Turkish Online Journal of Qualitative Inquiry (TOJQI)
Volume 11, Issue 4, November 2020: 1380-1392

Research Article

IMPACT OF COVID 19 ON THE INDIAN BANKING AND CAPITAL MARKET

Dr. Raghu K
Associate Professor & Head, Department of Economics, Acharya Institute of Graduate Studies, Bengaluru - 560107

Abstract - The global Covid-19 pandemic has emerged as a "black swan" event and will require extraordinary measures from governments across the globe to re-ensure economic stability. Globally, the pandemic has infected thousands of people in at least 190 countries and territories, according to the World Health Organization. As the immediate containment of the virus requires firm measures of quarantine and isolation, this has disrupted world economy in an unprecedented way. The Organisation for Economic Co-operation and Development (OECD) has halved the global gross domestic product (GDP) growth projection for 2020 due to the virus outbreak. Based on when the pandemic is likely to come under control, several economic scenarios indicate global recession of varying magnitudes. The Indian banking and capital markets sector will have to deal with the crisis in a manner never seen before. With the thrust on ensuring business continuity/contingency plans, this sector need to emerge as responsible institutions and ensure the safety and security of their employees, customers, and the society. With this backdrop the present paper made an attempt to explain the impact of covid-19 on the Indian banking and capital market.

Key Words: Covid-19, Banking Sector, Financial Sector, Money Market, Capital Market

INTRODUCTION

The uncertainty from COVID-19 will remain for the foreseeable future. Banks and capital markets institutions have no choice but to remain hyper vigilant and rewrite their business continuity playbooks as circumstances change. While it is reassuring to see some aggressive fiscal and monetary policy responses around the world already, clarity on how these actions will stabilize markets and accelerate the path to normalcy is slowly emerging, and in some cases yet to emerge. However, banks and their customers can take some comfort that capital ratios were the strongest going into this crisis than at any time in the last decade. Banks need to actively consider the immediate needs of their people and simultaneously the multiple near-, short-, and medium-term operational, financial, risk, and regulatory compliance implications. They have an opportunity to support market and economic activity and to facilitate a quick return to stability. If banks and capital markets firms respond well to these unprecedented challenges, they will not only help society, but also increase trust and the reputation of the banking industry in the long run. The global COVID-19 pandemic has emerged as a black frolic event and can need extraordinary measures from governments across the world to re-ensure economic stability. Globally, the pandemic has infected thousands of individuals in a minimum of a 195 countries and territories, in keeping with the globe Health Organization. Because the immediate containment of the virus needs firm measures of quarantine and isolation, and this has no continuous world economy in an unprecedented means. The Organisation for Economic Co-operation and Development (OECD) has halved the world gross domestic product (GDP) growth projection for 2020 thanks to the virus occurrence. Supported once the pandemic is probably going to come back in check, many economic situations indicate international recession of variable magnitudes.

One comprehensive implication of the pandemic is that it's doubtless to alter the globe economic order. Economies that square measure ready to “flatten the curve” in terms of containing the pandemic and showing resilience in resuming their consumption, producing, and minimising disruptions to their international offer chains square measure additional doubtless to achieve a bigger share of the globe GDP growth within the coming back decade. The pandemic is anticipated to distribute international wealth in terms of GDP growth and trade share. True has hit the Indian economy at a time once growth has slowed to rock bottom in a very decade. Within the recent past, there have been some signs of inexperienced shoots of recovery within the Indian economy. However, the approaching occurrence of the virus is anticipated to severely delay the beginning of the recovery method. Whereas presently Republic of India still appears to be comparatively insulated from large-scale infections, unless otherwise contained attributable to the government’s public health interventions, it's doubtless to grow exponentially. Economies across the globe have return up with business stimulant emphasising on quantitative easing; lowering interest rates, and relaxation of restrictive reserves for banks, tax incentives, government guarantees, subsidies, mortgage holidays, and bailout packages. There are coordinated international efforts by many countries and international bodies to tackle the impact of the pandemic because it becomes imperative that governments move and launch a coordinated effort to revive international stability. The Indian Government and alternative authorities have declared immediate relief actions to tackle the impact of the pandemic on the Indian economy. The honourable Prime Minister, Narendra Modi has found out a special economic task force below the leadership of the minister of finance. The task force has already declared a group of action things, and can continue do thus for economic stimulant to mitigate the impact of the pandemic on the economy. The Indian banking and capital markets sector can have to be compelled to wear down the crisis in a very manner ne'er seen before. With the thrust on guaranteeing business continuity/contingency plans, this sector ought to emerge as accountable establishments and make sure the safety and security of their workers, customers, and also the society. This note provides a quick summary of the impact that the pandemic is anticipated to own on the banking and capital markets sector, and proposals associated with “flattening the curve” for these establishments that might facilitate support the business to seek out resilience throughout this era furthermore as be ready for quicker recovery.

