REVIEW ARTICLE

Management Insight, Vol.XVI, No.2; 2020 Print ISSN: 0973-936X; Online ISSN: 2456-0936

COVID -19 and Indian Financial Markets: A Review

Kamaldeep Kaur Sarna
Assistant Professor, Department of Commerce, Shri Ram College of Commerce, University of Delhi

Abstract

COVID-19 is aptly stated as a Black Swan event that has stifled the global economy. As coronavirus wreaked havoc, Gross Domestic Product (GDP) contracted globally, unemployment rate soared high, and economic recovery still seems a far-fetched dream. Most importantly, the pandemic has set up turbulence in the global financial markets and resulted in heightened risk elements (market risk, credit risk, bank runs etc.) across the globe. Such uncertainty and volatility has not been witnessed since the Global Financial Crisis of 2008. The spread of COVID-19 has largely eroded investors' confidence as the stock markets neared lifetimes lows, bad loans spiked and investment values degraded. Due to this, many turned their backs on the risk-reward trade off and carted their money towards traditionally safer investments like gold. While the banking sector remains particularly vulnerable, central banks have provided extensive loan moratoriums and interest waivers. Overall, COVID-19 resulted in a short term negative impact on the financial markets in India, though it is making a way towards V-shaped recovery.

In this context, the present paper attempts to identify and evaluate the impact of the pandemic on the financial markets in India. Relying on rich literature and live illustrations, the influence of COVID-19 is studied on the stock markets, banking and financial institutions, private equities, and debt funds. The paper covers several recommendations so as to bring stability in the financial markets. The suggestions include, but are not limited to, methods to regularly monitor results, establishing a robust mechanism for risk management, strategies to reduce Non-Performing Assets, continuous assessment of stress and crisis readiness of the financial institutions etc. The paper also emphasizes on enhancing the role of technology (Artificial Intelligence and Virtual/Augmented Reality) in the financial services sector to optimize the outcomes and set the path towards recovery.

Keywords: COVID-19, Financial Markets, Financial Institutions, Stock Markets, Foreign Institutional Investors.

Management Insight (2020). DOI: 10.21844/mijia.16.1.1

Introduction

The ongoing pandemic due to widespread of Covid-19 virus has left economies derailed. The enforcement of worldwide lockdown brought economic activities to a standstill leaving millions jobless. Covid-19 is aptly stated as a Black Swan event that has stifled the global economy. As coronavirus wreaked havoc, GDP's contracted globally, unemployment rate soared high, and economic recovery still seems a far-fetched dream. Most importantly, the pandemic has set up turbulence in the global financial markets and resulted in heightened risk elements (market risk, credit risk, bank runs etc.) across the globe. Among various sectors of the Indian economy that were deeply impacted, the repercussions of the lockdown were clearly visible in the financial markets. Sudden slump in share prices, liquidity crunch and increasing probability of defaults had all players in the market hanging by the edge. The efforts of the government towards liquidity infusion brought a surge in economic activity leading to a recovery in the stock market. However, the banking and private debt sectors find themselves in a tough spot despite various market operations.

Such uncertainty and volatility has not been witnessed since the Global Financial Crisis of 2008. The spread of COVID-19 has largely eroded investors' confidence as the stock markets neared lifetimes lows, bad loans spiked and investment values degraded. Due to this, many turned their backs on the risk-reward trade off and carted their money towards traditionally safer investments like gold. Although, the results indicate that COVID-19 resulted in a short term negative impact on the stock market, it is making a way towards V-shaped

Corresponding Author: Kamaldeep Kaur Sarna, Assistant Professor, Department of Commerce, Shri Ram College of Commerce, University of Delhi, E-mail : kamaldeepkaursarna@gmail.com
How to cite this article: Sarna K.K. (2020). COVID-19 and Indian Financial Markets: A Review. Management Insight, 16(2) 1-8
Source of support: Nil
Conflict of interest: None
Received: 28.12.2020; **Accepted:** 24.03.2021; **Published:** 14.07.2021

