



# Research Directions Priorities for COVID-19 Concerning Finance

Prof Dr R K Vaithyanathan

Principal

Suguna College of Arts and Science  
Coimbatore, India

## Abstract

At the expense of previous studies that predicted such a significant occurrence and its economic implications or evaluated the effects of previous Pandemic, this study emphasizes tremendous monetary and societal effect of COVID-19. The potential effects of COVID-19 upon financial establishments and markets, whether implicit or explicit, are briefly discussed in this section, drawing on various sources of information. To ascertain features of COVID-19 and what, according to research, were the effects of other previous occurrences that are similar to COVID-19 in specific ways, it is necessary to assess the traits of COVID-19.

**Keywords:** Finance, Covid-19, Research

## 1. Introduction

We are all acutely aware of the ongoing enormous human cost of COVID-19 Pandemic. The situation worries us about long-term financial implications of crisis, especially the influence on economic markets. This Pandemic is still going strong at the time of writing, and the entire extent of catastrophe is yet undiscovered. Nevertheless, it is acceptable to anticipate a big part of concern in pandemics' role in finance.

This review summarises the short study on pandemics and finance to date. It draws some similarities, further well-studied fields of economic research. Recent academic articles have also eerily forecasted large-scale disasters like COVID-19 and their economic ramifications by analyzing the impacts of past illnesses and epidemics.

COVID-19's possible impacts on financial markets and establishments, both openly and implicitly, are fleetingly explored utilizing various works of literature. Analyzing what investigation indicates where the consequences of historical outcomes resemble COVID-19 and how COVID-19 may vary provides future study opportunities.

## 2. Economic consequences of Pandemic

The massive economic implications, pandemics have a demonstrable impact on financial systems. Many papers have been written on pandemic costs, previous pandemics like the HIV/AIDS epidemic, and prospective pandemic costs. In writings about these costs, ex-position expenses of deadly diseases and pandemics are often addressed. Haacker (2004) looks at the economic effects of HIV/AIDS epidemic, while Santaaulalia-Llopis (2008) looks at epidemic's effect on growth. Yach, Stuckler, and Brownell addressed rising expenses of worldwide fatness and diabetes (2006).

Latest studies warn us that economic implications of impending "pandemics and epidemics" should be expected, many of which are much more directly related to the COVID-19 problem. Bloom, Cadarette, and Sevilla are particularly forward-thinking (2018). CoVid-19 has brought to the forefront several economic issues that have never been considered: medical treatment costs, both public and private, and epidemic control and stress on health schemes incapable to deal routine challenges during flare-ups; decline of employees' performance; and social distancing, which disrupts economic activity, are all addressed.

Fan, Jamison, and Summers are all concerned about the same thing (2018). They recently wrote, "An unmet need for greater investment in preparedness against major illnesses and pandemics." According to researchers, the yearly costs of pandemic probability are expected about 550 billion dollars which is 0.8 percent worldwide GDP. Given COVID-19's expenditures, this significant sum now seems to be underestimated. "Bloom and Canning (2004), Lewis (2001), Madhav et al. (2017), Tam, Khan, and Legido-Quigley (2016), Yach, Stuckler, and Brownell (2006)", and several others stress the want for financial threat management considering probability of upcoming pandemics.

Infectious disease outbreaks that were controlled to a level much below their potential should also be recognized. Nipah is a highly infectious respirational illness that killed several people in Kerala, India, as described by Thomas (2018). It is because of the prompt response of public health experts. In this instance, a major worldwide health problem was avoided. The latest Worldwide Preparedness Monitoring Board study, Worldwide-Preparedness-Monitoring-Board (2019), is essential since it plainly states that a worldwide pandemic is coming devoid of preparation. Between 2011 and 2018, the World Health Organization recorded 1,484 widespread occurrences around 173 nations, as per the reports of Global Preparedness Monitoring Board. (2019).

### **3. The effect of COVID-19 on insurance sector and banking sector**

Banks are vulnerable to economic downturns, owing to the possibility of nonperforming loans and bank runs in the worst-case situation. According to Leoni (2013), development of human immunodeficiency virus in growing nations is related to substantial expansions in bank turnover. This is ascribed to the need for specific medications, resulting in large-scale deposit withdrawals.

