



Effect of the COVID-19 Pandemic Outbreak on Businesses and Markets Globally

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

On March 11, 2020, the World Health Organization declared COVID-19 a global pandemic, and its effects are still prevalent today. Due to the COVID-19 pandemic's controversial origins and swift global dissemination, strict safeguards were put in place by governments around the world to contain instances and slow the virus' rate of spread. While the competition for limited resources overtook global trade and collaboration, tactics fractured the fundamental supporting pillars of the contemporary world's macroeconomics and micro economics. Serious economic repercussions resulted from the COVID-19 pandemic outbreak all around the world and no nation was spared. In

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addition to the devastating impact on the economy, negative aftermaths were imposed upon society as a whole which drastically altered how businesses, markets, firms, and customers operated.

Keywords: Economic; sectoral issues; labor market issues; products; cash flow, Covid 19.

1. INTRODUCTION

“Pandemic outbreaks have historically been feared and the impact on the national and international economies has been financially, socially, and environmentally challenging. The coronavirus disease – 2019 (COVID-19) pandemic drastically affected the world. The topic of pandemic speculation is not solely on when a new outbreak will occur but rather on whether there will be an outbreak and where the outbreak will occur. Eastern and western countries recognize that it is not possible to realistically predict an outbreak in advance or stop the biological factors that cause influenza pandemics from occurring. Because of the formation of novel virus subtypes as a result of virus re-assortment, pandemics appear to happen every 10–50 years” [1]. “New viruses are likely to spread to humans more frequently as the world's population rises and as humans are forced to live nearer to animals” [2,3,4]. “The most effective strategy that businesses, markets, and society as a whole can implement is to take precautions to promptly respond in anticipation of an outbreak. To better prepare communities for when—and, more likely, if—an outbreak happens again, businesses and markets should learn from the effects of pandemic epidemics” [2] and adapt practices to sustain operations.

“The COVID-19 outbreak has had a significant impact on both the national and international economies. Numerous businesses and markets are dealing with a variety of problems and losses to varying degrees. Global enterprises in particular have encountered several issues, including a decline in demand, disruptions in the supply chain, financial crises, cancellation of export orders, a scarcity of raw materials, a decline in manpower, and difficulty with transportation, among other adverse business constraints. Undoubtedly, it is evident that the COVID-19 outbreak is having a substantial impact on businesses all over the world” [1,3-5].

“In 1918, the Spanish flu largely struck Europe and the United States of America. The Spanish flu drastically swept through both countries while devastating many families, businesses, and

communities leaving a similar aftermath as the COVID-19 pandemic. The Spanish flu killed between 20 and 50 million people over four subsequent waves, including roughly 675,000 Americans, despite infecting 500 million people—almost a third of the world's population at the time”[6]. “Different limits were enforced in various cities and nations. For instance, the New York City Health Commissioner ordered businesses to open and close in staggered shifts to prevent congestion on the subway. Because so many workers were sick, firms in the United States of America and Europe were forced to close. Businesses and markets, slowly but steadily, systematically identified strategies to re-establish the economy after the Spanish flu. The Spanish flu pandemic paved the pathway for new firms with start-ups thriving from 1919 during the pandemic's height till now” [6-11]. Similarly, as a post-COVID-19 economic strategy, eastern and western businesses and markets globally should identify practical and realistic concepts to boost economies to prevent worldwide financial infrastructure collapse.

“Numerous firms have had to cease business operations because of the COVID-19 pandemic outbreak which has caused an unparalleled disruption of operations in most industry sectors. Short-term issues that retailers and brands had to overcome included those pertaining to human health and safety, the supply chain, the workforce, cash flow, consumer demand, sales, and marketing. Overcoming these obstacles will not ensure a business's bright future or perhaps one at all. This is due to the fact that after the COVID-19 pandemic, the world will be substantially different from what it was prior to the outbreak” [12]. “Many markets have disappeared, particularly in retail, small businesses, and tourist and hospitality industries. The gross domestic product (GDP) was significantly impacted. Organizations' resources are now strategically designed within a priority framework, spent as efficiently as possible, or delayed if they are useful in the current setting. The COVID-19 pandemic shifted the business mindset. An indefinite hiring freeze has been established by many businesses, particularly start-ups, while online communication, online entertainment, and online purchasing are all

seeing extraordinary growth at the same time” [13-17].

