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# WHAT INCREASES MORE SYSTEMIC RISK: PANIC OR STRINGENCY?

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**Abstract:** *During the COVID-19 epidemic, systemic risk increased significantly due to financial instability and vulnerability in various sectors of the economy. When the coronavirus disease (COVID-19) was declared a pandemic, the panic level of individuals increased due to the severity of the disease, the novelty of the situation, the degree of uncertainty and unknowns, and the stringency of the measures taken by the authorities. Our work wants to cover the part of the literature that aims at the beginning of the event and the effect produced on the systemic risk the reaction of those involved – investors, financial institutions and national decision and regulatory bodies. This paper examines whether the systemic risk in the COVID-19 period was a consequence of the stringent measures taken by the authorities or whether it was the result of the panic reaction of market participants.*

**Keywords:** *COVID-19, Panic, Stringency Measures, Systemic Risk*

**JEL Classification:**

## 1. INTRODUCTION

The end of 2019 introduced a paradigm shift in the global perspective of the economic and financial system's vulnerability to an exogenous and unanticipated event, exemplified by the COVID-19 pandemic. The emergence of the SARS-CoV-2 virus in Wuhan, China, has led to significant and swift choices at national and global levels, affecting individuals, corporations, and both national and international institutions.

The necessity to identify certain patterns at the historical level has led to a comparison between the crisis caused by the virus and other events at the sanitary level, including the Spanish Flu of 1918-1920 and other infections with different viruses at the country or continent level. Similarly, at the level of economic impact, comparisons have been drawn with other significant events, including the Great Depression and the Global Financial Crisis of 2007-2009.

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The advent of the Coronavirus Disease 2019 (COVID-19) pandemic was not merely an unanticipated occurrence, as some scholars have termed it a ‘black swan’ event (Pentro, 2020), precipitating decisions with ramifications for each nation-state at the local and global levels. Additionally, the pandemic presented a unique opportunity to examine the influence of unforeseen circumstances on the daily lives of individuals and on the operations of economic and financial systems (Goodell, 2020).

At the economic level, the COVID-19 shock caused share prices of most companies to fall faster than during the 2007-2009 Global Financial Crisis (GFC) and systemic risk to rise to high levels. The significance is that "this time was different": we were close to a financial crisis and financial institutions seem to have successfully weathered the storm. This has depended to a large extent on the supportive measures taken globally by the various regulators and supervisors, as well as by national governments. But who determines the most systematic risk – the panic caused by the uncertainty of a pandemic or the stringent measures taken by governments?

When the coronavirus disease (COVID-19) was declared a pandemic by the World Health Organization (WHO) (11 March 2020), panic levels among individuals increased due to the severity of the disease, the novelty of the situation, the degree of uncertainty and unknowns, and the stringency of the measures taken by the authorities. Panic was also fueled by the media and the daily news of the number of deaths and dwindling supplies. As expected, the media coverage of the pandemic affected investors' decisions. The difficulty in assessing the significance and impact of the news led to increased volatility in equity markets. The article by (Haroon & Rizvi, 2020) shows that the ongoing COVID-19 outbreak created a media frenzy and competition for "breaking" news, and therefore there appears to be a link between coronavirus-related news and volatility in various industrial sectors of the US stock markets.