As the cumulative frequency of significant pandemics increases, so does the probability of an emerging country's financial system fail, according to Lagoarde-Segot and Leoni (2013). Microfinance institutions and banks will be forced to cut down on their group loaning poor during outbreaks since the cumulative impact will pressure all groupmates (Skoufias, 2003). Bank runs following floods or agricultural catastrophes would concern rural financial institutions (Binswanger and Rosenzweig, 1986). COVID-19's impact on financial institutions' operations has yet to be observed.

On average, what shall be the period when banks across the globe retain a vigilant loaning policy after COVID-19? Is there any study on bank reactions to macroeconomic shocks similar to COVID-19 (Bongini et al., 2019)?

According to Lagoarde-Segot and Leoni (2013), as the cumulative frequency of significant pandemics rises, so does the likelihood of a developing country's financial system collapse. As a result of the cumulative effect on all groupmates, microfinance and bankers will be compelled to reduce their group financing to the impoverished during epidemics (Skoufias, 2003). In a bank run after a natural disaster, rural financial institutions would be concerned (Binswanger and Rosenzweig, 1986). COVID-19's impact on financial institutions' operations has yet to be observed.

Academic studies predict substantial economic losses due to pandemics, and many contemporary illnesses and wellbeing problems developed into worldwide pandemics. Pandemics like COVID-19 are inevitable; therefore, insurance for such events is very beneficial. Tamura and Sawada (2009) investigated viability of insurance coverage considering avian flu pandemic in Vietnam. COVID-19's impact on financial institutions' operations has yet to be observed. outbreaks in Vietnam. The preceding coverage is often only available to financially stable individuals, at least privately. The bottom line of this issue will go unnoticed. Individuals with personal collateral recover financially

rapidly after severe crises, while those without collateral do not, according to Sawada and Shimizutani (2008).

#### **4. COVID-19's effect on government agencies and the public**

There is always a query that COVID-19 shall lead to an extended-term gamechanger in global buying patterns? For example, due to the HIV/AIDS epidemic, Haacker (2004) sees a long-term change in consumer behavior. A global slowdown in spending and domestic demand would be disastrous for the global economy.

Is it, therefore, feasible for governments to have a role in mitigating the economic effects of pandemics? Private insurance companies are reluctant to insure. Therefore, government should step in and help. There may be less worried about the government replacing private insurance (Cummins, 2006).

According to Cavallo et al. (2013), massive catastrophes come up with a detrimental impact on yield, in short and in the long run. Though, they do caution about results are based on examples of significant governmental changes after natural catastrophes. It is comprehensible that COVID-19's impact on financial production affects political changes.

Is COVID-19 dissimilar to past ecological disasters for consideration as a one-of-a-kind case? Should we expect economic output to return to normal, as it did after past disasters? COVID-19 has the power to affect the healthcare system's institutional structure and public support, as well as citizens' mindsets in the direction of administrations and requirements for efficient government engagement. What are the possibilities for governments to cope with natural disasters in the future (Ghesquiere and Mahul, 2010)? Pandemic preparedness and containment will probably be a people benefit (Kölle, 2015; Yamey, Ogbuaji, and McDade, 2018).

An Additional concern exists for the influence of COVID-19 on public trust. Any circumstance that diseases resembling COVID-19 involve individuals from all walks of life and ages will have ramifications. Poorer countries, according to Noy (2009), are more susceptible to natural disasters. According to Bjrnskov (2008), social fractionalization erodes social trust. Transaction costs throughout the financial system rise when societal trust declines (Fukuyama, 1995). What impact will this have on popular support for globalization, both socially and economically?

#### **5. The effect of pandemics on the financial markets**

Though little is known about how epidemics, much alone pandemics, affect financial markets, some flawed analogies may be made from previous natural catastrophes. Natural calamities like earthquakes and volcanoes, air disasters, and, more recently, terrorist attacks lead markets to react. COVID-19 has been disastrous for the airline industry globally in terms of deaths from aviation accidents. Bosch, Eckard, and Singal (1998) indicate that certain airlines may profit from consumers switching carriers after air catastrophes. This is unlikely to happen with COVID-19, which is driving a drop in worldwide aviation traffic.

COVID-19 will undoubtedly have a more significant effect on specific sectors than others. COVID-19, on the other hand, will have a significant effect on domestic demand in almost every country.

