

COVID-19 And International Business: Insights and Policy Challenges

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Abstract: The Covid-19 viral pandemic has had a distinct impact on various sectors of the economy, especially the services, and certain groups of population imposing the risk of permanent labor dislocations. In the midst of the pandemic, governments have adopted various measures to contain the spread of the virus, inadvertently causing a global economic recession, and thus, a sharp decline in global trade activity. Some estimates suggest that the decline in global trade have imposed a particularly heavy economic burden on trade-dependent developing countries and emerging markets. What's more, the coronavirus disease has casted doubts on the costs and benefits of the global supply chains that businesses have set up over the last few decades. Over the course of the pandemic-related recession, these chains were disrupted, thus rising the question of adopting policies aimed at reallocating resources in the economy and developing domestic production for goods that were previously imported. This article performs a comprehensive literature surveying of the multidimensional aspects of the pandemic's effects on international business. Against this background, it allows consideration within a large spectrum of how the coronavirus outbreaks in critical links of the global supply chains have resulted in supply interruptions and how businesses have responded in an effort to increase their resilience to these disruptions.

Keywords: international business, COVID-19, coronavirus, recession

INTRODUCTION

The pandemic COVID-19 has changed the general population's perceptions, attitudes, and behaviors worldwide, simultanioulsy affecting both international business and the economy (James et al., 2021). Living with new pandemic conditions, some impediments were found to affect the work performance of global businesses (Ding et al., 2021). COVID-19 has had a direct impact on the performance of global companies, both because employees were infected by the pandemic and because of the lack of ingredients and supplies from potential areas (Torsello & Winkler, 2020). Furthermore, some carriers have refused to travel to certain locations that have a a higher risk of infection with COVID-19 (Torsello & Winkler, 2020).

Apart from the direct negative effects of the coronavirus disease on the economy, an additional challenge was finding supply alternatives and hiring new workers and carriers by contractors. This situation prompted governments to take various measures, such as quarantines, import bans in certain areas, border closures, and permits only for essential items such as food and medicine (Torsello & Winkler, 2020). These measures caused general supply difficulties, liquidity crises, and price fluctuations. Besides the impact on international businesses, the COVID-19 pandemic has also affcteted the collection of data and statistical information. Consequently, the impact of

coronavirus disease on the economies and international businesses is still unclear and controversial, and thus constant monitoring is needed to better understand the impact of the pandemic and to obtain more accurate data.

Additionally, the forces and voices supporting nationalism and protectionism are expected to grow significantly in the post-COVID-19 world. On the other hand, those who support unrestrained globalization are expected to fall, while the global virtual teams with various technological solutions are expected to rise (Alon, 2020). For instance, the use of virtual money, regardless of being present before the pandmeic, has been greatly accelerated by the effects of coronavirus disease. What's more, the multinational corporations like Apple, Visa, Master Card, Alibaba, etc., are expected to benefit significantly from this acceleration (Alon, 2020). Multinational corporations are likely to shorten the supply chains, mainly focusing on local customers and domestic production. This situation will favor high-income countries and their workforce, while penalizing lower-income countries (Alon, 2020). Many studies have already shown that owners and managers are trying to cope and adjust to overall changes caused by the pandemic measures (Alonso et al., 2020).

Increased cross-border communication is critical to remain resilient. Therefore, the economies must embrace digital channels to achieve this objective. However, strengthening the digital infrastructure

and training managers to use digital media depends on the support of respective governments (Fath et al., 2020). To avoid unpleasant situations or bankruptcy, the leaders of different companies should formulate strategies to adapt their work on new pandemic conditions. For instance, the assessment made for the palm oil companies in Indonesia (one of the leading markets in the European Union) showed that their overall activity in selling palm oils was greatly affected by the Covid-19 pandemic since a considerable number of their products have remained in their stocks, thus hurting the bid-ask spread (Tandra et al., 2021). Isolation measures, quarantines, border closures etc., have various negative effects on the world economies, ranging from reduced economic activities, a sharp increase in unemployment, and lower incomes (Koppenberg et al., 2020).

