

Conditions of Functioning of SME Enterprises in Poland during COVID-19 Pandemic: A Case Study*

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Abstract

The COVID-19 pandemic, which started in December 2019 in Wuhan, China, changed the global economy significantly. Due to its unprecedented scale - for at least 100 years - the pandemic has been the source of a macro-economic shock. Its range and impact cause changes in the functioning of organisation, the market structure, competition principles and even in the legal system. This not only affects the volume of trade and prices, but also daily activities like shopping or greeting one another. At the same time, a series of economic processes have been seen to stop, including production and distribution of many goods, along with the freezing of transactions and debt. Since Coronavirus is an external factor, once the pandemic is over from the macroeconomic perspective, the economies of individual countries should be back to "balance" in the longer run. However, the way the global economy regains its growing trend will depend on how the virus subsides. Additionally, going down to the microeconomic level, a special role of individual entrepreneurs becomes notable, since by managing economic entities they are capable of cancelling the pandemic's negative effects in order to survive in the market and, subsequently, implement growth strategies. Deloitte's research has shown that the SARS-CoV-2 epidemic has had a negative impact on the functioning of 58% of Polish enterprises (Deloitte, 2020).

This paper presents a case study of a micro-enterprise that manufactures packaging. The purposes of the article is to analyse the impact of the COVID-19 pandemic on the functioning of a Polish SME company, with particular focus on the effects on the domestic and international market, the role of IT systems in its business, the plans for the future and the state's assistance.

Keywords: Enterprise Functioning, COVID-19 Pandemic, Small and Medium Enterprises Sector, Freezing of Economy

Introduction

Facing the growing, global epidemic, the resulting economic crisis, especially the threat of dramatic decline in the job market requires, just like with the 2008 financial crisis, or perhaps to an even higher degree, the change of paradigms of thinking about the future, in the perspective of several years. Up until today, the most important common feature of globalisation was the revolution in informational technologies that introduced IT tech, the Internet, automation and robotisation to even the furthest corners of the world, despite the fact that the rate of changes and utilisation of the benefits of the technology is not distributed uniformly (Carbonero, Ernst and Weber, 2018).

Global economy is based on the free flow of goods and capital, associated with quick technological changes, although it fails to guarantee stable growth with no risk and turbulences (IMG, 2019). One of the fundamental, structural features of today's economy are short-term temporal changes of cyclical nature that is evident in the alternating phases of growth and decline of the volume of manufactured goods and offered services within a geographical location. The consequence of this phenomenon are also fluctuations of employment in the job market, just like after 2008, when the global financial crisis hit (Arpaia, Kiss, 2014).

The emergence of the SARS-CoV-2 coronavirus in China and the disease it causes, COVID-19 (full name Coronavirus Disease 2019) forced a redefinition of cognitive perspective and political priorities virtually all over the world. The COVID-19 pandemic is the first global event in 21th C. that resulted in most countries all over the world having to significantly subject the ongoing functioning of the economy to the necessity of maintaining the societies' health security. This phenomenon was referred to as "freezing the economy" (Laurent, 2020).

Description of Temporal Characteristics of the COVID-19 Pandemic

Pursuant to the data from the World Health Organisation (WHO), the global emergence of SARS-CoV2 coronavirus may be connected with the identification of the virus in Wuhan, China (Hubei province) in December 2019. The sequence of events related to the spreading of SARS-CoV-2 in the world, from December 30, 2019 to August 26, 2020, was as follows (Męcina, Potocki, 2020; WHO, 2020):

- December 30, 2019 - notification of China National Health about the emergence of several clusters of pneumonia of unknown etiology in Wuhan.
- January 01, 2020 - closing of a local Huanan seafood wholesale market in Wuhan.
- January 07, 2020 - isolation of a new coronavirus.
- January 12, 2020 - disclosure of the sequence of the new virus.
- January 13 - 19, 2020 - first coronavirus cases identified outside China (Thailand, Japan, South Korea).
- January 20, 2020 - first cases of infection among healthcare workers caring for patients who were carriers of SARS-CoV-2.
- January 24, 2020 - 835 infections identified in China.
- March 11, 2020 - World Health Organisation announces COVID-19 pandemic.
- The first official case of SARS-CoV-2 infection in Poland was publicly announced on March 04, 2020 (Mostowy, 2020).
- On March 06, 2020 the number of registered cases in the world exceeded 100,000.
- On April 02, 2020 the number of confirmed deaths in the world exceeded 50,000, with 1,000,000 registered infections.
- On May 09, 2020 the number of registered cases reached 4,000,000.
- On August 26, 2020 the number of registered cases reached 24,000,000.

