

## Article

# The Impact of Economic Indicators on the Evolution of Business Confidence during the COVID-19 Pandemic Period

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**Abstract:** This publication focuses on issues related to the development of entrepreneurship. The aim of this publication is to demonstrate how fluctuations of economic indicators have been affecting business confidence during the COVID-19 pandemic. Business trust is important for entrepreneurs because it significantly determines the decision-making process and ensures stable development and functioning of an organization. Our study assessed the G7 and the E27 countries and Poland for comparison purposes for the years 2015–2021. Among other things, for the purposes of the study, the following were performed: literature analysis; formulation of the study research questions and a hypothesis: economic indicators negatively affecting business confidence during the COVID-19 pandemic period; data from the following databases which were used: EUROSTAT, GUS, OECD, TRADING ECONOMICS. The presented research results indicate that there is a relationship between the COVID-19 pandemic and the development of economic indicators and BCI. This is particularly noticeable during the development of the pandemic at the turn of the first and second quarters of 2020. The indicator shows negative values during this period. This study also showed that increasing COVID-19 infections in the pandemic's initial stage led to growing insecurity in developing business activities, which is proven by the calculated Pearson correlation coefficient scoring  $-0.3982$ .

**Keywords:** gross domestic product (GDP); unemployment; COVID-19; business confidence index (BCI)



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## 1. Introduction

The functioning and development of entrepreneurship depends, inter alia, on economic stability, market opportunities and business potential. The rapidly changing business environment and the expectations and requirements of customers are forcing owners operating a high risk-bearing business to manage it more quickly and flexibly. This is precisely why trust is such an important factor in modern business [1–3]. It is also a significant research area for science, as business confidence can be analyzed in many ways.

Relevant literature on business confidence illustrates many publications concerning investment, social and sociological aspects in various industries. The authors of these publications analyzed, inter alia, the relationship between business confidence and working conditions, the volume of production, unemployment and the scale of investments [4,5]. The analysis of the business cycles aims to give a hint on how to manage an organization or a country to achieve stability (of functioning, development, macro-level) by undertaking various activities aimed at a specific goal, which increases economic credibility, and, thus, business confidence [6–12].

However, a survey of the most important databases (Web of Science, Scopus) showed that there are very few publications that focus on the business confidence index during the pandemic. Thus, it can be stated that the issue of business confidence, in the overall assessment, is rarely researched and the literature is limited. Therefore, with this publication, the author would like to fill in the research gap.

The aim of this publication is to show how fluctuations of economic indicators affected business confidence during the COVID-19 pandemic. This publication addresses the following research questions:

- Does the COVID-19 pandemic significantly determine the main indicators for assessing economic development?
- Is there a relationship between the business confidence index and economic indicators?
- Has the outbreak of the Coronavirus pandemic significantly affected the business confidence index?

Additionally, a hypothesis was formulated: Economic indicators negatively affected business confidence during the COVID-19 pandemic period. The considerations presented in the study supported by the results can serve as a way to acquire appropriate knowledge of the functioning of market mechanisms in crisis situations, such as the emergence and development of a pandemic, which will allow for faster implementation of protective or development measures, especially since the study included countries (G7) with strong market economies that each have a significant impact on the world economy, where no significant changes caused by the pandemic were expected.

This publication has the following layout: It starts with the analysis of the subject matter and the next author's own approach to research. Subsequently, as part of the research presentation, different economic indicators are studied. The author made an effort to present the relationship between the number of infections and the direction of changes of individual economic indicators. Also, a comparative analysis is presented in this part of the paper. After presenting the research results, the author shows how the business confidence index has been developing during the pandemic. The publication ends with the author's conclusions.

## 2. Literature Review

The issue of confidence can be analyzed from various perspectives, thus affecting many research areas. Initially, it was considered to be a part of theology, human philosophy and ethics. Over time, confidence also started to include social psychology and sociology. Currently, it is also an issue of economic and business spheres because of its impact on the economic system [13,14]. This results in practitioners and scientists in management sciences and economics displaying a growing interest in this research area [15–19].

According to the theory and practice of management, business confidence is [20,21]:

- one of the elements of social capital because it contributes indirectly to a productivity increase and fosters economic development (has a positive effect on social exchange processes and the functioning of tax systems, favours investments and the proper allocation of resources, strengthens managerial decisions, etc.);
- the foundation of social interactions (implements collaborations and the implementation of common goals, stimulates the development of social bonds, new contacts, economic ventures, etc.);
- a resource of an organization (allocated in accordance with the process approach at the entry and exit of social processes, favouring the processes of economic and social exchange);
- an expectation of individuals and groups towards the behaviour of other people and groups (employees have expectations regarding the obtained results, rewards, behaviour of other people, etc.);
- a belief that questionable actions of other employees (especially managers) will be beneficial for both the entire organization and people expressing trust.

From the economic point of view, we can distinguish the following forms of confidence in business [22]:

- deterrence-based trust—consisting of relationships between commercial partners, where non-compliance with commercial agreements will result in the implementation

- of broadly understood penalties. Being deterred from unfair business practices is a sufficient reason to trust a partner. Trust is a reward calculated in a positive experience,
- knowledge-based trust—relating to the knowledge and experience of one’s own or other partners in business relations,
  - identification-based trust—is grounded on empathy in a business relationship. The common ethical values of business partners allow for the identification of their business goals and needs, becoming a fair and equitable system of mutual respect for rights,
  - consumer trust—is a special type of trust. The consumer is a partner in the process of exchange taking place in the market.

In other words, trust becomes a goal (when referring to the broadly understood crew resource management (CRM), marketing activities, economic exchange, etc.), a link between different social groups (both inside and outside the organization) and a measure to achieve objectives. This means that business entities should be based on credibility, honesty and act on the basis of principles, standards, law and data (information) exchange [7,23].

Among others, Gagea [24] or den Haan [25] indicate that the weakness of trust indicators is the subjective responses of stakeholders (mainly entrepreneurs and consumers), i.e., the quality of data that most often concern the short-term assessment of self-interest. The results of the research showed that a drop in customer confidence may result in a decline in economic, production and investment activity [26–28]. Also, the forecasts relating to individual sectors of the economy are subject to qualitative limitations. The advantages, however, are economic indicators (e.g., unemployment), which are reported monthly, giving entrepreneurs the opportunity to analyze and determine the dependence and strength of impact within specific time series. In research on trust in business, it becomes important to set a specific time frame and method of analysis [29,30], in particular the use (use) of dynamically changing factors, as the BCI indicator is pro-cyclical and mainly serves to predict declines [26,28,31]. Therefore, the most frequently used are macroeconomic ones, i.e., GDP, inflation rate, unemployment rate, etc. This is important from the economic point of view and development of the organization. There is always a possibility of a recession, which limits business confidence and forces economic entities to analyze the causes and mechanisms behind it. This will allow us to focus on predicting economic activity [26,32,33]. It also has an impact on the actions of the government, for example, through support measures to reduce taxes, which may produce a positive effect for entrepreneurs or a negative effect in the case of an increase of prices, interest rates and government investments [34–36].