Although most of the measures were justified, some were decided and applied in a short period of time, thus causing damage to the economy. Export-dependent countries have felt these isolation measures more strongly, while export bans are likely to significantly distort the supply chains (Koppenberg et al., 2020). Because of these measures, most African countries (Democratic Republic of Congo, Nigeria, Ghana, Zambia, etc.), which are highly dependent on generating revenue from natural resource sales to international markets, have experienced a downturn in their economy (Obayleu et al., 2021).

Moreover, not all trade policy measures taken in response to the pandemic were in line with the rules of World Trade Organization (Curran et al., 2020). For example, a decrease in the flow of goods and services was considered an indicator of radically reduced global growth, widespread business disruptions, and high rates of unemployment (Albertoni & Wise, 2021).

The duration and stringency of lockdowns caused significant implications for global economies in general, and energy use and CO2 emissions in particular. Several countries, such as Australia, U.S, Japan, and North Korea, did not implement instant restrictions and thereby, politicians and opinion-makers had more time to mobilize globalizing and de-globalizing discourses towards divergent conceptualizations of national resilience (Tyagi & Shah, 2021). The global emissions have fallen by more than 5% from the first quarter of 2019 to 2020 (Aktar et al., 2021).

This paper attempts to survey the insights of a large number of studies that examine the impact of COVID-19 on international businesses and to identify the future perspectives in overcoming the

pandemic challenges. In order to have a more accurate picture about the impact of coronavirus on international business, the article delves with two research questions, namely:

Rq1: What are the effects of Covid-19 on international business?

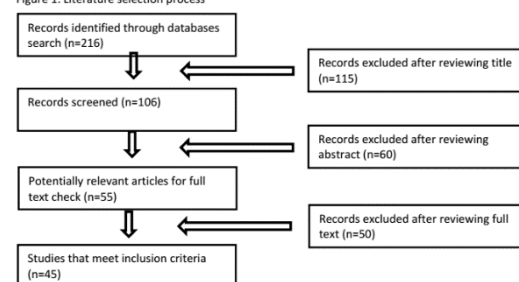
Rq2: Which countries and sectors are more affected by the coronavirus disease?

The rest of the paper is organized as follows. Section 2 refers to the material and methods used in the literature review. Section 3 shows the results and discusses the impact of Covid-19 on international businesses and different sectors and countries. Section 4 concludes and recommends.

2. MATERIAL AND METHODS

In the first stage, we systematically searched for the articles from Scopus, Google Scholar, and PubMed databases, published in the period from December 2019 till May 2021, using the following keywords: ('COVID-19 pandemic' or 'SARS-CoV-2' or 'Coronavirus disease'), ('World Economy' or 'Global Economy'), ('Multinational enterprise' or 'Multinational corporation'), ('International Business' or 'Global Business') and ('External Economic Shocks'). A total of 216 articles were found, but only 106 were appropriate for the survey conducted here. The process of selecting relevant studies went through several steps (Figure 1). In the first phase, articles that did not belong to the subject area were excluded. After the exclusion of certain articles based on analysis of the content of abstracts and full-texts (potentially relevant for full-text check were 55 records), the remaining 45 studies met the criteria for inclusion in this review paper.

Figure 1: Literature selection process



Source: own elaboration

3. RESULTS AND DISCUSSION

The Covid-19 pandemic, as a new and ongoing global crisis, has been the topic of many studies in general and in the field of international business in particular. In this context, the most influential journals dealing with this issue are the following:

Journal of International Business Policy, Journal of International Business Studies, International Business Review, European Journal of Risk Regulation, Critical Perspectives on International Business and Journal of the Japanese and International Economies.

Besides, the Journal of International Business Policy, Critical Perspectives on International Business, and the Journal of International Business Studies have published more than one article related to the COVID-19 pandemic and International Business. In light of this, United Kingdom, Australia, and EU member-states occupy the top positions as countries that have conducted the most studies.