PLOTTING THE ECONOMIC IMPACTS OF COVID-19

Covid-19 is looked as if it would be the biggest threat to the worldwide economy since the 2008 money crisis, because the economic upheaval ensuing from the pandemic is mounting. With each passing day, the impact of the virus on economies is rising and therefore the threat of a world recession looms. As nations square measure closing their borders, closing down businesses, and imposing social distancing norms, short decline in economic process has already been factored in by governments and central banks. However, the consequence of the conclusion is troublesome to grasp. There exists various ways that during which the unfold of the pandemic has effects on the worldwide economy. The four main square measures that square measure expected to be affected are provide chain, international and domestic demands, falling oil costs, and therefore the money impact on corporations and money markets particularly because of exaggerated stressed assets. the worldwide value growth projection for two020 has been halved from 2.5 percent to one.3 percent.3 With the virus touching producing and travel sectors, the International Energy Agency (IEA) has foretold the primary call in international oil demand in a very decade besides alternative country-specific projections.4 Economists expect China's rate to slump to 5 percent within the half-moon of 2020 from six percent within the previous quarter. The Euro zone economy is anticipated to shrink by one percent in 2020, down from the antecedent expected 1.5 percent growth. Concern encompassing the impact of the pandemic on the worldwide economy has hurt capitalist sentiment and brought down stock costs in major markets. In the US, the 7 year Treasury yield fell from 1.69 percent to below 1.2 percent for the primary time in a hundred and fifty years, when remaining steady around 1.8 percent to 1.9 percent throughout 2019 and early 2020.7 international initiatives of governments and central banks The governments and central banks round the world have enforced numerous relief measures to stimulate their economies and calm markets. The relief measures declared by governments and central banks are tailored in keeping with the disruptions caused by the pandemic to their various economies. However, the underlying themes driving these measures square measure comparatively similar, viz. quantitative easing, lowering interest rates, relaxation of restrictive reserves for banks, tax and compliance incentives as well as deferments, interest-free loans backed by government guarantees, wage subsidies, mortgage holidays, and most significantly bailout packages for the worst affected industries. The guiding principles for governments and central banks to come back out with these measures appear to be reducing volatility within the markets, making certain adequate liquidity through financial policy and alternative measures in order that monetary resource isn't strained, i.e., the money provide is obtainable to all or any sections of society and businesses. Another common theme across these relief measures is to scale back the impact of this economic upheaval on the weaker sections of society and uplift the small, tiny & Medium Enterprises (MSME) trade participants and take a look at to endure and change giant firms to beat these disruptions and guide them back to normality.

Due to the uncertainty of the case extra actions is also needed by central banks, regulators, and governments necessitating speedy coordination at each national and international level. Impact on the Indian economy and banking, and capital markets trade looking on the economic eventualities, India's economic process might be moderate to severely compact within the next financial year thanks to the disruptions caused by the pandemic. Twenty three the rupee has hit a record low against the USA dollar within the previous few days. So far, in 2020, foreign investors have sold-out nearly $10 billion in equity and debt markets. The pandemic has hit the economy at a time once growth had already slowed to very cheap in a very decade, lowering hopes of a speedy economic recovery. Banking and alternative money services corporations are mobilizing and taking steps to attenuate the pandemic's effects on day-after-day operations. These establishments have place heightened measures in situ to make sure the security and health of their workers. Corporations' square measure implementing business continuity plans, as well as alternate geographic point arrangements, like ripping work sites, work from home choices and rotating shifts for workers. The minister has declared many measures to influence the economic distress caused because of the pandemic and therefore the national internment. These measures pertain primarily to food and security at very cheap of the pyramid and entail PM Gareeb Kalyan theme of INR 1.50 lakh crore, insurance cowl value INR fifty 100000 for choose sanitation employees, food security, increase in wage, and alternative support beneath numerous government schemes. Whereas a lot of measures square measure expected within the future, the Ministry of Finance has declared a slew of measures to increase the statutory and restrictive compliances.