Therefore, ensuring stable development of enterprises in the global economy is becoming increasingly difficult. This is caused, among other reasons, by globalization, digitalization, the development of automation and smart technologies, and the economic recession or an economic crisis or legal restrictions.

Given the frequent (and sometimes unpredictable) changes of the global and domestic economy, it is essential to build a set of indicators to serve not only the government for macroeconomic management purposes, but also the domestic enterprises to meet their business operation purposes. Among such indicators, the early “warning indicators” are particularly important because they anticipate events that are likely going to happen to the economy [37]. The confidence index is one such indicator. Different countries measure the business confidence index in various ways; for example, in England (ICAEW) the business confidence index informs about the state of the economy; in the US (DFS), the confidence index of small and medium-sized enterprises is analyzed; and in Poland (CBOS), public confidence is analyzed. In Europe, the ZEW Institute and Erste Bank calculate the confidence index of investors from Eastern Europe, and the European Commission has introduced the manufacturing confidence indicator and the index of confidence in commercial activities. However, the most popular and frequently quoted are BCI (Business Confidence Index), CCI (Consumer Confidence Index) and FDI (Confidence Index) [38–41]. It was important, therefore, to modify the calculation of confidence indicators at the European Union level [42]. This allows us to conduct research in a larger number of entities (countries), e.g., the EU-27, or in a purposefully selected population [43,44].

The Business Confidence Index (BCI) is one of the most important early warning indicators. It provides information on future development, underpinned by opinion polls on the development of production, procurement and inventory of finished goods in the industrial sector. The BCI can be used to monitor growth in production and predict turning points in economic activity. Organization for Economic Cooperation and Development (OECD) calculates BCI on the basis of periods (monthly and quarterly) of economic indices and business expectations (Business Confidence Survey—BCS) [40,41].

The BCI, in an early warning indicator, is also used for predicting trends in the economy, which covers the most important economic indicators fostering trends in the near future. It is a particularly effective indicator in the period of economic slowdown, and thus is recognized among the media, decision makers, entrepreneurs and investors [4,34]. It also shows the current business situation, which includes investment opportunities and justifies the causality of an existing economic trend [23,45,46]. It is particularly important in the period of the outbreak and development of the COVID-19 pandemic. The difficult epidemic situation caused a significant threat to investments and development activities. The rapid pace of development was reflected in the activities of various industries [47–50]. It should be emphasized that strict research on the BCI index during the COVID-19 pandemic was not conducted and widely analyzed. On the other hand, there were studies covering various periods, e.g., of the global financial crisis or pandemic phenomena (COVID-19, Spanish flu), where the economic effects or consequences and economic indicators were analyzed [51–56].

### 3. Materials and Methods

The subject of the research, concerning business confidence, is important for both scientists and entrepreneurs. The aim of this publication is to show how changes in indicators have influenced the development of business confidence during the COVID-19 pandemic. It is particularly important in terms of running a business and shaping its development. Efforts were made in the study to show the impact of the pandemic on basic economic indicators such as GDP, inflation and unemployment, which could have affected economic decisions. The following questions were addressed:

- Does the COVID-19 pandemic significantly determine the main indicators for assessing economic development?
- Is there a relationship between the business confidence index and economic indicators?
- Has the outbreak of the Coronavirus pandemic significantly affected the business confidence index?

Additionally, a hypothesis was formulated: Economic indicators negatively affected business confidence during the COVID-19 pandemic period.

The study performs the analysis of domestic and foreign literature. The quantitative research was based on the secondary data obtained from the following databases: EUROSTAT, OECD, TRADING ECONOMICS of the Central Statistical Office [57] covering the years 2015–2021 (Q1). The values of the analyzed indicators were calculated in Microsoft Excel and the research results were presented in the form of Microsoft Excel charts. The Quantitative data was grouped into time series (quarters), which allowed for the transparency of the presented data.

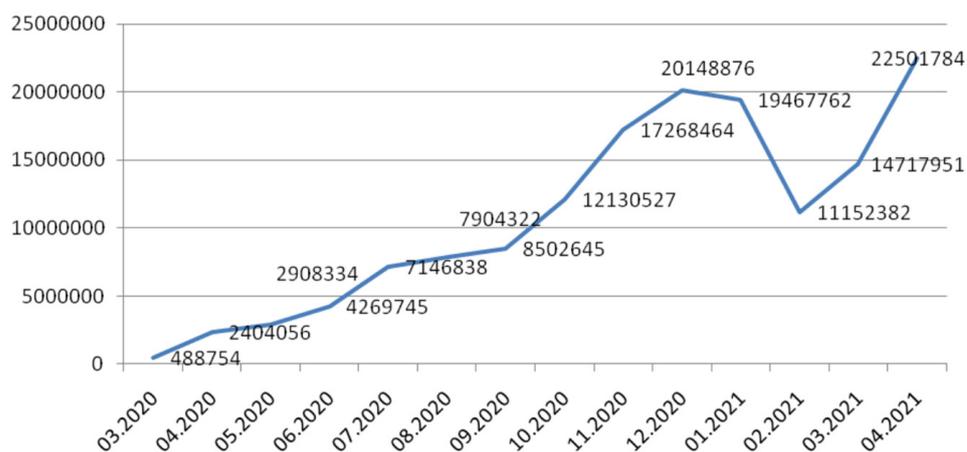
The empirical research was conducted on the basis of the G7: France (FR), Germany (DE), Italy (IT), the United Kingdom (UK), the United States (US), Canada (CA) and Japan (JP), which are among the major countries in the world in terms of economic development. This choice was intended because in countries with such a strongly developed economy, significant changes caused by the pandemic were not expected. We must also bear in mind that decisions made by the G7 members are not binding; nonetheless, they have a real and significant impact on the world economy. Therefore, it seems appropriate to present the overall impact of the pandemic on the world economy, and in particular on the main economic indicators, using the G7 group as a model. The research was complemented in some areas with countries from the European Union (EU27) and Poland.

