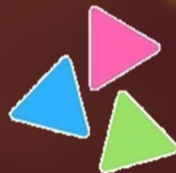
BHARATI VIDYAPEETH (DEEMED TO BE UNIVERSITY)
INSTITUTE OF MANAGEMENT & RESEARCH, NEW DELHI

"A" GRADE UNIVERSITY STATUS AWARDED BY MHRD, GOVT. OF INDIA
RE-ACCREDITED WITH "A+GRADE BY NAAC

FINANZA

THE RUPEE MATTERS



FINNOVATION

The Finance Society of BVIMR

VOLUME: 3, ISSUE - I

JANUARY- JUNE, 2020

From the Editor's Desk

I am delighted to present the latest issue of Finanza. We thank our readers for their word of appreciation and encouragement. We have been continuously receiving participation from budding as well as experienced authors. This issue contains the valuable contribution by a student of 12th grade on the topic of negative interest rates.

Presently our country is fighting with COVID-19 pandemic. It has changed the way we worked in the past. Adoption of digital modes has replaced physical delivery system in all types of industry, including education. All the sectors of the economy are affected in one way or the other. I am convinced that lot of efforts are required by each one of us to get back on the growth trajectory. This edition contains article suggesting measures to deal with current situation. Further, articles focusing on role of FINTECH and REGTECH will capture your interest as a reader.

I would like to thank our readers and authors for their contribution. The valuable feedback and word of encouragement will help improve forthcoming issues.

DR. MANPREET KAUR

Editor

REVIVING INDIAN ECONOMY AMIDST SLOWDOWN AND CORONA VIRUS OUTBREAK

Author: CA Tanvi Sawant & CA Jatin Chawda

(IIM Bangalore PGP 2019-21)

The global economy experienced a synchronized slowdown in 2019 due to various reasons such as trade barriers, growing geopolitical tensions, delay in Brexit deal, oil-market disruptions, etc. Global trade has sunk into contraction, with knock-on effects impacting investment and industrial production, especially manufacturing. Reflecting this, commodity prices slumped, with crude oil prices tumbling.

To make it worse, Corona Virus (COVID 19) outbreak all over the world in early 2020 is dragging the world economy towards global depression. The Moody's Investors Services has forecasted India's growth at 2.5% for year 2020.

➢ Issues faced by India

India, which was touted as one of the fasted growing economy was started to be seen in crisis since 2018. Some of the determinants of economic slowdown are as follows:

- credit crunch due to NBFC crisis
- mounting NPAs and banking frauds
- rising unemployment
- improper GST implementation
- demonetization,
- unimpressive resolution of insolvency cases under India's Insolvency and Bankruptcy Code ('IBC'),
- slump in consumer demand
- Fluctuation in oil price, foreign exchange market, etc.

