

The Impact of the COVID-19 Pandemic on Entrepreneurship in Romania

Beatrice TROCINESCU*

Bucharest University of Economic Studies, Bucharest, Romania

**Corresponding author, t.beatrice@ymail.com*

Alexandra Cătălina NEDELICU

Bucharest University of Economic Studies, Bucharest, Romania

catalina.nedelcu@fabiz.ase.ro

Abstract. *At the beginning of 2020, a virus originating from Wuhan, China, spread throughout the world, which in March of the same year was declared a pandemic by the World Health Organization. According to scientific studies and specialized publications, the pandemic had positive effects on the pharmaceutical industry and e-commerce, which accelerated the digitization process. The negative effects of the coronavirus pandemic consisted in the reduction of companies' revenues, the reduction of the number of customers, the reduction of investments and the temporary suspension of production. The research of this paper is descriptive, based on statistics and data from the official reports of the National Trade Register Office. The methods used are observation, analysis, data processing and synthesis. The aim is to identify the number of new investment sectors, newly established enterprises, companies that suspended their activity and those that entered insolvency in the period 2020 and 2021, compared to 2019. The impact of the coronavirus pandemic on entrepreneurship in Romania was not devastating, the entrepreneurs keeping their confidence in the stability of the market. Thus, in 2020, the company establishment rate was affected, because new entrepreneurs no longer had the courage to invest their money, but the companies already present on the market were not strongly impacted. The year 2021 is the surprise year, being the most favorable for entrepreneurship in the period 2019-2021. The most companies were established, and the rate of suspension and insolvency was the lowest. The contribution in this paper consists in the fact that it is demonstrated that the pandemic did not destroy the entrepreneurial activity in Romania. On the contrary, there was a sector, Information and communications, which experienced rapid development, thus developing the concept of "knowledge economy" in this country.*

Keywords: entrepreneurship, pandemic, COVID-19, Romania, enterprises, trade, knowledge economy.

Introduction

It's the first time since the Spanish Flu and the disastrous Second World War, when the world has gone through a difficult period from several points of view, caused by the coronavirus pandemic. Economists described this pandemic as a black swan, being a problematic crisis that affected entrepreneurial activity in all countries of the world, regardless of their level of development. According to the World Trade Organization (WTO), it is estimated that global trade decreased by 5.3% in 2020 and by 8.0% in 2021 (Dumitrescu et al., 2022; Andrei et al., 2021). The coronavirus pandemic has also deeply impacted the Romanian economy. For example, the GDP of our country contracted by 2.2% in 2020, compared to 2019. The Romanian government supported entrepreneurship, by awarding micro-grants, worth 2000 euros for each applicant. The budget was 100 million euros, 85% coming from the European Union funds, and 15% from the Romanian budget (Luca & Fauskanger, 2021).

The Romanian government also offered as support for SMEs, the postponement of payments for utilities - electricity, natural gas, water, internet and telephone services, but also paid technical unemployment (Antonescu, 2020). Numerous Romanian companies from various sectors were impacted either negatively or positively. For example, agriculture by reducing incomes, trade by reducing incomes, industry by suspending activity for a few months and online trade by increasing incomes (Dumitrescu et al., 2022).

To prevent unemployment and keep living standards unaffected, governments in various states have adopted expansionary fiscal and monetary policy to avoid job losses and bankruptcy. In this sense, the other European states have also undertaken actions to save their national economies. Denmark and the United Kingdom have promised to pay 70% of wages, on the condition that companies do not lay off staff. At the level of the European Union, the member states benefit from financial assistance allocated for the period 2021-2027, within the NEXT GENERATION program - Recovery and Resilience Plan (PRR), in the amount of 1,074.3 billion euros. For Romania, this package is an opportunity to counteract the consequences of the coronavirus pandemic, the country will benefit from 33 billion euros in non-refundable form and approximately 55 billion euros in refundable form. The United States covered a large percentage of wages, the condition being the maintenance of the number of employees. The Australian government in partnership with Australian banks have provided US \$ 40 billion to small and medium-sized enterprises (SMEs) through a loan scheme. South Korea covered the rents of street entrepreneurs (Song & Zhou, 2020). The Chinese government has offered a support package for the digitization of SMEs in the context of the crisis. Brazil and India only provided aid for small businesses (Belitski et al., 2021). The results highlight the fact that at global level the measures taken by the governments of different states had a dual effect on the economic indicators. Thus, these initiatives were accompanied by a consequential rise of inflation, but also by a significant drop in the exchange rate (Abdelkafi et al., 2022).