It is worth noting that activities aiming to minimize the effects of pandemic in Poland were initiated with the adoption of an act, on March 02, 2020, on special solutions related to the prevention, counteraction and combating COVID-19 (Journal of Laws, 2020, Item 374). The temporal characteristics of preventative activities aiming to reduce the risk of infection that was similar to the Polish characteristics, was also present among other European Union states - preventative activities were taken when the development of epidemic was already covered publicly (Herszenhorn, Wheaton, 2020).

The source literature underscores that the issue of efficient national pandemic governance in Europe was already less than certain (Speakman, Burris and Coker, 2020). There are two fundamental ways of reducing the scale of infection within a population (Imperial ... , 2020):

- mitigation – a strategy consisting in delaying the process of proliferation of the virus within a population, aiming to reduce the burden on national healthcare and to protect individuals most vulnerable to the infection;
- suppression – the strategy's main goal is to stop and reverse the upwards trend with regard to the number of infections to a fixed, low level.

In both these strategies there are fatalities of the infected, but only the suppression strategy increases the probability of significant reduction of cases that result in the death of the infected. In fact, both strategies only serve as a help, until an effective vaccine against the infectious disease is developed or a combination of existing drugs which allow curing of the infected is established.

It should be noted here that from the global perspective, the already known strategies of alleviating the effects of the pandemic have not worked as expected. Until August 27, 2020 there were a total of 24,35 million cases and 829,899 fatalities (Table 1).

Table 1: Coronavirus in Poland and in the world - confirmed cases, recoveries and fatalities - data as of August 27, 2020 (Scope..., 2020)

Confirmed cases	
Poland	World
64,689	24,349,576
Recoveries	
Poland	World
44,097	16,885,119
Fatalities	
Poland	World
2,010	829,899

It is worth noting that the emergence of a pathogen on a massive scale, an example of which is COVID-19, contributed to the economic shock and negative changes in particular sectors of the world's economy. These issues are discussed in the following section.

Perception of the pandemic as a global impicator of changes

Researchers fail to agree on the scope and depth of changes that the COVID-19 pandemic may bring to the global socio-economic system. Today, some politicians, economists and commentators believe that nothing really happened and that “in a short while” the world’s economy will be back on track, growing as usual. Some even think that in the wake of the pandemic today's world may be cleansed and take a turn in the right direction, an example of which may be getting convinced to stop climate changes (Wyns, 2020, Sikora, Lisowski, Wójcik, 2020). Sadly, there are many evidence pointing to the contrary, with such views possibly untrue or even mere wishful thinking. Most importantly though, having little to do with reality. The opposing views, emerging at a growing rate, claim that the world is facing a metamorphosis that is has not experienced in at least 100 years (Mazzucato, 2020).

According to M. Mazzucato (2020) that world is now facing a triple crisis: health, economic (financial) of unthinkable proportions and climatic, all of which cannot be tackled by “business as usual”. In the wake of it, the contemporary world economy's deficiencies will become transparent, especially drastic in terms of the labour market, increasingly more dominated by transnational corporations (Kowalczyk, 2020).

The world has been taken by surprise by the epidemic. Questions are arising about the future of the economy and seeking explanation as to why contemporary economic theories cannot provide answers to today's challenges. There is one point, however, with which the overwhelming majority seems to agree. The problem will not be solved and the pandemic overcome without radical changes in the role and meaning of the market and, most importantly, the state (Reddy, 2020). According to J.K. Galbraith (2020) however, the pandemic can be overcome with relative ease, compared to a war, provided the government steps up to the challenge. Which means providing reliable information about the course of the pandemic to the people, financing all medically necessary expenses from the budget (including efforts to develop a cure and a vaccine) and, most importantly, putting in place a special agenda that addresses the effects of the pandemic.

