

## AFTER-EFFECTS OF THE COVID-19 PANDEMIC ON THE ECONOMY

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**ABSTRACT:** *The worldwide spread of the COVID-19 pandemic and its economic consequences are poised to wreak havoc on economies globally, pushing numerous countries into economic collapse and depression. With the rapid increase in infection and death rates, and the uncertain recovery from the pandemic, even in developed countries with high vaccination rates, signs of economic turmoil are already appearing, including in European economies. The goal of this study is to determine the effects of the ongoing global crisis, specifically the COVID-19 pandemic, on various economic sectors such as demand, supply chains, trade, investment, pricing, energy price volatility, and exchange rates. By examining these factors at a macroeconomic level, it has been observed that the pandemic has led to a rise in unemployment globally. This paper further explores the probable impacts through research methods including analysis, synthesis, and comparison.*

**Keywords:** *Pandemic, Covid19, economy, labor, production, crisis.*

**JEL Classification:** *D80, E32, E66.*

### 1. INTRODUCTION

For almost two years since the Covid19 pandemic outbreak in Wuhan, China, it has spread all over the world, with tragic effects in all the states and domains. The effects of the Covid19 pandemic around the world haven't been as tragical as predicted from a healthcare point of view, but the economic outcome is severe. Experts say that the limitation of the health effects can be justified by the radical economic measures enforced by the governments of the countries in order to eradicate this pandemic. The repercussions are obvious in labor market, in production and in expenses. An increasing number of economists are raising concerns about a potential recession in the United States, Europe, and other parts of the world, as measures to contain the coronavirus abruptly halt major segments of the global economy. Many are drawing parallels between the rapid and severe economic downturn caused by the coronavirus and the Great Depression, which started in 1929.

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Of course, in delicate economic situations, the role of the productive system is no longer to ensure economic growth, but to support the needs of citizens, being a sector with a fairly high power of reorientation of activity, compared to the services sector. The most recent global challenge, which affects not only the economic system, but also the social, political, etc., is the pandemic caused by the SARS-COV-2 virus, also known as coronavirus. The pandemic caused by the COVID-19 virus has spread at an alarming rate, infecting millions of people, causing fears of an impending economic crisis. [Rădulescu, 2020] To stop the spread of the virus, countries have imposed strict traffic restrictions and social distancing measures. Social distance, the isolation of infected people, the imposition of travel restrictions and the decrease in demand for goods (except medical supplies, for which demand has increased), have led to a reduction in employment in all economic sectors, leading to the loss of many jobs. [Barua, 2020] The economic impact is becoming increasingly evident, leading to the conclusion that the economic turmoil caused by the COVID virus is the most significant shock the world has faced in recent decades. The pandemic undoubtedly triggers a financial and economic crisis, posing a substantial challenge to national governments, European institutions, and the global system. To address this, governments must grasp the extent of the crisis and the nature of the health, social, and economic issues at hand, as well as revise economic policies to navigate through this critical period. Considering that the Romanian economy is part of the worldwide economic exchange network, this analysis will first outline the global-level effects, particularly in key economic sectors, before examining the specific impacts of the COVID-19 virus on the Romanian economy.

## **2. COVID19 CONSEQUENCES ON THE GLOBAL PRODUCTION NETWORKS**

The impact of the COVID-19 pandemic on the world economy has transposed into a shock to both supply and demand, profoundly affecting trade flows, with disruptive implications on all levels of value-added networks. These events revived discussions about the advantages and disadvantages of globalization and represented a moment to revitalize trends promoting economic nationalism, opening debates on the opportunity of interventionist industrial policies.

A global value chain (GVC) is represented by the series of steps taken to manufacture a final product (or service), each stage of production adding value, and at least two stages being executed in different countries. Thus, a country, a sector or a company participates in a GVC if it is engaged (at least) in one of the stages. Proportional to value added, the participation of an economy in production networks has different degrees of intensity; at the same time, the position within the chain varies, from design activity and product development for the export of raw materials, intermediate or final goods.