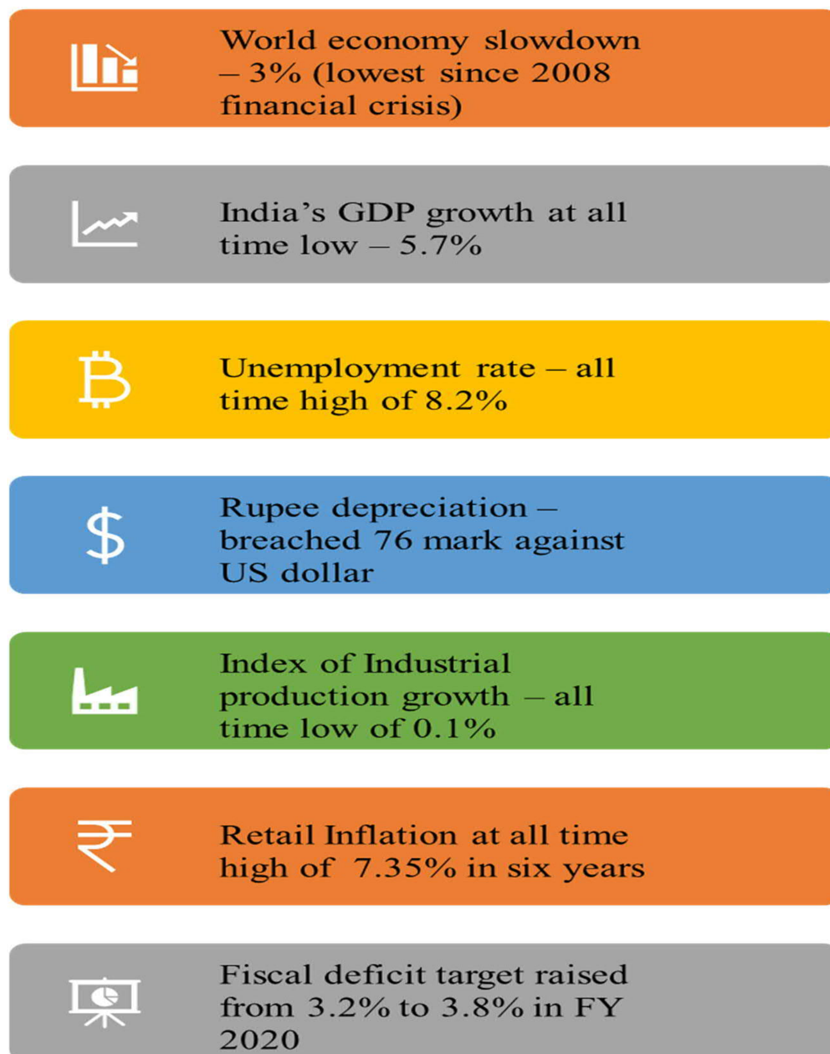


Fig 1: Some important figures

While India was fighting hard to revive its economy, fatal Covid 19 made the situation worst. The nation has been put under 21 days lockdown to contain its spread. The Covid 19 outbreak came up with huge economic costs causing demand and supply side disruptions, liquidity crunch and stock market crash. Demand side disruptions include adverse impact on hotel industry, travel and tourism, entertainment and financial services. While supply side disruptions refer to supply chain collapse originating from major countries like China, France, USA, Spain, and the UK. India has considerable trade associations in form of exports and imports with all these countries.

How to revive the Indian economy?

There has been a lot of debate over whether the slowdown is structural or cyclical. Whether a fiscal or monetary policy is effective? Whether it is domestic or global? The slowdown is partly structural and cyclical. The cyclical part is a year old i.e. shadow banking stress (NBFC crisis) and

weaker global demand, while structural is ongoing for 5-10 years i.e. declining investment-GPD ratio, productivity

stalling, etc. At the macro level, a structural slowdown normally comprises supply-side solutions like infrastructure, increased capacity of production, which are long term. However, cyclical slowdown is often due to low aggregate demand and can be corrected through counter-cyclical measures which are short term. As per Keynesian economy, government expenditure i.e. deficit spending should be spurted to increase the aggregate demand. Hence, we need supply-side solutions to a demand-side problem. Various measures need to be undertaken to revive Indian economy amidst global economic slowdown and Covid 19. Economic growth is measured with regards to changes in a country's Gross Domestic Product (GDP). The following diagram exhibit all the components of GDP.

