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# The Biggest Winners and Losers of the Coronavirus Crisis Based on **European Macroeconomic Data**

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Abstract: The 21st century has brought significant changes for economic operators, not only from a technological point of view. Some of these changes have been positive, while others have created major challenges or problems that have had to be adapted to very quickly. The COVID-19 pandemic or the Russian-Ukrainian conflict have triggered a clear crisis process in many countries and businesses. However, it is assumed that crises do not affect everyone in the same way. This study aims to examine the impact of these two events on certain European countries. To this end, five macroeconomic indicators have been selected and their changes before and after the crises are examined. The study seeks to answer the question of how the crisis events have affected the basic macroeconomic indicators of the countries and whether it can be said that the crisis has left everyone worse off. Are some countries more resilient to the current adverse trends? We base our analysis not only on macroeconomic indicators, but also review the evolution of the IMD competitiveness indicator as a confirmation. The macroeconomic indicators and the competitiveness report will show how the macroeconomic and competitiveness situation of each country has changed following the outbreak of the COVID-19 pandemic, which was also significantly affected by the Russian-Ukrainian conflict. By reviewing this period, it will become clear to what extent the countries under study were affected by the events and it will be possible to identify which countries can be considered the biggest losers.

Keywords: COVID-19 pandemic, Russian-Ukrainian conflict, crisis, competitiveness

# Introduction

The study was designed to examine the impact of the COVID-19 crisis on economic indicators. It is hard to argue that the crisis has had some form of impact on all countries. It is in the nature of crises that a good period can be followed by a bad period in the life of an economic agent, very often referred to as a crisis or recession. The word crisis conveys a negative connotation. Everyone thinks of downturns, poor results or negative effects, but in reality it is far from certain that a crisis always has negative consequences. In order to prove this, it is necessary to examine the question of whether crises have actually caused a setback for everyone or whether they have caused the opposite. There is a strong presumption that some countries' economic indicators even improved after the crisis and the focus of this study is now on GDP as a measure of economic growth. However, economic growth cannot be the only measure to prove this assumption. More complex, multidimensional indicators need to be looked at, so that in addition to economic growth, changes in competitiveness can also provide evidence. Two basic assumptions have been made in writing this paper.

H1: There is a strong assumption that there were countries after and during the crisis that did not suffer a significant decline in GDP and even an increase in GDP during the crisis. There are significantly fewer of these countries, so that for the majority of them COVID-19 has indeed had a negative impact on GDP.

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- H2: There is a strong presumption that the claim that the crisis necessarily has a negative impact on everyone is not true. There are some countries whose international competitiveness has been strengthened even under the impact of COVID-19, so that they have been able to maintain their competitive position during the crisis. It can also be assumed that countries can be grouped into different categories in terms of whether they are winners or losers from the crisis. The grouping is based on which countries have experienced positive changes in GDP and competitiveness, and which countries have experienced a deterioration in these indicators.

Simple macroeconomic data were used for the hypotheses. Before examining the hypotheses, we clarify the concept of national competitiveness and the nature and significance of crises. It is also important to distinguish between the onset and course of crises and recessions, as the two concepts are not the same. The first part of this paper deals with this. In the second part, we will look at the results of statistical or research organisations that can provide real evidence that the hypotheses are or are not correct.