The empirical study was based on the following research scheme:

- Stage 1. Analysis of changes in quarterly business indicators in the G-7 countries in the years 2015–2021. The focus was on the main economic indicators: GDP, inflation, exports, and imports. The aim of the indicator study was to show what changes were observed during the outbreak of the COVID-19 pandemic.
- Stage 2. Analysis of regression and correlation between selected business indicators.
- Stage 3. Comparative analysis of the calculated regression and correlation indexes.
- Stage 4. Assessment of the impact of changes in selected indicators on the level of business confidence in the G-7 countries in 2015–2021.

#### 4. Results

Through the analysis of different areas, it can be stated that in a very short period of time, the first infections caused a global pandemic, which is continuing today, along with the resulting effects. The World Health Organization (WHO) announced the COVID-19 pandemic on 11 March 2020 due to infections spreading across the globe with a mortality rate of 3.4%, and 2.29% in Poland (data from 3 March 2020). This study shows that the number of infections in the world is increasing. However, this growth is slowing down, creating waves, which is presented in Figure 1.



**Figure 1.** The number of COVID-19 infections in the world.

This effect results from, among other things, the pandemic (COVID-19) reaching different countries and from the course of infections. Such periods (waves of infection) have affected the economies of different countries, and in particular their sustainable development.

Figure 2 depicts that the increase or decrease in Gross Domestic Product (GDP) in the G7 have occurred during the pandemic (changes in GDP indicators in comparison to the corresponding period of the previous year). This has a significant impact on the discharge of socio-economic tasks, in particular production. It is important to note that the development of GDP in the G7 was similar (Figure 2).

The data shows that many countries reacted to the decline in GDP over a similar period of time. The largest drops were recorded in Great Britain and Italy.

Along with the decline in the GDP index, the opposite changes occurred in the unemployment rate. Changes in demand for goods and, in particular services, caused by the increasing number of infected and hospitalized people, forced entrepreneurs to reduce employment and suspend or liquidate their business. Figure 3 presents the unemployment rate (%) in the relevant periods and the research group.

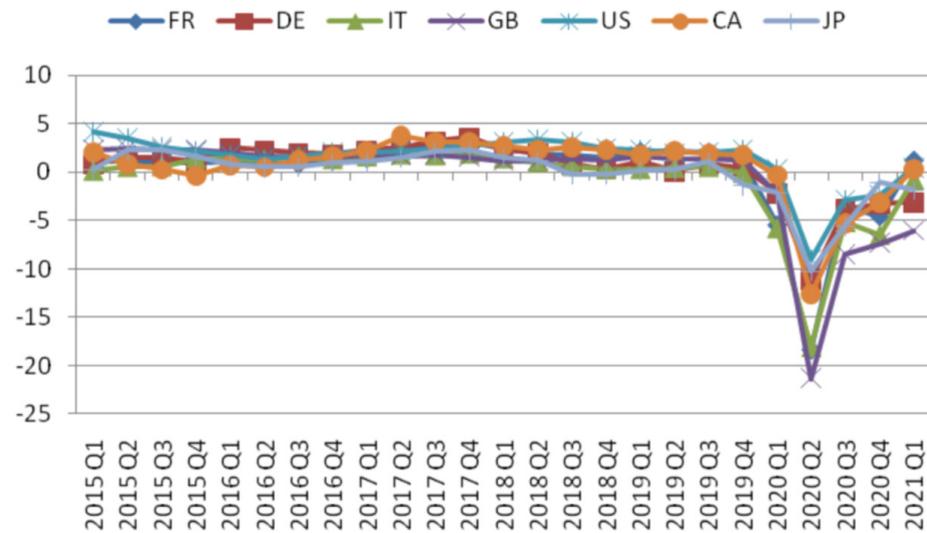


Figure 2. Changes in the GDP index in the G7 countries.

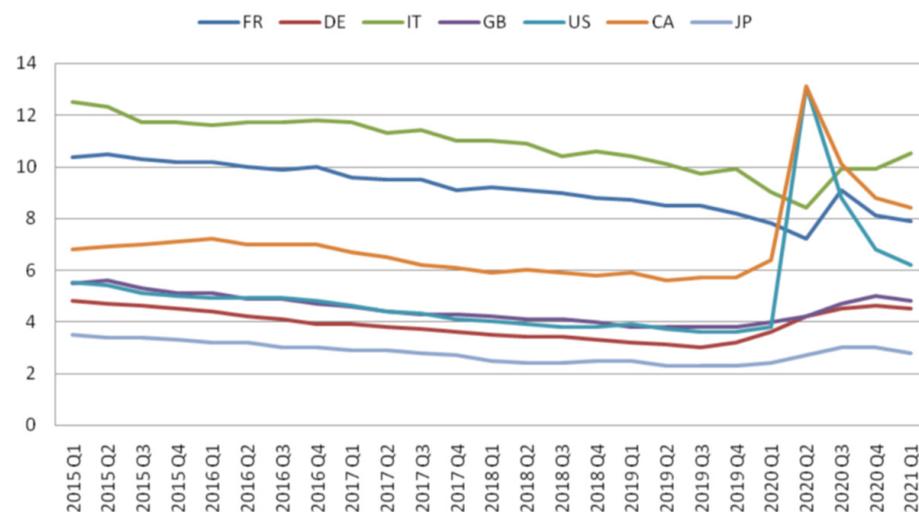
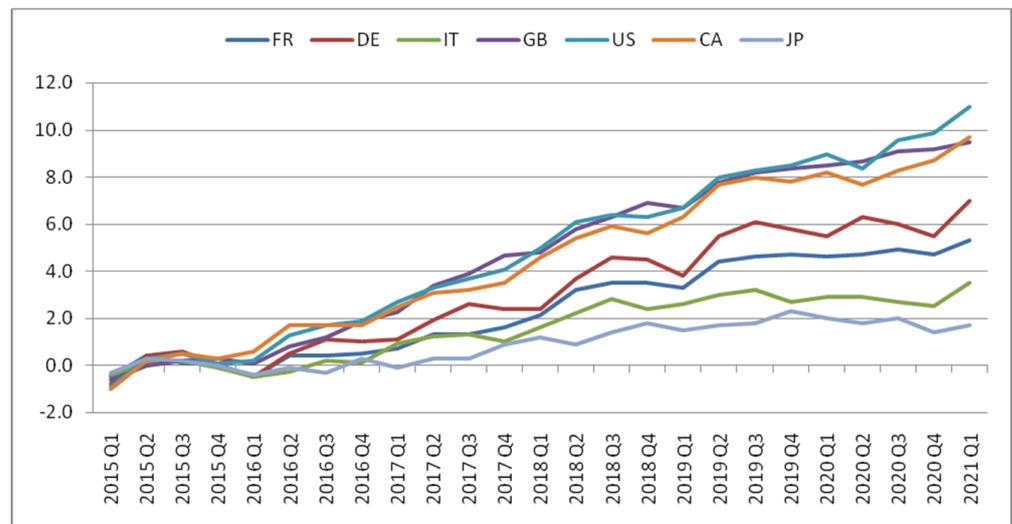


Figure 3. Evolution of the unemployment rate in the G7 countries.