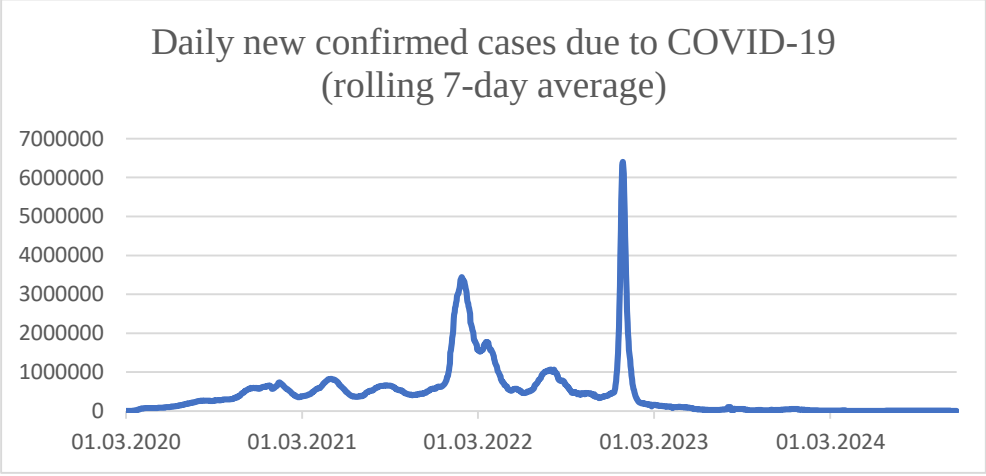
The aim of this paper is to investigate whether the systemic risk in the COVID-19 period was a consequence of the stringent measures taken by the authorities or whether it was the result of the panic reaction of market participants. Our work aims to cover the part of the literature that focuses on the beginning of the event and the effect on the systemic risk produced by the reaction of those involved – investors, financial institutions and national decision-making and regulatory bodies. In this regard, this paper wants to analyze the impact of the panic caused by both the uncertainty of the pandemic and the amount of news on the subject, as well as the measures taken by various institutions to minimize the impact of the events.

Our work is related to (Aggarwal, Nawn, & Dugar, 2021) who investigate the negative impact of COVID-19 on stock market returns. They find that the panic surrounding the pandemic affected overall returns by increasing the market risk premium and decreasing the equity risk premium.

## 2. BASIC FACTS

Five years after the first COVID-19 case in Wuhan, China, the global scenario suggests that we have largely moved on from this event in our lives. It is necessary to examine the factors that contribute to the significant systemic risk associated with it. The motivation stems from the fact that many specialized studies compare the impact of the COVID-19 pandemic with the Global Financial Crisis (GFC) in terms of financial impact.

The COVID-19 pandemic was unfortunately a global phenomenon. According to the Johns Hopkins University (CSSE), by December 2024 there were more than 676 million confirmed cases worldwide. This immense number of cases necessitated rapid and effective decisions by both the public and the private sector.




Source: World Health Organization (2024)

The report published by the International Monetary Fund (IMF, 2020) in April 2020 estimated that the global economy would contract sharply by 3%, significantly higher than during the 2007-2009 crisis. Against this backdrop, most governments responded immediately to minimize the impact of the shock through fiscal, monetary and macro-financial stimulus. On 20 March 2020, the Basel Committee on Banking Supervision coordinated the supervisory policies and responses of COVID-19, which

provided members of the jurisdictions with a set of regulatory and supervisory measures (BIS, 2020). Four years on, these measures have succeeded in mitigating the economic and financial consequences of the pandemic and in preventing a financial crisis of greater magnitude than the previous one.

The global pandemic has been identified as the catalyst for what is commonly designated as the 'Covid-19 recession', representing one of the most significant global economic downturns in recent history. In 2020, the global economy experienced a sharp contraction, with G20 economies exhibiting a year-on-year decline of approximately 3.4% in the first quarter. By mid-2020, it was estimated that approximately 400 million full-time jobs had been lost globally, with workers' income declining by approximately 10%, representing a loss of over $3.5 trillion (Martin, Sachez, & Wilkinson, 2023).

According to (Baldwin & Weder di Mauro, 2020), the COVID-19 pandemic is both a demand and a supply shock that is likely to significantly slow aggregate trade flows. Focusing on the financial and banking risks posed by the pandemic, (Beck, 2020) argues that the impact would depend on three factors – the global economic impact of the pandemic, how fiscal and monetary policies are handled and the regulatory responses to potential bank fragility. Among financial institutions, (Cecchetti & Schoenholtz, 2020) argue that banks are very vulnerable to potential economic shocks, comparing the challenges to the collapse of a bank. According to (Mann, 2020), the linkages between global commodity markets, financial markets, public sentiment and the economy are likely to exacerbate the situation and make policy responses difficult.