### **Results and Discussion**

### Theory of the National Competitiveness – Why not GDP?

The competitiveness of the national economy is one of the most important conditions for development and progress. By this, we mean the ability of a nation to create a social and economic environment in which its actors are best able to create value added that is recognised on the world market. The maintenance of prosperity becomes the driving force of competitiveness in the national economy, prosperity is not the basis of competitiveness, but its goal. Competitiveness in the national economy is crucially a competition of skills, and in particular economic skills. At the same time, this definition does not ignore the social aspects of competitiveness, as factors that are not directly related to market value creation but nevertheless affect a country's performance must also be taken into account (Chikán, 2006). Competitiveness is the balance of advantages and disadvantages that a country can achieve by selling its own products on international markets. (OECD, 1992) Another OECD formulation is that competitiveness is a measure of a country's ability to produce goods and services that can be sold on international markets under free market conditions, while maintaining and raising the living standards of its population in the long run (OECD, 1992). The competitiveness of a nation is a measure of its ability to produce goods and services that are (also) sellable on world markets under perfectly competitive conditions, while increasing the real income of its citizens (Rapkin, 1995). A country is not competitive if its actors are highly productive and operate at low cost, but cannot provide jobs for its population. According to Porter (2003), the standard of living of a nation is determined by the productivity of its economy, which measures how much goods and services a country has produced using a unit of human, financial and natural resources. Productivity is what allows a nation to support high wages, a strong currency and ensure a return on capital, and hence a high standard of living. Competitiveness is an indicator of national economic performance that expresses how efficiently a nation utilises the human, financial and natural capital at its disposal (Porter, 1990, 1993). Krugman (2003) relates competitiveness to participation in international trade. In his view, trade between two countries normally increases the income of both countries. According to Jeffrey Sachs, the competitiveness of one country is the lack of competitiveness of another country. According to the European Commission (2012), the competitiveness of a country is a guarantee of the well-being of its citizens. Competitiveness in the national economy means growth in output, high employment and a sustainable environment, and one of its key elements is adaptability, which also increases resilience to shocks. The objective is to increase competitiveness, for which there is no single EU definition. According to the Commission's 2003 definition, competitiveness is the ability to raise the standard of living of the population and to improve employment, while taking into account sustainability criteria. One of the main foundations of EU competitiveness is the so-called "competitiveness pillar". The White Paper was one of the key factors in establishing competitiveness. The Delors report states that increasing competitiveness is not an end in itself, but a means to increase prosperity and living standards. This goal can only be achieved with an adequate level of employment, and therefore an economy is considered competitive if it can create a sufficient number of jobs while maintaining high economic growth. As can be seen from the above interpretations, economic growth and competitiveness are linked at several points. It can also be said that competitiveness is almost the basis of economic growth, since improved economic outcomes may require a strengthening of competitiveness. If one's competitiveness deteriorates, one will, after a while, no longer have the skills to ensure that one can remain competitive. The logical consequence of this is a decline in indicators, a drop in productivity or a negative change in financial indicators. Yet economic analyses tend to focus on GDP. GDP is the total value of goods and services produced for final consumption in a given country, whether produced domestically or by a foreign operator. The above interpretations of competitiveness have repeatedly shown that it is not enough to think in terms of GDP alone, as it is equally important to look at changes in quality of life indicators. The latter is also affected by the crisis, not only in terms of GDP. Following this logic, it is therefore important to examine the impact of the COVID-19 crisis on economic indicators, but it is equally important to show the impact on competitiveness or quality of life indicators. One thing is certain. The crisis is still having an impact and there is hardly any economic operator who has not suffered some positive or negative consequences. The question is whether or not this can be identified in the same way for countries. The following outlook will explain this.