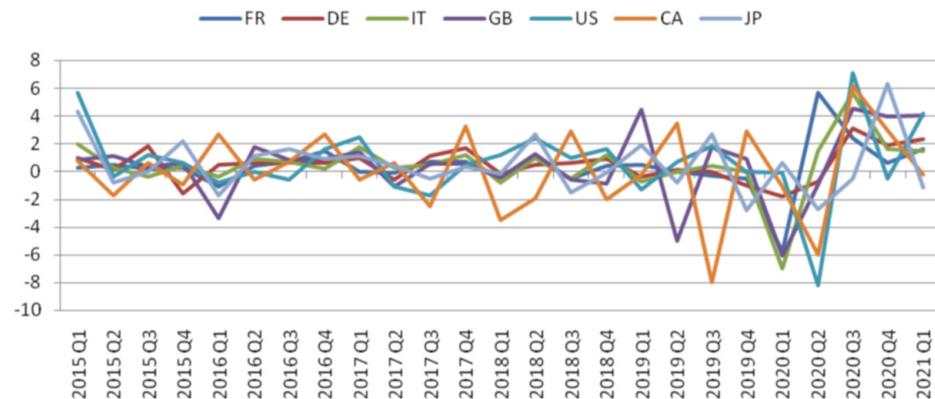
It has to be mentioned when analysing the above data that during the pandemic, various restrictions and limitations were imposed and are still being imposed. Different countries, at varying speeds and intensities, implemented increasingly strict restrictions, often resulting in reducing work in certain occupations. Public awareness concerning ways to prevent the disease resulted in limiting to a minimum the use of various services, in particular tourism, food services, cultural and educational services. It is worth noting that a significant change in the growth of the unemployment indicator (%) in the countries researched falls on a similar period, despite the continued downward trend.

The inflation rate, which is another important economic indicator, had the same direction within the same research period. It indicates the percentage change in prices in the analysed period, and because of limited purchasing possibilities, entrepreneurs were forced to raise prices, as the money purchasing power was falling. Figure 4 presents the comparison of price changing to the base year of 2015.



**Figure 4.** Changes in the inflation rate in the G7 countries.

The import index also showed significant changes within the analysed period. Figure 5 depicts that among the G7 members there is no uniformity in the demand for imports. Different countries have various demands over different periods, which creates a kind of “seasonality”.

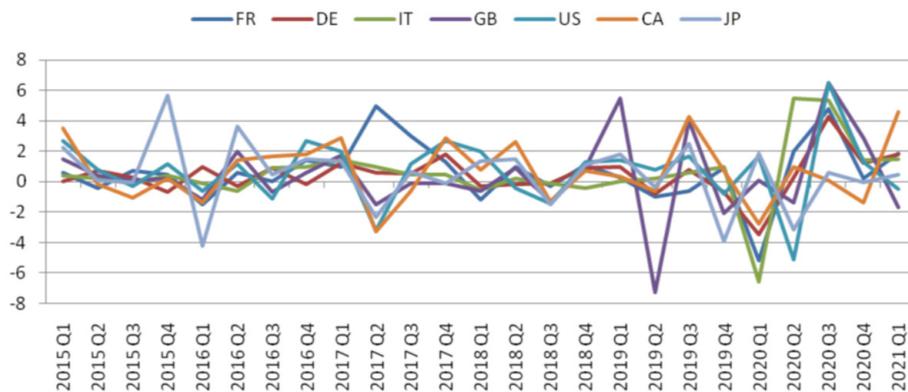


**Figure 5.** Changes in the import index in the G7 countries.

However, a very noticeable change at the beginning of 2020 occurred due to the increase in the number of infections, which led to a slowdown of imports. It is worthy to note that the presented quarterly data were previously compared by  $m/m-1$ , seasonally and calendar adjusted transforming into BEC categories [58].

A similar phenomenon can be noticed in the study of the export index (Figure 6). However, in the time of the increase in the number of COVID-19 infections for both the first and the second wave, a significant deviation from the existing fluctuation norm can be seen.

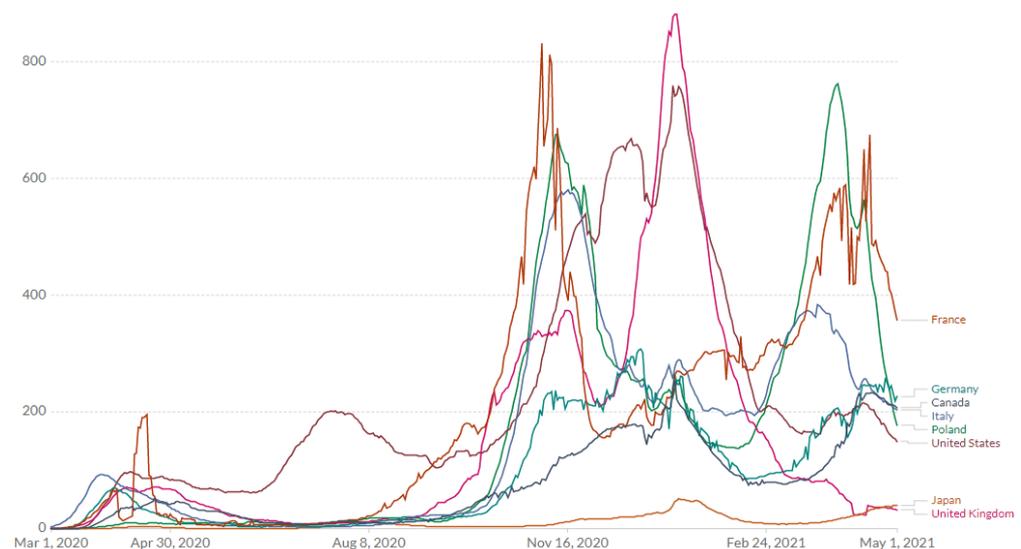
The above figure shows that that Great Britain has recorded the greatest fluctuation over the respected years. This is probably due to Great Britain coping with Brexit. As in other cases, along with the increase in the number of infections, a significant deviation of extreme values can be noted. The period of deficit was recuperated in the following quarters.