At an economic level, the COVID-19 pandemic has had different effects across different industries, with some sectors experiencing significant disruptions while others have adapted to new consumer behavior. The travel and tourism industry were one of the hardest hits, with severe travel restrictions and global lockdowns. This led to a drastic reduction in flights, hotel stays and other tourism-related activities. International travel came to a virtual standstill as countries imposed strict entry requirements, significantly affecting airlines, travel agencies and related businesses[ii]. The retail sector showed a mixed performance during the pandemic[iii]. Physical retail outlets suffered significant losses due to closures and reduced consumer activity. Conversely, e-commerce experienced an unprecedented surge as consumers shifted their shopping habits online[iv]. This shift highlighted the growing

[ii] https://www.unwto.org/impact-assessment-of-the-covid-19-outbreak-on-international-tourism
[iii] https://hortoninternational.com/how-covid-19-is-impacting-the-retail-industry/
[iv] https://www.statista.com/topics/6139/covid-19-impact-on-the-global-economy/#statisticChapter

importance of digital infrastructure in retail. Manufacturing and global supply chains were severely disrupted, leading to delays and shortages in the delivery of goods and raw materials. The pandemic highlighted the vulnerability of just-in-time inventory systems and over-reliance on single-source suppliers. Several industries, such as automotive and electronics, experienced production slowdowns due to limited access to key components. The service sector, particularly businesses that rely on face-to-face interaction, faced severe challenges[v]. The hospitality and entertainment sectors suffered prolonged closures, while those that reopened operated at reduced capacity and under strict health regulations. Many service-oriented businesses reported sharp declines in sales as consumer demand for dining out, attending events and other leisure activities remained subdued even after restrictions eased (Naseer, et al., 2023).

At the financial level, the COVID-19 pandemic had a significant impact on the stock market and financial stability, leading to unprecedented volatility, sharp declines and subsequent recoveries.

In March 2020, global stock markets experienced a historic downturn as investors reacted to the uncertainty and economic disruption caused by the pandemic. For example, the S&P 500 Index fell approximately 34% from its mid-February peak in just over a month, one of the fastest declines in market history. Other major indices, including the Dow Jones Industrial Average and the NASDAQ Composite, also suffered significant losses during this period (Tobias, Natalucci, & Qureshi, 2022).

Studies suggest that the pandemic led to a significant increase in market volatility. The conditional volatility of stock returns spiked in several global markets, with negative news related to COVID-19 affecting investor sentiment more than positive news about recovery ( (Khan, Fifield, & Power, 2024), (Basouny, Bouaddi, Ali, & R., 2021)).

After the initial shock, stock markets began to recover rapidly. By mid-August 2020, the S&P 500 had returned to its pre-pandemic level, reflecting a remarkable rebound driven by several factors. The rapid recovery was facilitated by increased investor risk appetite as central bank intervention provided reassurance about economic stability. This led to a surge in equity prices across many sectors (Tobias, Natalucci, & Qureshi, 2022).

Despite the initial turmoil, the global financial system proved resilient throughout the pandemic thanks to proactive policy measures. However, concerns

[v] https://www.bls.gov/opub/ted/2022/u-s-manufacturing-output-hours-worked-and-productivity-recover-from-covid-19.htm

remain about the potential overvaluation of equity markets and the long-term impact of persistently low interest rates. The pandemic highlighted the importance of managing volatility in times of crisis. Regulatory measures, such as short-selling bans, were introduced in some regions to stabilize markets and restore investor confidence (Jan, Li, Xiyu, Farhan Basheer, & Tongkachok).