“Early estimates of the COVID-19 pandemic’s effects on the number of business owners, based on national data from April to June 2020, showed a sharp decline in small business activity. Over a two-month period from February to April 2020, there were 15.0 million fewer active business owners in the United States than there were in 2008” [18]. “No previous 1-, 2-, or even 12-month period has ever witnessed such a significant shift in company activity. For example, the number of active business owners fell by 730,000 from the beginning to the end of the Great Recession, or only 5%” [19]. “Over the course of the business cycle, firm ownership generally remains quite stable. Large declines in significant subgroups, such as owners working about 2 days/week (28%), owners working 4 days/week (31%), and owners of incorporated enterprises (20%), contributed significantly to the loss of 3.3 million active company owners (or 22%). The number of hours worked overall by all business owners decreased by 29%” [18-22].

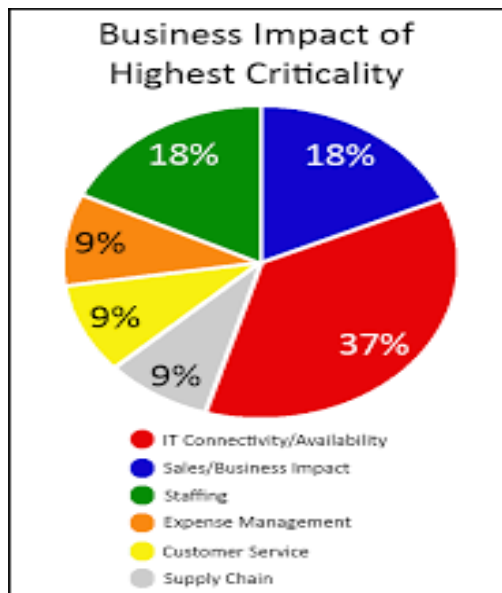


Fig. 1. Impact of Covid on business [23]

2. EFFECT OF COVID-19 ON GLOBAL ECONOMY

“The findings of multiple studies show that further research is required to determine the long-term consequences on turnover, productivity, innovation, and entrepreneurship in developed nations of the governmental responses to COVID-19. Future studies seek to highlight a

larger economic, political, and societal problems such as inequality and poverty, unemployment in developing nations, and the difference between rich and poor nations” [15, 22]. “The COVID-19 shock has varied macroeconomic and microeconomic consequences on small and large businesses as well as on unincorporated and incorporated businesses. Smaller enterprises generally struggle to seize the opportunities that the COVID-19 crisis brought about. More research is necessary on how local and federal governments, nonprofits, civil society, and other stakeholders help to lessen the impact of crises. Open innovation, knowledge spillovers, and the creation of collaborations between small and large businesses might all play a significant role in fostering entrepreneurship and reducing the impact of COVID-19. The long-term dynamics of science, technology, engineering, and mathematics (STEM) are particularly fascinating” [8,24,25] and present promising strategies to enhance global economics.

“To comprehend the psychological and economic forces that drive creativity during crises, further knowledge is required”. While other studies have shown that context is important (Audretsch et al., 2021a; Welter, 2011; Welter et al., 2019), “the context of an economic crisis is an important but understudied one” [10,26-28]. “Three recent and overlapping waves of contextualization in the entrepreneurship field”, Welter et al. (2019) “demonstrate how the discussion has progressed from challenging the Silicon Valley model by examining the why, what, and how of entrepreneurship to considering more individualized factors in the enactment of contexts (second wave), all while expanding the scope of entrepreneurship research (third wave)” [27,29,30]. “There is a notion that suggests that it may be possible to estimate the COVID-19 lockdown’s influence on economic activity by taking into account the relationships between each of the three waves and their individual effects” [27,31]. “Deeper mental concerns may also be at play in addition to sectoral issues, labor market issues, and economic growth issues” [32,33] which contribute to economic stability.

