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*COVID-19 as a Source of Failure or a Catalyst for Positive  
Changes in Business?*

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**Abstract**

**Theoretical background:** Beyond doubt, the COVID-19 pandemic has caused a series of perturbations in the economies of almost every country in the world. This global crisis has contributed to the business turmoil and has been seen in services in particular. Due to restrictions on economic activity introduced by governments of countries, which were aimed at slowing down the scale of virus infections, many enterprises faced a severe dilemma, i.e. how to continue their activities, how to survive the crisis, and maybe end this activity, or change it into another. For many companies, the pandemic crisis turned out to cause multi-faceted losses and even bankruptcy. But also, some companies saw the crisis as an opportunity to introduce positive changes and gain new sales markets and customers. For these companies, the coronavirus pandemic has become a growth catalyst.

**Purpose of the article:** The theoretical part of the article is devoted to analyzing the literature resources on the coronavirus pandemic and its impact on business. In the practical part, the author explores the results of the quantitative research conducted in 2021 to find out how the coronavirus influenced the functioning of the SME sector in Poland. The author posed the following research questions: How did coronavirus impact the functioning of enterprises? How did companies cope with this crisis? Was the pandemic crisis a source of financial failure or collapse of Polish enterprises? Was it an opportunity for

market success? Did the pandemic initiate new business strategies, cause or accelerate changes in the business model?

**Research methods:** The literature review was made using the database of scientific articles in Google Scholar and ResearchGate. The author searched for relevant articles using the following keywords: “COVID-19”, “coronavirus”, “pandemic”, “pandemic crisis”, and “lockdown”. The quantitative study covered 500 Polish business entities operating in production, trade, and services in domestic and foreign markets. There were no limitations regarding the area of activity (according to the Polish Classification of Activities) or the number of years of firms’ presence on the market. The study did not cover large enterprises, i.e. 250 or more employees.

**Main findings:** In general, the coronavirus pandemic caused problems in the market but did not contribute to the drastic collapse of the SME sector, nor was it a catalyst for their spectacular development. The conducted study showed that most companies dealt moderately well with the pandemic crisis. They took remedial action to avoid a complete loss of liquidity, going out of business, and bankruptcy risk. A small percentage saw an opportunity in the crisis or used this time to improve their situation.

## Introduction

COVID-19 was caused by the acute respiratory syndrome 2 (SARS-CoV-2) coronavirus. This new virus appeared for the first time in Wuhan, China, at the end of 2019 and quickly spread to other countries around the globe (World Health Organization, 2020). The outbreak of the COVID-19 pandemic in the business sphere has resulted in many changes in the economic situation in both developed and developing countries. The main problems that arose due to the closure of economies were: bottlenecks in supply chains, difficulties in transport, restrictions or complete exclusions from the functioning of gastronomy (restaurants, cafes, bars, etc.), or places that are part of the entertainment sector (clubs, discos, theatres, and cinemas, etc.), or restrictions on the operation of travel agencies, bans on staying in hotels, participating in sports or artistic activities, cancelled concerts, conferences, and festivals, or closing the activities of shopping malls, service points and introducing customer limits in shops (Fairlie, 2020; Fairlie & Fossen, 2022; Tiutiunyk et al., 2021; Baldwin & Mauro, 2020; Richter, 2020; Pan et al., 2020; Sharma et al., 2020). For many companies, the continuity and economic guarantee had come into question. Essentially, the tourism, dining and entertainment industries suffered the most during the period of the greatest lockdown, and many companies were forced to change sectors or file for bankruptcy. Companies’ economic situation deteriorated mainly during the enormous increase in the incidence, high dynamics of the virus spread, and the growing number of deaths worldwide. World trade was somewhat frozen in uncertainty, which caused several financial problems for companies. Cutting expenses, limiting production, reducing costs, closing unprofitable or unnecessary departments, lowering the number of orders, and reducing employment were among the most frequently chosen quick solutions to saving companies from loss of liquidity and bankruptcy. The pandemic has become a kind of challenge. It was a period of a trial of strength and a test of coping with a crisis, especially one that is unusual and unexpected. To stay in the market, companies had to adapt to the

unstable situation and somehow start to function in an environment of uncertainty. Thus, on the one hand, they applied *ad hoc* methods of protecting their financial base, as mentioned above. On the other hand, they took actions that allowed them, or facilitated, their functioning on the market and removed the risk of collapse. First of all, companies have used the Internet as an operational tool. Some have transferred marketing strategies to the Web using the driving force of social networks to promote products. Others entered e-commerce and started trading in their online retail stores via platforms such as Amazon, AliExpress, Ebay, or Allegro in case of Poland or similar (Bhatti et al., 2020; Andrienko, 2020; Davis, 2020). Some entities used the Internet to gain new contacts, establish cooperation and enter new markets. Perhaps, had it not been for the coronavirus pandemic, these companies would never have managed to do so. Those who lacked that time the skills, knowledge, and courage to implement new contingency strategies could benefit from governmental, local, and organizational support programs in many countries (Kluzek, 2021; Bartik et al., 2020; Abuselidze & Slobodanyk, 2020; Kuckertz et al., 2020). The article aims to examine and diagnose the features of the impact of COVID-19 on the functioning of Polish enterprises in the SME sector. Hence, the following research questions are: 1) How did the coronavirus pandemic impact the functioning of enterprises?; 2) How did companies cope with this crisis?; 3) Was the pandemic crisis a source of financial failure or collapse of Polish enterprises?; 4) Was it an opportunity for market success?; 5) Did the pandemic initiate new business strategies, cause or accelerate changes in the business model?

The conducted research yielded several noteworthy observations in this regard. The results and conclusions presented in the article may constitute a supplement or the basis for further study and comparative analysis.