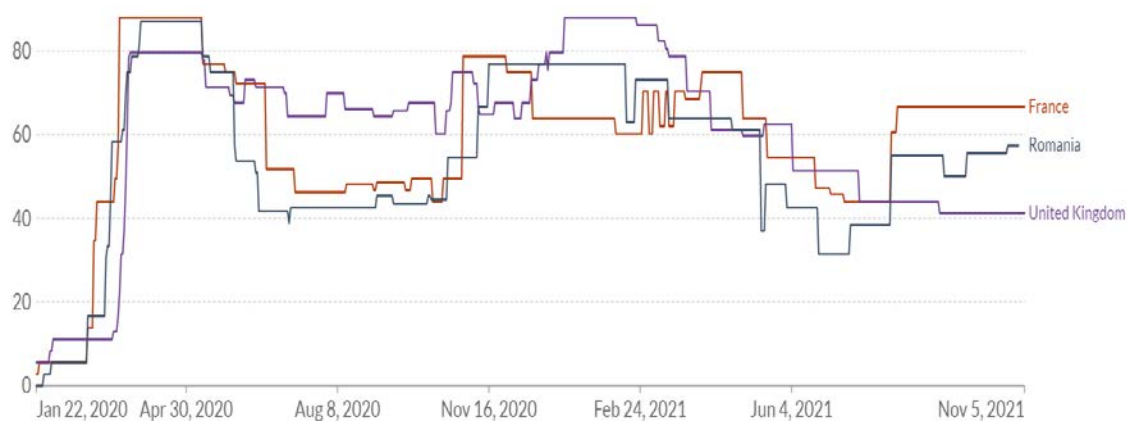
Globalization has imposed a high level of specialization, which in conjunction with the effect economies of scale and technology transfer, facilitated the geographical coagulation of production capacities [Radu, 2009]. But this disposition, modeled even by the strategy to minimize inventory costs, has revealed its vulnerability to risk interruptions of activity. The spread of pandemic shocks was initially felt on the supply side. The immediate effect on production by ceasing activities has been doubled by an indirect impact with contagion on the value chain, also in association with restrictions which concerned the transport, whether of goods or persons. At the same time, at the level of demand, material changes of the consumption behavior could have been noticed, which increased its volatility.

The direct impact of the activity interruption for health security reasons could have been noticed during the first half of 2020 in most of the countries and companies. In Romania, for example, the illustrative case was represented by the activity cutoff for a few weeks at the

largest operators in the automotive sector, in line with the behavior of large companies operating on the continent. Enormous companies such as Ford and Renault had suspended their activity for more than one month, inline with the Global trend. What is really interesting to analyze, is that in Renault's case, before the March-April 2020 break, they had encountered a situation on 1<sup>st</sup> of February 2020, when they had stopped the production, due to the lack of crucial pieces. This allegedly minor event can expose an important point: the healthcare system has a sinuous evolution, with apex moments, such as March-April 2020, or nowadays, November 2021, but also with linear moments, such as last two summers. The economic field is not that malleable, and the outbreaks are being felt on long term, before and after a new apex on the medical axis. In order to have chances to survive a new tension point in healthcare, we have not to concomitantly also fight on the economic field. Ford factories in Europe and North America, alongside with their local partner suppliers, have ceased operations in the second half of March 2020, mainly for health security reasons of their own employees. Cessations of production operations have, however, caused further contagion effects in the chain, through deliveries delay of intermediate products including to producers whose activity would not otherwise have been directly affected by pandemic measures. We can see the equivalency in these two big companies situations, because the pattern is easy to spot and predict starting from a certain point.

y states around the world. The global economy has been stroke from many directions, causing flagrant imbalances in the GVC.