MEASURING THE IMPACT OF PANDEMIC ON THE BANKING AND FINANCIAL SERVICES

The pandemic is impacting the money services sector in multiple ways in which from business continuity problems and operational concerns to the general money outlook. Whereas these establishments prepare to supply support to staff, customers and society as their predominant responsibility, this can be expected to place a strain on them in many ways. As money services firms' area unit mobilising and taking steps to minimise these impacts, they'll doubtless face implications that they have to contemplate each short and long run. Short impact (3-6 months).

Huge Funds Losses

Many monetary establishments may suffer moderate to significant capital losses within the close to future. Risk-weighted assets (RWA) area unit expected to be compact by higher charges from augmented volatility levels and better counterparty risks. Doubtless less favourable economic outlook may negatively impact the loss allowances. Additionally, borrowers might want to finance at longer maturities to lock in lower interest rates. Money establishments might need to place their growth targets on the backseat thanks to these losses, because it would need raising further funds.

Slashed Operational Potency and Lower Revenues

Because the pandemic advances, the temporary closure of branches and worker absences can impact operations. This may have an effect on lead generation and therefore the sales pipelines, so speed down business for multiple quarters. There may well be augmented demand for benefit the close to future thanks to the result on refilling schedules. Just in case of charge per unit cuts, banks' web interest financial gain and fee financial gain is predicted to be challenged. Thanks to lower off take and alternative pressures, like lower quality underneath management and lower investment activities, banks may face degrowth situations.

Liquidity Catastrophe

Some institutions' contingency funding plans (CFPs) might have already been invoked. Moreover, thanks to market volatility, there may be vital swings in stress testing results and limit/threshold breaches. Some market participants might already be experiencing augmented liquidity modification things. With an unforeseen halt in money inflows within the kind of loan repayments, there may well be an attainable situation of liquidity imbalance resulting in a quality liability mate. money establishments is also needed to sell assets not supposed to be oversubscribed underneath regular market conditions to hide the unforeseen liquidity shortfalls. A pointy visit interest rates and augmented volatility in securities and exchange costs might increase the institutions' market risk.

Higher Delinquencies and Better Capital Requirements

Impediment in money flows will cause loan default by numerous sectors compact by the pandemic. Money establishment area unit already watching exposure to sectors, like cordial reception, shipping, transport, tourism, and aviation. This can be certain to increase till business stability is earned. Underneath this rules, non-performing assets rumoured by these establishments might even see a surge within the half-moon of FY21. A resultant decrease in investor worth may end up in merchandising off securities and redemption through mutual funds, so impacting the liquidity of monetary establishments (FIs). With purchasers doubtless experiencing stressed money conditions, credit quality/ratings is also compact. The pandemic-induced market atmosphere might negatively impact money institution's credit rating profile. New general, country, or alternative business risk factors might intensify and have an effect on the trustiness of monetary establishment, counterparties, and borrowers, particularly within the high-yield grade. It's imperative to judge however credit rating agencies can account changes to those risk factors.

Slashed Profit

Continued business lag will cause a big decrease in profitability and consequently a decrease within the earnings before interest, tax, depreciation, and amortization (EBITDA). This might lead to loss of capitalist confidence within the establishment and more strain the present woes with relevance funding. Any future growth plans would consequently be affected and may well be in want of postponement, because the establishment would want to concentrate on rising margins and top line growth.

Non-Financial Risks

Monetary establishments' area unit exposed to varied alternative non-financial risks, like conduct risk/culture, brand risk, model risk, third-party risk, and cyber risk which will or might not have any money impact in future. If a bank's in operation model has to modification, it's going to become tough for the boards of those establishments to still meet governance obligations, like overseeing risk, providing credible challenges to the management, and acting as accountable stewards of the establishment. These challenges area unit expected to translate into high capital infusion needs for the money establishments to keep up each regulative capital and growth capital. The long-run implications of the pandemic for the Indian money services sector area unit unknown. Once normalcy returns, money establishments' area unit expected to possess learnt many lessons, together with the way to best retain operational resilience once confronted with future pandemics, and presumably, the way to design new in operation models like alternate work arrangements. The pandemic might more accelerate migration to infrastructure of the future digital channels and property.