© The Author(s). 2020 Open Access This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and non-commercial reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/zero/1.0/) applies to the data made available in this article, unless otherwise stated.

recovery. As the banking sector remains particularly vulnerable, central banks have provided extensive loan moratoriums and interest waivers. This can be seen in the way Reserve Bank of India has come out with numerous revisions of the repo-rates and changes in prerequisites for loan agreements amongst others. Relying on rich literature and live illustrations, the influence of COVID-19 is studied on the stock markets, banking and financial institutions, private equities, and debt funds. The paper covers several recommendations so as to bring stability in the financial markets. The suggestions include, but are not limited to, methods to regularly monitor results, establishing a robust mechanism for risk management, strategies to reduce Non-Performing Assets, continuous assessment of stress and crisis readiness of the financial institutions etc. The paper also emphasizes on enhancing the role of technology (Artificial Intelligence and Virtual / Augmented Reality) in the financial services sector to optimize the outcomes and set the path towards recovery.

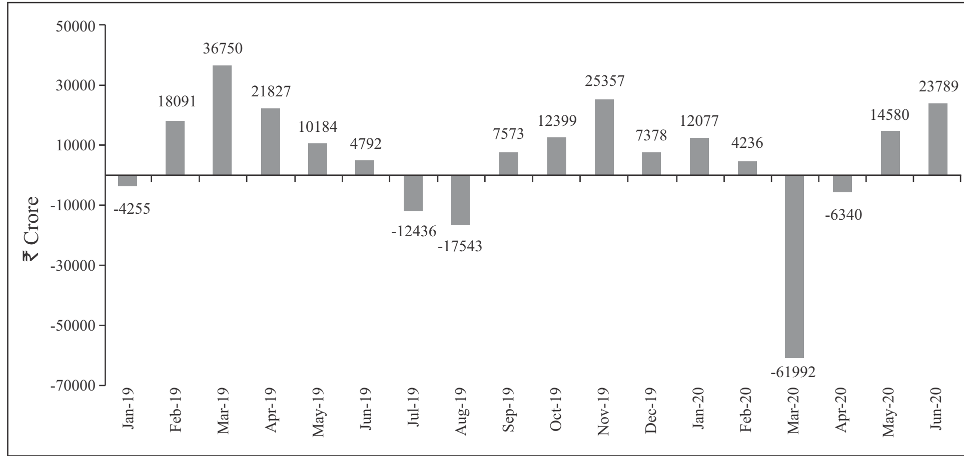
Thus, the present paper is an attempt to comprehend the behaviour of various parties to the financial set up in India during the lockdown. Various causes, before and during the lockdown, leading to the current scenario of different markets as well as their consequences are highlighted. Additionally, opportunities provided by integration of artificial intelligence with the financial markets in an attempt to foresee the future of financial markets in India is explored. The present paper is divided into six sections. After the introductory first Section, Section 2 describes the scenario of V-shaped equity markets amidst the pandemic. Section 3 evaluates the ramifications of the pandemic on the wobbling banking sector. Analysis of Debt markets in India during the crisis is examined in Section 4. Section 5 discusses the importance of Artificial Intelligence (AI) in uplifting the economy during and post-pandemic. Finally, Section 6 concludes from broad policy perspective.

V-shaped Equity Markets

Many experts believe that the stock markets are both the backbone and the reflector of a country's economic progress. Stock markets across countries are not only interlinked and correlated, but are also largely dependent on investor sentiments. The markets have indicated a V-shaped trend: the markets collapsed when WHO declared the COVID-19 pandemic. After the markets reached nearly lifetime lows, they once again started to rise. The climb in prices of some shares and equities was so much that many experts opine the existence of a speculative bubble.