Central banks responded aggressively to the crisis with measures such as interest rate cuts and quantitative easing. While these measures aimed to stabilize financial markets, they also introduced complexity. The expansionary monetary policies encouraged investors to take on greater risks, resulting in the inflation of asset valuations prior to the advent of the pandemic. When the crisis materialized, this overvaluation contributed to precipitous declines in stock prices as investors rapidly adjusted their expectations (Tobias, Natalucci, & Qureshi, 2022).

The global nature of the pandemic meant that there was a high degree of interconnectedness between financial markets, with shocks in one region having a rapid and significant impact on others. It was observed that increased volatility was not exclusive to developed markets, but also manifested in emerging economies. This was attributed to heightened correlations among global indices. The interconnectedness of global markets amplified the effects of negative news and market reactions across borders ( (Basouny, Bouaddi, Ali, & R., 2021), (Khan, Fifield, & Power, 2024)).

The long-term consequences of these policies are yet to be fully realized. Although some recovery has been observed, with GDP growth returning in numerous regions by late 2021 and into 2022, challenges such as rising inflation have emerged as a consequence of an increased money supply and disrupted supply chains. Inflation rates increased significantly globally in 2021 and 2022 due to the combination of pent-up demand and constrained supply. The global economic and financial systems have been significantly impacted by the ongoing pandemic. While the immediate consequences were severe, the longer-term implications will continue to evolve as economies adapt to the new realities of the post-pandemic era ( (Buch, 2021), (Martin, Sanchez, & Wilkinson, 2023)).

## 3. SYSTEMIC RISK DURING COVID-19 PANDEMIC

The Global Financial Crisis (GFC) or the European Debt Crisis was directly related to economic activity, and the impact was felt in terms of systemic risk. In the case of the COVID-19 pandemic and later the military conflicts (the Ukrainian war

and the Israel-Hamas conflict), the effect was exogenous and felt at several levels. As the contemporary world has never faced such a challenge, which has had a significant impact on all activities and sectors, it has prompted both government institutions and central bodies to respond loudly. All these events have once again focused on understanding how systemic risk spreads.

The COVID-19 pandemic introduced a different type of systemic risk, originating from the real economy rather than a specific sector, as was the case during the GFC when the source of the crisis was the financial system. Studies have found that the level of systemic risk during the pandemic was higher than during the GFC ( (Rizwan, Ahmad, & Ashraf, 2020), (Baumöhl, Bouri, Hoang, Shahzad, & Výrost, 2020)). The pandemic was also the first major event since the GFC that provided an opportunity to assess the effectiveness of the measures taken to mitigate the shock and impact of the 2007-2009 crisis (Dodd-Frank Act, Basel III, and national macroprudential policies).

The spread of the virus forced governments to impose containment measures, including social isolation, lockdowns and business closures. These decisions resulted in significant reductions in revenues and costs for businesses, as well as job losses and reduced incomes for households.

During the COVID-19 epidemic, systemic risk increased significantly due to financial instability and vulnerability in various sectors. Studies have shown that the epidemic has a significant impact on systemic risks, especially in the financial sector. (Duan, Ghoul, Gurdhami, Li, & Li, 2021) analyzed the impact of COVID-19 on international systemic risk and found that the growth rate of confirmed COVID-19 cases had a positive and significant effect on systemic risk.

Institutions and companies took swift action to try to mitigate the impact on the population. Despite the shock to households and firms, these fiscal and monetary policy responses have helped to protect the financial system from a major crisis.

The results obtained by (Duan, Ghoul, Gurdhami, Li, & Li, 2021) indicate that the growth rate of confirmed cases is associated with an increase in systemic risk through two channels: the rigor with which governments responded to the impact of the pandemic and the risk of bank failure. The authors also expect the fragility of the banking system to increase as a result of the pandemic shock. However, (Carletti, Claessens, Fatas, & Vives, 2020) note that banks have a higher resilience capacity due to the implementation of reforms after the 2007-2009 global financial crisis, and that firms, households and banks have received government support, reducing the potential negative impact.