Through this paper, the aim is to point out how the entrepreneurial activity in Romania was impacted, following the COVID-19 pandemic, in the years 2020 and 2021, compared to the non-pandemic year, 2019. As a motivation for this research, it is the fact that entrepreneurship represents a vital part of the Romanian economy, providing over 60% of jobs. This work consists of a descriptive research, through which to identify the number of the new investment sectors, newly established enterprises, the number of companies that entered insolvency and also suspended activity, in the period 2020 and 2021, compared with 2019.

Literature review

The effects of the COVID-19 pandemic

In the specialized literature, studies are published on the effects on the activity of Romanian companies, because the activity of SMEs was the most vulnerable during the crisis, due to their size, as well as due to reduced financial possibilities. At the global level, SMEs represent more than 95% of all companies and represent 65% of the workforce (Antonescu, 2020). Being a practical research, the study on entrepreneurship during the COVID-19 pandemic includes numerous quantitative studies, which were applied to Romanian entrepreneurs, active in various branches of the economy.

Thus, according to the results of specialized studies, the pandemic had positive effects on the pharmaceutical industry, accelerating the digitization of drug deliveries. The tourism industry and air transport services were deeply affected, because the activity of the companies in the mentioned sectors was suspended during the state of emergency or alert in Romania (Nicola et al., 2020). The

agricultural reign has been hit in a frightening way, this intensifying the food blandness worldwide. All-embracing, the impact of the COVID-19 pandemic consisted of reduced income, lack of customers, the need for capital injection, reduced investments, suspension of production and cuts in the work schedule of employees (Dumitrescu et al., 2022). The solutions that entrepreneurs in the agricultural sector adopted were the digitization of services and the technologization of production, known in the specialized language as "knowledge economy". It can thus be observed that technology and digitization constituted the levers of economic recovery (Modgil et al., 2022). For example, in India, the agri-food sector supports half of the workforce, and digitization represented an opportunity and hope during the pandemic for the agriculture of this Asian country (Kumar et al., 2020).

Knowledge Economy

"Knowledge economy" or "smart work", as analysts from the world's developed economies say, represents the lucrative activity based on intellectual capital, research and technical support. The concept of "intelligent work" developed strongly during the coronavirus pandemic, because this was the solution to mitigate the fall of the economy and the collapse of entrepreneurial activity. Thus, the intelligent work or the collaborative, innovative and digital economy was the solution for numerous commercial activities at the global level. The health crisis was the external shock and the test of entrepreneurship's resilience to smart work, thus removing all the barriers against remote activities and digitalization (Hu, 2020).

Methodology

The research of this paper is a descriptive one, based on statistics and data from the official reports of the National Trade Register Office. The methods used are observation, analysis, processing and synthesis of the statistical data. In this paper it will be presented the number of newly established firms, the new investment sectors, the enterprises that suspended their activity and those that entered insolvency in 2020 and 2021, in relation to 2019. Also, the gender distribution of authorized persons of active legal entities and the age distribution of active entrepreneurs will be researched. The types of companies studied are sole proprietorships, authorized natural persons, economic interest groups, family businesses, joint-stock companies, limited partnerships and limited liability companies. The final goal is to identify the effects on entrepreneurship in Romania in the pandemic years 2020/2021, compared to the non-pandemic year 2019.