The level of spillover associated with other past disasters has a lot to do with the level of similarity with previous catastrophes, offering acumen into possible effect of COVID-19 upon financial markets. Because COVID-19 will have a worldwide impact, compared to COVID-19 scenario with historical events, while further limited, spillovers with far-reaching consequences, terrorist actions, although initially restricted in scope, are meant to generate a sweeping shift in civic opinion; therefore, studies on influence of extremist incidents on business markets may give particular viewpoint. Karolyi (2006) investigated "spillover effects" of extremist actions and if research topic recommends that future terrorism adds to overall risk in a broad or "systematic" manner. He concludes that the evidence is limited, but little research has examined asset pricing models' volatility or beta concerns. Several studies have shown that the market's response to extremist incidents is exceptionally benign, with downturns lasting just a few minutes (Brounen and Derwall, 2010). Choudhry (2005) examined a

small number of US businesses in various industries after September 11 to see whether the terrorist incident affected market betas, with conflicting findings. The September 11 terrorist attacks, according to Hon, Strauss, and Yong (2004), enhanced global market correlations, with the effect varying by geographical region. Several other research "(Chesney, Reshetar, and Karaman, 2011; Choudhry, 2005; Corbet, Gurdgiev, and Meegan, 2018; Nikkinen and Vähämaa, 2010)" provides a mixed illustration of in ways and means of terrorist acts impacted financial market structure. COVID-19 is expected to be a first-of-its-kind pandemic as per global scope since the 1918 influenza pandemic.

However, a disaster upon a scale of COVID-19 remained ruled out. It is noteworthy to compare COVID-19's results in the direction of a hypothetical atomic war. Unless a dubiously restricted impact is considered, nuclear war is unsurvivable for everyone on our planet. Therefore, the prospect of atomic war is often having minimal effect on marketplace costs other than towards signaling our economic in a harmful international tension. The reason seems to be that other alternatives are irrelevant in a non-survivable occurrence rather than its low probability.

According to Epstein (2019), a 37-year-old male in the United States has a 0.2 percent probability of dying in the following year. A 37-year-old woman's chances are around 0.1 percent. As we become older, our odds increase exceptionally slowly. A 52-year-old man has just a 0.6 percent risk, while a 52-year-old woman confronts only a 0.4 percent risk. On the other hand, what are the odds of a global nuclear war breaking out in the next year? We do not have enough data to make an informed estimate. Many people think that nuclear wars, which are considered probability-tail events, are unsurvivable. A nuclear war will not affect our 401(k) because it is useless without life on planet. However, COVID-19 is causing chaos on the worldwide economy (compare the US bailout plan of \$2.2 trillion to the \$1.7 trillion bailout program during the financial crisis). Covid-19, in contrast to a nuclear conflict and financial market's role would stay crucial. When a viral respiratory disease appears out of nowhere next time, there will be a giant worldwide financial market response, it seems. Unquestionably, the findings of COVID-19 will influence the future work on downside risk in financial markets (Kwon, 2019).

## **6. COVID-19's financial and wealth expenditure implications**

Researchers probably expected to look at how COVID-19 may affect company financing in the long run. COVID-19, as previously mentioned, emphasizes the possibility, if not the probability, of infectious illness outbreaks that have significant adverse impact on worldwide household needs. This is considered a game-changer since economic markets have failed to price potential of catastrophic track-risk disasters being impossible to survive in any event. COVID-19 and other similar viruses are wreaking havoc on the global economy in previously unimaginable ways. Nonetheless, they can be overcome. We should now expect a prolonged-term effect on corporate finance and capital expenditures.

According to Elnahas, Kim, and Kim (2018), businesses in disaster-prone zones acclimate less leveraged. They ascribe this discovery to companies impacted around various ways, including operational disruption, increased capital costs, and less financial flexibility, consistent with a capital structure trade-off viewpoint (Kraus and Litzenberger, 1973). While companies are often portrayed as staunch in their capital structure approach, they are frequently influenced by macroeconomic jolts (Huang, Gao, and Chen, 2018).

COVID-19 demonstrates an undervaluation of equity risk in the past. Will businesses use less leverage because of this? A long-term change in equity costs is possible. Lee and McKibbin (2004) found a two hundred-basis-point rise in China and Hong Kong's national risk premium following the SARS outbreak. The effect of nation premiums on equity costs is indeed dependent on a firm's exposures to various markets. However, a two percent growth in a nation default risk (probably much more remarkable for COVID-19) would result in a considerable increase in equity investment costs, underfunding of global pensions. However, Lee and McKibbin (2004) found that China and Hong Kong have higher national risk since they are high-risk regions for SARS. COVID-19 is a true pandemic since it affects the whole world instead of just a few nations.