## Literature review

The impact of the COVID-19 pandemic on market functioning in the European Union countries in 2020 is illustrated by using the statistical data of Eurostat in Table 1. In comparison to the year 2019, a drastic decline in retail trade was noted, mainly from March to May, the time of the greatest lockdown. Especially in this period, the trade of textiles, clothing, footwear, and leather goods in specialized stores dropped by almost 56% in March and nearly 78% in April 2020. Recreation and cultural goods fell by 34% in March and more than 47% in April. Non-food products fell by approx. 16% in March and 28% in April 2020. Also, the decline in sales was noticed remarkably in department stores. In the following months, some gains and rebounds were visible in the summer, then declines again in the fall of 2020. During the lockdown, there was a significant increase in Internet sales and a boost in courier and delivery services from March to May 2020 compared to the same period a year earlier.

**Table 1.** Turnover and volume of sales in wholesale and retail trade in EU countries in 2020 – percentage (%) change compared to the same period in the previous year

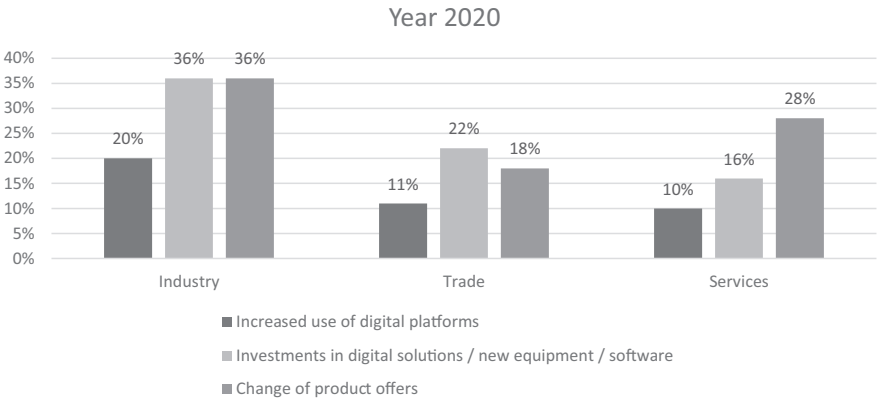
| Type of sales<br>Months                                                             | January | February | March | April | May   | June  | July  | August | September | October | November | December |
|-------------------------------------------------------------------------------------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|
| Retail sale of food, beverages and tobacco                                          | 1.2     | 3.8      | 8.7   | 1.0   | 4.9   | 0.6   | 1.0   | 3.3    | 2.3       | 4.7     | 2.3      | 5.5      |
| Retail sale of non-food products (except fuel)                                      | 4.1     | 3.6      | -15.7 | -28.0 | -3.9  | 4.6   | 1.9   | 6.3    | 4.1       | 6.3     | -0.5     | 0.7      |
| Retail sale of textiles, clothing, footwear and leather goods in specialized stores | 0.2     | -2.1     | -55.6 | -77.8 | -35.4 | -16.5 | -15.8 | -4.6   | -8.6      | -11.3   | -36.9    | -21.9    |
| Retail sale of cultural and recreation goods in specialized stores                  | 0.2     | 0.3      | -34.3 | -47.4 | 1.9   | 11.5  | 7.4   | 7.8    | 2.3       | 4.8     | -15.8    | -1.9     |
| Retail sale <i>via</i> stalls and markets                                           | 5.0     | 1.1      | -26.8 | -31.4 | -6.5  | 2.6   | 0.9   | 5.0    | 2.2       | 1.8     | -2.7     | -1.0     |
| Retail trade not in stores, stalls or markets                                       | 5.6     | 4.7      | 9.7   | 21.7  | 29.0  | 24.3  | 11.2  | 22.4   | 16.1      | 27.1    | 34.5     | 27.3     |
| Retail sale <i>via</i> mail order houses or <i>via</i> the Internet                 | 8.9     | 9.8      | 12.4  | 30.2  | 38.5  | 29.0  | 15.7  | 27.6   | 20.7      | 32.9    | 38.4     | 32.8     |

Source: Author's own study based on Eurostat data.

According to a Deloitte survey from 2020, the pandemic negatively impacted the functioning of 58% of Polish companies, positively – 6% of companies, and for 35%, the impact was neutral; 63% of financial directors admitted that the problems were mainly related to financial liquidity, 34% did not find any issues or disruptions in financial matters, and 56% of companies had problems receiving payments from their contractors on time. Payment backlogs and late payments were the main problems; 39% of companies did not experience any complications with timely payments by contractors;  $\frac{3}{4}$  of the surveyed companies believed that the pandemic harmed investment plans; 2% saw no problem in this regard; 100% of the respondents said that the pandemic situation had a negative effect on revenues; 90% of the respondents indicated that unemployment would change due to the pandemic, 60% of companies admitted that the pandemic had a significant negative impact on unemployment, and 29% said the impact of the pandemic on employment was medium (Deloitte, 2020).

The Polish Agency for Enterprise Development (PARP) in cooperation with the Market and Public Opinion Research Institute – CEM, conducted the “COVID-19 Business Pulse Survey (COV-BPS) – Poland” in the period from May to July 2020 and achieved similar research results. Based on the collected results, it was found that 69% of companies recorded a decrease in sales and a decline in demand in the analyzed period compared to 2019. The service sector suffered the most as a result of the pandemic. 91% of companies decided to remain open and operate despite the imposed restrictions. Only 5% of companies were only partially available; 1% of companies temporarily closed due to government regulations, and 3% of entities decided to close out their

own choice. It is worth emphasizing that 0% of the surveyed companies closed their activities permanently; 22% of the surveyed companies indicated that the continuation of the activity was disturbed and envisaged its duration up to 3 months. There had been changes in employment consisting in reducing working hours, granting holidays or lowering salaries (PARP, 2020). The pandemic period was a time to look for unplanned and quick solutions to survive the crisis and introduce organizational changes and transformations in many companies. Thanks to Internet access, many entities decided to shift to e-commerce. According to PARP (2020), companies had implemented or used digital platforms more often (32%) than usually. Platforms were more frequent in commercial and service companies than industrial ones (Figure 1). More small and medium-sized companies had invested in digital media than micro-companies. The most significant change in the product offer occurred in services (PARP, 2020).



**Figure 1.** Counteracting the shocks related to COVID-19 by companies

Source: PARP (2020).

