acquisition: the impact of heterogeneity in products and technology portfolio and marketing capabilities. **Journal of Research in Marketing and Entrepreneurship**, London, v. 23, n. 1, p. 41-59, july 2021.

BUHEJI, M.; CUNHA, K. C.; GODFRED, B.; MAVRIC, B.; SOUZA, Y. L. C.; SILVA, S. S. C.; HANAFI, M.; YEIN, T. The extent of COVID-19 pandemic socio-economic impact on global poverty. a global integrative multidisciplinary review. **American Journal of Economics**, Rosemead, v. 4, p. 213-224, apr. 2020.

CARDON, M.; STEVENS, C.; POTTER, R. Misfortunes or mistakes? Cultural sensemaking of entrepreneurial failure. **Journal of Business Venturing**, Bloomington, v. 26, n. 1, p. 79-92, jan. 2011.

CUCINOTTA, D.; VANELLI, M. WHO declares COVID-19 a pandemic. Acta Bio Medica: Atenei Parmensis, Parma, v. 91, n. 1, p. 157-160, mar. 2020.

CUMMING, D. Contracts and exits in venture capital finance. **Review of Financial Studies**, London, v. 21, n. 5, p. 1947-1982, sep. 2008.

FUENTE, A. The economic consequences of Covid in Spain and how to deal with them. **Applied Economic Analysis**, Zaragoza, v. 29, n. 85, p. 90-104, mar. 2021.

TIENNE, D. Entrepreneurial exit as a critical component of the entrepreneurial process: Theoretical development. **Journal of Business Venturing**, Bloomington, v. 25, n. 2, p. 203-215, mar. 2010.

DOERN, R.; WILLIAMS, N.; VORLEY, T. Special issue on entrepreneurship and crises: business as usual? An introduction and review of the literature. **Entrepreneurship and Regional Development**, Oxfordshire, v. 31, n. 1, p. 1-13, nov. 2018.

FAIRLIE, R. The impact of COVID-19 on small business owners: Evidence from the first 3 months after widespread social-distancing restrictions. **Journal of economics & management strategy**, Hoboken, v. 29, n. 9, p. 1-14, aug. 2020.

Global entrepreneurship monitor 2020-2021. Global report. Global Entrepreneurship Research Association (GERA). London: London Business School, 2021.

EGELN, J.; FALK, U.; HEGER, D.; HOWER, D.; METZGER, G. **Ursachen für das Scheitern junger Unternehmen in den ersten fünf Jahren ihres Bestehens**. Mannheim und Neuss: Studie im Auftrag des Bundesministeriums für Wirtschaft und Technologie, 2010.

HSU, D.; WIKLUND, J.; ANDERSON, S.; COFFEY, B. Entrepreneurial exit intentions and the business-family interface. **Journal of Business Venturing**, Bloomington, v. 31, n. 6, p. 613-627, nov. 2016.

JANSEN, M. Resolving Information Asymmetry Through Contractual Risk Sharing: The Case of Private Firm Acquisitions. **Journal of Accounting Research**, Chicago, v. 58, n. 5, p. 1203-1248, dec. 2020.

KOLADKIEWICZ, I.; WOJTYRA, M. Entrepreneurial Exit: Research Perspectives and Challenges. **Problemy Zarządzania**, Warsaw, v. 14, n. 62, p. 89-106, jul. 2016.

KRUKOWSKI, K.; DETIENNE, D. Selling a business after the pandemic? Crisis and information asymmetry impact on deal terms. **Business Horizons**, London, v. 64, n. 5, p. 1-15, aug. 2021.

LELAND, C.; DECKER, R.; FLAAEN, A.; HAMINS-PUERTOLAS, A.; KURZ, C. Business Exit During the COVID-19 Pandemic: Non-Traditional Measures in Historical Context. **Finance and Economics Discussion Series**, Washington, v. 89, p. 1-59, apr. 2021.

LUZZI, A.; SASSON, A. Individual Entrepreneurial Exit and Earnings in Subsequent Paid Employment. **Entrepreneurship Theory and Practice**, Hoboken, v. 40, n. 2, p. 401-420, mar. 2016.

MARTIN, A.; MARKHVIDA, M.; HALLEGATTE, S.; WALSH, B. Socio-Economic Impacts of COVID-19 on Household consumption and Poverty. **Economics of Disasters and Climate Change**, Cham, v. 4, p. 453-479, jul. 2020.