Government measures included: encouraging increases in capital levels by issuing directives requiring banks not to pay dividends, to reduce or waive capital requirements for some risk-weighted assets, and to release some capital buffers, such as absorptive countercyclical capital, which is designed to be used during recessions (International Monetary Fund, 2020). These policies have allowed banks to release capital to provide liquidity and to continue lending to riskier sectors. (International Monetary Fund, 2020) notes that the regulatory relief provided by these policies reduced the requirements of the Basel Accord to a minimum in some jurisdictions. Most regulatory responses have been consistent with the core standards implemented after the global financial crisis, focusing on the individual soundness of institutions. For the CoVaR assessment of European banks, (Borri & Di Giorgio, 2021) note that the new regulatory decisions implemented after the 2007-2009 global financial crisis, which imposed higher capital requirements on banks and stricter stress tests, proved successful in avoiding another financial crisis. However, (Didier, Huneeus, Larrain, & Schmulker, 2021) warn that the current regulatory infrastructure was not designed to deal with an exogenous systemic shock such as the COVID-19 pandemic.

The implementation of government support programs with the objective of stabilizing economies has resulted in the reduction of immediate risks, achieved through the provision of liquidity and the prevention of widespread defaults among businesses and households[vi]. Nevertheless, the reliance on these measures gave rise to concerns regarding the long-term financial stability and the potential moral hazard.

The efficacy of regulatory reforms introduced in the wake of the global financial crisis was evaluated during the pandemic. As (Duan, Ghoul, Gurdhami, Li, & Li, 2021) mentions, while certain reforms improved resilience, they proved inadequate in fully protecting banks from the detrimental consequences of the pandemic.

## 4. PANIC INDEX DURING COVID-19

As classical financial theory does not leave out the role of investor sentiment, its impact appears to be significant, as some patterns influence the evolution of different parts of the markets. Consequently, (Baker & Wurgler, 2006) developed a measure of market changes influenced by investor sentiment in the form of an index called the Investor Sentiment Index (ISI). Investor sentiment refers to the general attitude of investors towards a particular event or piece of information. It affects

[vi] https://www.esrb.europa.eu/mppa/covid-19-policy-measures/html/index.en.html

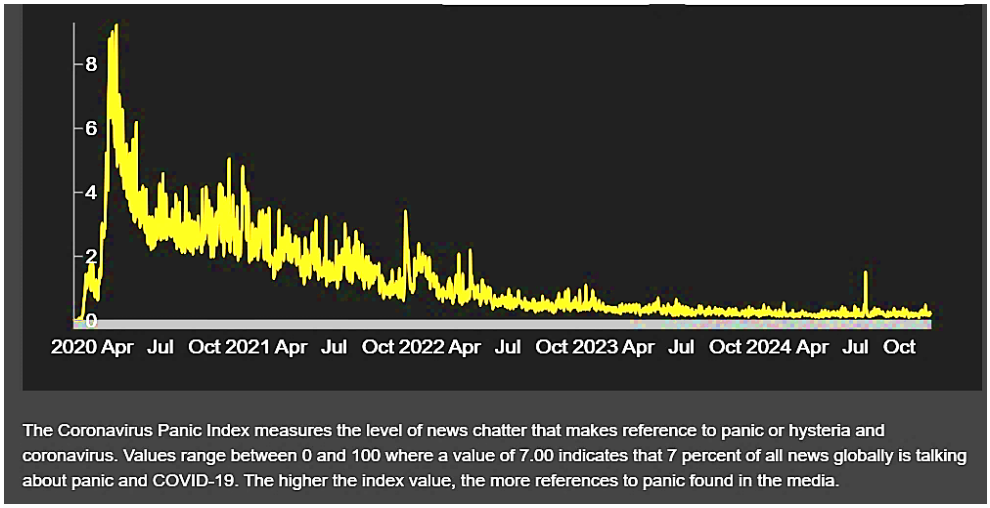
market activity and prices. In general, a rise in prices is considered bullish sentiment and a fall in prices is considered bearish sentiment. Also, in terms of sentiment, low sentiment refers to when prices are falling, and high sentiment refers to when prices are rising. Investor sentiment can both influence and be influenced by financial stability. (Gaies, Sahbi Nakhli, Ayadi, & Sahut, 2022) mention in their paper that during the significant events affecting the financial system, investor sentiment is related to financial stability. A similar conclusion is also reached by (Nițoi & Pochea, 2022), who mention that "markets are more sentiment driven in turbulent times" and propose a measure for quantifying systemic risk based on sentiment.