Seetharaman (2020) draws attention to the banking sector, which significantly increased sales of banking products/services and customer service via the Internet as a result of the pandemic. Shang et al. (2021) mention that third world countries have experienced accelerated digitization as a positive effect of the coronavirus pandemic. The expansion of digital trading platforms, online work platforms, and digitally organized logistics has opened up opportunities for expanding a centralized database, which could be valuable economic assets in the future. According to Priyono et al. (2020), digital technologies have become a tool to combat the destructive impact of the COVID-19 pandemic on business. In their study, the authors indicated that companies sought to accelerate digitization due to the pandemic crisis, digitized the sales function, and found digital partners to enter the market. Gregurec et al. (2021) suggest regarding digital technology as a trigger for a company's development. According to the authors, the COVID-19 pandemic pushed companies to create new strategies that could prepare the ground for long-term growth and market leadership. Thanks

to digital technology, companies can improve and modernize internal operations and processes, thus, improving efficiency and productivity. The authors also point out that digitization is a good tool for transforming business models and increasing the innovation of business processes. Klein and Todesco (2021) also write about using digital technologies to support the company's operations during a pandemic. According to the authors, rapid digitization allowed the surveyed companies in Brazil to find themselves in a crisis. Thanks to it, companies could build strategic alliances to share available resources, the shortages during the pandemic were felt significantly. E-commerce has become the domain of small businesses in particular. Digitization has helped companies in Brazil modernize business processes, promote sales through social networks, and make transactions through electronic banking applications. Ziółko et al. (2021) emphasize the value of online applications for ordering food, such as Uber Eats or Foodpanda, at a time when the demand for food home delivery is instantly growing among the customers. This increase in Poland was significant during the pandemic when home deliveries of food were an alternative to closed restaurants. The ordering process via a smartphone/tablet application is faster and more convenient, thanks to the technology. Fehér et al. (2022), based on research carried out among Hungarian companies, claim that IT solutions contribute to opening new opportunities. Hungarian companies focused primarily on developing communication technologies and solutions for electronic identity management or mobile IT tools. Artificial intelligence and cloud technology in business has become equally important. Companies have also increased their interest in deepening their knowledge and acquiring digital skills.

The increase in online sales reflects the scale of interest among companies in digital technology goods. According to the United Nations Conference on Trade and Development (UNCTAD), a spectacular rise in the volume of online purchases was recorded in the United Arab Emirates. The share of online purchases increased from 27% in 2019 to 63% in 2020. Successively in Bahrain, such a share was 45% in 2020, three times greater than before. In Uzbekistan, online shopping increased from 4% in 2018 to 11% in 2020. In Thailand, it was observed that in 2020, 56% of Internet users made purchases on the Internet for the first time. According to the UNCTAD survey, the fewest online purchases during this period were recorded in El Salvador (1% of Internet users), Azerbaijan (5%), Uzbekistan (11%), and Colombia (17%), which is due to the low degree of digitization or the ability to quickly transfer sales to the Internet by local companies (UNCTAD, 2022). The increase in online sales/purchases in the European Union was particularly noticeable in 2020 in Greece, where the share of online purchases increased by 18 percentage points, and Ireland, Hungary, and Romania – by 15 percentage points each.

As mentioned earlier, the pandemic forced companies to move their sales to the Internet due to the prohibitions and restrictions on stationary trade introduced almost all over the world. The question remains whether the transition to e-commerce, partial or complete, so impressive in 2020, should continue in the coming years and whether this phenomenon can be seen as a symptom of changes in business models.

Research methods

This research uses data from a quantitative study based on a prepared questionnaire using CAWI and CATI methods. The author of this paper prepared the questionnaire, and the study was conducted by the ASM – Market Research and Analysis Center LLC (order no. ZP/06/37/21) in June–September 2021. The criterion for selecting the research sample included 500 business entities from the SME sector (micro, small, medium), excluding large companies and operating in domestic and foreign markets. According to the Polish Classification of Activities, no restrictions have been applied to the activity area nor to the number of years of presence on the markets. The study covered all voivodeships and examined 82 entities of the micro-scale, 298 – small, and 120 – medium-scale. Among the surveyed companies, 241 operate on the global market, and 259 operate in the EU (including the Polish market). 73.8% of the surveyed companies have been operating for over 16 years; 11.6% are companies with 13–16 years of experience; 9% of companies have been on the market for 9 to 12 years, and 4% of the surveyed entities are relatively young companies, operating on the market for no more than eight years. Only 1.6% of the surveyed companies are companies established in 2018–2020. Among the surveyed companies, production as a form of activity dominates – 57% of companies, whereas 41.8% of the entities indicated trade. Services are offered by 34.6% of entities. Companies combine services or offer only single ones. A detailed breakdown of the business types of activity of the surveyed companies is presented in Figure 2.

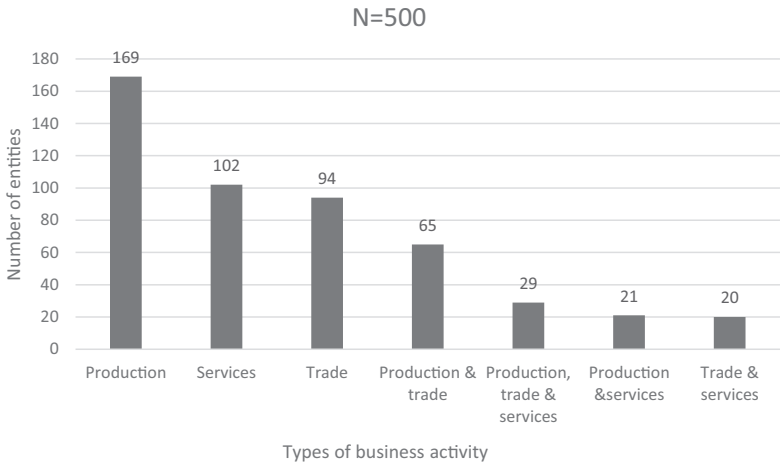


Figure 2. The types of business activity of the surveyed companies (N = 500)

Source: Author’s own study.