The monetary services business players have to be compelled to actively take into account the short, medium, and semi permanent operational, financial, risk, and regulative compliance implications ensuing from the continued uncertainty round the pandemic. Banks and monetary establishments should re-analyse their business models and set up for various situations. This may facilitate ascertain areas of focus and rank action things. It'll additionally highlight the degree of risk at associate early stage, so establishments will devise mitigating steps to contain the impact of the pandemic. Regular observation and analysis of outcomes will facilitate establishments manage risks and guarantee time of operations. outline situations and prospects to raised perceive the impact of pandemic on their own portfolio and monetary health, given the quickly evolving economic process, monetary establishments have to be compelled to outline varied situations supported the unfold of the virus and corresponding economic implications. These situations will then be accustomed check their portfolios and forecast their individual monetary positions, which might facilitate monetary establishments style their response to the pandemic and be higher ready to handle true because it unfolds. Whereas shaping the situations, the subsequent should be unbroken in mind.

Create It a Cooperative Effort

Determine the key individuals from the relevant functions and kind a social unit. This core team are to blame for developing and managing the situation definition and reforecasting processes by making ready for it.

Determine and Agree Upon Situations

Outline plausible alternate future situations to assess the impact of your choices, and build situations supported potential virus unfold and human reaction. The situations ought to be engineered round the unfold of the virus and not simply on the impact on gross domestic product and macro variables. This may need developing a spread of expectations for the progression of the sickness, government response, and provide and demand shifts. In addition, every situation should contain enough details to assess the probability of success or failure of various choices.

Target the Drivers That Matter For Business

Customise the situations to your specific context and challenges, together with less obvious prospects. Take care to incorporate external risks, like travel or regional shutdowns, further as potential opportunities. The unknown situations are various, together with whether or not the virus can peak or flatten and the way before long, the gravity and length of the economic downswing, the amount of debt strain on countries, government, firms, tiny businesses, and shoppers, the impact of delinquencies, extent of support to be provided to support borrowers, the impact on top-line and margins for banks and a number of other factors. Leverage scenario-based stress testing and statement amid the extremely unsure state of affairs because of the pandemic, monetary establishments ought to check their portfolios, for every of the outlined situations to rose perceive the impact. As per the prevailing regulative framework, monetary establishments are anyways needed to conduct stress tests on their portfolios. This economic and market atmosphere warrants extra stress testing and in contrast to regulative stress testing, this may not be simply a hypothetic exercise. Stress-test results can have direct implications for choices that monetary establishments have to be compelled to create in real time. Characteristic sectors/regions/clients that are most in danger and re-evaluating the loan loss provisions underneath totally different economic situations are essential. Moreover, victimisation the outlined situations, monetary establishments ought to use situation based mostly statement to navigate their own finances through this level of uncertainty and disruption. With scenario-based statement, monetary establishments will assess the various alternatives.

Plan for business continuity within the face of a pro-longed internment money establishments have taken responsive measures and aim to cut back in-person interactions, downsize operations whereas providing funding to retail and institutional customers. Temporary closure of offices, rotation of workers, reduced operational hour's square measure a number of the measures banks have enforced to this point. Following the govt. announcement of a 21-day internment amount, banks can solely supply essential services, i.e., money deposit and withdrawal, cheque clearing, remittances, and government transactions. Nonessential services may be availed of through mobile and on-line banking channels. Given things, it's imperative that banks guarantee well-equipped systems to manage the inflated load, fast troubleshooting, and determination to make sure seamless operations and adequate security risk controls. A continuing unfolds of the pandemic and its aftermath will considerably bog down business. Hence, money establishments would want to require extra measures to make sure business continuity by rethinking their client acquisition strategy and cross merchandising merchandise. Timely communication of incentives and revised policies through numerous channels to customers are the key to ascertain trust and ease panic. Given the uncertainty that Republic of India is facing presently, banks will probably use services like video-know your client (video-KYC) for a paperless on boarding, chatbots for client relationship management, and videoconferencing facilities for patrons to possess a sill banking expertise. Innovation in times of issue is important. Banks and money establishments should inure eventualities that may occur post the internment amount likewise. This could be important in developing a versatile contingency arrange that best equips the banks for crisis management and provides solutions to its customers. Pre-empt future risks and capital needs for banks supported the state of affairs analysis, banks are during a higher position to pre-empt their future capital needs on the subsequent parameters:

Market risk

Managing and mitigating risks is one amongst the foremost important aspects of any financial organization. Quality Liability Management (ALM) could be a comprehensive framework for activity, monitoring, managing, and mitigating market risk of a bank and different money establishments. Throughout adverse market conditions, banks and money establishments could face things of quality liability mismatches because of delayed money inflows than what was earlier expected within the type of loan repayments. they will have to be compelled to get back internal models capturing market risk and reply to this suitably by accounting for extra capital that perhaps needed to slim down this pair. The banks conjointly have to be compelled to communicate with run batted in and perceive if capital is adversely affected and materially differs from model-implied eventualities.

Liquidity Risk

Because of market volatility, there can be sudden stress testing results and threshold breaches thanks to severe liquidity crunch. CFPs helps banks and different money establishments raise extra capital needed in adverse market conditions. They have to watch market activity against their liquidity stress indicators for triggers that may activate the CFP. Money establishments should review their CFPs, assess what went wrong, incorporate key learning from this expertise, and consequently modify their CFPs to safeguard themselves from one thing comparable to this that may crop up within the future.

Credit Risk

Banks and different money establishments already stare at important exposure to sure sectors. The onset of the pandemic has exacerbated constant and resulted in amplified strain on the quality of those establishments. Businesses have witnessed an insufficiency in money flows and square measure anticipating turbulence within the returning months. Hence, banks might probably witness a pointy increase within the inability or a delay in compensation of loans within the current quarter. Banks should arrange the liquidity support and capital infusion they may need from the run batted in to keep up credit disbursement, whereas effectively managing stressed assets.

Operational Risk

Money establishments have invoked many measures to cut back face-to face interactions and increase usage of digital tools on scale that has been new in Republic of India so far. Day-after-day operations have surged reliance on the IT infrastructure of the establishments, highlight the requirement for essential cybersecurity controls in situ. Banks have to be compelled to regularly monitor their inheritance design and guarantee applicable checks to mitigate the chance of cyber frauds and phishing attacks. Written agreement obligations and management structure should be revisited to make sure continuity of operations as a amendment in operating conditions is possibly to cause interruptions. The legal risk, the establishment is exposed to, is especially aggravated within the given circumstances. Hence, establishments should take applicable measures to minimise operational errors, interruptions, and damages. Many banks and money establishments have delayed their plans to lift capital for his or her growth targets, given the volatility of the market. However, conducting a comprehensive money analysis against the economic factors, risks, and evolving capitalist sentiment to best manage their liquidity whereas maintaining growth in credit disbursements is required. State of affairs analysis would be essential to require pro-active measures which will go an extended manner in crucial the money health of the money establishments and also the economy as an entire.

Assess and Manage International and Native Operations

Every market may expertise variable levels of stress and disruption. Hence, it's vital for monetary establishments particularly banks to spot and appraise however with efficiency vital activities may be rerouted to native and international offices, and the way resilient this might convince be. For this to go on, the banks should do a location-based geographical analysis on arras that are worst affected and areas that are comparatively resilient in times like these. Banks with a worldwide presence got to appraise however will capital allocations be determined across commercialism books in stressed markets, and whether or not preventive steps, like commercialism quality divestments are needed. If so, that assets may be disposed of initial and the way quickly hedging ways may be adjusted across interchange, commodities, equities, or mounted financial gain, because the state of affairs develops. For this, capital allocation and hedging ways across commercialism books ought to be re-evaluated.

Invest In Infrastructure That Banks Might Have

A monetary institution's ability to manifest opportunities out of the unquiet atmosphere supported technology and external partnerships to make client price can verify its success within the future. To change versatile or remote work, organisations got to have the proper infrastructure in situ. There could also be multiplied demands on organisations' digital infrastructure to switch manual operations, which ought to be seen as a business chance to alter core operations and optimise on price savings. Banks and monetary establishments ought to contemplate testing and coming up with for alternate capability to method and still deliver services whenever attainable. These establishments might also get to review infrastructure that's presently in situ, like VPN connections, security tokens, bandwidth, and laptops to assess further investments in technology needed to realize the required infrastructure.