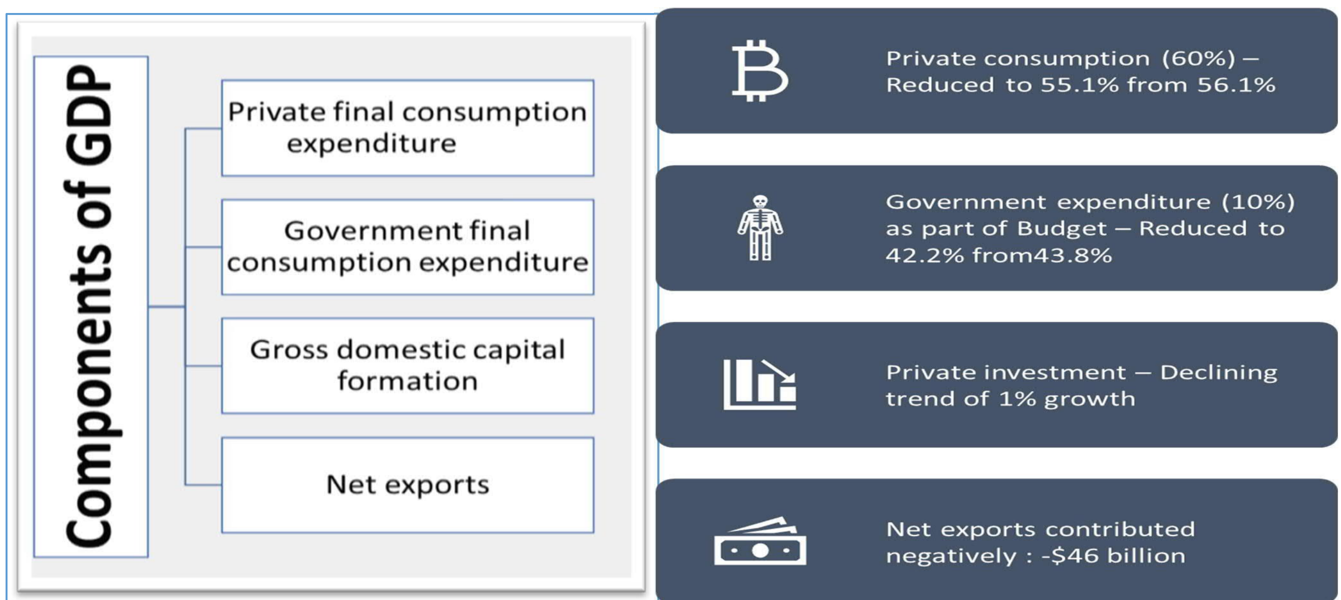


Fig 2: Components of GDP

Let us analyse the measures to be undertaken with respect to all the components of GDP in reviving Indian economy.

1. How to increase private consumption?

Private consumption is one of the key drivers of aggregate demand contributing 55% - 58% of the GDP. It accounts for the money spent by consumers for consumption of goods and services such

as groceries, consumer durables, etc. Recent trend shows that private consumption has been sluggish majorly due to plunging demand for consumer durables in urban areas and slowing demand of cash intensive FMCG in rural areas. Following chart depicts the quarterly performance of Private Final Consumption Expenditure (PFCE).

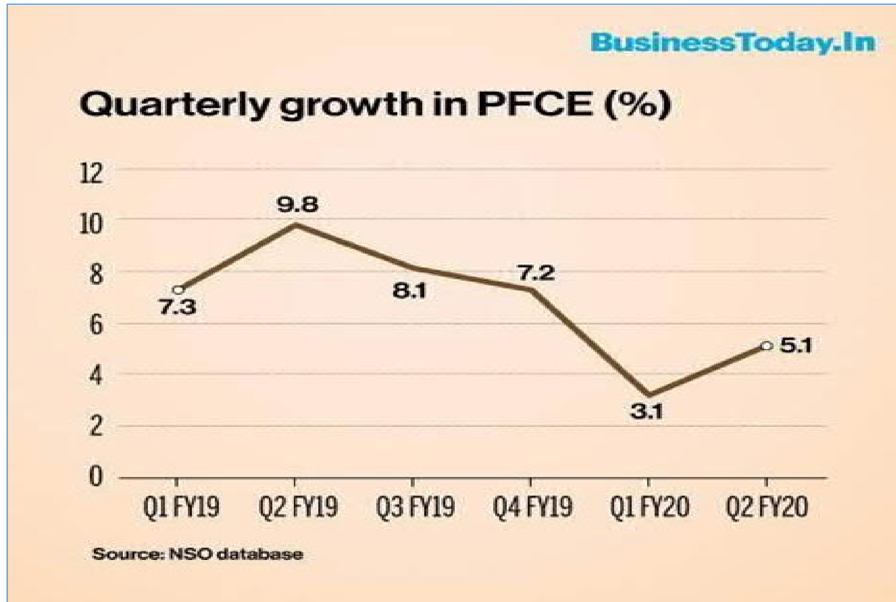


Fig 3: Quarterly Growth in PFCE (%)