3. IMPACT OF COVID-19 ON CONSUMER BEHAVIOR

“There has been a misalignment between consumer tendencies and biophysical realities for a very long time. COVID-19 has made it even

more urgent to consider how different lifestyle choices affect society. Consumer behavior in many nations was at an alarm stage with a lot of panic purchases of food and feminine hygiene items” [34,35]. “Consumer mood is also changing privately. Citizens’ shopping habits and needs have had to be reevaluated in light of difficult access to products and services with an emphasis on the most basic necessities. The linear economy model which predicts, for example, that mobile phones have an average life time of four years (two years in the USA) will also likely be affected by the technological obsolescence of modern products brought about by rapid innovation and individual consumerism” [36], Spash (2020). “On the other hand, patenting is a problem in the healthcare industry which may profit from mass manufacture and consumerism of essential equipment. Most medical devices are protected by patents, and the Italian 3D printer patent infringement case prompted calls for Open Source Ventilators and Good Samaritan Laws to assist in responding to COVID-19 and other worldwide health catastrophes. These program or policies, conceivably, could assist in addressing the costly, limited, highly skilled, and resource-intensive production of essential equipment through cottage industry production” [34,37,38] to help sustain the economy in the aftermath of the COVID-19 pandemic.

“In light of many factors, the COVID-19 pandemic has demonstrated that the production capacity of Personal Protective Equipment (PPE) (even for the ubiquitous facemasks) is constrained in many nations (Dargaville et al., 2020) with some nations needing to ration facemask manufacture and distribution in factories” [39]. “Unsurprisingly, the Do-It-Yourself (DIY) facemask market has grown in importance for addressing shortages and as part of a post-lockdown escapes strategy in addition to being necessary for the protection of large populations, as described” by Livingston et al [40-43].

A resurgence of cottage industry production of tools and basic but necessary things like facemasks might alter the global production landscape for decades, most likely resulting in a slowing of consumerist impulses. Given the high likelihood that a recession will lead businesses to adopt short-term perspectives and cancel long-term and medium-term research and development (R&D) in favor of short-term product development and immediate cash flow/profit. Undoubtedly, the automotive and

aerospace sectors in previous recessions were adversely affected, and the COVID-19 pandemic also will have an impact on R&D in this industry area moving forward [44,45].

4. PARADIGM SHIFT OF BUSINESS MODELS DUE TO COVID-19

Some detractors contend that vast changes are hasty responses to the pandemic and that once "normalcy" has returned; businesses will either go back to their previous business models or find a new equilibrium to reach. That may very well be the case, but businesses wishing to broaden their horizons might certainly make use of the chance that the pandemic has offered to digitize a business or develop a workable alternative business model [46,47]. Businesses must be flexible and acquire capabilities quickly to take advantage of the opportunities presented by digitalization and survive the changes that the environment forces upon them. These dynamic capabilities are related to particular strategic and organizational processes like product redesign, finding and collaborating with new ecosystem partners, and strategic decision-making that adds value in such dynamic environments by repurposing existing resources in novel value-creating ways [45]. Educational institutions that have not only adapted online platforms to hold virtual classes but have also produced educational goods that blend engaging asynchronous instructional pedagogies with synchronous classrooms are excellent examples of such organizations [46,48].

Organizations also frequently adopt "temporary adhocracies" that exist for the sole purpose of innovation when environmental variability is as extreme as it is in the COVID-19 condition. In such adhocracies, experts in marketing, information technology, and design thinking should collaborate on a 'scrum-like project' that aims to quickly fulfill the potential for digitization of the product/service offered. The project would also look for digital replacements and, if neither were possible, would identify ways to deliver the physical product or service with the least amount of physical contact [49,50]. The deep foundations that underlie the organization's strategy, structure, and procedures, including core values, systems of control, and the division of power, cannot be disregarded in the process of achieving the new equilibrium that the post-COVID-19 situation brings about for any project. Organizations will be able to institutionalize the change and fortify them for the post-COVID-19

business environment thanks to these fundamental components [51,52].