In the sample studied, 179 entities are involved in industrial production, 80 in trade, and 60 companies in transport. Thirty-three entities operate in the building

and construction field, and 32 entities operate in the food industry. Ten entities indicated that they run the IT business. In addition, there were three companies in the tourism industry, two in health, one in education, and one in finance and insurance. Ninety-nine entities indicated a different area of activity than the ones mentioned above, including industries such as automotive (4), biochemistry/biotechnology (2), brewing (1), clinical trials (1), cold metallurgy (1), cosmetics (1), decorations (2), electro-mechanics (1), electronics and communication (4), energy (2), furniture (2), furniture hardware (1), games, toys, books (1), gardening (1), gastronomic (1), industrial fittings (1), IT (2), jewellery (1), large-format printing (1), manual processing, metal stamping (1), metallurgical (1), metals (3), music (1), printing (7), refrigeration and air conditioning (1), seed production (1), temporary work (1), trade in building materials (1), warehousing (1), wood (1).

## Results

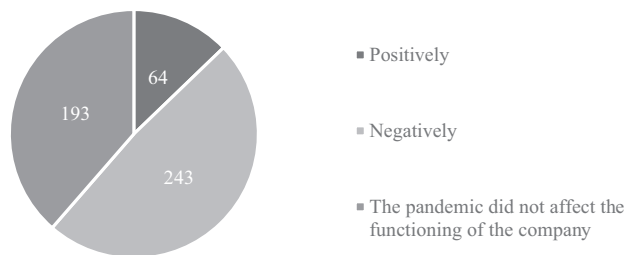
Before the pandemic, the studied companies had a generally good view of their financial health. Such companies were recorded in the study by 44.2%; 22.2% stated that this condition was very good, and 1.2% said it was even sensational. 27.6% of the entities admitted that their financial situation was satisfactory, and 3.8% assessed their condition as poor. Only 1% of the surveyed companies admitted that their financial condition before the pandemic was terrible.

The effects of the pandemic were experienced to a moderate degree by 37.80% of the surveyed entities. For 14.6% of the companies, the pandemic had a strong negative impact on their functioning, and 28.6% said that the pandemic had slightly affected them, while 19% said that the pandemic did not affect them.

Companies were asked if they saw the risk and took into account the permanent closure of the company as a result of the coronavirus pandemic and possibly when such closure of the company they expected. 468 out of 500 (93.6%) said they did not plan to close their operations. 5.4% considered the risk of closing/ending operations after six months or slightly longer. Only four companies admitted that they would shut down business within three months, and one company gave itself up to a month to stay on the market.

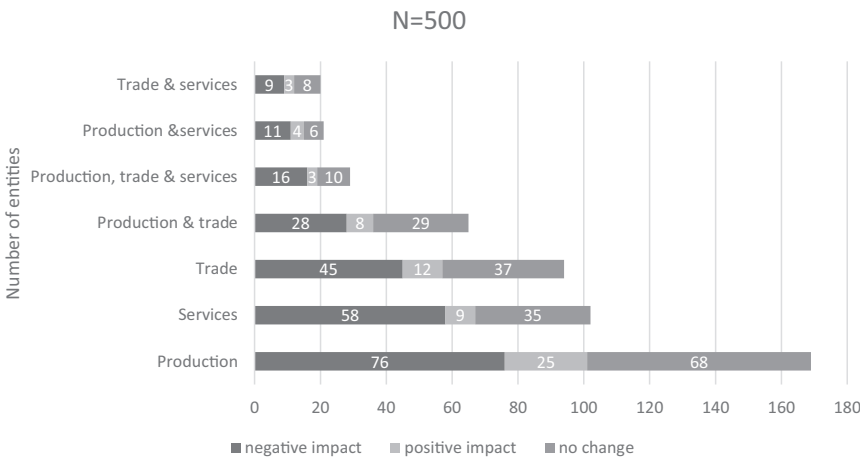
Almost half (48.6%) of the surveyed companies admitted that the pandemic harmed their functioning, around 40% did not find any impact, and for 13%, this impact was positive. The results are presented in Figure 3.

The pandemic did not affect 193 companies out of the research sample to specify the above percentages. A detailed presentation of the impact of COVID-19 on the functioning of the surveyed enterprises, considering the division into types of economic activity, is shown in Figure 4.



**Figure 3.** How did the COVID-19 pandemic affect the functioning of the company? ( $N = 500$ )

Source: Author’s own study.



**Figure 4.** The impact of COVID-19 on the surveyed companies regarding their types of activity ( $N = 500$ )

Source: Author’s own study.

Only 64 entities positively assessed the impact of the pandemic (Table 2). They indicated that they recorded increased sales to contractors and sales to customers improved, and the company acquired new customers and increased production and exports during that time.

**Table 2.** The positive effect of the pandemic ( $N = 64$ )

| Companies’ answers                                           | Number of companies |
|--------------------------------------------------------------|---------------------|
| Increased sales for companies/contractors                    | 40                  |
| The company gained new customers                             | 28                  |
| More sales to consumers                                      | 27                  |
| The company increased production                             | 23                  |
| Exports have increased                                       | 18                  |
| Smooth supply of raw materials in the country                | 7                   |
| The company gained new suppliers / new distribution channels | 6                   |
| I don’t know / It’s hard to say                              | 2                   |
| Smooth import of materials from abroad                       | 0                   |

Source: Author’s own study.

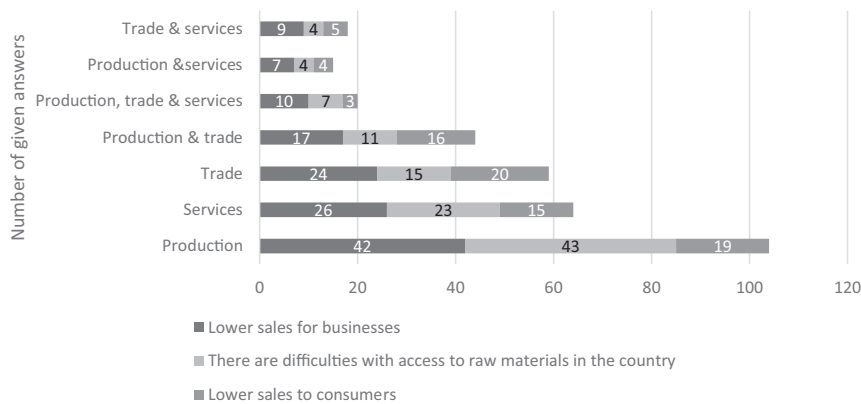
Yet, more companies among those surveyed were negatively affected by the effects of the pandemic. The critical problems at that time were lower sales for contractors and customers, demanding access to raw materials in the country, and imports from abroad (Table 3). Also, companies had problems with exports or those resulting from employees' absence. There were 243 such entities among all respondents.