The signs of “panic about the future” can be observed more and more frequently. The reason behind the radical and quick reevaluation of opinion on the course of growth tendencies of the global economy was, naturally, the SARS-

CoV-2 pandemic and the diseases it causes, COVID-19. This gives rise to more and more fears about the future, and not just the future of the civilization's fundamentals, such as the economy, but about the future of the civilization in itself. This is a simple consequence of the fact that although the economy itself is slowly rising from the global financial crisis in the beginning of 21st C., the economic has not yet been ready to explain this phenomenon and most certainly to accurately name the basic principles of the new theory of economics. This has been overlapped by a strong need to counter the challenges of the pandemic. The challenges related to the future model of the economy, the relations between the market and the state or the intensity of international cooperation. The situation is dangerous in that the rate at which the global economy, labour market and financial stability is very quick and that is starting to threaten the national security of more and more countries (Kowalczyk, 2020).

The predictions on the future of national economies and the entire, global economy are becoming more and more pessimistic and troubling. According to J. Bullard, the head of the Federal Reserve Bank in St. Louis, one of the banks of the Federal Reserve System (FED), even 47 millions Americans may lose their jobs in the wake of the SARS-CoV-2 pandemic, bringing the unemployment rate up to 32.0% (Bullard, 2020). According to the International Monetary Fund the pandemic has already pushed the world into recession (Bluedorn, Gopinath and Sandri, 2020).

Based on the data from the European Commission, all European Union states will suffer recession. In 2020, Poland's GDP will shrink by 4.3%, with an average 7.4% fall for the entire EU (Forbes, 2020).

The pandemic has already made an impact on the situation in individual sectors of the economy. First, it impacted economy sectors closely related to human traffic, namely tourism and communication, and secondly trade, which is the movement of goods. Declines are also affecting global financial markets.

Consequences of COVID-19 for enterprises in Poland

The speed of reaction of governments of individual EU states to the proliferation of the virus within populations depended on objective factors - the number of infections and fatalities, and subjective ones - how the decision makers evaluated the epidemiological risk. One of the key decision rationales was the occurrence of the first fatalities caused by COVID-19. The introduction of measures which affect the course of social and economic processes to such a high degree promptly produces negative consequences on national, regional and global scale.

Using the typology of susceptibility of economy sectors to the pandemic-induced economic crisis, as created by the analysts of the International Labour Organization (ILO), it may be estimated that 37.46% of the globally employed (1.25 billion people) work in global economy sectors that are most vulnerable to the crisis (ILO, 2020).

At the same time, the International Labour Organization claims that around 2.7 billion employees (81% of the world's workforce) are subject to partial or complete work limitation. Even 195,000,000 people could lose their jobs in Q2 2020, of which 12,000,000 in Europe along (PulsHR ..., 2020).

The program for supporting Polish economy announced by the government of the Republic of Poland initially provided for the activation of PLN 212 billion (PAP, 2020). It was acknowledge, however, that an insufficient part of the expenses was appropriated directly to protect jobs and guarantee income to employees and other groups if such income is lost. A large part of the program was more related to the support for the financial sector, to help companies maintain financial liquidity and to introduce bank guarantees to keep companies solvent (BGK, 2020). The growing social expectations, increasingly higher political postulates and the firm stance of entrepreneurs and labour union representatives convinced the government to activate additional assistance worth PLN 100 billion, dedicated to maintain employment and protect jobs, regardless of the size and type of business activity. The total value of intervention of the government of the Republic of Poland will be around PLN 300 billion (15% of Poland's GDP) (Tarcza ..., 2020).

However, moving to the micro-economic level, of relevance for a single enterprise, mainly negative effects of the COVID-19 pandemic can be shown. Based on Devire's¹ organisations research, the problems predominantly affect sectors such as transport, forwarding, logistics, automotive, aviation, commerce, construction and manufacturing. In the territorial context, employers from the Łódzkie province exhibited the most pessimistic mindset - 86% of them declared that their businesses would be negatively impacted by coronavirus. Only 5% of employers saw a chance for them in the current situation - this group declared that it would have a positive impact on their activity. The most

dramatic boom can be seen in e-commerce, because most of commerce dealings moved online. Manufacturers of sanitary goods and protective clothing are also reaping profits. Also, information technology businesses sees higher demand for hardware, services and remote working software (Devire, 2020). This research shows that entrepreneurs were expecting, to the greatest extent, reduced demand for products or services (48% of the respondents), in such sectors as: consulting, transport, forwarding, logistics and industrial manufacturing. Additionally, as many as 45% of entrepreneurs pointed to the possibility of reducing their employment (mostly in manufacturing, aviation, commerce and gastronomy) (Devire, 2020).