Extant literature indicates that market liquidity, transaction cost, and marketability affect investor choice while also explaining stock market returns (Demsetz,1968; Amhiud et al.,2015). The spread of the pandemic largely raised concerns over investors' liquidity due to the degree of uncertainty surrounding the market. The initial stages of the pandemic saw many investors reluctant to buy equities while others were trying to square off their positions and exit the market causing the exchange to be illiquid. Secondly, the increase in volatility to almost 2.77 caused mid-caps, small-caps and all sectors to show drastic negative growth rates. Amongst all the sectors, realty, bankex and auto performed the worst.Lastly, a colossal amount of foreign investment outflows led to Sensex crashing over 38% in March and April. Due to this the INR has also depreciated by approximately 7.2% against the USD since March.

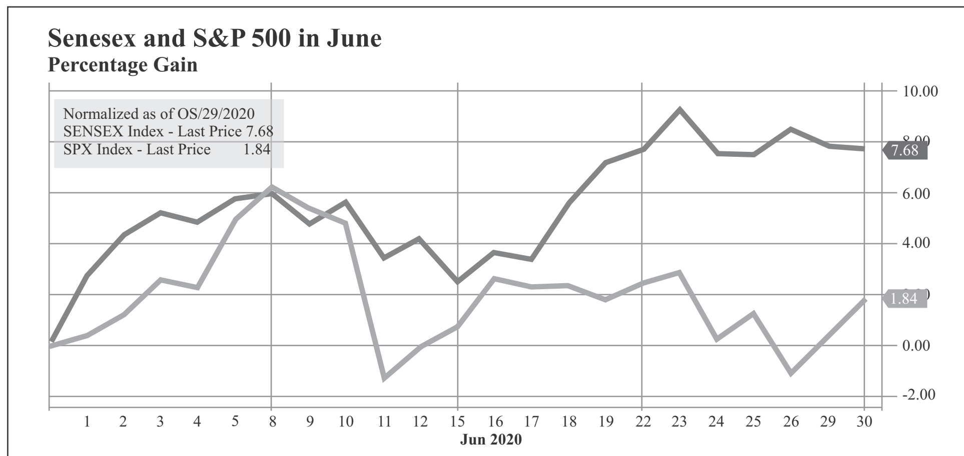
Although, in the first half of the year there seemed to be an extremely indirect relationship between the increase in COVID cases and the stock market returns, the second half dictates a completely different scenario. As we head into the month of September, the bulls ambush the bears. With little or no bearish retaliation, a dramatic upswing can be seen in the equity markets: they have been rallying as much as 50% since, seemingly relentless in their conquest. Fundamentals and valuations appear to be of limited relevance nowadays. As lockdowns were enforced, people had a lifetime of savings and umpteen time at hand. Consequently, they turned toward the stock market to earn a quick buck. More than being a reflection of the economic state of the world, markets have become a legal gambling platform. Such liquidity infusions within the market have led to inflated asset values.



Source: NSDL

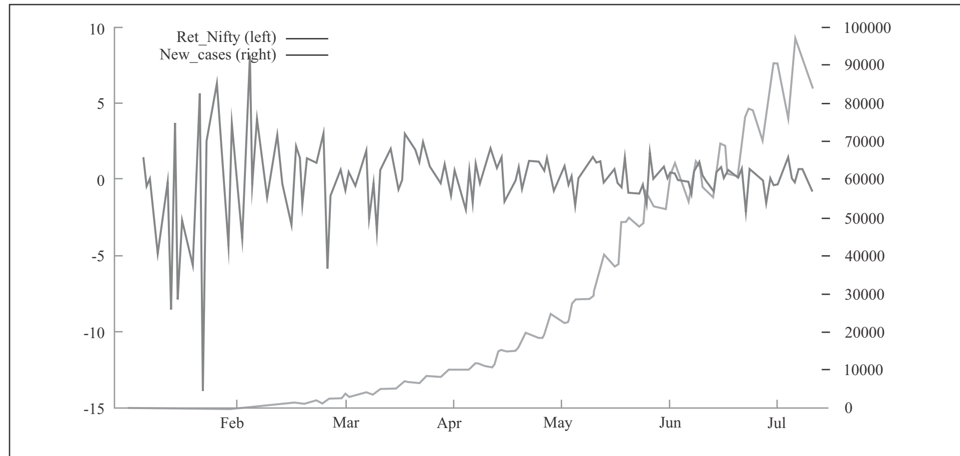
Figure 1: Foreign Portfolio Investment Outflows from the India Equity Markets