Rq1: What are the effects of Covid-19 on international business?

The first signs of trade downturn were evident since January 2020. What's more, the immediate and negative impact of COVID-19 was more visible on international trade than other fields of the economy. The transport delays and timing of COVID-19 lockdowns have led to production interruptions in global supply chains. This situation does not favor an open economy and international trade. In an attempt to limit the dependence on imports for essential goods and increase the resilience of supply chains, many policymakers and analysts argue for implementing interventions with the aim of reorganizing the value chains (Kostoska et al., 2020; Kostoska, 2021). This situation is well known as a return of manufacturing activity and previously offshored jobs to industrialized countries (Lighthizer, 2020). But, according to Bacchetta et al. (2021), the COVID-19 pandemic can help to diversify the sources of supply chains. As a matter of fact, the researchers have already expected the changes in global value chains since the outbreak of the Covid-19 pandemic, but, depending on the costs of value chain reorganization, their extent will differ for different sectors. Moreover, it is more likely that they will be driven by pre-existing trends (for instance, the rising factor costs in emerging countries), increasing uncertainty about trade policy, and the automation of production.

The results of several articles examining the effects of coronavirus disease on international trade show a clear picture regarding the first research question set out in this paper. Our findings confirm that Covid-19 harms international businesses by reducing exports due to isolation measures, thus disrupting the supply chain networks and increasing the risk of bankruptcy (Koppenberg et al., 2020; Obayleu et al., 2021; Curran et al., 2020;

Tyagi & Shah, 2021; Baldwin & Tomiura, 2020; Baldwin & Evenett, 2020; Chowdhury et al., 2021; Branicki et al., 2021; Lin & Fal, 2021; Liu et al., 2020; Zhang & Hamori, 2021).

Covid-19 has decreased the world GDP by -2.5% (Fernandes, 2020), and according to UNCTAD (2020), this is the most significant GDP decrease since 2009, when trade in services fell by 9.5% following the global financial crisis. These studies also reveal that Covid-19 affected the trade between countries by increasing costs (Obayleu et al., 2021; Baldwin & Tomiura, 2020; Branicki et al., 2021). Moreover, the world economy has been damaged (from 3.5% up to 6%) in terms of consumption decrease and supply chain flow (Fernandes, 2020).

Our findings demonstrate that countries in Asia experienced very negative trade returns (Liu et al., 2020), but Covid-19 has had a significant impact on European countries as well (Chowdhury et al., 2021). With the aim of adapting to coronavirus disease, the firms envisioned to repatriate their chains supply, thus focusing their activities at the regional level (Fath et al., 2020; Curran et al., 2020) and changing the types of products they offer (Obayleu et al., 2021). For example, one of the largest alcohol firms in Ghana changed its production by switching to hand sanitizers (Obayleu et al., 2021).

To better target the impact of Covid-19 on international market, Fernandes and Tang (2020) compare and parallel the trade implications of coronavirus pandemic to those of SARS in China. Although there are some differences between SARS and coronavirus disease, there are still many standard details. Starting from the sudden and abrupt travel and trade disruption triggered by the unexpected outbreak of SARS, same as Covid-19 pandemic, there is a clear opportunity to conduct an event study for the effects of a health crisis on international trade. Despite the apparent differences between SARS and Covid-19, Fernandes and Tang (2020) draw attention to some clear advantages of using the SARS epidemic to highlight the trade implications of coronavirus pandemic. The authors make use of the SARS short duration to examine the recovery path of trade when the disease is eventually over. Consequently, SARS, in some cases, serves as a benchmark measure for examining the effects of coronavirus pandemic on international trade.