Source: NSO Database

Automobile sector being one of biggest contributor in decelerating demand for consumer durables. Multiple blows like liquidity crunch in the NBFC sector, high prices due to introduction of new safety and security norms (BS VI) have contracted the sale of vehicles. Vehicle finance has fallen from as high as 92% to about 68%. Domestic air traffic was adversely affected due to grounding of private airlines in July 2019, impacting demand and air fares. The following chart demonstrates the consumption matrix.

Particulars	Growth in Apr-Jun 2019 (in %)	Growth in 2018 (in %)	Impact
Car sales	-23.3	18	Tyre, steering & steel manufacturers, auto dealerships, vehicle loans are negatively affected
Two-wheeler sales	-11.7	15.9	Biggest fall from October to December 2008. Impact same as above
Tractor sales	-14.1	25.7	Bad indicator of rural demand
Unsold homes	7	Not available	The real estate sector has linkages with 250 ancillary industries e.g. Paint, steel, cement, furnishings etc.
Volume growth of FMCG companies	5	12	Even everyday purchases have slowed down

Fig 4: Consumption Matrix-Automobile Sector

Therefore, there is a dire need to boost private consumption. It can be accomplished by some of the measures mentioned below:

➢ Increase in income of middle & lower-income groups

The bottom half of the income distribution provides for demand impetus in India. There is inadequacy of labour incomes in India, especially when 71% of regular wage and salary earners are contract workers. Rather than gifting corporate sectors huge tax cuts, the Government could have used the funds for minimum wage legislation or providing employment under the MNREGA scheme. The allocation of funds to MNREGA should be increased to ensure 100 days of work as against the present average of 45 days.

The government should increase expenditure on infrastructure mainly in rural areas. National minimum wage also mandates a substantial hike. The latest hike was given in the year 2019 of mere Rs.2 taking the minimum wage from Rs. 176 to Rs. 178. It is pertinent to note that the expert committee for setting up minimum wages recommended Rs. 375 per day. Such negligible rise in wages is ineffective in fuelling the purchasing power of the mass workers. India's per capita income is the lowest among the G20 countries.

Further, implementation of schemes such as such as PM Kisan Samman Nidhi to provide direct income support should be given due importance. As on Feb 2020, only 60% of the beneficiaries have received money under this scheme.

➢ Simplified tax collections

Reduction in personal taxes at least for lower-income groups will help to increase household consumption since household savings rate has gone down from 23% to 18%. GST Council should increase the rates on low-GST items with inelastic demand and reduce rates for high-GST items with elastic demand. This will reduce rate differentials and discourage GST evasion and corruption, boosting consumer demand. However, tax buoyancies cannot be expected to arise when there is growth slowdown.

➢ Agricultural & rural sector reforms

The current slowdown is an ideal time to implement doable agricultural reforms since the sector is a potential employer and enabler for 50% of India. It has the potential to revive the animal spirits, ensure reforms on land, market, price as announced by Agriculture Development Council and GST

council to make agriculture the lead of sustainable growth by 2022. Promotion of occupations like farming handicrafts, handloom which is less affected by slowdown is a must. There is a need to change the distorted framework of agriculture relying on water scarcity and climate change and improve inefficient system of pricing, procurement, storage and distribution system of food (40% of food is wasted during supply chain). Growth in rural income needs more macroeconomic attention like affordable housing, clothing, health and education of reasonable quality which will help to increase both economic activity and employment.