**Table 3.** The negative effect of the pandemic (*N* = 243)

| Companies' answers                                                                                                        | Number of companies |
|---------------------------------------------------------------------------------------------------------------------------|---------------------|
| Lower sales for businesses                                                                                                | 135                 |
| There are difficulties with access to raw materials in the country                                                        | 107                 |
| Lower sales to consumers                                                                                                  | 82                  |
| There are difficulties in importing materials from abroad                                                                 | 74                  |
| Exports decreased                                                                                                         | 68                  |
| The company is struggling with the absence of employees due to illness or childcare                                       | 56                  |
| The company's clients/contractors are in arrears with the payment of receivables                                          | 45                  |
| There were limited logistics services                                                                                     | 40                  |
| There have been previously no problems with infrastructure, e.g. telecommunications, transport, heating/electric problems | 11                  |
| Increased administrative bottlenecks have been noted                                                                      | 8                   |
| I don't know / It's hard to say                                                                                           | 7                   |
| Limited certification services occurred                                                                                   | 3                   |

Source: Author's own study.

When you look at the distribution of responses (Figure 5) to the first three most important problems identified by companies in connection with the pandemic, it can be noticed that manufacturing companies primarily pointed to the problem with sales to contractors and access to raw materials. In the case of trading companies, sales to contractors and to consumers were basically equally not good. Service companies, on the other hand, similarly indicated that their problem was lower sales to contractors.



**Figure 5.** Three major problems due to the pandemic according to the surveyed companies

Source: Author's own study.

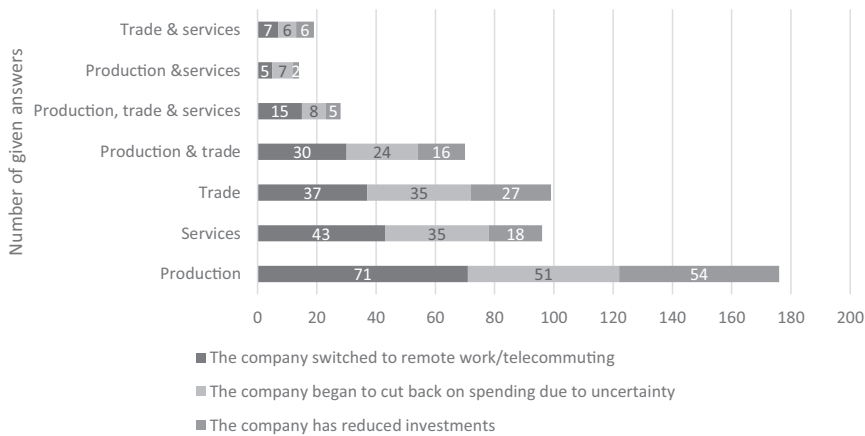
Bearing in mind that, in essence, the coronavirus pandemic must have had certain effects on the functioning of companies, be they positive, negative or neutral, it was assumed that companies somehow reacted to the state of affairs and took or not appropriate actions in response to the crisis and shutting down the economy. In answer to the question asked in the survey, what type of remedial actions were taken by companies basically, most entities indicated the transition to remote work with the use of telecommunications/IT tools or the reduction of expenses due to the uncertain situation, as well as reduction/limitation or withholding the investment. Table 4 presents all the collected responses from the surveyed companies.

**Table 4.** Remedial actions of the surveyed companies in response to the pandemic crisis (*N* = 500)

| Companies' remedial decisions in response to the pandemic crisis                                                                                                                                                                                                                                                            |                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Type of decision (required 1–3)                                                                                                                                                                                                                                                                                             | Indications of respondents (number of replies) |
| The company switched to remote work/telecommuting                                                                                                                                                                                                                                                                           | 208                                            |
| The company began to cut back on spending due to uncertainty                                                                                                                                                                                                                                                                | 166                                            |
| The company has reduced investments                                                                                                                                                                                                                                                                                         | 128                                            |
| The company temporarily reduced employment or sent employees on leave                                                                                                                                                                                                                                                       | 72                                             |
| The company has reduced working hours                                                                                                                                                                                                                                                                                       | 72                                             |
| Wages and salaries have been reduced                                                                                                                                                                                                                                                                                        | 68                                             |
| Orders canceled                                                                                                                                                                                                                                                                                                             | 34                                             |
| Deferred repayment schedule of bank loans obtained                                                                                                                                                                                                                                                                          | 34                                             |
| The company has extended working hours                                                                                                                                                                                                                                                                                      | 27                                             |
| The company laid off employees                                                                                                                                                                                                                                                                                              | 23                                             |
| Temporary closure of the company introduced                                                                                                                                                                                                                                                                                 | 5                                              |
| Filed for bankruptcy                                                                                                                                                                                                                                                                                                        | 0                                              |
| None of the above                                                                                                                                                                                                                                                                                                           | 92                                             |
| Other:                                                                                                                                                                                                                                                                                                                      | 27                                             |
| seeking financial assistance or subsidies; applying for a rent reduction; change of the schedule of hours of such work; introduction of a shift/rotational system; introduction of additional safety rules: masks, protective tarpaulins, screens, cleaning and disinfection products; cancellation of all live conferences |                                                |

Source: Author's own study.

The three most important remedial activities indicated by the surveyed companies are more or less equally distributed in the case of typically commercial companies (Figure 6). These companies indicated that the transition to remote work was equally important, as was the reduction of expenses and investments. Manufacturing companies, primarily as a remedy for this situation, have chosen to work remotely. This is even more visible in the case of service companies, where the greatest number of indications was also for remote work, and relatively the least for reduction of investment. Similarly, companies with a mixed form of activity dealing in production and trade responded.