### The Difference between Crisis and Recession

The concept and meaning of crisis for the organisation has changed significantly in recent decades. In the early 1990s, crisis was still understood as the inadequate response of the organisation to the situation. A crisis situation was defined as a situation in the life of an organisation in which the balance of the organisation was upset and a kind of temporary disorder arose, requiring immediate and urgent intervention by management. As time went by, it became increasingly important to look at the environmental factors and to identify the main causes of the crisis in terms of the extent to which the environment could be observed and adapted to. Increasingly, the crisis was seen as an inadequate response to environmental change. It was interpreted as a mismatch between the organisation and the environment, as previous solutions, which had worked well in the past, no longer served the organisation's objectives. It became apparent that existing management techniques do not always help the organisation, so in addition to product and technological innovations, the use of leadership, organisational and management innovations became increasingly important. This has not only required a transformation of decision-making mechanisms or procedural rules, but in many cases the crisis has also led to a restructuring of the entire organisation, forcing those involved to renew part or all of the organisational processes. This has now led to a situation where crises have become almost closely associated with innovation, modernisation, revitalisation and opportunity. According to modern approaches, there is no difference between a crisis situation and a situation of opportunity. For modern organisations, dealing with a crisis is not an emergency, a panic, a 'necessary evil', but an opportunity to develop, to transform, to renew. Crisis is also an opportunity, a chance for renewal. Crisis is a regular event in the life of organisations, which affects everyone and can affect everyone. The only difference is that some organisations can manage it well or even prevent its effects, while others suffer the consequences, put out fires or, in the worst case, are forced to cease their activities. Crisis management is also a form of change management, but the stakes are much higher for the organisation to remain a player in the business world. A recession is when an economy experiences a few months of GDP contraction, a crisis is when, after such a contraction, GDP falls by a few for a few years or stagnation. It is also common to talk about stagflation and depression. The latter refers to a recession that is persistent or severe and causes significant social damage. A recession is a decline in economic activity associated with a fall in output at the national economy level. GDP does not necessarily have to go negative to be a recession, a significant and sustained slowdown is sufficient. Whichever the case, such crises always have a negative impact on the living standards of a wide section of society, and cases such as stagflation can only exacerbate this. Stagflation refers to a high inflation rate in a context of stagnation. Stagnation, i.e. a slowdown or stagnation of economic growth, and inflation are negative because, when a crisis develops, the inflationary effect further erodes the value of people's real income, which can lead to an increase in poverty. Arthur Okun expressed this relationship in terms of a simple indicator called the Misery, or poverty index. The Misery index is the sum of two simple macroeconomic indicators, the unemployment rate and the inflation rate. The higher the value of the index, the more unfavourable the degree of poverty in society. A crisis means a slowdown in economic growth, when consumption usually falls and the unemployment rate is unfavourable. The purchasing power of money falls, as reflected in inflation. In such a situation, economic agents can buy less real goods for each unit of income, and their needs are therefore met at a lower level. All this leads to lower satisfaction, lower living standards, i.e. increasing social impoverishment. However, the common feature of organisational and economic crises is clear. They always affect the broadest range of people, so they usually affect many people.

### Winners or Losers? Which One are You?

In 2011, the Washington Post published a study that looked at who was worst off after the crisis. Five things were examined in this. Inflation, national debt, changes in GDP, unemployment and budget deficit. These numbers were added up and those with the most negative change were the biggest losers. After the covid epidemic, this became relevant again. Even today, the question is who are the biggest losers of the epidemic. Three groups were formed. The indicators of the winners changed positively. In the indifferent group, the indicators did not change significantly, while in the losers group, these indicators dropped significantly. At the same time, not only the macroeconomic parameters have changed, but also competitiveness.

was also significantly transformed by COVID, we also examined these from the competitiveness reports. The 2001 survey is a good illustration of the issues we raised in the first hypothesis. The authors examined five economic parameters to detect the differential impact of crises. They found that some countries even improved their indicators after the crisis. We wanted to see for ourselves how this is evolving. First, we present statistics from the Economist, which show that there was a wide variation in GDP trends across OECD countries. Some countries, such as Ireland or China, have seen significant GDP growth, while countries such as Spain or Portugal are among the big losers in the crisis, according to the Economist.

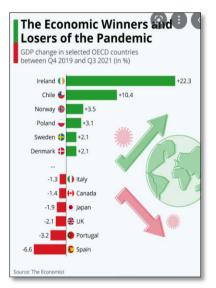


Figure 1. The economic winners and losers of the pandemic. GDP change in selected OECD countries between Q4 2019 and Q3 2021 (in percent) - Source: Economist