➢ Credit off take and infusion of liquidity in certain sectors

Sectors like automobile and construction are fighting the liquidity crunch due to the stress of shadow banks and certain regulatory norms. However, slowdown of these industries has led to forward and backward spillover effect on the linked industries leading to amplified effect. Hence, it is important for credit off take which can be possible through co-origination or co-financing of loans between the public sector banks and NBFCs to provide retail loans for vehicles and homes. This will set the cycle moving in the right direction. Also, special fund for last-mile funding of housing projects and expedition of GST refunds to MSMEs will boost these sectors.

2. How to increase investment and capital formation?

➢ Increasing confidence of the public and ensuring no liquidity trap

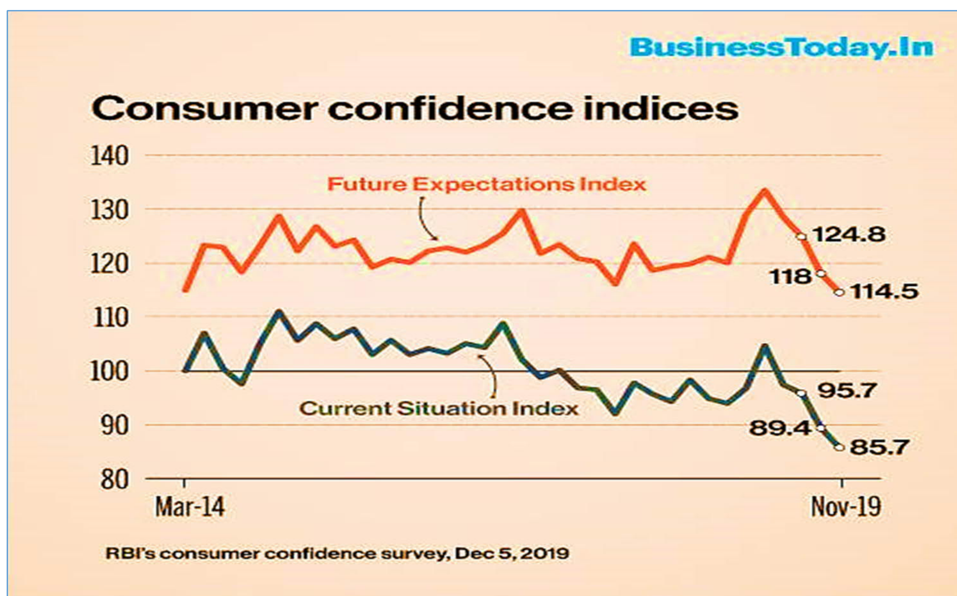


Fig 5: Consumer Confidence Indices

Source: RBI consumer confidence survey

A liquidity trap occurs when there is small rate of interest and public prefers to hold cash rather than invest. (E.g. Japanese economy). This happens when the animals are dispirited due to uncertainly i.e. low confidence. There must be a continuous demonstration of intent on all fronts i.e. economic, social, political and economic. Investors must be assured not to be vilified if they fail and even one event like IL&FS will make them highly risk-averse. Economic Survey states that unleashing animal spirits help drive private investment which drives demand, create capacity, labor productivity, and new technology and generates jobs.

➢ Increase in long-term capital formation

Huge correct public capital expenditure can help attract or crowd in private investment (better infrastructure) or crowd out by huge government borrowings. Private investment showed a 34% fall in 2019. Hence the driver is missing which needs to be brought back as follows:

Re-orientation of funds from consumption to capital and foreign capital infusion for greenfield investments and Aggressive strategic disinvestment to keep the fiscal deficit in place

Government must do away with FDI caps that remain across sectors which will help foreign investors to save Indian ailing sectors (e.g. Aviation)

Proper and faster alternative methods of dispute resolution like arbitration to address massive backlog of judiciary matters

Improve corporate confidence, decriminalize certain offences, gain trust and belief of private investors, increase domestic investment, FDI is just icing on the cake.