Re-Evaluate Operating Ways

one in every of the largest challenges for monetary establishments is to change various work arrangements for workers, if required to shield staff and adapt to attainable workplace access restrictions, all whereas reassuring business continuity. Given the present things and lockdown scenarios, monetary establishments are exploring potentialities of staggering shifts for the workers and fascinating with central response groups to manage vital communication with the workers. As a response to the eruption, monetary establishments might have to think about applying way forward for work ideas and practices that are already underneath exploration. They have to prioritize the foremost vital comes, workflows, and deliverables, and communicate these clearly to staff. Establishing open lines of speech, as well as frequent communication with staff and customers can facilitate these establishments in addressing uncertainties. For instance, sales groups will connect with customers over voice calls and justify the steps taken by them and their impact on their customers. Whereas disrupting consumer service, the pandemic also will impact the delivery price chain of distributors, like agents, brokers, and advisors. A scaled up approach to exploitation digital tools for client relationship management and acquisition would facilitate continuity of operations. mobilisation staff with applicable tools, using relevant techniques to keep up quality of work/productivity, and guaranteeing that technology choices are in situ to attach staff operating remotely while not compromising access and information security isn't simply the necessity of the hour however the approach forward. Banks should oftentimes communicate with offshore delivery centres and develop applicable contingency plans if not in situ nevertheless. They will additionally contemplate testing alternate work arrangements from offshore delivery centres to see if service performance is affected in any approach. The necessity to seek out alternate venues for service delivery if a specific centre experiences AN operational disruption might also arise.

Re-Assess Business Models

To think about immediate to medium term implications monetary establishments would want to re-assess the impact on their business models to operationalize the mandates for changes needed in systems, credit, compliance, and operations thanks to the regulative measures and business implications. This can embody revaluating ways of portfolio management (rates, portfolio optimisation) and nonperforming quality management (curate models for giving non-performing quality waivers and its implications). Within the medium to long run, the establishments might have to relook at their trade finance and cross-border businesses thanks to potential changes in offer chain models of key consumer industries and country risk profiles. At the core of of these eventualities, the client expertise has to be unhampered. The business model changes got to contemplate higher client acceptance of touch less and digital interactions. This can have large implications on the approach monetary establishments build the long run of client expertise for his or her organisations.

CONCLUSION

Financial establishments ought to set up for multiple eventualities till the social control of operations, keeping each customers and staff wants at the centre of their businesses. It's expected that the govt stimulation can address the broader economic challenges. There'll be disruptions and delinquencies; but these challenges will open up decisions for deepening client relationships, investments in technology of the long run, shift in mindsets to really adopt and execute way forward for work. Monetary establishments got to appraise, test, and implement business continuity and contingency plans alongside innovation in times of trial. Establishments that take sensitive measures to produce client and worker reliefs will really differentiate, eventually grow, and sustain themselves. Establishments' exploitation the downswing to sharpen their business models are expected to realize additional from the impetus that government stimulation is probably going to produce. In summary, times ar expected to be powerful however by adopting a wakeful short, medium and semi permanent action set up, monetary services players will emerge from this crisis as stronger, confident, and socially accountable establishments.

References:

1. Adda, J. (2016). Economic activity and the spread of viral diseases: Evidence from high frequency data. The Quarterly Journal of Economics, 131(2), 891-941. DOI: doi.org/10.1093/qje/qjw005
2. Baker, S. R., Bloom, N., Davis, S., Kost, K., Sammon, M., & Viratyosin, T. (2020). The Unprecedented Stock-Market Reaction to COVID-19, KelloggInsight. Chicago, IL: Kellogg School of Management, Northwestern University.
3. Brown, S. J., & Warner, J. B. (1985). Using daily stock returns: The case of event studies. Journal of Financial Economics, 14, 3-31. https://doi.org/10.1016/0304-405X(85)90042-X
4. Chaddha, N, A Das, S Gangopadhyay and N Mehta (2017), 'Reassessing the Impact of Demonetisation on Agriculture and Informal Sector', India Development Foundation (IDF), New Delhi, January.
5. Choudhary, S. (2020), "*Covid-19 impact: domestic demand for petrol, diesel, ATF and shipping fuel drop 10%*", available at: https://economictimes.indiatimes.com/industry/energy/oil-gas/domestic-demand-for-petrol-diesel-atf-shipping-fuel-drop-10/articleshow/74681471.cms?from=mdr
6. Das, G. (2020), "*136 million jobs at risk in post-corona India*", Livemint, available at: www.livemint.com/news/india/136-million-jobs-at-risk-in-post-corona-india-11585584169192.html
7. DH Web Desk (2020). Coronavirus India update: State-wise total number of confirmed cases, deaths on April 17. Deccanherald Online Newspaper, Retrieved April 20, 2020, https://www.deccanherald.com/national/coronavirus-india-updatestate-wise-total-number-of-confirmed-cases-deaths-onapril-17-826340.html
8. Ducharme, J (2020) World Health Organization Declares COVID-19 a 'Pandemic.' Here's What That Means. Time Online Newspaper, Retrieved April 20, 2020, from https://time.com/5791661/who-coronavirus-pandemic-declaration/March 11.
9. Duflo, Esther, Abhijit Banerjee (2020), "A prescription for action: Nine steps after the next 21 days", Indian Express, March 29, 2020. Dev, S, Mahendra (2020), "Addressing COVID-19 impacts on agriculture, food security, and livelihoods in India", IFPRI Blog, April 8. https://www.ifpri.org/blog/addressing-covid-19-impacts-agriculture-food-security-and-livelihoods-india
10. Fama, E. F. (1970). Efficient capital markets: a review of theory and empirical work. The Journal of Finance, 2, 383-417. https://doi.org/10.2307/2325486
11. Fama, E. F. (1991). Efficient capital markets II. The Journal of Finance, 46, 1575-1618. https://doi.org/10.1111/j.1540-6261.1991.tb04636.x
12. Fama, E. F., Fisher, L., Jensen, M. C., & Roll, R. (1969). The adjustment of stock prices to new information. International Economic Review, 10(1), 1-21.
13. Foster, L. (2012). Does the US Presidential Election Impact the Stock Market? CFA Institute Web.
14. Gormsen, N. J., & Koijen, R. (2020). Coronavirus: Impact on Stock Prices and Growth Expectations. VOX, CEPR Policy Portal. https://voxeu.org/article/coronavirus-impact-stock-prices-andgrowth-expectations
15. Goyal, M. (2020), "*Covid-19: how the deadly virus hints at a looming financial crisis*", The Economic Times, available at: https://economictimes.indiatimes.com/news/economy/finance/covid-19-crisis-how-the-deadly-virus-hints-at-a-looming-financial-crisis/articleshow/74752200.cms