Results and discussions

Table 1. Entrepreneurial activity in the period 2019-2021 on the Romanian market

Year	The number of newly established enterprises	The number of enterprises that have suspended their activity	The number of enterprises entered into insolvency	Female entrepreneurship	Male entrepreneurship
2019 (non-pandemic year)	134220	14040	6524	34.46%	65.54%
2020 (pandemic year)	109939	10913	5694	34.36%	65.64%
2021 (pandemic year)	148294	13020	6144	34.20%	65.80%

Source: data processing from <https://www.onrc.ro/index.php/ro/statistici> .

According to the data obtained from the National Trade Registry Office, in the year before the outbreak of the pandemic, in 2019, 134220 companies were registered in Romania. Of these,

21.8% were Trade sector, numbering 29304. The Construction branch ranked second, with a number of 14760, actually 11% of all inscribed enterprises. The third sector in the ranking is that of Scientific activities, with a percentage of 9.6% and a number of 12875. In 2019, 14040 companies in Romania suspended their activity, most of them from the trade sector, numbering 4,280. In the same year, 6524 companies entered insolvency on the Romanian market, the representative sector being trade, totalizing 1995.

The Trade branch embraced the concept of "knowledge economy", conducive to expand and adapt this branch of the economy to current requirements. The purpose is to encourage the development of businesses with activities in the fields of Trade, to stimulate e-commerce, services and digitization. The results of the "knowledge economy" aim are manifested in the stretch of e-commerce capacity of firms, the increase in the degree of technology and digitization of enterprises in the field of Trade activities through the acquisition of new, innovative technologies and the increase in the degree of digitization of Romanian companies by purchasing digitization vouchers and e-commerce certificates (ERP type). According to data published by the Brazilian collaborative commerce platform VTEX, the number of orders placed online and picked up from the store increased by during the pandemic.

In 2019, the gender distribution of authorized persons of active legal entities was represented by 34.46% women and 65.54% men. In the same year, the age distribution of entrepreneurs according to age was represented by people up to 29 years old in the proportion of 8.74%; by people aged between 30-39 years in proportion of 27.34%; by people aged between 40-49 years in proportion of 29.74%; by people aged between 50-59 years in proportion of 19.67% and by people over 60 years of age in proportion of 14.51%.

Table 2. Company registrations in 2019 on the Romanian market

Sectors of activity	Number
Activities of private households as employers of domestic staff; activities of private households producing goods and services intended for own consumption	3
Administrative service activities and support service activities	7068
Cultural activities	5385
Scientific activities	12875
Public administration	20
Agriculture	8527
Other service activities	8403
Trade	29304
Construction	14760
Water distribution and sanitation	439
Hotels and restaurants	6997
Extractive industry	117
Manufacturing industry	10920
Information and communications	7505
Financial intermediation and insurance	1344
Production and supply of electricity and thermal energy, gas, hot water and air conditioning	86
Health and social assistance	3350
Transport and storage	11029
Real estate transactions	2689
Education	3399
Total	134220

Source: data processing from <https://www.onrc.ro/index.php/ro/statistici>

According to the data collected from the National Trade Register Office, in the 2020 pandemic year, 109939 companies were registered in Romania. Of these, 24.3% were enterprises from the Trade sector, totaled 26748. The Construction branch ranked second, with 13682 firms, conferring 12.4% of the total number of registered companies. The third sector in the ranking is that of Transport and warehousing, with a percentage of 10.6% and a number of 11688. In 2020, 10913 companies in Romania suspended their activity, most of them being from the Trade sector, in number of 3014. In the identical year, 5694 firms went into insolvency on this market, the symbolic field being that of Trade, 1691. The fatalistic impact of the pandemic on the number of businesses newly settled on the market is evident, compared to 2019, this being decreasing in 2020 compared to 2019 by 18%. This impact was caused by the lack of security of the entrepreneurs in the stability of the market and by the economic crisis triggered on the background of the health crisis. But the number of companies entering insolvency and of companies with suspended activity has decreased compared to 2019. The indicators highlight the fact that entrepreneurial activity was not affected in the first year of the pandemic in Romania.