5. EFFECT OF COVID-19 ON GLOBAL MARKETS

“As people stayed at home and economies nearly shut down, the COVID-19 pandemic was likely to lead to bankruptcy for many well-known firms in various industries. Famous United States of America businesses like Sears, JCPenney, Neiman Marcus, Hertz, and J. Crew were struggling financially. The travel industry was severely impacted, 80% of hotel rooms were vacant, airlines had reduced their personnel by 90%, and 2020 was anticipated to be a loss-making year for vacation destinations” [53]. “Expos, conferences, sporting events, and other sizable gatherings, in addition to cultural institutions like galleries and museums, had unexpectedly canceled” [53,54].

“Lockdowns caused a halt to businesses in general and personal services like cabs, gyms, and hair salons. Significant sectors including the automotive, trucking and electronics industries had abruptly shut down (although they started to open up two months after their closure). In relation to this fairly abrupt close-down, there were several unanswered questions about COVID-19. A lingering question such as ‘how, for example, should employers care for their employees in the wake and aftermath of COVID-19’ posed many challenges. A question such as ‘why businesses are ill-equipped to deal with such circumstances (by setting away money or considering other sources of income, for example)’ presented uncertainties. More significantly, the question in part to ‘how are businesses and even nations making the most of the current scenario to improve their competitive position’ continues to be unclear. Though many nations are trying to regain economic stability and bounce back from the effects of COVID-19, China is one of the nations that appear to be purchasing infrastructure and technologies developed in Europe” [55-57].

“The COVID-19 pandemic forced businesses to adapt to new ways of thinking and facilitation of operational standards. While some companies are having trouble, others are gradually adjusting to new business methods, trends, and adaptations. Innovative, forward-thinking strategies were quickly adapted for a variety of Internet-based enterprises, including those offering services for remote work, food delivery, online shopping, online education, online

entertainment, online psychotherapy telehealth, and telemedicine. Consumers’ consumption habits also changed, leading to an increase in the demand for takeout meals, snacks, alcohol, and cleaning supplies as more time was spent at home”[2,50,58-60].

“Healthcare, pharmaceutical, herbal, oil/gas, and vitamin-related companies were among the other businesses that prospered. Since markets tend to change slowly, it is common to presume that they are static when researching them. But if the COVID-19 pandemic has taught anything, it showed that some markets can shift quickly and are dynamic. Furthermore, a market is a network of actors (firms, customers, public bodies, etc.) functioning by a set of norms, not just a single firm which made the COVID-19 pandemic effects on business and markets a major focal point to explore with consideration of the aftermath economy. Though markets are systems that are occasionally described as dynamic ecosystems that provide value” [61-64], markets can have strengths and weaknesses, especially when faced with an economic crisis as a result of a pandemic such as COVID-19.

THE IMPACT OF THE COVID-19 PANDEMIC ON OVERALL BUSINESS OPERATIONS

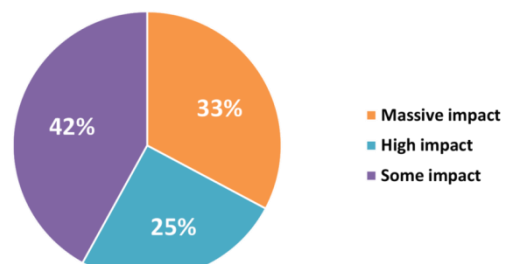


Fig. 2. Impact of Covid on world business [65]