This pulled together with enormous relief and stimulus packages acted as a magnifying catalyst to market liquidity. Lying at the heart of pricey stocks and possible signs of the speculative bubble are amateur trading activities made easierby millennial-friendly apps such as Upstox and Robinhood. Looking at privateequity investments, the index data highlights a 0.77 volatility. This implies that the private equity investments are less volatile as compared to market investments (KPMG, 2020). However, there are many challenges being faced by private equities in the current scenario in terms of uncertainty of future cash flows, impact on risk free rates and on-equity specific risk premiums. The interest rates in the economy are also fluctuating which are adding on the existing uncertainty and eroding investments.



Source: Bloomberg

Figure 2: V-shaped equity markets



Source: Author's Compilation

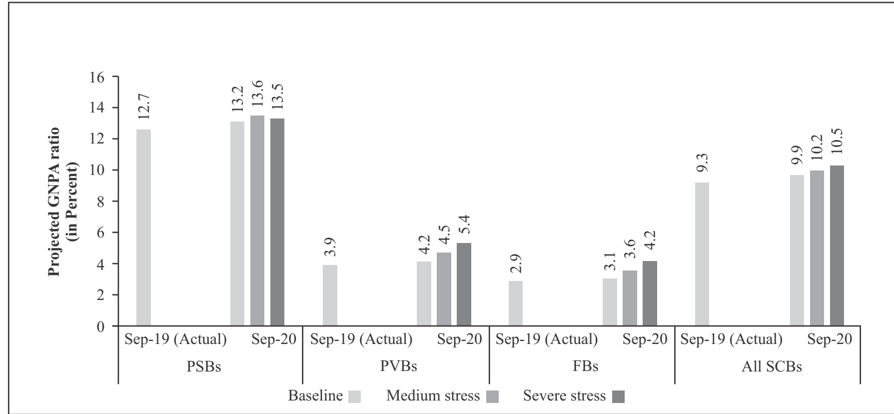
Figure 3: Covid-19 cases and Stock Return

In conclusion, the stock returns of all the indices were initially negative, however we are now seeing a global recovery. However, many economists and financial experts opine that the recovery is unsustainable. Even after going through major financial turmoil, some stocks have touched life time highs. The impact of COVID 19 has highlighted the ways in which consumer spending and the markets can be severely impaired by uncertainty.

Wobbling banking sector

The spread of the novel COVID-19 has taken the banking sector to its knees. The adverse impact is clearly visible on the banks, non-banking financial institutions and the financial services sector in totality. With the help of this section, we aim to analyse four aspects of the same. Firstly, the rise in non-performing assets; secondly, ramifications with respect to liquidity; thirdly, the revenue compressions in the sector and lastly, the steps taken by the RBI.