The analysis of quarterly transaction-level trade data in China show that the firms experienced a significant decline, but the aggregate exports and imports started to recover by the fourth quarter of

2003, immediately after the end of the SARS epidemic. However, the evidence also shows that two years after SARS was over, the average export and import growth of firms in the affected regions was still four and six percentage points below the pre-SARS level. According to this information, SARS has had a medium-term effect on Chinese international trade. Let's now compare and make a parallel between Covid-19 and SARS and their impact on global economy. If we refer to the situation explained above, it turns out that Covid-19 affects the world economy even after the world health organization declares the pandemic over. A similar comparison for the effects of the pandemic is made by Büchel et al. (2020). More specifically, the authors make a systematic comparison of the recent decline in trade as a result of Covid-19 with the effects of the financial crisis of 2008. They conclude that, Switzerland, although ranked as the country with the second-largest GDP globally, was severely hit by this unknown and unforeseen crisis, since Swiss trade fell by 11% in 2020 compared to 2019. The authors also find that the market results exposed four months after the pandemic blockade of March 2020 are exactly the same as those recorded nine months after the financial crisis of 2008. This finding clearly shows that there is a faster market recovery from the pandemic in 2020.

3.1. The impact of COVID-19 on imports and exports

According to De Lucio et al. (2022), the negative effects of Covid-19 on international trade are more

Table 1: The G7 countries volume of imports of goods and services

	2019	2020	2021
Canada	0.36%	-11.26%	17.54%
France	2.58%	-11.47%	7.44%
Germany	2.57%	-9.04%	6.76%
Italy	-0.65%	-12.59%	8.96%
Japan	-0.40%	-6.78%	12.57%
United Kingdom	2.73%	-18.12%	2.30%
United States	1.08%	-9.28%	18.86%

Source: WEO database

Table 2: The G7 countries volume of exports of goods and services

	2019	2020	2021
Canada	1.26%	-9.85%	16.37%
France	1.76%	-16.3%	10.45%
Germany	0.97%	-10.15%	8.55%
Italy	-1.62%	-13.76%	9.63%

intense when exporting and importing countries share comparable income levels, especially when it comes to high-income countries. The number of exporters in August 2020 was 6.6% lower than recorded in the same month of 2019 (Minondo, 2021). Since COVID-19 pandemic appeared in 2019, it was 2020 when the international trade was the most affected by the decline in imports and exports (Ozili & Arun, 2020). This situation with the outbreak of the Covid-19 pandemic can best be observed from data shown in Table 1 and Table 2. The tables clearly indicate the impact of COVID-19 on imports and exports of G7 countries.

Hayakava and Mukunoki (2021) examined the change in exports of 34 (out of 173) countries between 2019 and 2020. Comparing the period between April and May 2020 with the corresponding months of 2019, the authors find that the highest decline was recorded in some specific industries, as shown below:

- 10% for food products
- 45% for mineral products
- 20% for plastics and rubber
- 50% for leather products
- 20% for wood products
- 20% for paper products
- 35% for footwear
- 60% for transport equipment

In 2020, the Swiss imports fell by 13.3% compared to 2019 (Büchel et al., 2020), while the lockdown of mid-March and end of July caused a drop in Swiss exports by 14 billion CHF.

Japan	-1.42%	-12.30%	14.99%
United Kingdom	2.65%	-16.72%	-2.61%
United States	-0.11%	-12.97%	10.48%
Source:	WEO		database

Rq2: Which countries and sectors are more affected by the coronavirus disease?

The Covid-19 outbreak is a stark reminder that catastrophes have existed in the past and will continue to happen in the future. Since we cannot prevent them, we have to be prepared to deal with their effects on the economy and society. As we are still living with the pandemic, the explosion results have not yet been fully assessed in most trade data. However, there are some indications that maintaining trade flows could support the fight against the COVID-19 pandemic and alleviate the crisis of trading economies (Obayleu et al., 2021).