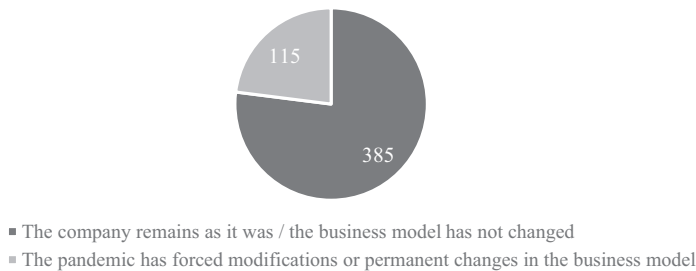


**Figure 6.** Three major remedial actions due to the pandemic taken by the surveyed companies

Source: Author's own study.

The coronavirus pandemic worldwide was perceived mainly as a period of a deep crisis that affected both the social and economic spheres. Research generally confirms that companies have been negatively affected by the pandemic and its effects are still visible. However, a crisis can catalyze positive changes and contribute to development, good transformation, and success (Włodarczyk, 2011; Walas-Trębacz & Ziarko, 2011). Koźmiński and Piotrowski (2000) claim that the crisis even conditions the development of companies. Pasieczny (2005) underlines that development mechanisms in the company are activated just at the moment of trouble, but not for all companies. It must be such a stimulus for development.

Similarly, Piecuch and Skalik (2010) concluded that in the case of Polish companies, the crisis triggers a defensive reaction; most companies do not think about development and do not see any opportunities for this development in the problem focusing their attention on surviving a difficult situation. Therefore, the study asked whether the coronavirus pandemic contributed to the introduction of permanent changes or modifications to the business model of the surveyed companies and whether these changes resulted in further development. The vast majority (77%) of the surveyed entities did not decide to introduce changes to the business model. Only 23% of companies admitted that the pandemic forced them to introduce modifications or permanent changes that influenced the current shape of the business model. The detailed results are presented in Figure 7.



**Figure 7.** Modifications in the company / permanent changes to the business model ( $N = 500$ )

Source: Author's own study.

Firms that admitted that their business model has changed due to the pandemic have identified several types of change that reflect this model shift. The collected responses are presented in Table 5.

**Table 5.** The nature of modifications/changes in the business model introduced by companies due to the coronavirus pandemic ( $N = 115$ )

| Nature of modifications/changes in business model                                                                                               |                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Key modifications/changes (1–3 required)                                                                                                        | Indications of respondents (number of replies) |
| The company modified sales with non-standard / new products / services in response to market demand                                             | 45                                             |
| The company switched to e-commerce / introduced sales / online services                                                                         | 31                                             |
| Automated and computerized production                                                                                                           | 17                                             |
| The company has modified relations with the environment using social networks                                                                   | 15                                             |
| Expanded human resources with new specialists in e-commerce / marketing / telecommunications / commercial brokers                               | 14                                             |
| A completely new production was implemented in response to market demand                                                                        | 13                                             |
| Introduced logistics services / own transport / delivery                                                                                        | 11                                             |
| The company changed the industry / added a new area of activity                                                                                 | 6                                              |
| The company gained a partner and started the merger/acquisition procedure                                                                       | 3                                              |
| The company has changed the type of business                                                                                                    | 2                                              |
| Other:                                                                                                                                          | 13                                             |
| introduced innovations, expanding the contact base (e-mail and telephone) with customers, establishing new cooperation, introducing remote work |                                                |

Source: Author's own study.

The changes introduced by the companies take into account the modification of the product offer, the introduction of entirely new ones in response to the market demand, and the improvement or inclusion of services that meet market needs. Moreover, companies often indicated that they had fully or partially shifted their sales to the Internet, i.e. launched e-commerce activities. A few also used social networks/media to modify relations with the business environment. Some manufacturing companies have decided to automate and digitize production. This may be because,

in a pandemic, it was difficult to maintain smooth shifts in employees' work due to their absence or the requirement of keeping a distance and limits of workers staying in one room/production hall simultaneously.

## Discussions

Based on the results of the conducted research and their presentation, it remains to answer the research questions asked at the beginning.

How did the coronavirus pandemic impact the functioning of enterprises?

According to the study results, before the pandemic situation in Poland was officially announced, most companies assessed their financial condition as good or satisfactory. 81% of the surveyed companies felt the effects of the pandemic. Generally mild to moderate. Nearly 15% of companies said they were severely affected by the pandemic. Almost half of the respondents admitted that the pandemic harmed running a business. Still, nearly 40% of the respondents stated that the pandemic's impact on the company's functioning was non-existent. Only 13% felt the positive effects of the pandemic. The results of the research conducted in this area largely coincide with the results of the studies by Deloitte (2020) and PARP (2020). Almost identical results were obtained in a survey conducted in March 2020 by the French-Polish Chamber of Commerce (2020) among 118 companies, in which it was noted that 98% of the surveyed entities felt the impact of the coronavirus on running a business. Only 2% said that the pandemic did not contribute to any changes. In general, 90% of enterprises surveyed in this report expected deterioration in financial results, so their feelings about the impact of the pandemic on business are *de facto* harmful compared to the results of the study presented in this article, merely to a less extent.

The fundamental problems, according to the surveyed companies, that arose during the pandemic were the reduction in the sales volume, issues with the import of raw materials/materials or access to them on the domestic market, export restrictions/reduction, problems with the presence of employees at the workplace, emerging payment gridlocks, untimely payment of receivables. Similar issues were reflected in the World Bank's 2021 report. The organization indicates declines in sales, turbulences in the continuity of companies' work, forced restrictions on working hours, reduction of employment, wages, and additional benefits (World Bank, 2021).

How did companies cope with this crisis?

Did the pandemic initiate new business strategies, cause or accelerate changes in the business model?

During the Puls Biznesu debate entitled: "Polish Company – an International Champion" at the Warsaw headquarters of PwC in October 2020, it was indicated that Polish companies were doing rather well during the pandemic crisis. Many medium-sized companies began to look for export opportunities taking advantage of the opportunity for expansion, including to the USA, Georgia, and Singapore.