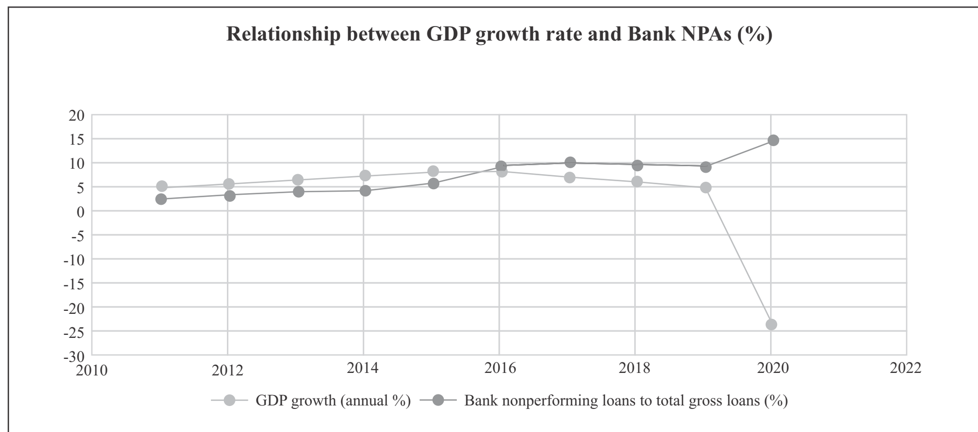
Entering into the second quarter of FY 2020-21, rating agencies like S&P and Fitch indicated major red flags for the banking sector and therefore, revised the operating environment score for the critical sector by a notch. This left India at a rating of BBB- which is just one score above the junk grade. The Indian banking sector further faced obstacles as it was said to be undercapitalized and saddled with bad loans (ET Market New, 2020). There has been a substantial increase in the non-performing assets and loan defaults during the lockdown period. The major proportion of NPAs are being generated by the Medium and Small Enterprises (MSME) Sector due to substantial fall in their revenues, stops in production amongst others. Out of the loans worth Rs. 2.32 lakh crore of the MSME sector, loans worth Rs. 13,500 crore are at a high risk of default (Rakesh Kumar,2020). As the NPAs rise by approximately 7%, India is said to have the worst asset-ratio of any major nation. With the mounting of bad debts, there has been a major slowdown in credit growth clubbed with deterioration of the asset quality.



Source: The Financial Stability Report by RBI.

Figure 4: Gross Non-Performing Asset Ratio for private sector banks, public sector banks and Non-banking financial institutions (September 2019- September 2020).

The increased loan defaults continue to have a trickle-down effect on the liquidity and capital adequacy in the Indian Banking Sector. The loan growth for most private banks has dropped: Kotak Mahindra Bank's loan growth dropped by approximately 6.7% amongst others. Furthermore, as the banks become extremely stringent on their new lending policies combined with the economic downturn, the lending rates have been the lowest since 2008. Hence, banks continue to face weak financials and poor liquidity. The struggles of the private banking sector to survive in the volatile business environment can be seen in the way all major banking: ICICI, HDFC, Kotaketc have raised capital and funds from the public during this period. All these factors also led to revenue compressions as the banking industry market value fell to a level lower than that of the 2008-09 crisis. The causations of them include lower net interest margins, drop in payment revenues and a decline in trade finance and cross-border payments.



Source: Author's Compilation

Figure 5: Counter-Cyclical Relationship between GDP and Bank NPAs

Looking at the wobbling banking sector, it became also imperative for the Reserve Bank of India to intervene. There were a series of policies and measures implemented by them for keeping the financial services sector afloat. The relief measures include extensive loan moratoriums and interest waivers. RBI has granted all the banks a three months grace period during which they have some respite from rules governing bad loans. There has also been a reduction in the Cash Reserve Ratio by 100 basis points to 3% of the net demand and time liabilities. Furthermore, the reverse repo rate is 40 base points lower whereas the repo rate has been reduced

from 5.15% to 4.40%. Finally, the RBI also infused $6.5 billion of additional cash for banks to lend to shadow leaders and small borrowers.

While the RBI has introduced a new monetary policy in this period of crisis, a lot still remains to be done. It is imperative that the central bank takes all possible initiatives to maintain sufficient liquidity in the financial system and its constituents. The infusion of adequate credit flows is also a must for putting the medium and small enterprises on track. Even though the banking system is more stable now than it was in the months of March and April, many more policies have to be implemented to uproot the uncertainty.

Debt: The clash of risk and reward

Turning our attention towards the debt dynamics of the economy, the lockdown significantly reduced economic activity leaving the private debt and Treasury Bondmarket in turmoil. The sudden drying up of a significant amount of cash flows has brought tension among all market players as the danger of increasing delinquent investments hovers over their heads.