**Figure 1. COVID-19 Stringency Index**



Source: Oxford COVID-19 Government Response Tracker, Blavatnik School of Government, University of Oxford – Last updated 10 November 2021 16:50 (London time)

Transport and movement restrictions imposed by the authorities have exacerbated the vulnerabilities of cross-border networks, starting, hilariously, even with the shortage of sanitary equipment or with the limitation exports of food raw materials. These sectors, considered as being strategic, have been subjects to special restrictions and surveillance, with great potential to affect some operations, even in the conditions where the production facilities within the networks maintained their activity.

In the broader context of international trade renegotiation, in many countries around the world, governments have had access to immediate intervention in the case of such goods, in order to divert the normal course of trade flows in favor of domestic demand (measures undertaken in particular for pharmaceuticals and food). These governmental decisions have obviously affected the GVC chain, due to their central role in the international economic

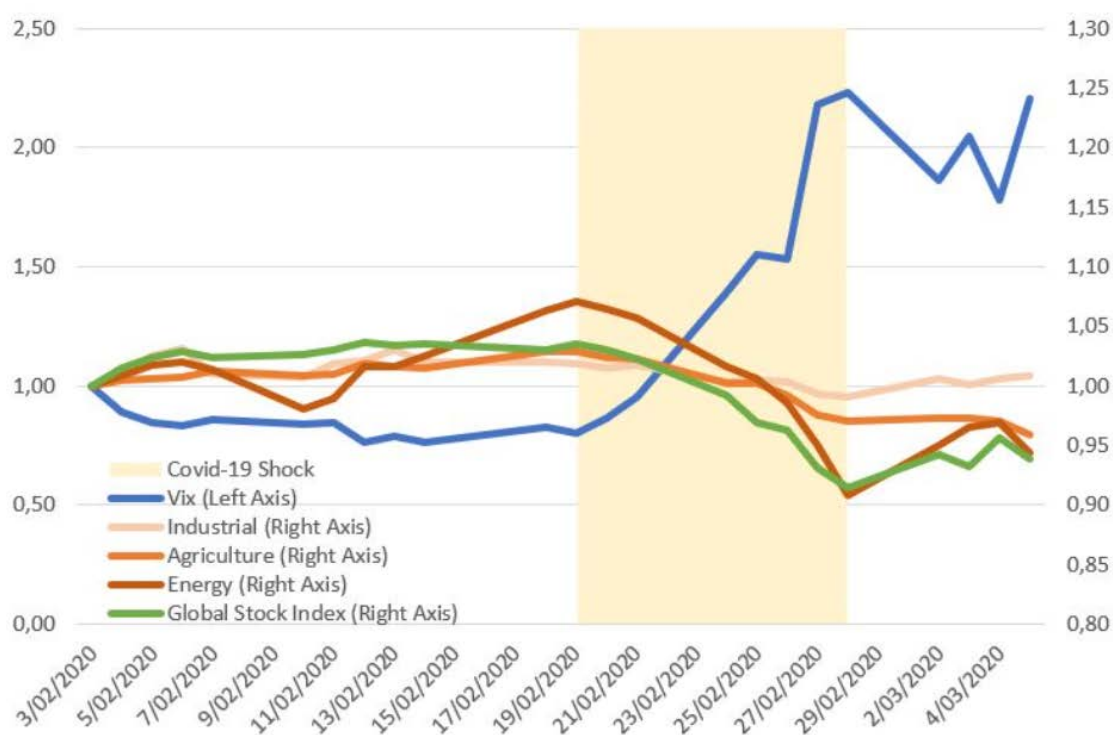
dynamic. However, these actions brought to light the problems of returning to economic nationalism.

Another factor associated with the pandemic crisis that revealed GVC vulnerabilities had targeted the changing structure of demand and its increasing level of volatility, in the context of changing consumer preferences. This influence could have been possible remarked from the first months of the year [Prizzon, 2020], taking the form of a demand peak for certain products for medical use at the same time as a strong reorientation of consumers regarding food (with the closure of restaurants and supplying the population with non-perishable food stocks).