**Figure 6.** Changes in the export index in the G7 countries.

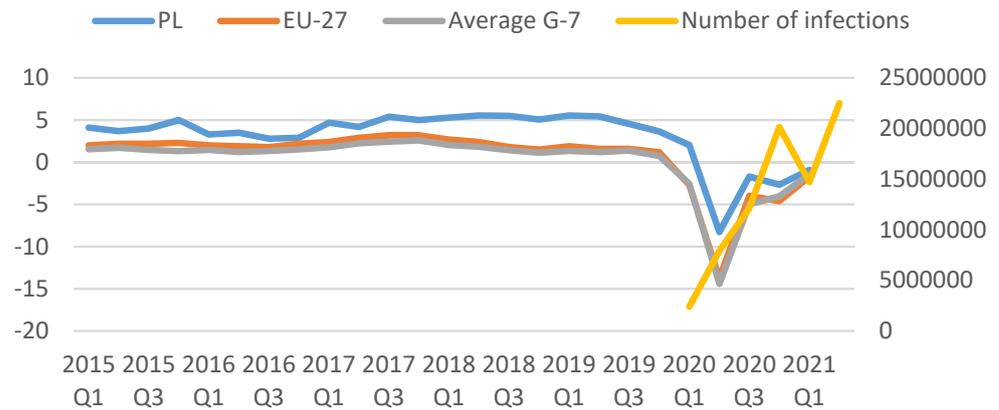
## 5. Discussion

The conducted study shows that the COVID-19 pandemic had a negative impact on the main economic indicators among the surveyed G7 countries. Figure 7 depicts the distribution of the pandemic among the G7 members and Poland during the period considered.



**Figure 7.** Changes in the number of incidences.

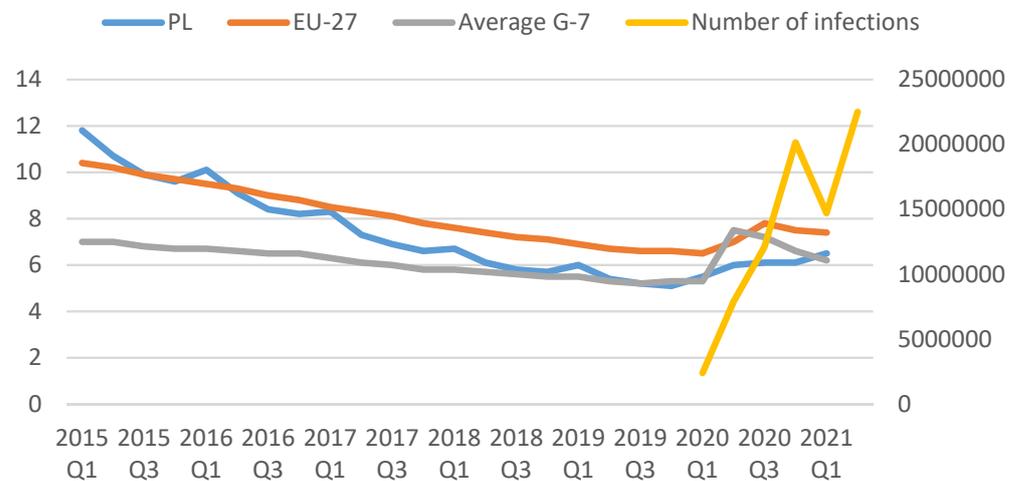
The analysis of Figure 7 indicates that every country has been coping with stages of the pandemic differently. For example, when the second wave of the pandemic was ending in the United States and they were preparing for the third one, in many countries the third wave had already ended. Additionally, various countries introduced prophylactic and preventive measures against the pandemic faster and achieved better results than countries which acted slowly, thus contributing to spreading of the pandemic. Slower response of the governments to the pandemic outbreak has significantly affected economic indicators, which had an impact on sustainable development [47,50]. This is apparent in the analysis of the GDP indicator. Figure 8 depicts the evolution of GDP in the G7 countries, but also in the EU and Poland. By adding the number of infections in the world, dependencies become noticeable. This means that the increase in the number of incidences had a considerable impact on GDP.



**Figure 8.** Average GDP and the number of infections.

The presented breakdown (decline) of the GDP ratio presented in Figure 8 to the previous corresponding period, when the number of new infections began to increase unequivocally, confirms the correlation. The Pearson correlation further supports this claim, which, for the GDP and the average quarterly increase in the infections of the G7 members, amounted to  $-0.4598$ . The negative correlation indicates that with an increase in the number of new infections, the average value of the GDP indicator decreases. This is a moderate correlation where the link between two features is economically significant. A similar dependence occurs in relation to the countries of the European Union and Poland.

The research also showed a similar phenomenon in relation to the analysed unemployment rate (Figure 9).