The corporate bonds market in India has been in a downward spiral since the ILFS default, AAA rated company, causing a major liquidity squeeze. This set up a domino effect leading to a variety of defaults by companies on principal and interest payments including Dewan Housing Finance Ltd.(DHFL). Clubbed with this was rating downgrades to a variety of debt funding companies as the cascading effect of these defaults spilled over to mutual funds and banks that had a large degree of exposure to IL & FS and DHFL (Nath, 2020;Das,2020).Correspondingly, commercial paper (CP) and certificate deposit (CD) rates were subject to more volatility as the stress on the commercial debt market continued to build (Nath, 2020; Das,2020).

Talking of the current scenario, the burden on the debt market of the nation has heightened with India Ratings and Research predicting additional debt worth Rs. 1.67 trillion turning delinquent as an impact of Covid -19. Furthermore, the threat of default along with cash requirements has driven the investor sentiment towards risk aversion. Debt schemes have come under redemption pressure as leading investors have withdrawn from investment grade corporate bonds with no takers for lower-rated and unrated corporate papers(Neogi,2020). To meet the redemption requirements, debt schemes and fund managers have averted to selling higher-ratedliquid bonds leaving their investment portfolio exposed to riskier investments. Yield spreads across different rated bonds along with CD and CP rates have become highly volatile with default probabilities continuing to rise.

Source: The Hindu-BusinessLine

Figure 6: Volatility of Certificate Deposit (CD) rates

The government on its part, along with the RBI, has resorted to various monetary and fiscal measures to provide liquidity support to corporates in the short run. Various market operations included rate cuts, cuts in Cash Reserve Ratio and Targeted Long term repo operations along with special liquidity facility for mutual funds to ease their liquidity papers. The idea was to incentivize banks to invest in investment grade corporate bonds,commercial papers and other debt instruments to provide liquidity to non-banking

financial corporates (Daga,2020).

However, the RBI's infusion of liquidity through CRR cuts and drops in policy rate turned out to be less effective, as it did not result in entities taking higher exposure. In a practical sense, the cut in repo rate resulted in higher book profit (valuation for March quarter-end) to ensure the funding of bank mergers, propping up balance sheets and also less funding for recapitalization of banks.

Artificial Intelligence: An inevitable future during and post-pandemic

As we comprehend and analyze the current scenario, it is essential to look at what lies ahead of us.In the world of finance, technology is making huge leaps and bounds to evolve our methods and perspectives pertaining to trade and commerce.As we are moving into the fourth industrial revolution, domains like artificial intelligence and machine learning are becoming a dominant and significant part of financial activities. What remains for us to see is how the role of artificial intelligence develops in this particular dimension.

In light of the ongoing pandemic and worldwide lockdown, the dependence of humans on technology has grown by tantamount.From banking institutions to personal investors,all parties in the finance sector have turned eyes to AI based solutions as an alternative to human intelligence. Withdrawal from in person meetings clubbed with narrower margins of error, AI could possibly take over the advisory role in terms of investment and budgeting. Financial advice in the present situation is often found to be impersonal and generic (Contri, 2020; Golaski,2020). Its subjective nature makes it prone to human errors and personal bias of the service provider. AI could possibly go a long way to upgrade the advisory role where decisions are based on statistically proven choices. Through programs based on sophisticated algorithms that factor in tons of historical data, a wave of self-driven finance can be ushered into the society. Customers seeking help regarding complex decisions such as home buying,corporate financing etc. could interact with AI produced agents that would provide solutions based on complex mechanisms. This reimagined experience would help financial institutions intensify the growing culture of product customization and personalized experience along with enhancing future predictions and strategy formulation.

While exposing us to the idea of all inclusive databases that track all our activities, use of AI could be deployed to safeguard us against those who wish to exploit this information. Potential application of smart technology to the cyber security sphere could compliment the role of humans in threat aversion (Wegner,2019). Automated surveillance mechanisms can prove to be cost effective methods to upgrade the protective measures for financial transactions. Through machines capable of performing cognitive functions, organisations can false proof their systems and amplify their fraud detection capabilities.

The interaction between humans and machines has evolved over the years to a point where computers have started competing with their own makers. Integrating human intelligence with computerized analysis and solution can harness the potential of financial markets.The responsible use of AI has the aptitude to redefine our financial systems on the lines of complete transparency and effective engagement.