### 3. COVID19 IMPACT ON RAW MATERIALS AND ENERGY

The pandemic shock was strongly felt in the raw materials sector. The prices of goods have been more affected in the context of the large-scale interruption of transport activity (Tooze, 2020).

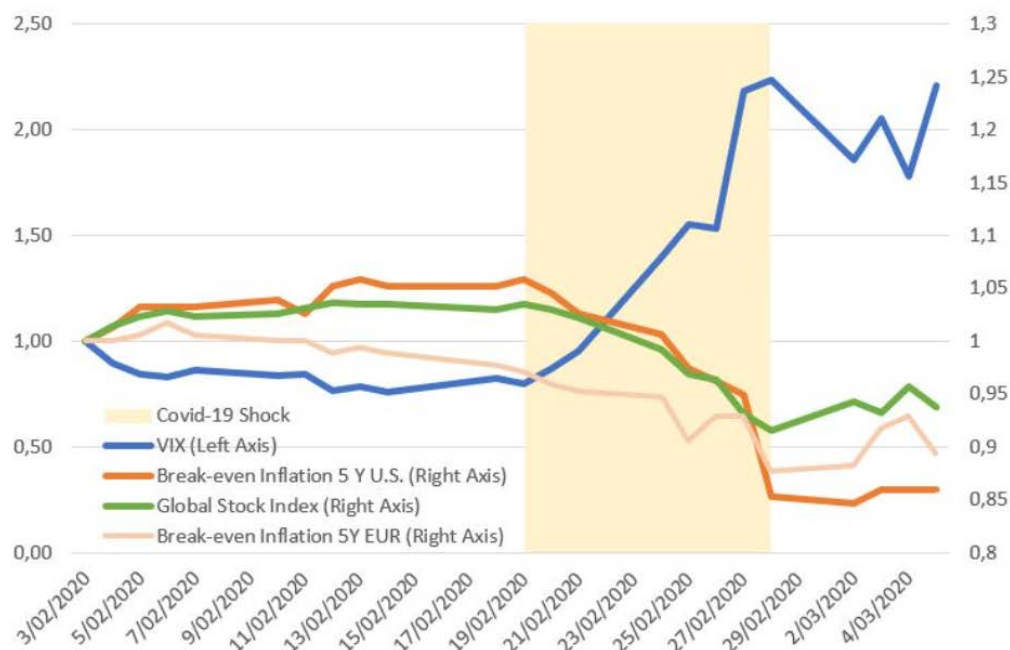
**Figure 2. The COVID-19 shock: indices of stocks, VIX and raw materials prices**



Source: Bruegel. Note: Agriculture includes unweighted average of corn, wheat, soybean, cocoa, sugar, rubber, ethanol; Energy: unweighted average of crude oil and natural gas; Industrial: unweighted average of copper, aluminum, zinc and tin; Global stock index is MSCI All-Country World Equity Index.

The idea exposed in Figures 2 and 3 is that between 20 February and 28 February (the yellow shaded area in the figures) markets were hit by a COVID-19 collapse. Afterwards, the global economy was hit by other strokes. We can acknowledge what happened in the six days highlighted in Figures 1 and 2 as the pure impact of the COVID-19 shock and as a kind of natural experiment from which to draw conclusions on its macroeconomic emanation.

**Figure 3. The COVID-19 shock: indices of stock exchange, VIX and break-even inflation**



Source: Bruegel.

Thus, the energy index price of the raw materials calculated by the World Bank fell on average by 31.7 percent in 2020. Quotation Brent crude oil has amply fallen in the first half of the year. The trend has later reversed, once with the resumption of economic activity, the increasing price being also supported by limitation-strategy coordination of OPEC + production.