Over time, various indexes and measurement tools have been developed for sentiment analysis, ranging from the best-known Volatility Index (VIX) or Fear Index to the American Association of Individual Investors (AAII) Sentiment Survey, TRMI – Thomson Reuters Market Psych Index, Google Trends, Global Fear Index or Media Coverage Indices.

The global health issues that emerged at the end of 2019 led to the development of literature on market reactions and research on the topic. Raven Pack developed the Coronavirus Media Monitor[vii], which includes various indicators related to panic, fake news, media hype and global sentiment.

When the World Health Organization (WHO) declared the novel coronavirus disease (COVID-19) a pandemic many individuals experienced a sense of heightened concern. This was due to several factors, including the severity of the disease, the novelty of the situation, the degree of uncertainty and unknowns, and the stringency of the measures taken by the authorities. It is also worth noting that the media and the daily news of the number of deaths and dwindling supplies may have contributed to the atmosphere of panic. As anticipated, the media coverage of the pandemic influenced investors' decisions. The challenge in gauging the importance and impact of the news resulted in heightened volatility in equity markets. The article by (Haroon & Rizvi, 2020) indicates that the ongoing COVD-19 outbreak led to a media frenzy and competition for "breaking" news, suggesting a potential correlation between coronavirus-related news and volatility in various industrial sectors of the US stock markets.

[vii] More information at https://www.ravenpack.com/solutions/research/coronavirus-media-monitor?.




Source: https://coronavirus.ravenpack.com/

Furthermore, when COVID-19 was declared a pandemic, little was known about the virus and the market reaction was characterized by uncertainty about the future. Economic relations between countries were affected. In their article (Narayan & Kumar, 2023), they mention that in the case of Asian countries, the US is their main importer. During the COVID-19 period, trade restrictions and lower global demand led to supply chain disruptions, resulting in a decline in trade volumes and production, causing massive losses to businesses and making the trading system fragile.

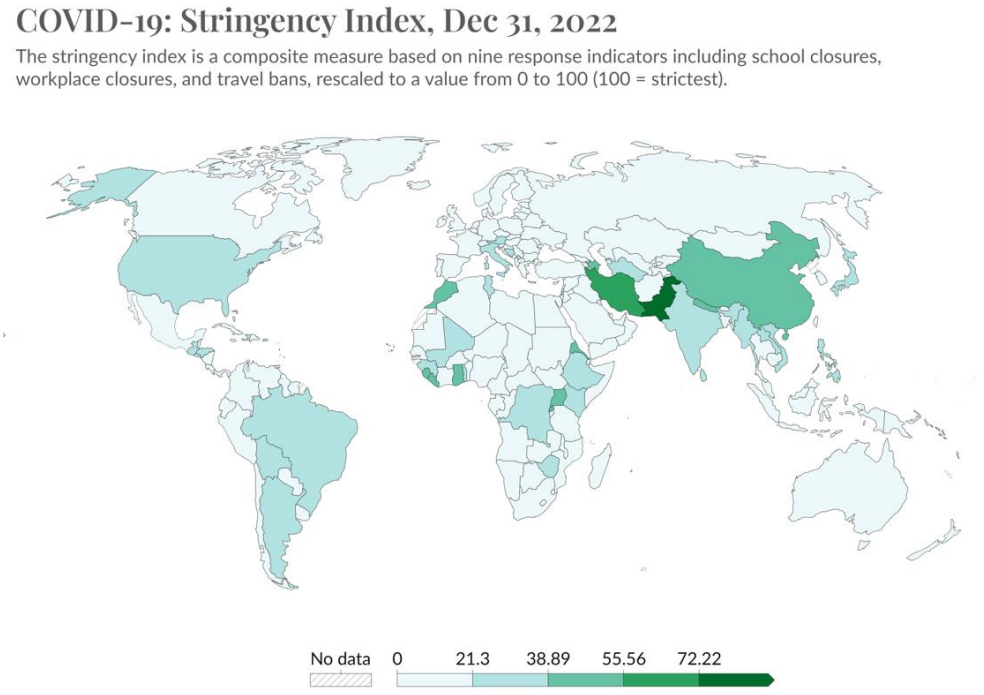
Negative news related to COVID-19, such as rising infection rates and government lockdowns, had a more pronounced effect on market volatility than positive news. Studies have shown that bad news significantly affects the conditional variance of stock returns, leading to asymmetric volatility behavior (Khan, Fifield, & Power, 2024).