The pandemic, however, favored large companies to a large extent. For example, the Polish pharmaceutical industry's Polish company Celon Pharma made changes to the product offer. During the pandemic, it recorded a 176% export increase in the first half of 2020. KGHM seized the opportunity and, due to the restrictions, it increased its sales in Europe during the lack of access to the Chinese market. Also, companies producing wooden doors and windows and those dealing with construction tools benefited from interrupted supply chains from China to the US and increased their share in the US market (Puls Biznesu, 2020). However, examining any spectacular positive changes in the SME sector is difficult. It was found in the survey presented in this paper that the pandemic period did not prove to be the beginning of lasting changes in business models. Most entities (77%) did not modify their company and made no permanent changes due to the pandemic. For a few, only 23%, the pandemic caused partial modifications due to market needs, e.g. new products/services were introduced to the offer, or digital platforms were used to avoid losing contact with the market. Some of them invested in the company in proper technologies, hired specialists, and entered into relations with the environment through social networks. Only two companies have completely changed their activities. Thus, the pandemic did not become a catalyst for positive changes in the surveyed companies. The changes and modifications introduced were instead a defensive shield against the adverse effects of the pandemic, thanks to which companies could survive the crisis.

Was the pandemic crisis a source of financial failure or collapse of Polish enterprises?

Was it an opportunity for market success?

The gathered results indicated that none of the companies ended the business activity. Not one of them has filed for bankruptcy. 8% of companies during the pandemic increased sales to contractors, while almost 1/3 struggled with a decline in sales. Less than 6% gained new customers, and 5% increased production. Thus, again, to a large extent, companies have decided to wait through the difficult period of unfavorable economic conditions. They undertook several actions to save their situation. 41.6% of companies indicated that transitioning to remote work was the critical decision to continue operating. Two hundred and eight entities selected this answer in the study. The second frequently chosen answer was to reduce spending – 33.2% of the companies considered this decision one of the most important in the pandemic. Similarly, the decision to reduce investments – this answer was indicated by a quarter of the surveyed enterprises. Thus, considering the above issues, it is difficult to talk about chances of success in the market in the case of the surveyed companies. Rather, it should be emphasized that entities focused primarily on saving their business and financial liquidity, rather than using the pandemic as an opportunity to seize a chance to succeed in the market. Few companies from the surveyed population noticed such opportunities.

## Conclusions

The effects and consequences of the COVID-19 pandemic are the subjects of many studies from various fields of science. It is impossible in one study to examine the impact of a pandemic on the functioning of all enterprises. Therefore, the presented results of the research on Polish SMEs represent a particular fragment that may constitute the basis for further analysis. Some conclusions have been drawn. The surveyed companies, that represent the SME sector, coped quite well with the crisis caused by the pandemic, which is undoubtedly an economic crisis. Shock and uncertainty about the future accompanied all companies. They felt the inconvenience of closing economies, but none of the surveyed companies closed their activities. Most surveyed companies perceived the crisis negatively, but many felt the pandemic neutrally, and some saw its positive effects. The minority of the surveyed entities used this time to introduce changes in the organization and management of the company. They implemented new strategies, changed the product offer, entered e-commerce, digitized and automated production processes allowed companies to change or modify their business model.

To conclude, the surveyed companies were able to find themselves in a crisis, unprecedented so far, and reacted quite efficiently to the emerging difficulties. Therefore, it cannot be said that the coronavirus pandemic turned out to be an economic fiasco for these companies. After all, none of the companies surveyed filed for bankruptcy. Nor can it be said that the pandemic was a stimulus or a catalyst for changes in the business model. A relatively small number of entities surveyed saw the need for such changes or used this time as an opportunity to introduce them. Instead, others chose to wait and endure a period of uncertainty, refrained from making risky decisions, or lacked the necessary skills and knowledge.

## References

- Abuselidze, G., & Slobodianyk, A. (2020). Social responsibility of business and government in the conditions of the COVID-19 pandemic. *E3S Web of Conferences* 210, 15016, ITSE-2020.  
**doi:10.1051/e3sconf/202021015016**
- Andrienko, O. (2020). *Ecommerce & Consumer Trends During Coronavirus*. Retrieved from <https://www.semrush.com/blog/ecommerce-covid-19/>
- Baldwin, R., & Mauro, B.W. (2020). *Economics in the Time of COVID-19*. London: Centre for Economic Policy Research Press.
- Bartik, A., Bertrand, M., Cullen, Z., Glaeser, E., Luca, M., & Stanton, C. (2020). How are small businesses adjusting to COVID-19? Early evidence from a survey. *NBER Working Paper No. w26989*. Retrieved from <https://www.nber.org/papers/w26989>
- Bhatti, A., Akram, H., Basit, H.M., Khan, A.U., Mahwish Raza Naqvi, S., & Bilal, M. (2020). E-commerce trends during COVID-19 Pandemic. *International Journal of Future Generation Communication and Networking*, 13(2), 1449–1452.