Faster transmission via the banking system through positive liquidity and health balance sheets will help private investment. Strengthen PSBs and shadow banks through mergers and recapitalizations

Fast-tracking infrastructure investments to increase the incremental capital output ratio (GDP growth rate (%) = Savings rate as a % of GDP ÷ Incremental Capital Output Ratio (‘ICOR’)

Simplified tax laws and efficient administration. Compliance should be made easier and non-compliance tougher. Strengthen IBC laws

Leveraging technology to link small entrepreneurs to final consumer and maximise potential from certain sectors like tourism, gems and jewellery, clinical research

Fig 6: Investment Drivers

➢ Improve the quality of human capital formation

Demography affords India a sweet spot since it has a demographic cycle which is 10-30 years behind other countries which means greater productivity, savings & competitiveness due to fewer

dependents. However, India has not been able to capitalize on the sweet spot as it has lowest labour force participation

Amongst G20 countries. India needs to form new flexible and consolidated labour laws with minimum wage code to encourage employment in formal sector. It should set up skilling institutions and education in collaboration with industry information based on a large-scale enterprise survey. This will help to increase workforce in manufacturing, service and agricultural industry which shows decline currently.

➢ Increase in Total Factor Productivity (TFP)

The momentum of growth in India should be contributed by TFP. The government should invest in the changes in TFP which can be interpreted as a measure of the collective contribution of non-conventional inputs such as improvements in input quality, market access, economies of scale, and technology apart from land and labour. As per the given figure, there has been a stagnation in contribution from TFP leading to a decline in the growth.