16. Goyal, S. (2020), "*What is the impact of coronavirus on Indian economy?*", available at: www.jagranjosh.com/general-knowledge/what-is-the-impact-of-coronavirus-on-indian-economy-1582870052-1
17. Hong, H. (2016). Information Cascade and Share Market Volatility: A Chinese Perspective. Journal of Asian Finance, Economics and Business, 3(4), 17-24, https://doi.org/10.13106/jafeb.2016.vol3.no4.17
18. Khosla, S. (2020), "*Impact of coronavirus on the digital payments segment in India*", available at: www.dqindia.com/impact-coronavirus-digital-payments-segment-India/
19. Krishnan, Deepa and Stephan Siegel (2017), "Survey of the Effects of Demonetisation on 28 Slum Neighbourhoods in Mumbai", Economic and Political Weekly, Vol. 52, Issue No. 3.
20. Kumar, V. (2020), "*Covid-19 and its impact on the Indian IT industry*", available at: https://industrywired.com/covid-19-and-its-impact-on-the-indian-it-industry/
21. Lee, J. W., & Brahmasrene, T. (2018). An Exploration of Dynamical Relationships between Macroeconomic Variables and Stock Prices in Korea. Journal of Asian Finance, Economics and Business, 5(3), 7-17. http://doi.org/10.13106/jafeb.2018.vol5.no3.7
22. Mahendra Dev, S. (2020), "*Addressing COVID-19 impacts on agriculture, food security, and livelihoods in India*", available at: www.ifpri.org/blog/addressing-COVID-19-impacts-agriculture-food-security-and-livelihoods-india
23. Mehrotra, Santosh, and Jajati K. Parida (2019):India's Employment Crisis: Rising Education Levels and Falling Non-agricultural Job Growth. https://cse.azimpremjiuniversity.edu.in/wpcontent/uploads/2019/10/Mehrotra_Parida_India_Employment_Crisis.pdf
24. Muthukrishnan, M. (2020), "*COVID-19 and its impact on Indian economy*", available at: https://bfsi.eletsonline.com/covid-19-and-its-impact-on-indian-economy/
25. Nguyen, D. D., & Pham, M. C. (2018). Search-based Sentiment and Stock Market Reactions: An Empirical Evidence in Vietnam. Journal of Asian Finance, Economics and Business, 5(4), 45-56. http://doi.org/10.13106/jafeb.2018.vol5.no4.45
26. Ozili, P., & Arun, T. (2020). Spillover of COVID-19: Impact on the Global Economy, SSRN Electronic Journal. DOI: doi.org/10.2139/ssrn.3562570
27. Ramelli, S., & Wagner, A. F. (2020). Feverish Stock Price Reactions to COVID-19, Swiss Finance Institute Research Paper No. 20-12. DOI: doi.org/10.2139/ssrn.3550274
28. Salamudin, N., Ariff, M., & Nassir, A.M. (1999). Economic influence on rights issue announcement behaviour in Malaysia. Pacific-Basin Finance Journal, 7(3), 405-427. https://doi.org/10.1016/S0927-538X(99)00010-4
29. Shah, A. (2020), "*Sensex posts biggest gain in 11 years: investors richer by Rs 4.7 lakh crore*", The Economic Times, available at: https://economictimes.indiatimes.com/markets/stocks/news/sensex-logs-biggest-one-day-gain-in-11-years-investors-richer-by-rs-4-7-lakh-crore/articleshow/74810933.cms
30. The Hindu Business Line (2020), "*Covid-19 lockdown estimated to cost India $4.5 billion a day: acuité ratings*", The Hindu Business Line, available at: www.thehindubusinessline.com/economy/covid-19-lockdown-estimated-to-cost-india-45-billion-a-day-acuit-ratings/article31235264.ece
31. The Indian Express (2020), "*Stock markets post worst losses in history; aensex crashes 3,935 points amid coronavirus lockdown*", The Indian Express, available

at: https://indianexpress.com/article/business/market/bse-sensex-nse-nifty-stock-market-live-updates-coronavirus-global-markets-6327415/

32. The Indian Express (2020), "*We should plan for negative growth rate this FY, says Arvind Subramanian*", The Indian Express, available at: https://indianexpress.com/article/india/express-adda-live-updates-arvind-subramanian-coronavirus-economy-recession-india-lockdown-6382855/
33. The Times of India (2020), "*World bank sees FY21 India growth at 1.5-2.8% – slowest since economic reforms three decades ago*", The Times of India, available at: www.thehindu.com/business/world-bank-sees-fy21-india-growth-at-15-28-slowest-since-economic-reforms-30-years-ago/article31322011.ece
34. UNESCO (2020a), "*Covid-19 educational disruption and response*", UNESCO, https://en.unesco.org/covid19/educationresponse
35. UNESCO (2020b), "*Adverse consequences of school closures*", UNESCO, available at: https://en.unesco.org/covid19/educationresponse/consequences
36. UNESCO (2020c), "*290 Million students out of school due to COVID-19: UNESCO releases first global numbers and mobilizes response*", UNESCO, available at: https://en.unesco.org/news/290-million-students-out-school-due-covid-19-unesco-releases-first-global-numbers-and-mobilizes
37. Wang, C, Li, W., Drabek, D., Okba, N. M. A., van Haperen, R., Osterhaus, A. D. M. E., van Kuppeveld, F. J. M., Haagmans, B. L., Grosveld, F., & Bosch, B. (2020). A human monoclonal antibody blocking SARS-CoV-2 infection. BioRaxiv, DOI: doi.org/10.1101/2020.03.11.987958