Regarding the second research question set out in this article, the findings reveal that the most affected countries come from both the developing world (Baldwin & Tomiura, 2020; Bown, 2020; Gonzales, 2020; Matto & Ruta, 2020) and from countries that are heavily dependent on trade (Curran et al., 2020; Bown, 2020). The latter are severely affected by the restrictions on exports and imports. New Zealand is an example of a country whose economy has sunk since the onset of the pandemic and is likely to continue to decline in the future (Tyagi & Shah, 2021).

However, data on the effects of COVID-19 pandemic on international trade and the economy in general vary from country to country, and some of them are quite controversial. For instance, the disease has severely affected the Indian economy with a negative growth of 4% (Chowdhury et al., 2021; Fernandes, 2020). Although India and Iran are among the world's ten largest economies, these two countries are among the last to be affected by the pandemic (Baldwin & Tomiura, 2020). It is important to note that, the imports and exports, as well as the trade deficit of India has significantly decreased during the pandemic (2019/20) compared to the period from 2011 to 2012 (Mahajan & Tomar, 2020).

According to Minondo (2021), the negative effects of COVID-19 on trade is more observable in Spain than in other large EU countries. All of this pandemic damage to international trade stems from strict social distancing measures imposed by the government. The trade deficit has decreased from \$183.3 billion in 2011/12 to \$118.1 during the COVID-19 pandemic in 2019/20 (Obayleu et al.,

2021). The exports have reduced from \$306 billion in 2011/12 up to \$239.3 billion in 2019/20 (Obayleu et al., 2021). The imports have also decreased from \$489.3 billion in 2011/12 to \$357.4 billion in 2019/20.

Except for chemical and pharmaceutical products whose export has increased by 2.7%, and 12%, respectively, the most exported products of India showed a significant decline during the COVID-19 pandemic (Obayleu et al., 2021). The imports have also observed a significant decrease, with the exception of machinery and chemicals which recorded a growth of 1.8% and 11.6%, respectively (Mahajan & Tomar, 2020). Likewise, there was an evident decrease in online product availability by 10%. The most significant changes were registered in the airline sector, that is 78% decrease in overall flights in India in March 2020 compared to March 2019 and 71.1% of flights in April 2020 compared to April 2019 (Chowdhury et al, 2021). In general, the growth rates of particular sectors in India have mainly decreased between 2019 and 2020 (Mahajan & Tomar, 2020) (Table 3).

The Covid-19 pandemic has also affected China, reducing its GDP by 6.8% in the first quarter of 2020 (Fernandes, 2020; Liu & Wang, 2020; Benxi & Zhang, 2020). Furthermore, the export has decreased by 17.2% in the first two months of 2020 (Liu & Wang, 2020). Meanwhile, the industrial output fell by 13.5% while, a year earlier, the infrastructure investment was reduced by 30% (Fernandes, 2020). Every shock that occurs in the Chinese economy is strongly felt in the world economy, since China represents over 16% of the world economy and is currently the world's largest importer and exporter (Fernandes, 2020). Moreover, China is the main supplier of parts and the leading purchaser of global goods and services in many industries.

The pandemic has resulted in China's decreased demand for African commodities (Obayleu et al., 2021). Since 2014, China has been standing as the most critical source country for international tourism (Fernandes, 2020), but in January 2020, the hotel occupation of China saw a drop of almost 90% (Hayakawa & Mukunoki, 2021; Nicola et al., 2020). The travel sector is significantly affected since 80% of the hotel rooms are empty (Asmelash & Cooper, 2020). The tourism sector was strongly

affected since the destinations have seen almost no profits in 2020 (Donthu & Gustafsson, 2020), while the restaurant and food sectors saw a reduction of 46.8% (Liu & Wang, 2020). On the other hand, investment in fixed assets has recorded an annual decline of 25% (Fernandes, 2020).

According to the stock market data for China, transportation, catering, accommodation, postal services, and warehousing are the sectors most negatively affected by the pandemic (Nicola et al., 2020). Additionally, unemployment in China has increased by 5 million inhabitants (measurements until March 2020) (Fernandes, 2020). Other products where a decrease in exports was observed are the following: fruits by 11.54%, vegetables by 11.84%, tea by 21.64%, horticultural products by 50%. In this unfavorable economic situation, the export has increased for some agricultural products, such as the grain and oil (17.5%) and medicinal herbs (52%).