Currently, the Transport and warehousing sector has experienced an expansion of digitization or the concept of "knowledge economy". The orders sent, delivered, the status of a product, of a truck, all these can be checked remotely. During the COVID-19 pandemic, this concept has developed even more, because now through carriers, we can buy almost anything. Technologies play a key role, in optimizing carriers' route to reduce costs or in collecting real-time telematics data and transmitting it to the carrier's control room. Integrating such a service into an ecosystem of digital tools, even small players can enjoy the same convenience and short-term financing conditions as the biggest companies in the market

In 2020, the gender distribution of authorized persons of active legal entities was represented by 34.36% women and 65.64% men. In the same year, the age distribution of entrepreneurs according to age was represented by people up to 29 years old in the proportion of 8.33%; by people aged between 30-39 years in proportion of 26.78%; by people aged between 40-49 years in a proportion of 30.00%; by people aged between 50-59 years in a proportion of 20.08% and by people over 60 years old in a proportion of 14.81%.

Table 3. Company registrations in 2020 on the Romanian market

Sectors of activity	Number
Activities of private households as employers of domestic staff; activities of private households producing goods and services intended for own consumption	3
Administrative service activities and support service activities	5472
Cultural activities	2707
Scientific activities	10375
Public administration	11
Agriculture	4272
Other service activities	6486
Trade	26748
Construction	13682
Water distribution and sanitation	339
Hotels and restaurants	4923
Extractive industry	117
Manufacturing industry	6650
Information and communications	7146
Financial intermediation and insurance	1325

Sectors of activity	Number
Production and supply of electricity and thermal energy, gas, hot water and air conditioning	186
Health and social assistance	2593
Transport and storage	11688
Real estate transactions	2634
Education	2582
Total	109939

Source: data processing from <https://www.onrc.ro/index.php/ro/statistici>.

According to the data collected from the National Trade Register Office, in the pandemic year 2021, 148294 companies were registered in Romania. Of these, 19.8% were enterprises from the Trade sector, in the number of 29434. The Construction category ranked 2nd, with a number of 16252, representing 11% of all established companies. The third sector in the ranking is that of Agriculture, with a percentage of 10.4% and a number of 15482. In 2021, 13020 companies in Romania suspended their activity, most of them being from the Trade sector, in number of 3771. In the same year, 6144 firms went into insolvency on the Romanian market, the illustrative sector being also that of Trade, numbering 1785. In 2021, the number of established companies increased by 10.5% compared to 2019, a non-pandemic year, and by 35% compared to 2020, a year of economic shock. This percentage indicates that the market has started to recover, the entrepreneurs regaining confidence in the economic stability of the country, the entrepreneurial dynamics surpassing even the year of the economic boom, 2019. But, compared to 2020, in 2021 the companies began to feel the effects of the interruptions of economic activities and economic imbalance. Thus, the number of activities entering insolvency increased by 7.9%, and the number of companies with suspended activity by 19.3%.

Digitization has become the new trend in agriculture, with more and more farmers wanting to turn to technology to ultimately increase farm productivity. The pandemic has influenced agriculture from the point of view of the "knowledge economy" concept, due to social distancing measures and more expensive labor. Currently, digitalized farms are able to purchase machinery, receive financing or credit from the European Union more easily and purchase land.

In 2021, the gender distribution of authorized persons of active legal entities was represented by 34.20% women and 65.80% men, observing a downward trend of female entrepreneurship and an upward trend of male entrepreneurship in the period 2019-2021. In the same year, the age distribution of entrepreneurs according to age was represented by people up to 29 years old in the proportion of 8.48%; by people aged between 30-39 years in a proportion of 26.34%; by people aged between 40-49 years in a proportion of 30.22%; by people aged between 50-59 years in a proportion of 20.19% and by people over 60 years old in a proportion of 14.78%. Thus, the age category between 40-49 years is representative every year from 2019-2021 in entrepreneurship in Romania.