According to FAO data, agri-food prices have increased by 3.8 percent in 2020 with the aggravated increasing price trend in the second half of the year. This direction was imprinted by developments in the segment of cereals, oilseeds and, to a lesser extent, of sugar, in the context of more modest agricultural results, caused by adverse climatic phenomena in several regions of the world.

Precious metals prices continued to rise in 2020, the annual variation of the index calculated by the World Bank standing at 26.6 percent. The trend was initiated by the gold quotation, given the increasing preference for this asset in times of uncertainty. In fact, this context is associated with the support of available incomes at a relatively robust level and performance and with heterogeneity of various sectors and companies from an economic point of view, including on the background of structural transformations that have taken shape [Leijen, 2020]. All the transformations have fueled demand for placements in as diverse assets as possible, which was reflected in a favorable evolution of mentioned market, but also in the capital market, as well as during cryptocurrencies quotations.

#### 4. COVID19 IMPACT ON LABOR MARKET

The economic shock induced by COVID-19 pandemic led to deteriorating conditions on the labor market in 2020, generating redundancies, restrictive employment opportunities and a significant moderation of the growth rate of salaries. The number of employees contracted 1 percent, marking the end of an eight consecutive years period of growth (DeBord, 2020).

However, the crisis has not uniformly impacted economy, wider restrictions on staffing schemes taking place in sectors directly affected by the introduction of mobility restrictions and measures suspension / restriction of activity (HoReCa, air transport, entertainment activities, cultural and recreational), but also in industry, where the shock has already amplified the downward trend in the number of employees, outlined in 2019. Instead, higher demand for labor had been noticed in areas compatible with physical distancing, such as construction, courier services, IT, but also in essential activities such as the healthcare and pharmaceutical sectors (Hutt, 2020).

Under these circumstances, an increase in the excess supply of labor force was observed, BIM unemployment rate rising to 5 percent on the whole 2020 (from 3.9 percent in the previous year, the lowest level after year 2000) - the maximum annual value, respectively 5.4 percent, was reached in the second quarter (peak period of the crisis), the indicator stabilizing in the second half of the year around value of 5.3 percent; unemployment rate followed a more attenuated trajectory, increasing from 2.8 percent in February (the minimum of the last two decades) [Jones, 2020], to about 3.2 percent in the second half. At the same time, the capacity of the economy to create jobs has diminished, the vacancy rate decreasing compared to the previous year. [Cochran, 2020] The increasing number of potential candidates for employment led to a reversal of the "balance of power" in the sense of a greater bargaining power of employers in setting contractual terms, unlike previous years, when workers were in a dominant position - the phenomenon is specific to the recession phase of the economic cycle, being surprised by the wide movement along the Beveridge curve, visible during year 2020.

Schemes for supporting working capital and investments, along with support measures for the labor market, have helped to limit the negative effects of COVID-19 pandemic on the economy and the preservation of short - term employment.