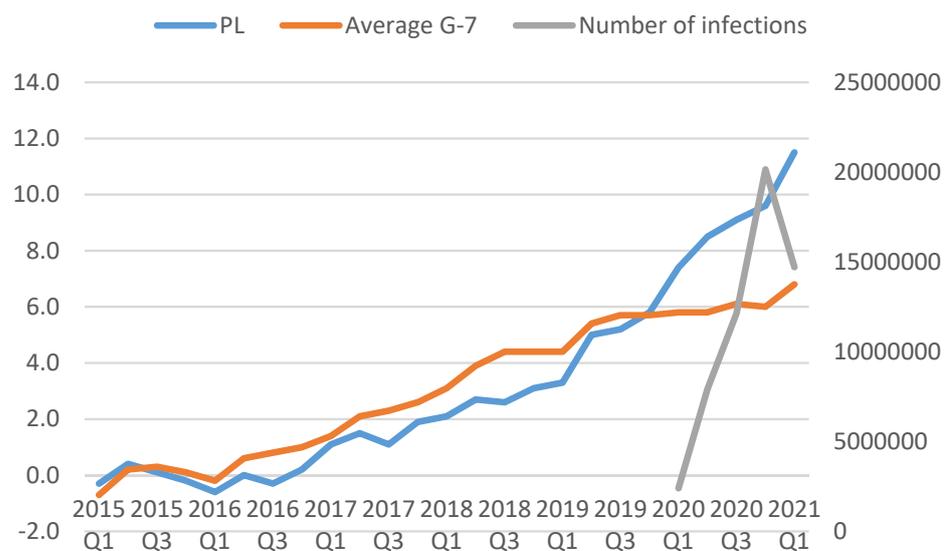


**Figure 9.** The countries' average unemployment rate and the number of infections.

Figure 9 shows that, over the longer period of time, there is a noticeable downward trend in the G7 countries and the European Union, despite the initial rise in unemployment rate in the first months of 2020. Only Poland shows an upward trend. Short-term analysis in accordance with the Pearson's Correlation coefficient is at  $0.4220$  (a positive moderate correlation). The situation with unemployment in the coming months can change, despite the growing trend in the shorter period, but a return to the downward trend seems more likely to happen. This is also supported by both the Pearson's Correlation coefficient for the long period at  $0.1823$  (giving a positive correlation for a lack of link between the two analysed features) and the mobilization of world governments in counteracting the effects of COVID-19; for example, the introduction of free-of-charge vaccinations. In the case of the G7 countries, the level of unemployment has a chance to stabilize over time and get

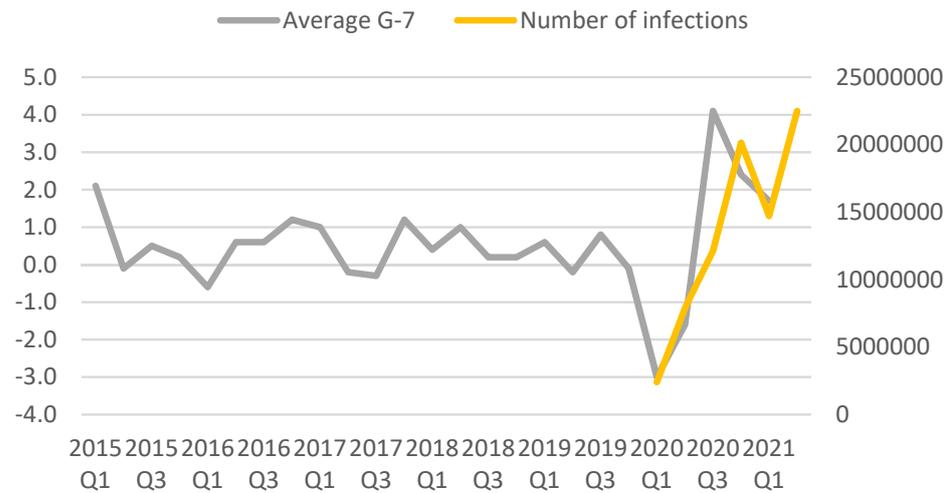
back on the “correct course”; the one before the pandemic. However, it is appropriate to take into account that some anomalies may occur, especially when the next waves appear, but they should not be as intense as before [7]. In Poland, the analysed tendency may be rising due to, inter alia, the number of people vaccinated, which still is at a relatively low level compared to the EU and G7 countries. It is worth noting that the analysed indicators of the average of the G7 and E27 countries are similar and react in the same manner to the number of new infections, which may be due to the high degree of economic development. Therefore, further deliberations focus on the G7 members and Poland.

The data presented in Figure 4 indicate an upward trend in the inflation rate in the countries analysed. This is probably due to the global market conditions, and, in particular, from the demand for energy and its increasing price, workforce, and changing legal conditions [58–60]. In comparison with the increase in the number of infections, it can be seen that inflation (the G7 average) slowed down, especially in the initial period of the pandemic, whereas in Poland (Figure 10) it did not. At the end of 2020, despite the earlier slowdown of inflation, a renewed increase can be noticed and at a much faster pace. The probable reasons for this include loosening the introduced restrictions and limitations, lock-downs (for specific industries), the increase of prices resulting from the necessity to adapt to the sanitary regime, production downtime and limitations, and the reduction of money purchasing power [7,11,35,47]. This is also supported by the Pearson’s correlation index, which confirms the relationship between the analysed features (a moderate positive correlation) taking a value of 0.4928.



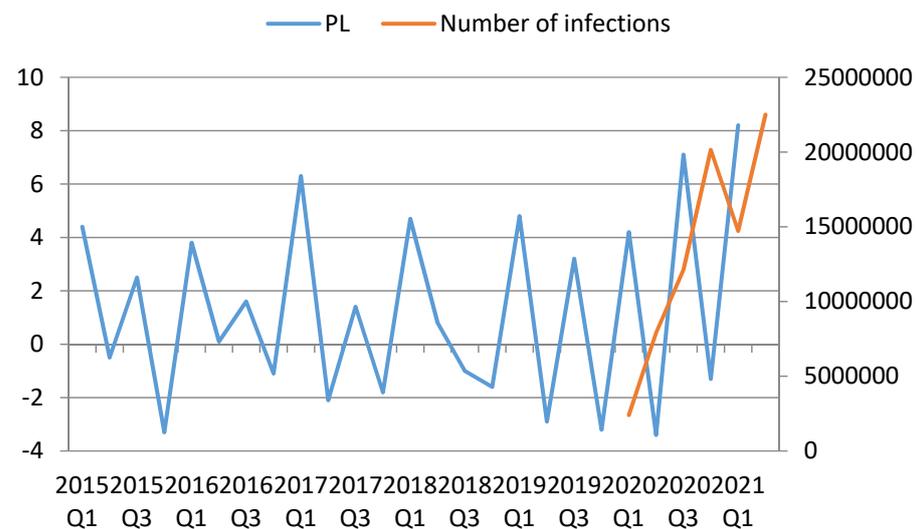
**Figure 10.** The countries’ average unemployment rate and the number of infections.

Also, the study of the import index presented in Figure 5 indicates fluctuations resulting from the decreasing demand from the beginning of 2020. This is the result of undertaken actions of different governments, the declining demand for services and goods and their availability. This is supported by the analysis of the import index (the G7 average) in comparison to the number of new infections, which, according to the Pearson’s correlation, is 0.1008 in the long term and 0.1315 in the short term. This clearly indicates a very low (nearly zero) relationship between the analyzed features. Although there is no significant statistical relationship, Figure 11 shows a certain correlation; thus, the statement that the outbreak of the pandemic will affect the level of imports seems justified from an economic point of view.