Table 4. Company registrations in 2021 on the Romanian market

Sectors of activity	Number
Activities of private households as employers of domestic staff; activities of private households producing goods and services intended for own consumption	1
Administrative service activities and support service activities	6974
Cultural activities	3572
Scientific activities	13708
Public administration	24

Sectors of activity	Number
Agriculture	15482
Other service activities	6584
Trade	29434
Construction	16252
Water distribution and sanitation	410
Hotels and restaurants	6980
Extractive industry	111
Manufacturing industry	8741
Information and communications	10964
Financial intermediation and insurance	1849
Production and supply of electricity and thermal energy, gas, hot water and air conditioning	592
Health and social assistance	3861
Transport and storage	15010
Real estate transactions	3973
Education	3772
Total	148294

Source: data processing from <https://www.onrc.ro/index.php/ro/statistici>.

It is worth noting that in 2021, the companies in the Information and communications sector increased by 46% compared to 2019. This percentage marks the fact that Romania accelerated the digitization and technology process, thus introducing the concept of "knowledge economy" and more on the Romanian market.

Digitalization or the notion of "knowledge economy" of the medical system is not a new talking point, but it is one that has become helpful in the context of the pandemic. It presents advantages like the path of the patient in the medical system, the management of data related to it, the management of resources, but also the communication between patients and doctors, between different health specialists. During the pandemic, pharmacies in the country contributed to the implementation of digitization in their activity, by delivering medicines or antigen tests at home.

In Romania, the digitization of the education and training system has been a priority topic since February 2020, with the outbreak of the COVID-19 pandemic. According to Eurostat data, in 2019 no less than 43% of Romanians between the ages of 16-74 had low digital skills, ranking Romania in first place in the European Union in this regard, Bulgaria (38%) being in second place. Thus, in order to align with the European path, the country must strongly implement the concept of "knowledge economy" in schools.

Conclusion

According to the data collected from the National Trade Register Office, in the non-pandemic year 2019, 134220 companies were registered in Romania, in 2020, 109939 companies were registered, and in 2021, 148294 companies. These data highlight the fact that 2020 was a year of imbalance and economic shock, the rate of establishment of companies in Romania falling by 18% compared to 2019. This decrease demonstrates the loss of confidence of entrepreneurs at the beginning of the journey in the stability and safety of the Romanian market. But, in 2021, the entrepreneurial environment rebalanced, the number of newly established enterprises exceeding by 35% in 2020 and even by 10.5% in 2019. The top sector for entrepreneurs' investments was every year, the Trade sector, actually 29304 businesses in this sector in 2019, 26748 companies in 2020 and 29434 companies in 2021. It is worth noting that in 2021, companies in the Information and

communications sector increased by 46% compared to 2019. This percentage indicates that Romania has accelerated the digitization and technology process, thus introducing the concept of "knowledge economy" even more on the Romanian market. This concept consists in intelligent work, namely in the implementation of working from home, the digitalization of services and procedures, but also technology within one company.

Regarding the Romanian companies with suspended activity, they numbered 14040 in 2019, the most affected sector being that of Trade. In 2020, entrepreneurs did not panic because of the economic imbalance, suspending only 10913 companies, 22.3% less than in the non-pandemic year 2019. However, in 2021, due to the crisis that began to take shape on global market, 13020 companies were suspended in Romania, 19.3% more than in 2020.

It should be noted that in 2020, 5694 companies entered insolvency, 12.7% less than in 2019 (6524 firms), an excellent year from an economic perspective. Nevertheless, in 2021 the repercussions of the coronavirus pandemic began to be felt, and the number of activities entered into insolvency increased compared to 2020 to 6144, by 7.9% more. It is worth mentioning that most of the companies from the 2019-2021 period that suspended their activity or entered insolvency, were active in the Trade sector.