| (Ranking out of 23 <sup>†</sup> ) GDP |      | Household income<br>per person |      |      | Share prices‡ | Investment |      | Public debt<br>to GDP§ |      |      |
|---------------------------------------|------|--------------------------------|------|------|---------------|------------|------|------------------------|------|------|
| Denmark (1)                           | 2.1  |                                | 3.4  |      | 57.3          |            | 12.1 |                        | 3.5  |      |
| Slovenia (2)                          | 1.2  |                                | 10.1 |      | 33.0          |            | 6.8  |                        | 7.4  |      |
| Sweden (3)                            | 2.1  |                                | 2.0  |      | 50.4          |            | 5.6  |                        | 6.2  |      |
| Norway (4)                            | 3.5  |                                | 4.0  |      | 31.3          |            |      | -8.5                   |      | -9.0 |
| Chile (5)                             | 10.4 |                                | 32.7 |      |               | -5.6       | 6.7  |                        | 11.9 |      |
| Ireland (=6)                          | 22.3 |                                | 4.8  |      | 17.1          |            |      | -78.8                  | 0.9  |      |
| Poland (=6)                           | 3.1  |                                | 3.3  |      | 25.4          |            |      | -7.1                   | 5.0  |      |
| Netherlands (8)                       | 1.7  |                                | 1.7  |      | 30.8          |            |      | -4.3                   | 5.6  |      |
| United States (9)                     | 1.4  |                                | 6.2  |      | 24.4          |            | 3.6  |                        | 18.9 |      |
| Australia (=10)                       |      | -0.2                           | 3.5  |      | 9.1           |            | 7.4  |                        | 10.2 |      |
| Canada (=10)                          |      | -1.4                           | 9.4  |      | 25.9          |            | 0.7  |                        | 11.6 |      |
| Finland (12)                          | 1.5  |                                |      | -0.8 | 31.3          |            |      | -1.3                   | 9.7  |      |
| Hungary (13)                          | 0.6  |                                | 0.1  |      | 16.9          |            | 4.2  |                        | 11.1 |      |
| Greece (14)                           | 1.2  | 1.                             | 1.5  |      | 1.1           |            | 19.0 |                        | 21.8 |      |
| France (=15)                          |      | -0.1                           | 0.7  |      | 17.4          |            | 1.3  |                        | 14.4 |      |
| Italy (=15)                           |      | -1.3                           |      | -0.2 | 18.5          |            | 6.9  |                        | 20.1 |      |
| Belgium (=17)                         | 0.5  |                                | 1.1  |      | 2.2           |            | 2.4  |                        | 14.5 |      |
| Portugal (=17)                        |      | -3.2                           |      | -0.3 | 27.1          |            | 0.5  |                        | 12.0 |      |
| Austria (19)                          | 1.1  |                                |      | -5.8 | 18.6          |            |      | -1.1                   | 14.0 |      |
| Germany (20)                          |      | -1.1                           |      | -0.9 | 15.6          |            |      | -1.9                   | 13.6 |      |
| Japan (21)                            |      | -1.9                           | 1.0  |      | 17.4          |            |      | -3.8                   | 20.7 |      |
| Britain (22)                          |      | -2.1                           |      | -2.3 |               | -2.2       |      | -7.4                   | 21.9 |      |
| Spain (23)                            |      | -6.6                           |      | -6.3 |               | -7.2       |      | -6.5                   | 22.3 |      |

Figure 2. League table of nations . selected OECD countries, % change during the COVID-19 pandemic -Source: OECD Statistics

We get a much more nuanced picture when we look behind the scenes. Macroeconomic performance is not solely dependent on changes in GDP. In addition to GDP, we also need to look at factors such as household income and consumption, or the evolution of investment in a country. In relation to hypothesis H1, it is also strongly suggested that the propensity to invest has also evolved very differently across countries. It is also very interesting to see that although there were some countries where GDP increased following the COVID-19 crisis,

it is very interesting to see that even in countries with increasing GDP, investment rates did not increase in all cases. The example of Ireland illustrates this well, as although it has shown a significant increase in GDP, it is clear that it is not the increase in the investment rate that explains the better economic performance. In this respect, Ireland is a curious exception. This is interesting because, in principle, if the GDP of a country has increased as a result of the COVID-19 crisis, the volume of investment in that country has not typically moved into negative territory. Such countries include, for example, the Nordic countries, but the biggest winner in this respect is also China, where the volume of investment has also risen, not just the total value of goods and services for final consumption.