Although the discussed difficulties the entrepreneurs are or will be facing have been identified among a wider group of businesses, the following points will discuss the results of a case study of a micro-businessⁱⁱ, with regard to the effects of the COVID-19 pandemic.

Methodology

The purposes of the article is to analyse the impact of the COVID-19 pandemic on the functioning of a Polish SME company, with particular focus on the effects on the domestic and international market, the plans for the future and the state's assistance.

The following research problems were formulated:

1. What are the effects of the COVID-19 pandemic on the analysed entity (in domestic, international and strategic view)?
2. What is the scale of the state's assistance for enterprises during the economy's lock-down?
3. What are the plans for the future and the strategy for the coming year?

The applied study methods included a case study and a documentation method. The case study, or analysis and description of a single, most usually real case, that allows drawing conclusions on the causes and results of its course and, in a broader sense, a given business model, market specifics, technical, cultural and social conditions, etc. This means drawing conclusions on the basis of a single case. It is a study method consisting in a comprehensive description of a certain group or a unit, approached without any initial hypotheses. The subject of exploration is individual in nature. The case study's most important element, looking from the perspective of credibility, is the quality of its substantial content. The quality is manifested, among else, by the accuracy of the raised problems, formulated diagnoses and the adequacy of solutions proposed for a given situation (Langley 1999). The documentation method consists in the use of factual information for examination purposes, collected, in advance, for economic practice purposes and recorded in relevant documents.

A case study of a manufacturing enterprise

Enterprise Xⁱⁱⁱ will be analysed in this article, a business manufacturing and trading corrugated and plain cardboard packaging. The enterprise manufactures packaging from 2-, 3- and 5-ply cardboard, in various corrugation configurations (C, B, E), as well as flap boxes, otherwise known as FEFCO201, along with custom shaped packaging.

According to the Polish Classification of Activity, this is classified as Section C, Division 17.21.Z - Manufacture of corrugated paper and paperboard and of containers of paper and paperboard, SIC code: 51119902 – Printing paper, 51130304 – Corrugated and uniform box packaging (PKD, 2020).

It is worth adding that the COVID-19 pandemic forced a more widespread use of IT solution than previously. While the economy was in lock-down, the organisation fully transitioned to remote working to maintain relations with employees and business associates. Speaking of relations with clients and suppliers, remote working elements had been implemented earlier, especially with regard to daily correspondence, invoicing and bank transfers. Hence, the work's specific nature and organisation was not largely affected.

Answers to individual research issues will be provided below.

The effects of the COVID-19 pandemic on the analysed entity (in domestic, international and strategic view)

The change of the scale of activity must be identified as the main element. The analysis of the company's revenues in the months preceding the pandemic (January - March, 2020), until the months during lock-down (April - June, 2020), a 34.61% drop in sales was identified (Table 2).

Table 2: Total sales in January - June, 2020, in X enterprise (Own work)

Month	Total sales
January	PLN 134,132.89
February	PLN 175,812.73
March	PLN 227,383.71
April	PLN 104,246.55
May	PLN 126,042.50
June	PLN 121,091.59

The reduction in sales resulted from limited orders and reduced scale of operations of the company's clients. Many businesses with which enterprise X cooperates export their products and their shut-down, in turn, forced X to hold their operations.

With regard to the overheads, such as warehouse leases, leasing contracts, machinery depreciation or accounting and legal fees, which did not change during the pandemic, the reduced sales resulted in employee remuneration being paid from current revenues and the remaining overheads from the organisation's previously saved resources. Operational loss was incurred from April to June.

Employment-wise, production employees have civil law agreements, meaning that no job orders translated in no work and no remuneration. Employees with employment contracts received their remuneration as usual.

In order to minimise any additional costs, some of the tasks and subcontracted (outsourced) services were taken over by the enterprise's employees. For example, transport services were no longer outsourced (X would deliver the goods to the clients on their own) and warehouse tasks were taken over by X's production employees (preparing adequate quantities of goods for shipment, accepting deliveries, warehouse cleaning).