Conclusion and Policy Implications

The four sections of our paper aim to analyse the inevitable impact of COVID-19 on major sectors in the Indian economy. We can conclude that the initial spread of the pandemic brought the entire country to a standstill and also hit the backbone of our economic system: capital markets and banks. Our analysis highlights that irrespective of the few improvements over the past six months, the economic situation continues to be dire. This can be seen through the quantum of loan defaults, fall in foreign institutional investors, volatility of the equity markets amongst others.

There are immediate actions and policy measures that have to be implemented by the government and the RBI to prevent the current situation from deteriorating. While the RBI has already executed the New Monetary Policy which includes cut in repo and reverse repo rates, grace periods to banks, loan moratoriums etc., there is still a need to make the entire system more robust.This is necessary so as to be prepared for any uncertainties and stress situations that could arise yet again in the future. As we move into the fourth industrial revolution, there is a greater requirement to incorporate machine learning

and artificial intelligence into our systems. This could aid in conducting stress tests, simulations and scenario analysis which could help outline the weaknesses in our systems. In the long run, it is essential that the government and the central banks also increase investor awareness and knowledge, this will bring forward a more rational decision at their end. This is important as the equity markets largely move by sentiment. While we have made a lot of progress, we will have to patiently wait for things to get back to normal.

References

Borate, N. (2020). How COVID-19 Is Impacting the Indian Private Debt Market. Available at: https://www.livemint.com/money/personal-finance/debt-funds-face-risks-of-default-liquidity-amid-covid-19-scare-11585073815488.html

Daga, H. (2020). How COVID-19 is impacting the Indian Private Debt Market. Available at: https://www.preqin.com/insights/research/blogs/how-covid-19-is-impacting-the-indian-private-debt-market

Das, S. (2020). Indian economy at a crossroad: A view from financial stability angle. Reserve Bank of India. Available at: https://m.rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=1097

ENS Economic Bureau (2020). NPAs set to rise sharply on COVID impact, financial system remains sound. The Indian Express. Available at: https://indianexpress.com/article/business/banking-and-finance/npas-set-to-rise-sharply-on-covid-impact-financial-system-remains-sound-says-rbi-6522155/

ET Markets. (2020).Covid-19 impact: Additional Rs 1.67 trillion debt may turn delinquent, says India Ratings. Available at: https://economictimes.indiatimes.com/markets/stocks/new s/covid-19-impact-additional-rs-1-67-trillion-debt-may-turn-delinquent-says-india-ratings/articleshow/76818962.cms

Galaski, R. and Contri, B. (2020).The new physics of financial services: How artificial intelligence is transforming the financial ecosystem. Available at: https://www.businessinsider.in/finance/responsible-use-of-artificial-intelligence-can-make-our-financial-markets-even-stronger/articleshow/69963155.cms

KPMG (2020). Private equity valuation issues in the midst of COVID-19. Available at: https://home.kpmg/bh/en/home/insights/2020/06/private-equity-valuation-issues-in-the-midst-of-covid-19.html

Nath, G.C., and Das, A. (2020).Analysing India's corporate bond market during Covid-19. Available at: https://www.thehindubusinessline.com/opinion/analysing-indias-corporate-bond-market-during-covid-19/article31738213.ece.

Neogi, S. (2020).COVID-19 effect: Debt funds in turmoil, check credit risks. Available at: https://www.financialexpress.com/money/covid-19-effect-debt-funds-in-turmoil-check.

Tesher, D.C. (2020). COVID-19 Impact. Standard & Poor. Available at: https://www.spglobal.com/ratings/en/research/articles/200204-coronavirus-impact-key-takeaways-from-our-articles-11337257

Wegner, K. (2020). Responsible use of artificial intelligence can make our financial markets even stronger. Available at: https://www.businessinsider.in/finance/responsible-use-of-artificial-intelligence-can-make-our-financial-markets-even-stronger/articleshow/69963155.cms