The covid crisis has changed the situation of countries. It didn't have the same effect on everyone. There were countries that did not suffer much damage as a result of the crisis, while there were groups of countries where the declines were significant. We examined this in relation to OECD and EU countries. Poland, for example, was a big loser from the epidemic, which suffered a significant drop in competitiveness in Europe. At the same time, there were countries that were able to stably maintain their competitive position. Among these we can find, for example, the Czech Republic. Hungary did not fall significantly in the competitiveness rankings, but at the same time, our macroeconomic results fell significantly. All this can be said in relation to several countries, since macroeconomic indicators have basically deteriorated in most countries. Competitiveness has already been discussed in the literature section. It is much more than simply producing or supplying something and intending it for final use. The above findings on competitiveness are supported by the Swiss-based competitiveness research organisations. The Institute for Management and Development (IMD) and the World Economic Forum (WEF) publish annual competitiveness studies. These clearly show what was already reported in the Washington Post in 2011. The international organisations also provide data to show that changes in national competitiveness have not taken the same form across countries. There were some countries that were able to strengthen their position in the international competitiveness rankings even after the COVID-19 outbreak. However, one thing needs to be mentioned and corrected here. Achieving competitiveness requires economic actors to make targeted investments and investments. The expected impact of an investment can be felt years later, so it is also possible that countries that have shown competitiveness gains under COVID may still be reaping the benefits of their actions a few years ago. If we were to look at international competitiveness rankings, say five years after COVID, we might not get the same results. As a follow-up to this study and to our research, we will have this opportunity and it will be worth looking at macroeconomic indicators and international competitiveness rankings a few years later.

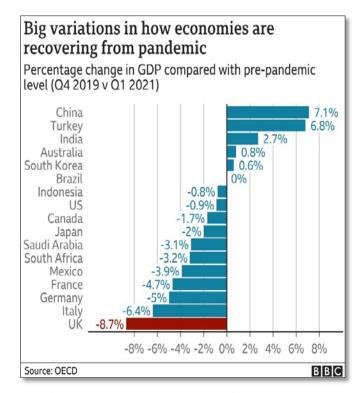


Figure 3. Big variations in how economies are recovering from pandemic - Source: OECD Statistics

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In the 21st century the competitive national economy can only be improved by establishing the conditions of the knowledge-based (innovative) economy. Knowledge and human capital has a leading role in that process. This is why strengthening competitiveness requires the investments into knowledge, thus we need to spend more on education (sciences), innovation, research and development, like many countries do (for example the Scandinavian countries). We can come to the conclusion when examining competitiveness that there will always be economic participants, who are forced to face a decline for some reason. The aim of these lesser developed participants is to catch up, but in order to do so they have to be able to answer the questions of what to compete with and how to gain a competitive edge on the global and local markets. The covid crisis fundamentally affected the economic situation of the countries. Macroeconomic indicators were adversely affected in most countries. However, they show a more varied picture in terms of competitiveness. Several countries were able to strengthen their competitiveness or manage to keep it stable. At the same time, there were countries that were at a significant competitive disadvantage. Poland is the best example of how to turn a competitive country into a less competitive one. It is also a general finding that the winners during the crisis were those who were innovative. In addition, it is important that the country is prepared, has reserves and knows how to prepare for crises. The following table also provides evidence that some countries are able to stay below the pre-crisis level of COVID-19. This raises questions about how to recover quickly from the crisis and get back on the growth path. The answer is quite clear. It is not a question of waiting for a miracle from subsidies and EU transfers, but of focusing on competitiveness. If competitiveness could be kick-started and strengthened everywhere, it could bring with it positive spin-offs such as the acquisition of markets or an increase in turnover. This study was not intended to address such issues. The only objective we had in mind was to see the range of countries that have actually been able to get through the period so far with minimal losses. Of course, in time, the situation there may change and a negative process may start.