## 7. Conclusion

Investors, policymakers, and the public have learned from the COVID-19 tragedy that natural calamities may cause financial damage to an inconceivable scale. Nevertheless, different non-survivable catastrophes including global atomic war, slow-moving calamities such as climate change, or limited disasters that produce spillover in addition to market responses, the “COVID-19 Pandemic” has an immediate worldwide catastrophic economic impact felt global. All parties must now face what many have already realized: such catastrophes are possible, if not probable, shortly. What effect will this have on capital costs, pension planning, insurance, government participation in financial institution protection, social trust, transaction costs, and societal, political stability? Financial academics will likely discuss these and other topics for many years to come.

## References

- [1] Haacker, Markus, 2004. The Impact of HIV/AIDS on Government Finance and Public Services. International Monetary Fund, Washington.
- [2] Global-Preparedness-Monitoring-Board, 2019. A world at risk: annual report on global preparedness for health emergencies. Global Preparedness Monitoring Board of the World Health Organization, Geneva.
- [3] Ghesquiere, Francis, Mahul, Olivier, 2010. Financial protection of the state against natural disasters: A primer. World Bank Policy Research Working Paper (5429), 1–26.
- [4] Fukuyama, Francis, 1995. Trust: The Social Virtues and the Creation of Prosperity. Free Press, New York.
- [5] Finance and Development 55 (2), 46–49.
- [6] Fan, Victoria Y., Jamison, Dean T., Summers, Lawrence H., 2018. Pandemic risk: how large are the expected losses? Bulletin of the World Health Organization 96 (2),129–134.
- [7] Epstein, David, 2019. Nuclear risk and financial markets. Enterprising Investor. <http://blogs.cfainstitute.org/investor> April, CFA Institute, accessed March 26, 2020.
- [8] Elnahas, Ahmed, Dongyoung Kim, and Incheol Kim, (2018), "Natural disaster risk and corporate leverage," Working Paper.
- [9] Cummins, J David, 2006. Should the government provide insurance for catastrophes? Federal Reserve Bank of St. Louis Review 88 (4), 337–379.
- [10] Corbet, Shaen, Gurdgiev, Constantin, Meegan, Andrew, 2018. Long-term stock market volatility and the influence of terrorist attacks in Europe. Quarterly Review of Economics and Finance 68, 118–131.
- [11] Choudhry, Taufiq, 2005. September 11 and time-varying beta of United States companies. Applied Financial Economics 15 (17), 1227–1242.
- [12] Chesney, Marc, Reshetar, Ganna, Karaman, Mustafa, 2011. The impact of terrorism on financial markets: An empirical study. Journal of Banking and Finance 35 (2),253–267.
- [13] Cavallo, Eduardo, Galiani, Sebastian, Noy, Ilan, Pantano, Juan, 2013. Catastrophic natural disasters and economic growth. Review of Economics and Statistics 95 (5),1549–1561.
- [14] Caporale, Guglielmo Maria, Kang, Woo-Young, Spagnolo, Fabio, Spagnolo, Nicola, 2020. Non-linearities, cyber-attacks, and cryptocurrencies. Finance Research Letters 32, 101297.
- [15] Brounen, Dirk, Derwall, Jeroen, 2010. The impact of terrorist attacks on international stock markets. European Financial Management 16 (4), 585–598.
- [16] Bosch, Jean-Claude, Woodrow Eckard, E, Singal, Vijay, 1998. The competitive impact of air crashes Stock market evidence. Journal of Law and Economics 41 (2),503–519.
- [17] Bongini, Paola, Cucinelli, Doriana, Battista, Maria Luisa Di, Nieri, Laura, 2019. Profitability shocks and recovery in time of crisis evidence from European banks.Finance Research Letters 30, 233–239.

- [18] Bloom, David E., Cadarette, Daniel, Sevilla, JP, 2018. Epidemics and economics: New and resurgent infectious diseases can have far-reaching economic repercussions.
- [19] Bloom, David E, Canning, David, 2004. Epidemics and economics: Interactions between global change and human health. *Scripta Varia* 106, 304–331.
- [20] Bjørnskov, Christian, 2008. Social trust and fractionalization: A possible reinterpretation. *European Sociological Review* 24 (3), 271–283.
- [21] Binswanger, Hans P, Rosenzweig, Mark R, 1986. Behavioral and material determinants of production relations in agriculture. *Journal of Development Studies* 22 (3),503–539.