## 5. STRINGENCY MEASURES DURING COVID-19

In the context of the COVID-19 pandemic, stringency refers to a set of government policies aimed at controlling the spread of the virus through various containment and closure strategies. The most widely recognized metric for assessing these policies is the stringency index developed by the Oxford COVID-19 Government Response Tracker (OxCGRT) (Hale, et al., 2021).

The Stringency Index is a composite measure that aggregates the stringency of government responses across countries. It is calculated based on 9 key indicators

reflecting different containment and closure measures: school closures, workplace closures, cancellation of public events, restrictions on public gatherings, closure of public transport, home confinement orders, public information campaigns, restrictions on internal movement and controls on international travel. It should be noted that the Index does not assess the appropriateness or effectiveness of these measures, only their level of severity.




Source: Blavatnik School of Government, University of Oxford (2023)

Although the primary objective of measures to reduce the impact of the pandemic is public health, there are implications for several sectors, including the economy. Stringent measures have an impact on economic performance and can lead to economic downturns due to reduced consumer activity and business closures. (Giofre, 2021) analyses the index with foreign investment trends and found that increased stringency can discourage investment during a pandemic. Also, the study by (Aggarwal, Nawn, & Dugar, 2021) states that the stringency measures affect profitability by updating growth forecasts and updating the market risk premium.

Considering the decisions taken after the global financial crisis of 2007-2009 and the increased resilience of the financial system compared to that period, the expectations for the shock absorption capacity of the COVID-19 pandemic by the

banking system were higher. This is why, as mentioned by (Demirguc-Kunt, Pedraza, & Ruiz-Ortega, 2021), the impact of the pandemic was greater at the level of bank securities. Furthermore, the need to quickly implement measures to reduce the impact of the pandemic shock, both at the level of central banks and governments, has led to a decrease in bank profitability and solvency, an increase in government costs and an increase in economic risks ( (Demirguc-Kunt, Pedraza, & Ruiz-Ortega, 2021)).

The COVID-19 pandemic had a significant impact on the economy and bank lending through fiscal measures. The economy has regained momentum thanks to unprecedented support and the introduction of containment measures in response to the reduction in the number of infections. Despite the benefits of these measures, the economic outlook remains subdued and debt levels – both private and public – increased during the pandemic.

According to a study by (Demirguc-Kunt, Pedraza, & Ruiz-Ortega, 2021), the negative impact of the crisis was mitigated by liquidity support, debt relief programs and monetary easing, but this differed across banks and countries. Bank stocks experienced abnormally negative returns due to countercyclical prudential measures. The authors also examined the impact of different measures and classified them into four categories: (i) liquidity support, (ii) prudential measures, (iii) debt relief, and (iv) monetary policy. The positive impact on profitability was attributed to measures related to liquidity and debtor support.

Relevant in this case of adopted measures to mitigate the effects of the pandemic is the survey of (Brodeur, Gray, Islam, & Bhuiyan, 2021), which examines the literature related to COVID-19 and government responses, synthesizing the results of a large number of studies.