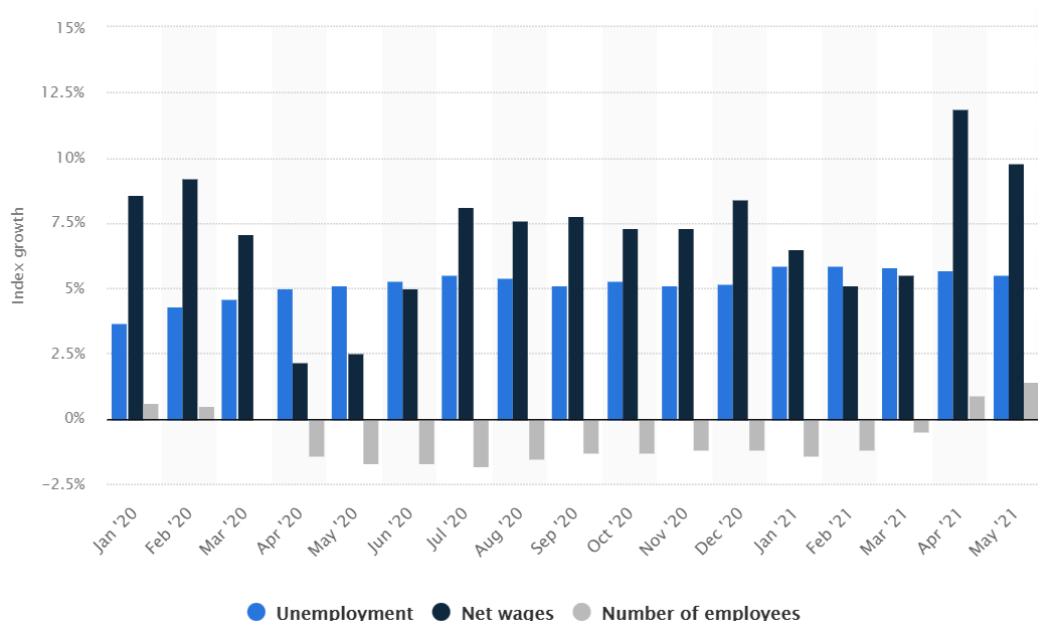
Only considering the programs on the labor market, a counterfactual exercise which involved increasing the number of unemployed by the number of employees who have benefited from government support measures under different scenarios, reveal a higher level of unemployment rate by about 2 percentage points at end of 2020.

However, once these programs are completed, some jobs may not be viable anymore, and the process of resources reallocating might intensify. In fact, there are changes in domestic labor demand, companies manifest a growing interest for professions which involve working remotely and having a high level of digital skills, in line with global trends (Zhan et al., 2020).

In this sense, stronger and stronger indices are emerging according to which the pandemic shock amplified structural changes, essentially connected to accelerating the process of automatization and digitization of economic activities, and the Romanian labor market is expected to have a fragile position in front new requirements, increasingly inclined towards the new generation of technologies (such as robotics, artificial intelligence, 3D printing, cloud computing, e-commerce, analysis and processing of large databases). According to some estimates, our country owns the higher percentage of jobs endangered by process automation in European economies (over 60 percent), along with a very reduced percentage of people with digital skills. Economy index and digital society index calculated by the European Commission shows that less than a third of Romanians with ages between 16 and 74 had elementary digital skills, compared to 58 percent in the EU, Romania ranking 27th out of 28 of European countries in this regard.

In this context, implementation of active labor market policies become essential in order to assure a smoother transition to the new economic reality, which can shape into programs for reconversion vocational training and / or training in order to acquire / develop compatible skills with current or some requirements designed to facilitate the candidates search process and matching them with vacancies.

**Figure 4. Impact of the coronavirus (COVID-19) outbreak on the labor market indicators in Romania from February 2020 to May 2021**



Source: <https://www.statista.com/statistics/1119871/romania-labor-market-indicators/>

## 5. CONCLUSIONS

COVID-19 is jeopardizing economies - no matter large or small, developed or developing. As of today, end to this pandemic remains uncertain. The uncertainty is causing loss of public confidence and trust worldwide [Fernandez, 2020]. The macroeconomic outbreaks in any economy are likely to worsen across economies, if consumer and producer confidence is lost and a powerful demand shock coupled with massive supply-side supports cannot be implemented in a timely manner. In the current context, recovery from the disease is primary and economics is secondary. However, as evidence of economic adversities emerge, it would be wise to begin from now designing and implementing aggressive and innovative policy actions with a long-term perspective to prevent the looming. We believe that the current crisis triggered by the coronavirus pandemic is revisiting issues similar to those seen during the 2008 crisis, and even some fundamental ones from as far back as 1929. This situation calls for new economic strategies, encompassing a reassessment of the roles played by international institutions, global supply chains, and the labor market. Additionally, it necessitates the pursuit of new developmental objectives that consider the challenges confronting the global economy and beyond.

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