**Figure 11.** Import growth and the number of infections.

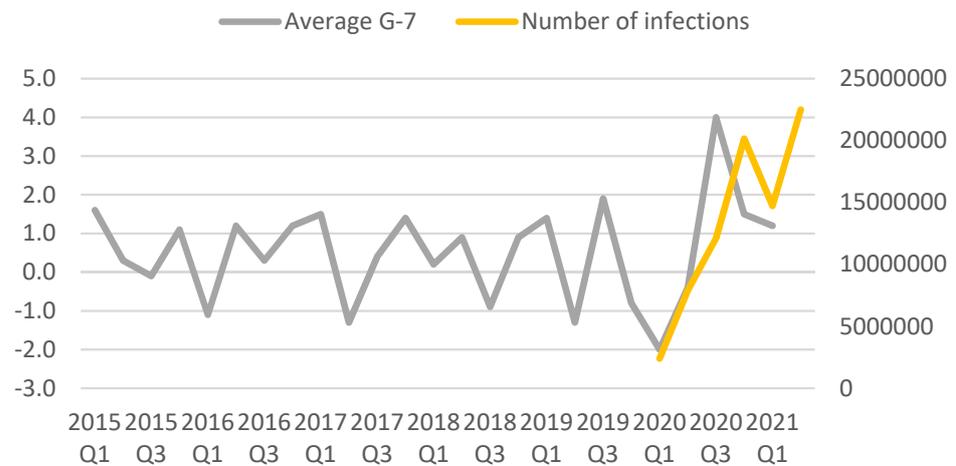
The analysis of the studied phenomenon in Poland clearly shows no dependence of the increase in infections (Figure 12).



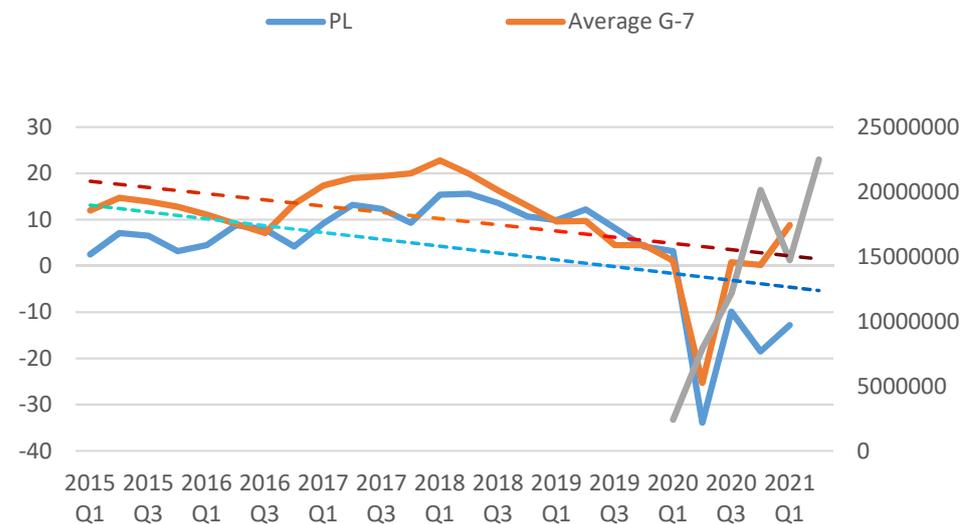
**Figure 12.** Import growth rate in Poland and the number of infections.

A similar situation is presented in Figure 13 in the study of the export index. The Pearson correlation coefficient indicates the lack of correlation both in the long (0.0861) and short (0.1115) terms. Therefore, the conclusions for exports are the same as for imports.

The analysis of the above economic indicators shows that the business confidence index (BCI), understood as the entrepreneurs' confidence indicator concerning future development, can affect the future of an organization, and in particular, its stable development. The research has shown that the biggest issues with business confidence among entrepreneurs occurred in Great Britain [47]. This seems justified as Brexit is a long-term process in which significant changes happen in the law and the functioning of entrepreneurship. The certainty of business operations for other countries was "normal". However, with the outbreak of the pandemic a number of companies lost this certainty by the lack of knowledge about the possible actions taken by the government and how long the pandemic would last, restrictions and limitations on business activities [61]. For many business operators, this situation aroused questions: should they continue their business activity, suspend or liquidate it or maybe switch to another industry [19,50]? The analysed indicator used to monitor production growth and predict turning points in economic activity indicated the most negative assessments (Figure 14).



**Figure 13.** The countries' average export index and the number of infections.



**Figure 14.** Business confidence index and the number of infections.

The average business confidence index for the G7 countries has been on a downward trend for years. The same goes for Poland. However, due to the outbreak of the pandemic, this indicator decreased significantly. Therefore, it is evident that the increase in new infections affects the confidence index of an enterprise [62]. In this case, based on the Pearson correlation coefficient, the increased rate of infections affected the business confidence amounting to  $-0.3982$ , giving a negative low correlation. Even though this is a statistically relatively low indicator, it indicates a significant economic relationship. In other words, along with the increase in COVID-19 infections, the confidence index of enterprises decreases, and thus limits the possibilities of investment and stable development [12,61].

However, we can see that in the subsequent periods the indicator increases, which confirms the importance of announced and implemented actions undertaken by different governments. The implemented measures are to support entrepreneurs in maintaining and operating their businesses, or to ensure possible development through various types of incentives [60,63]. In Poland, four Anti-Crisis Shields (Table 1) have been implemented with varying effects [64].

**Table 1.** Anti-crisis shields in Poland.

No Anti-Crisis Shield	Most Important Measures
1.0	<ul style="list-style-type: none"> <li>• a subsidy for salaries of employees,</li> <li>• a downtime pay for employees and entrepreneurs,</li> <li>• microloans to 5.000 Polish zlotys,</li> <li>• exemption from the Tax Office (ZUS),</li> <li>• Possibility of reverse accounting for the Personal Income Tax (PIT) and Corporate Income Tax (CIT) losses,</li> <li>• extended time for submitting a PIT declaration,</li> <li>• possibility to resign from simplified advances in 2020 and calculation of monthly advances based on the current income,</li> <li>• possibility of introducing exemptions from real estate tax by communes,</li> <li>• special solutions for entrepreneurs from the tourism, hospitality sector, cultural and entertainment industries, congress, sport.</li> </ul>
2.0	<ul style="list-style-type: none"> <li>• A subsidy for salaries of employees,</li> <li>• a downtime pay,</li> <li>• no obligation to maintain employment after the subsidy ends,</li> <li>• microloans,</li> <li>• exemption from the Tax Office (ZUS), the Health Insurance, the Labour Fund (FP), the Guaranteed Employment Benefit Fund (FGŚP), the Cohesion Fund (FS), the Bridge Pension Fund (FEP),</li> <li>• postponement of deadline with respect to transfer pricing,</li> <li>• real estate tax exemption for public-benefit organizations.</li> </ul>
3.0	<ul style="list-style-type: none"> <li>• No need to obtain a new permit or declaration should changes be made to the foreigner's working conditions,</li> <li>• exemption for the self-employed from Health Insurance and ZUS contributions,</li> <li>• exemption from the Health Insurance contributions for those benefiting from the "start-up" service,</li> <li>• microloan and a downtime pay also or those who set up their business before 1 April 2020.</li> </ul>
4.0	<ul style="list-style-type: none"> <li>• Limiting severance payments,</li> <li>• limiting the obligations related to the company's social benefit fund,</li> <li>• termination of the non-competition agreement,</li> <li>• expanding the group of people entitled to the downtime pay,</li> <li>• a subsidy for salaries of employees who were not subject to downtime,</li> <li>• broader criterion of decrease in turnover,</li> <li>• cancellation of a microloan up to 5.000 Polish zlotys without the need to submit an application,</li> <li>• deduction of donations.</li> </ul>