## 6. PANIC OR STRINGENCY DURING COVID-19?

The literature on pandemic panic and its impact on systemic risk is limited, focusing on the study of the impact on financial or oil markets. However, the article by (Haroon & Rizvi, 2020) can be considered relevant to the sentiment side generated by coronavirus news. They empirically show that an increase in stock market volatility is associated with the overwhelming panic generated by news and media. The impact is particularly significant for sectors directly affected by the pandemic.

A similar result is obtained by (Aggarwal, Nawn, & Dugar, 2021), who show that the panic caused by the COVID-19 virus negatively affects stock returns by updating the market risk premium.

The research suggests that both panic and stringency measures have an impact on systemic risk, but in different ways.

Increased panic, as measured by the Ravenpack Panic Index, leads to higher stock return volatility in both US and global markets (Szczygielski, Charteris, Bwanya, & Brzeszczynski, 2023). This suggests that panic has the potential to contribute to systemic risk by destabilizing financial markets.

As shown in (Aggarwal, Nawn, & Dugar, 2021) tighter lockdowns in the Oxford COVID-19 Government Response Tracker have a negative and significant impact on stock returns through the growth expectations channel. Tighter lockdowns may affect economic growth prospects, leading to systemic risk.

The same study finds that after controlling for the stringency of lockdowns, COVID-19 panic does not lead rational investors to drive down stock prices, implying that panic alone is not a major driver of systemic risk. Surprisingly, after controlling for panic, increased stringency has a positive impact on returns through the market risk premium channel. This unexpected finding suggests that stringency may also have a stabilizing effect on markets by making investors feel safer.

The pandemic led to a notable increase in the frequency of abrupt price movements, or "jumps," in financial markets. These jumps were frequently prompted by updates regarding pandemic developments and government measures. Investors exhibited a pronounced response to the announcement of prospective new restrictions or alterations to public health policy, which gave rise to abrupt market fluctuations. The character of these fluctuations differed across countries, contingent on their distinctive pandemic management strategies (Zhu, Wen, & Song, 2024).

The interconnectedness of global financial markets means that shocks from one market will quickly propagate to others. There is no doubt that during periods of panic, these network effects can and will amplify systemic risks, as was demonstrated when developed economies experienced significant market disruptions that affected emerging markets.

Panic has a more immediate and acute impact on market stability than stringency measures. Panic triggers rapid sell-offs and volatility that can destabilize financial systems almost instantaneously. In contrast, stringency measures often have a delayed effect, influencing economic fundamentals over time. While they may stabilize situations in the long run, their initial implementation can lead to increased uncertainty and risk.

## 7. CONCLUSIONS

In summary, panic and stringency affect systemic risk, but the research (Aggarwal, Nawn, & Dugar, 2021) suggests that stringency measures have a more significant negative effect, mainly by undermining economic growth expectations.

The influence of panic and stringency measures on financial systemic risk are still a subject of investigation, particularly in the context of crises such as the global pandemic caused by the SARS-CoV-2 virus. Both factors have a significant impact on the stability of the financial system. However, their effects differ in nature and magnitude.

A state of financial market panic is characterized by a rapid loss of confidence among investors, which in turn gives rise to a widespread sell-off and heightened volatility. The recent pandemic caused by the SARS-CoV-2 virus is an example of a case where a significant degree of panic was observed, with a notable impact on systemic risk. Panic can lead to heightened market volatility, as evidenced by the rapid declines in stock prices during the early days of the pandemic. Studies have confirmed that such panic-induced volatility can spill over across global markets, exacerbating systemic risk.

In conclusion, while both panic and stringency measures contribute to systemic risk, panic exerts a more pronounced immediate effect on financial stability due to its capacity to rapidly alter market dynamics. In contrast, stringency measures influence systemic risk through longer-term economic adjustments and shifts in investor behavior.

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