The scale of the state's assistance for enterprises during the economy's lock-down

The enterprise X received the state's assistance in the form contributions paid to the Social Insurance Institution (ZUS) waived for three months (April - June, 2020) and a low interest loan for micro-businesses from the Labour Fund, amounting to PLN 5,000, which may be remitted, provided the enterprise continues business activity for three years since the day of issuing the loan.

Plans for the future and the strategy for the coming year

X's most important client was a business whose main activities include offset printing, impregnating, coating and laminating clothing articles. The client uses products that are difficult to obtain or whose prices are impossible to accept in the Polish market. The growing trade relations made it possible to import these goods from Chinese vendors. From October 2019 until March 2020 around 30% of the enterprise's revenues came from the sale of goods to this particular client. Sadly, the even sector is still battling serious problems, resulting in no new orders. Therefore, a significant reduction in the sale of a specific range of items can be identified (Table 3).

Table 3: Volume of sales of individual goods for the most important client, January - June, 2020, [pcs] (Own work)

Product name	January	February	March	April	May	June
Cleaning tape for pad printing [pcs.]	1010	1190	690	138	138	621
PET heat transfer film [pcs.]	2000	4000	4000	0	0	0
Carbide ring, 2 mm [pcs.]	30	20	30	0	10	10
Squeegee rubber [pcs.]	5	5	5	0	0	5
PTFE Teflon film [pcs]	220	445	225	0	0	100

The reduced revenues and changes in the structure of clients forced the enterprise to introduce major modifications in its operation. Most importantly, the enterprise focused on seeking new, potential clients. A lot of enterprises are still dealing with the effects of the economic lock-down. Entrepreneurs were forced to stop leasing warehouses and let go production employees, all in order to survive in a market seeing dramatically reduced sales. They still, however, expect better availability of goods, the possibility of placing order at any time and short lead times.

With these facts in mind, strategic business rationales were developed for the coming year. New business partners were found, to whom solutions for particular problems were offered, e.g. storage of goods. Once these clients provided forecasts until the end of 2020, inventory stocks were agreed that would be maintained by X within a specific time, with goods delivered at the client's request. This means that the organisation is capable of handling such deliveries within a single day, or even mere hours. Many businesses find this solution very beneficial, because given their specific scale of operations, larger entities would not commence small series production, not to mention being able to offer to the smaller buyer prices that would be satisfactory for both parties.

Conclusions

It is evident that the coronavirus pandemic will have far-reaching consequences, both for global and Polish economy. The course and severity of this impact will be the outcome of numerous processes, most notably the duration of the pandemic, the scale and involvement of states in the liquidation of the inevitable results, as well as the attitude of entrepreneurs.

The recently unprecedented reduction of international economic exchange is, and will remain, the direct effect of combating the pandemic. Private consumption suffered a dramatic drop due to closed borders, shopping centres, restaurants and cultural facilities. Several sectors, such as entertainment, restaurant, and most importantly tourism and transport, suffered a major downturn.

The economies of today are interrelated via capital, both with regard to the supply chain and the value chain, in terms of operation of entities within a specific brand and from a macro-economic perspective. A single economic entity may affect numerous organisations by limiting or stopping, altogether, its operations. Most importantly, this applies to large enterprises which cooperate with a wide array of suppliers and subcontractors.

The article discusses the results of a case study of enterprise X, a manufacturer and seller of corrugated cardboard and cardboard packaging. The COVID-19 affected the enterprise's functioning to a high degree. Most importantly, a reduction in sales of around 34.61% was noted during the freezing period. Operating profits suffered a loss, despite some government assistance (waived ZUS contributions, low-interest loan). From the strategic perspective, X's business model was modified, because the enterprise's key client reduced its business activity (the client generated nearly 30% of the revenue). More focus was put on other areas of activity - such as storage services for specific range groups, maintaining their availability and keeping customer service at a high level (e.g. delivery within several hours).

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ⁱ The research was conducted using CAWI method, in March 2020, on a group of 2,500 respondents. The surveyed included: 38% managers, 20% directors CEO, 33% specialists and 9% employees with other functions.

ⁱⁱ A micro-business is understood as an entity employing fewer than 10 employees, whose annual turnover or balance sum does not exceed EUR 2 million (Official Gazette L 187 of June 26, 2014).

ⁱⁱⁱ The organisation's owner refused to name the company.