- Davis, S. (2020). *How Coronavirus Is Impacting Ecommerce*. Retrieved from <https://roirevolution.com/blog/coronavirus-and-ecommerce/>
- Deloitte. (2020). *Niemal sześć na dziesięć polskich firm odczuło negatywny wpływ epidemii koronawirusa. Polscy CFO: kluczowym celem w ciągu najbliższych 12 miesięcy będzie redukcja kosztów*. Retrieved from <https://www2.deloitte.com/pl/pl/pages/press-releases/articles/niemal-szesc-na-dziesiec-polskich-firm-odczulo-negatywny-wplyw-epidemii-koronawirusa.html>
- Fairlie, R. (2020). The impact of covid-19 on small business owners: Evidence of early-stage losses from the April 2020 current population survey. *NBER Working Paper 27309*. Retrieved from <http://www.nber.org/papers/w27309>
- Fairlie, R., & Fossen, F.M. (2022). The early impacts of the COVID-19 pandemic on business sales. *Small Business Economics*, 58, 1853–1864. doi:10.1007/s11187-021-00479-4
- Fehér, P., Kő, A., Kovács, T., Öri, D., Szabó, I., Szabó, Z., & Varga, K. (2022). *The Impact of the COVID-19 Pandemic on the Digitalisation Practices of Hungarian Companies*. 41<sup>st</sup> International Conference on Organizational Science Development: Society's Challenges for Organizational Opportunities, 23–25 March 2022, Slovenia: Congress Centre Portus. Retrieved from <https://press.um.si/index.php/ump/catalog/view/663/886/2048-1>
- French-Polish Chamber of Commerce. (2020). *Wpływ koronawirusa na działalność firm w Polsce*. Retrieved from <https://fr.calameo.com/read/004601149748ee2a1c15e>
- Gregurec, I., Tomičić-Furjan, M., & Tomičić-Pupek, K. (2021). The impact of COVID-19 on sustainable business models in SMEs. *Sustainability*, 13(1098). doi:10.3390/su13031098
- Klein, V.B., & Todesco, J.L. (2021). COVID-19crisis and SMEs responses: The role of digital transformation. *Knowledge and Process Management*, 28, 117–133. doi:10.1002/kpm.1660KLEINANDTODESCO133
- Kluzek, M. (2021). State aid for SMEs during the pandemic in Poland. *Annales Universitatis Mariae Curie-Skłodowska, sectio H – Oeconomia*, 55(4), 23–35. doi:10.17951/h.2021.55.4.23-35
- Koźmiński, A.K., & Piotrowski, W. (2000). *Zarządzanie. Teoria i praktyka*. Warszawa: PWN.
- Kuckertz, A., Brändle, L., Gaudig, A., Hinderer, S., Morales Reyes, C.A., Prochotta, A., Steinbrink, K.M., & Berger, E.S.C. (2020). Startups in times of crisis – a rapid response to the COVID-19 pandemic. *Journal of Business Venturing Insights*, 13, e00169. doi:10.1016/j.jbvi.2020.e00169
- Pan, S.L., Cui, M., & Qian, J. (2020). Information resource orchestration during the COVID-19 pandemic: A study of community lockdowns in China. *International Journal of Information Management*, 54, 102143. doi:10.1016/j.ijinfomgt.2020.102143
- PARP. (2020). *Pomiar pulsu przedsiębiorstw. Badanie COVID-19 Business Pulse Survey (COV-BPS) – Polska*. Retrieved from [https://www.parp.gov.pl/storage/publications/pdf/08-COV-BPS-Survey\\_Poland\\_results\\_FINAL\\_PL\\_plus\\_author\\_info.pdf](https://www.parp.gov.pl/storage/publications/pdf/08-COV-BPS-Survey_Poland_results_FINAL_PL_plus_author_info.pdf)
- Pasieczny, J. (2005). Dlaczego kryzys nie musi prowadzić do rozwoju? *Przegląd Organizacji*, 6(785), 7–11. doi:10.33141/po.2005.06.01
- Piecuch, T., & Skalik, J. (2010). *Funkcjonowanie polskich MŚP w warunkach kryzysu*. Wrocław: Wyd. UE.
- Priyono, A., Moin, A., & Putri, V.N.A.O. (2020). Identifying Digital transformation paths in the business model of SMEs during the COVID-19 pandemic. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 104. doi:10.3390/joitmc6040104
- Puls Biznesu. (2020). *COVID postrachem, ale i motorem biznesu*. Retrieved from <https://www.pb.pl/covid-postrachem-ale-i-motorem-biznesu-1005321>
- Richter, A. (2020). Locked-down digital work. *International Journal of Information Management*, 55, 102157. doi:10.1016/j.ijinfomgt.2020.102157
- Seetharaman, P. (2020). Business models shifts: Impact of Covid-19. *International Journal of Information Management*, 54, 102173. doi:10.1016/j.ijinfomgt.2020.102173
- Shang, Y., Li, H., & Zhang, R. (2021). Effects of pandemic outbreak on economies: Evidence from business history context. *Frontiers in Public Health*, 9(632043), 1–9. doi:10.3389/fpubh.2021.632043

- Sharma, P., Leung, T.Y., Kingshott, R.P.J., Davcik, N.S., & Cardinali, S. (2020). Managing uncertainty during a global pandemic: An international business perspective. *Journal of Business Research*, 116, 188–192. doi:10.1016/j.jbusres.2020.05.026
- Tiutiunyk, I., Humenna, Y., & Flaumer, A. (2021). COVID-19 impact on business sector activity in the EU countries: Digital issues. *Health Economics and Management Review*, 1, 54–66. doi:10.21272/hem.2021.1-06
- UNCTAD. (2022). *COVID-19 boost to e-commerce sustained into 2021, new UNCTAD figures show*. Retrieved from <https://unctad.org/news/covid-19-boost-e-commerce-sustained-2021-new-unctad-figures-show>
- Walas-Trębacz, J., & Ziarko, J. (2011). *Podstawy zarządzania kryzysowego. Część 2: Zarządzanie kryzysowe w przedsiębiorstwie*. Kraków: Krakowska Akademia im. Andrzeja Frycza Modrzewskiego.
- Włodarczyk, E. (2011). Zdarzenie losowe i sytuacja kryzysowa. In E. Włodarczyk & I. Cytlak (Eds.), *Człowiek wobec krytycznych sytuacji życiowych. Z teorii i praktyki pracy socjalnej* (pp. 311–330). Poznań: Wyd. UAM.
- World Bank. (2021). *How COVID-19 is affecting companies around the world*. Retrieved from <https://www.worldbank.org/en/news/infographic/2021/02/17/how-covid-19is-affecting-companies-around-the-world>
- World Health Organization. (2020). *WHO Coronavirus Disease (COVID-19) Dashboard*. Retrieved from <https://covid19.who.int/info>
- Ziółko, M., Sulek, K., Suprunenko, Y., Werońska, K., & Dziedzic, D. (2021). The increasing popularity and service quality assessment of online food ordering applications in the COVID-19 pandemic. A study of Uber Eats in Poland. *Annales Universitatis Mariae Curie-Skłodowska, sectio H – Oeconomia*, 55(4), 73–95. doi:10.17951/h.2021.55.4.73-95