By April 2021, the COVID-19 pandemic caused a drop in US exports by 2.6%. Moreover, the imports of essential medical goods triggered a trade deficit of 4.8% (Benxi & Zhang, 2020). In February 2020, only for one week, the S&P 500 index lost \$5 trillion, while at the same time, ten of the largest companies in the S&P 500 had a combined loss of over \$1.4 trillion. The pandemic COVID-19 had a negative economic impact on Germany as well (Chowdhury et al., 2021; Kilic & Marin, 2020). Germany is one of the leading global value chains

and the hub in Europe, thus the despairs of this country will produce supply-chain contagion in virtually all nations, and especially in Europe.

In March 2020, the main stock index in Germany-DAX (Deutsche Aktien Xchange) decreased by more than 10% (Zhang & Hamori, 2021), while a year-to-date stock return fell by 33% (Chowdhury et al., 2021), and flights (compared to the same month of the previous year) decreased by 32.1% (Chowdhury et al., 2021). Moreover, the airline sector belittled the workforce by 90% (Donthu & Gustafsson, 2020).

The coronavirus disease has also affected the economy and trade of Canada (Zhang & Hamori, 2021). The agricultural exports of Canada have a significant impact on international businesses since they export more than half of the country's agricultural production (Zhang & Hamori, 2021). The adverse effects of COVID-19 on world economic growth (in the EU, China, United States, etc.) has automatically affected the Canadian exports, especially the agriculture exports (Zhang & Hamori, 2021; Barichello, 2020). The lockdown measures taken because of the Covid-19 have caused bankruptcy for many sectors as consumers stayed at home and economies were shut down (Tucker, 2020). The American retail giants have survived wars, depressions, recessions, and the rise of online shopping but, due to an enormous financial pressure, they have not been able to cope with the Covid-19 pandemic.

Table 3: Selected indicators for India

	2018/19 (April- November)	2019/20 (April- November)
The index of industrial production IIP.	5.00 %	0.6%
Growth of manufacturing sector	4.9%	0.9%
Growth of refinery products sector	5.3%	-1.1%
Steel sector	3.6%	5.2%

Source: <https://taxguru.in/finance/industry-infrastructure-economic-survey-2019-2020.html>

CONCLUSIONS

The literature survey conducted here offered a holistic view of the impact of COVID-19 pandemic on international business. The pandemic has imposed numerous challenges for both the economies and international businesses. The difficulties in producing essential goods have caused disruptions to the product supply chains, while the decline of exports and imports caused many losses for international businesses. The analysis also shows how the pandemic caused a poor cash flow in the markets, a significant slowdown in revenue growth, and enrichment of the virtual enterprises.

The first research question offers evidence that the impact of the pandemic was more profound than initially anticipated, thereby harming the international businesses (by reducing exports and imports due to isolation measures) and disrupting the supply chain networks. Regarding the second research question, the evidence shows that the most affected countries come from developing world. The tourism and aviation industry were the most negatively affected, while an increase was observed in pharmaceutical industry and essential medical bars. Since we are still living with the pandemic, any further developments will provide significant results for the international business research.

Some articles considered here have also made a useful comparison between Covid-19 pandemic and both the SARS and 2008 financial crisis. Additionally, the findings suggest that this pandemic will remain uncertain for international trade and will also redirect the future supply chain flows. In times like these, the fear of economic collapse calls for strong leadership in business, government, and broader society. Governments and financial institutions must constantly control and re-evaluate the situation caused by COVID-19. In order to re-energize the economy after the crisis, the relief measures need to be planned, rebalanced and properly implemented. Finally, a development plan that encourages entrepreneurship is also needed to flourish sustainable business models.

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