## 6. Conclusions

In summary, the analyzed indicators have confirmed the following hypothesis: The economic indicators had a negative impact on business confidence during the COVID-19 pandemic. Even though the business confidence index was following a downward trend before the pandemic outbreak (March 2020), it was relatively stable. The significant decline started with a slight delay, which seems natural, as entrepreneurs and economies of the countries in question were reacting hastily to the changes. However, the lengthening pandemic and imposed restrictions made it more difficult to maintain and develop a business, and sometimes even caused stagnation in some branches of the economy. The growing awareness of the emerging threats around the world resulted in governments introducing anti-crisis measures. Nevertheless, economic indicators illustrate that even for the G7 members, countries with a high socio-economic level, the average has significantly deteriorated; for example, GDP – 14.42%, unemployment rate at 7.63%, inflation at 7.22%. According to the Pearson correlation coefficient, such rapid changes resulting from an increase in the infection rate were shown to be related. Although the dependencies were relatively small, they are significant from an economic point of view. The research showed that the biggest changes occurred in the second quarter of 2020, which was the worst in terms of the analyzed indicators. The development of the factors shows that many companies and governments were not prepared for radical changes, had no preventive

plans and did not know how to cope with the present situation. The results of the research confirm the theory that economic indicators are strongly determined by important socio-political-economic situations such as the COVID-19 pandemic.

This induces a crisis in the world market and its subsequent collapse. This confirms that the COVID-19 pandemic determines the main economic indicators and therefore directly affects the business confidence indicator. The consequence of the research is that even the economically strongly developed countries (G7), which have a real and significant impact on the world economy, have felt the changes caused by the pandemic even though this was not expected. In practice, this means that a decrease in the business confidence index, occurring in the short term, significantly affects the economic activity of enterprises and consumer decision-making. The scale of adjustments the companies had to apply showed that organizations were not prepared for the situation, as no similar situation happened previously. As a result of the lack of experience and appropriate knowledge, many business entities have been liquidated or have been struggling with various difficulties, most often financial. In England, for example, the post pandemic changes have been significant as the Brexit impediments stacked up.

It should be emphasized, however, that individual countries began to become more and more involved in protective measures, both in terms of social (epidemic) and economic life. Properly managed enterprises (flexibly, taking advantage of emerging opportunities, etc.), thanks to the implemented state shields, developed their activities or changed industries, and others managed to maintain them. Various forms of employee protection, e.g., in the field of co-financing of wages, standstill benefits, micro-loans, etc., allowed entrepreneurs to, inter alia, maintain employment or introduce changes in the organization of work. Skillful work planning, introducing shifts, doing online work, or being able to work from home, showed that organizations were looking for ways to survive and learn to deal with crisis situations. Some proven solutions have been implemented on a permanent basis, which shows the organization's ability to develop in crisis situations. The experience gained in implementing anti-crisis measures by governments allowed companies to react faster and introduce corrective and preventive actions in subsequent waves of the pandemic. The implementation of crisis preventive measures by governments and obtained experience were an important factor allowing companies to react quicker and introduce corrective and preventive actions in the successive pandemic waves. This is apparent in the changes of rates level in relation to successive waves. The growing awareness of the society, entrepreneurs and governments of the analyzed countries indicate that economic activities will achieve their goals in the long run and ensure stable development of organizations. Even Poland, despite being a not so highly developed country, has coped well with the COVID-19 crisis. The analysis of the data in the study gives the possibility of assuming that in the long term the main economic indicators will begin to reach an upward trend, and the business confidence index will allow to increase the conduct of investment and development activities in individual countries. This means that despite the existing COVID-19 pandemic, the economy, through the actions of governments and the behavior of market stakeholders, slowly but steadily began to recover and rebuild, trying to ensure stable development and functioning of business entities.

### *6.1. Limitations*

A key limitation of the study in this study is the data collection method. This is due to the fact that some data available in the EUROSTAT, GUS, OECD and TRADING ECONOMICS databases distinguished different classification systems depending on the country. I believe that the general study of the business confidence index is a good start for further analysis. It is worth noting that the difficulties in doing business resulting from the development of the COVID-19 pandemic were also differently identified, classified and presented by individual countries, which resulted in a significant dispersion of data. Therefore, in the future, it would be worth analyzing what the index looks like in individual branches of the economy. The limitation was also related to the short pandemic period

of 2020–2021 that was used for the analysis. In the future, it will be worth analyzing the phenomena in the longer term.

### 6.2. Implications and Recommendations for Further Research

The results of the research enriched the theoretical basis of the meaning of the business confidence index used by companies, organizations or individual investors. The study fills a scientific gap in the analysis of BCI shaping during the COVID-19 pandemic. On the basis of the conducted research, it was identified and confirmed that a pandemic, regardless of where it occurs, be in highly developed countries (G-7) or in other E-27 countries, always affects the main economic indicators and the business confidence index. Most often, the impact is negative. The results also indicate that scientific research needs to be undertaken deeper and broader research and be conducted over a longer period of time. In future research, it is worth analyzing and trying to identify what factors in particular (in the main) economic indicators in the pandemic era (COVID-19) determine volatility and with what strength they affect the BCI indicator.

The main business implication of the study is the necessity to monitor the BCI index by economic entities. Thanks to the observation of the BCI index during crisis (pandemic) periods, entities can introduce significant changes in the area of management, planning, production, work organization, etc. The changes will have an economic impact on the functioning, stable development or building an appropriate image of the organization.

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