MARJANSKI, A.; SULKOWSKI, L. The Evolution of Family Entrepreneurship in Poland: Main Findings Based on Surveys and Interviews from 2009-2018. **Entrepreneurial Business and Economics Review**, Krakow, v. 7, n. 1, p. 95-116, jan. 2019.

METZGER, G. Business Closure and Financial Loss: Who Foots the Bill? Evidence from German Small Business Closures. **SSRN Electronic Journal**, London, jan. 2010.

MORRIS, M.; SOLEIMANOF, S.; WHITE, R. Retirement of entrepreneurs: Implications for entrepreneurial exit. **Journal of Small Business Management**, Hoboken, v. 58, n. 6, p. 1089-1120, jan. 2020.

MURAKAMI, E.; SHIMIZUTANI, S.; YAMADA, E. Projection of the Effects of the COVID-19 Pandemic on the Welfare of Remittance-Dependent Households in the Philippines. **Economics of Disasters and Climate Change**, Cham, v. 5, p. 97-110, sep. 2021.

NICOLA, M.; ALSAFI, Z.; SOHRABI, C.; KERWAN, A.; AL-JABIR, A.; IOSIFIDIS, C.; AGHA, M.; AGHA, R. The socio-economic implications of the coronavirus and COVID-19 pandemic: A review. **International Journal of Surgery**, Amsterdam, v. 78, p. 185-193, jun. 2020.

PARASTUTY, Z.; BREITENECKER, R.; SCHWARZ, E.; HARMS, R. Exploring the Reasons and Ways to Exit: The Entrepreneur Perspective. In: BOGENHOLD, D.; BONNET, J.; DEJARDIN, M.; LEMA. D, G. P. **Contemporary Entrepreneurship: Multidisciplinary Perspectives on Innovation and Growth.** Springer: Cham, 2016. p. 159-172.

PINKOVETSKAIA, I.; BEREZINA, N.; SERDLIKOVA, E. The main reasons for the exit of entrepreneurs from business. **Amazonia Investiga**, Florencia, v. 9, n. 26, p. 68-73, feb. 2020.

PINKOVETSKAIA, I. Modeling of indicators activity small and medium entrepreneurship in regions with use of function density of normal distribution. **Problems of development territory**, Vologda, v. 6, n. 80, p. 93-107, jan. 2015.

PINKOVETSKAIA, I.; NURETDINOVA, Y.; NURETDINOV, I.; LIPATOVA, N. Mathematical modeling on the base of functions density of normal distribution. **Revista de la Universidad del Zulia**, Maracaibo, v. 12, n. 33, p. 34-49, may 2021. RIAR, F.; BICAN, P.; FISCHER, J. It wasn't me: entrepreneurial failure attribution and learning from failure. **International Journal of Entrepreneurial Venturing**, Geneva, v. 13, n. 2, p. 113-136, apr. 2021.

SARASON, Y. Social ventures: exploring entrepreneurial exit strategies with a structuration lens. **International Journal of Social Entrepreneurship and Innovation**, Geneva, v. 5, n. 1, p. 1-10, jul. 2018.

SHANE, S.; VENKATARAMAN, S. The promise of entrepreneurship as a field of research. **Academy of Management Review,** Briarcliff Manor, v. 25, n. 1, p. 217-226, jan. 2000.

SICHE, R. What is the impact of COVID-19 disease on agriculture? Scientia Agropecuaria, Trujillo, v. 11, n. 1, p. 3-6, apr. 2020.

UCBASARAN, D.; SHEPHERD, D.; LOCKETT, A.; LYON, J.. Life after business failure: The Process and Consequences of Business Failure for Entrepreneurs. **Journal of Management**, Thousand Oaks, v. 39, n. 1, p. 163-202, jan. 2012.

WALSH, G.; CUNNINGHAM, J. Business Failure and Entrepreneurship: Emergence, Evolution and Future Research. **Foundations and Trends in Entrepreneurship**, Boston, v. 12, n. 3, p. 163-285, jul. 2016.

VITENU-SACKEY, P.; BARFI, R. The Impact of Covid-19 Pandemic on the Global Economy: Emphasis on Poverty Alleviation and Economic Growth. **The Economics and Finance Letters**, New York, v. 8, n. 1, p. 32-43, jan. 2021.

WENNBERG, K.; DE TIENNE, D. What do we really mean when we talk about 'exit'? A critical review of research on entrepreneurial exit. **International Small Business Journal**, Thousand Oaks, v. 32, n. 1, p. 4-16, jan. 2014.