6. WORLD WIDE SOCIO-ECONOMIC DEVELOPMENT DURING COVID-19

Investors fluctuated between optimism and pessimism amid worries that COVID-19 would cause a global economic and financial crisis with few metrics to indicate how prolonged and extensive the economic effects could be between late February 2020 and spring 2021, choking financial markets from the United States of America to Asia and Europe [66]. As a result of the significant declines in financial market indices from Asia, Europe, and the United States of America on February 24, that date in particular will always be remembered. Investors went for safe-haven assets like the benchmark 10-year

U.S. Treasury note, whose yield dropped historically to less than 1% on March 3, 2020 [67]. On March 3, 2020, in response to worries that the world economy was collapsing, the Federal Reserve cut key interest rates to support economic growth. At the same time, the Bank of Japan bought assets to give Japanese banks access to short-term liquidity, and the government of Japan said it would also provide wage subsidies to workers. Also, the Bank of Canada reduced its benchmark interest rate. The International Monetary Fund (IMF) said that it was making \$50 billion accessible through its Catastrophe Containment and Relief Trust and emergency lending facilities for low-income and emerging market nations (CCRT). Pressure on the dollar and on U.S. Treasury assets decreased as risk estimates by participants in the financial markets decreased [68].

7. HOW COUNTRIES COOPERATE TO COPE WITH ECONOMIC CRISES

The G-7 leaders (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States of America) convened by teleconference on March 16, 2020, to debate and plan their policy responses to the negative effects of COVID-19's global spread on the economy [69]. The G-7 leaders emphasized their commitment to doing "everything is required to achieve a robust global response through greater coordination and enhanced cooperation of efforts" in the joint statement they issued following the emergency teleconference meeting [70]. The nations committed to coordinating research efforts, expanding medical equipment availability, mobilizing "the full range" of policy tools, including monetary and fiscal measures as well as targeted actions, and directing the International Monetary Fund (IMF) and the World Bank Group, among other international organizations, to support the nations. The nations also tasked their finance ministers with weekly coordination [70,71].

On March 25, the G-20 emergency summit was called by Saudi Arabia, the G-20 chair for 2020, to consider a response to the epidemic. The G-20 is a larger economic bloc that includes the G-7 nations as well as some significant emerging markets. World leaders resolved that the G-20 will be the key forum for international economic cooperation after the 2008 financial crisis. Some commentators were surprised that the G-7 responded to COVID-19 before the G-20, while others questioned whether the G-20's larger size

and more economic variety may make cooperation more challenging [72].

Given their limited resources, international agencies like the IMF and multilateral development banks have attempted to push ahead with economic assistance. Furthermore, on March 20, 2020, the Financial Stability Board (FSB), a global organization that includes the United States of America and regulates the financial system to ensure stability, issued a statement stating that its members are actively working together to maintain financial stability during market stress related to COVID-19. While noting that many FSB members have already taken action to release available capital and liquidity buffers, the FSB is urging governments to exercise flexibility within the bounds of current international standards to maintain access to funding for market participants and businesses and households experiencing momentary difficulties as a result of COVID-19 [73-75].

8. CONCLUSION

The world was in danger from the effects of the COVID-19 pandemic which had a negative impact on every element of life, particularly the global economy. The COVID-19 pandemic which first appeared in December 2019 has had a wide range of effects on the world's microeconomics and macroeconomics. The economic effects of the pandemic worsen as the world nearly ceased global business operations, imports, and exports. The pandemic significantly disrupted the supply and demand chain in addition caused increased healthcare costs and reduced labor force. Manufacturers were forced to lay off some employees or postpone business operations to avoid further losses that placed financial constraints on many families. After the pandemic began, there was a sharp drop in oil consumption that was unheard of in the previous 30 years due to the closure of factories and businesses and decreased travel rates. By the end of 2021, the epidemic had cost the world more than 2 trillion dollars and the GDP had decreased. Though the COVID-19 pandemic created a ripple of hardship for families and drastically impacted economies globally, COVID-19 forced society to learn and implement practical new or revised ways to sustain systems while ensuring safety measures to rebuild the economy.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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