Regarding the gender distribution of authorized persons of the companies, men represent the majority in Romanian entrepreneurship. At the same time, there is an increasing trend of male entrepreneurship and a decreasing trend of female entrepreneurship, in the period 2019-2021. According to the descriptive research, entrepreneurs aged between 40-49 represent the majority category in Romanian entrepreneurship, being the majority. There is also an upward trend of this age category in recent years, actually 29.74% in 2019, 30% in 2020 and 30.22% in 2021.

Therefore, the impact of the coronavirus pandemic on entrepreneurship in Romania was not devastating, the entrepreneurs maintaining their confidence in the stability of the market and in the rapid economic recovery (Dinca et al., 2021). Thus, in 2020, the company establishment rate was affected, because new entrepreneurs no longer had the courage to invest and risk their money. But the companies already present on the market were not deeply affected, because the rate of suspension and insolvency was lower than in the non-pandemic year 2019. The year 2021 is the year of surprise, and according to the data collected from the National Trade Register Office, this year was the most favorable for entrepreneurship, from the period 2019-2021. The most companies were established, and the rate of suspension and insolvency was the lowest. It is also worth noting that the Trade sector and the Construction sector are the most developed activities in Romania, which attract the most entrepreneurs and involve the largest workforce at the national level.

References

- Abdelkafi, I., Loukil, S. & Romdhane, Y. (2022). Economic uncertainty during COVID-19 pandemic in Latin America and Asia. *Journal of the Knowledge Economy*.
- Andrei, A., Dincă, V., Mitan, A. & Vătămănescu, E. (2021). Connecting the Dots: Exploring the Knowledge-based Antecedents of SMEs' Profitability and Development via International Ventures. *Management & Marketing. Challenges for the Knowledge Society*, 16(3), 167-186.
- Antonescu, D. (2020). Supporting small and medium size enterprises through the COVID-19 crisis in Romania. *Institute of National Economy*.
- Belitski, M., Guenther, C., Kritikos, S. & Thurik, R. (2021). Economic effects of the COVID-19 pandemic on entrepreneurship and small businesses. *Small Business Economics*, 58:593–609.

- Dincă, V., Bogdan, A., Vasiliu, C. & Zamfir, F. (2021). The Influence of Romanian Mobile Commerce Companies on Developing Green Innovation. *Sustainability*, 13, 10075.
- Dumitrescu, C., Manea, N., Marinescu, R., Niculescu, N., Dobrescu, R. & Puiu, R. (2022). Covid-19 pandemic's impact on company activities in Romania. *Journal of Eastern Europe Research in Business and Economics*.
- Hu, R. (2020). COVID-19, smart work, and collaborative space: A crisis-opportunity perspective. *Journal of Urban Management*, 276-280.
- Kumar, A., Padhee, A. & Kumar, S. (2020). How indian agriculture should change after COVID-19. *Food Security*, 12:837-840.
- Luca, T. & Fauskanger, E. (2021). Sustainability of economic measures in Romania during COVID-19 crisis. *Review of Business Research*, 21(1), 33-41.
- Modgil, S., Dwivedi, Y., Rana, N., Gupta, S. & Kamble, S. (2022). Has Covid-19 accelerated opportunities for digital entrepreneurship? An indian perspective. *Technological Forecasting & Social Change*, Vol. 175, 121415.
- National Trade Registry Office (2022). Statistici. Accessed on 14 November 2022 <https://www.onrc.ro/index.php/ro/statistici>.
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M. & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, Vol. 78, 185-193.
- Sánchez, J. (2021, December 7). 6 tendințe în comerțul digital pe care să le urmărești în 2022. VTEX. <https://vtex.com/ro/blog/strategie/tendinte-comert-digital-2022/>.
- Song, L. & Zhou, Y. (2020). The COVID-19 pandemic and its impact on the global economy: What does it take to turn crisis into opportunity? *China & World Economy*, 1–25, Vol. 28, No. 4.