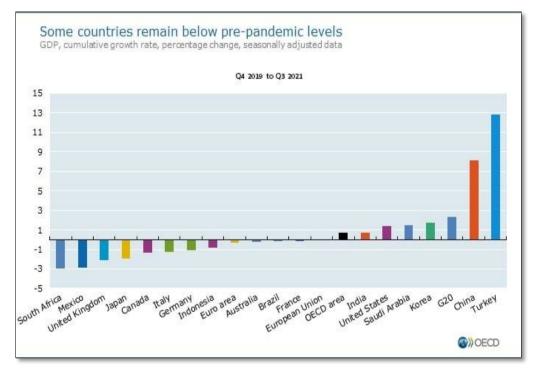


Figure 4. Some countries remain below pre-pandemic levels - Source: OECD Statistics

# Conclusion

The basic aim of this study was to test two of our hypotheses. Testing these two hypotheses required statistical insight on our part. In addition to basic macroeconomic statistics, we reviewed the two following reports on competitiveness:

IMD: World Competitiveness Yearbook WEF: Global Competitiveness Report In addition to these two competitiveness papers, we also used the Economist and OECD papers and reports. As a reminder, the first hypothesis was the following:

H1: There is a strong presumption that after and during the crisis, there were countries that did not suffer a significant decline in GDP and even an increase in GDP during the crisis. There are significantly fewer of these countries, so that for the majority of them COVID-19 has indeed had a negative impact on GDP.

This hypothesis can be regarded as confirmed. To prove it, all we need to do is look at the statistical values that we can see, for example, next to the names of the countries in relation to GDP. But it was not just the GDP that made countries winners and losers. In many places, there were also differences in household income, changes in the structure of consumption or even the volume of investment. Investment volumes also varied widely across countries. While investment rose in some countries, it fell in others. In principle, it was inevitable that where GDP fell, investment would fall. However, we did find countries where the opposite was true, with investment falling despite GDP growth. There can be only one explanation for this. They are not getting GDP growth from investment, but from other sources. One can fully agree with the 2011 study by Gonzalo Munyo and Ernesto Talvi. Indeed, countries can be divided into groups according to how far they have overcome the effects of the crisis, whether they have achieved good or bad results as a consequence of the crisis. China is clearly the winner of the crisis and we can see this clearly in our study. Indeed, there are also countries that are losers from the crisis. Germany is one of them, as we can see and feel the downturn in its macroeconomic data. We have also been able to show that the crisis has indeed affected everyone, but that some have not suffered a major setback. A similar conclusion can be drawn for the other hypothesis, which has also been confirmed. In it, we argued that this interesting phenomenon can be observed in the same way in international competitiveness rankings. Namely, that crises do not necessarily cause a decline in competitiveness. Some countries have been able to strengthen their competitiveness even after 2020 or have not experienced a decline. The best example of this is the IMD competitiveness material, which clearly shows the results and rankings for 2022. There are several countries that have even managed to strengthen their competitiveness, while others have unfortunately experienced a significant decline in competitiveness. This includes Poland. Indeed, Poland can be said to be one of the big losers in the crisis. This is because, immediately before the pandemic, their national competitiveness was still on a very good trajectory. Then, as a result of COVID-19, this momentum was interrupted and it suffered a serious drop in the competitiveness rankings. Add to this macroeconomic data and the picture becomes even more nuanced. Although Poland's GDP did not fall significantly, investment rates declined here too. As investment will be lower, the impact will probably only be felt in the future. Hypothesis H2 also suggested that countries could be grouped into different categories, as Talvi did in 2011.

H2: There is a strong presumption that the claim that the crisis will necessarily have a negative impact on everyone is not true. There are some countries whose international competitiveness has been strengthened even under the impact of COVID-19, so that these countries have been able to maintain their competitive position during the crisis. It can also be assumed that countries can be grouped into different categories in terms of whether they are winners or losers from the crisis. The grouping is based on which countries have experienced positive changes in GDP and competitiveness, and which countries have experienced a deterioration in these indicators.

The groups could be named in terms of being clear winners or losers following the COVID-19 pandemic. GDP and competitiveness provide the main basis for comparison. It can be concluded that China is by far the biggest winner from the COVID-19 situation. With its increasing competitiveness, GDP is also growing strongly. The biggest losers include the UK, Germany and Poland. This is because either their GDP has fallen a lot or their competitiveness has fallen too. The latter is very bad because while GDP is only a given, a weakening competitiveness means that the country cannot do much in the present to build its future.

# **Scientific Ethics Declaration**

The authors declare that the scientific ethical and legal responsibility of this article published in EPESS journal belongs to the authors.

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