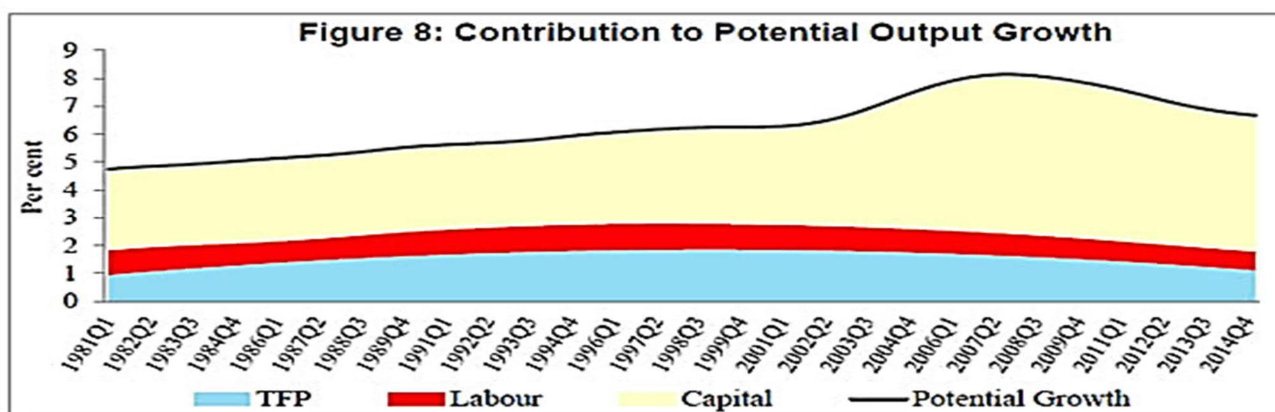


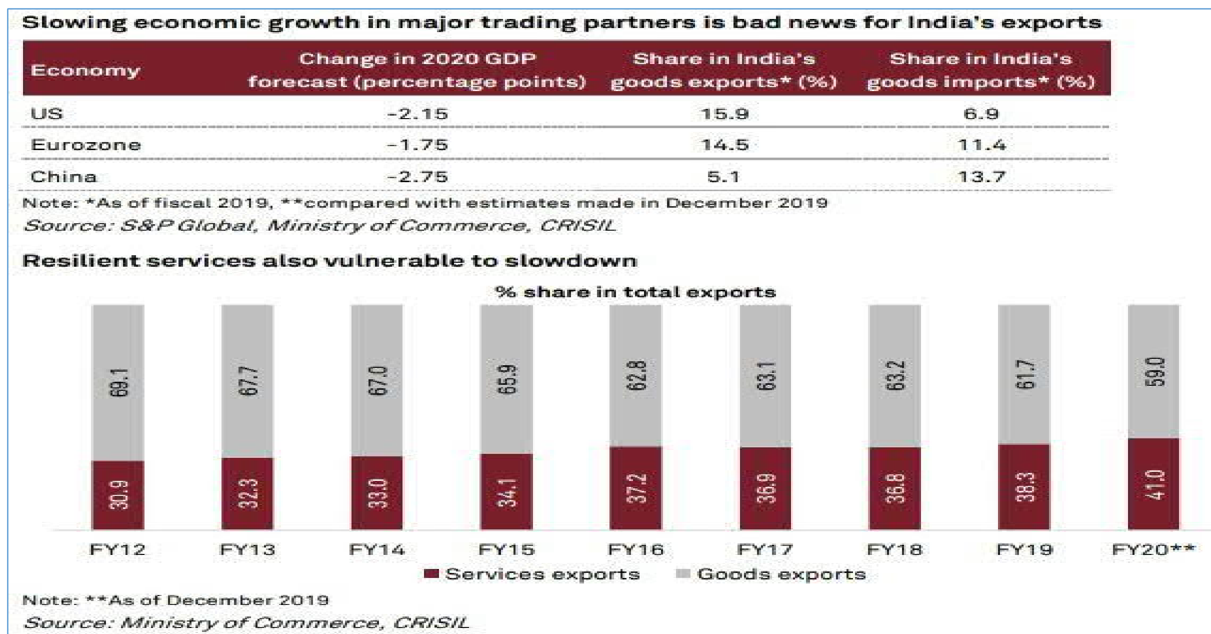
Fig 7: Contribution to Potential Output Growth

➢ Introduce asset recycling

It includes disinvestment of government stakes in companies and selling/auctioning off government-owned assets like roads, ports and airports to foreign and domestic long-term investors who are averse of construction risks but are ready for operational risks. Thus, it creates new assets thus recycling without endangering the fiscal deficit. This is however different from public-private partnership. Here government constructs and sells off to private.

3. Increase share through export competitiveness

Indian exports are uncompetitive due to the high cost of funds as compared to China, prices of land and skilled labour, erratic supply of power and basic infrastructure. We need some solid reforms like engaging more proactively in Regional Comprehensive Economic partnership or reducing higher custom tariffs and reversing overvaluation of rupee etc. which has led to current account deficit making India vulnerable to volatility in capital flows and high prices. It should not be restricted towards tinkering around subsidies or tax rates for exporters.


Slowing economic growth in major trading partners is bad news for India's exports

Economy	Change in 2020 GDP forecast (percentage points)	Share in India's goods exports* (%)	Share in India's goods imports* (%)
US	-2.15	15.9	6.9
Eurozone	-1.75	14.5	11.4
China	-2.75	5.1	13.7

Note: *As of fiscal 2019, **compared with estimates made in December 2019
Source: S&P Global, Ministry of Commerce, CRISIL

Fig 8: Slowing economic growth

Source: Ministry of Commerce, CRISIL

Further, schemes like 'One District, One Product' can prove to be instrumental in uplifting exports. It can be used to encourage artisans and craftsmen at district level. However, India should follow the US model of 'District Exports Council' to make districts committed partners in exports. Also, the coverage of 'Merchandise Exports from India Scheme' which provides incentives linked to exports should be increased.

How can India handle economic crisis during Coronavirus outbreak?

The Indian economy is hard hit by the corona virus outbreak. The primary contributors to the GDP – private consumption, investment and exports are be adversely impacted. India's GDP growth may fall below 3% under such circumstances.

The Finance Minister, Mrs. Nirmala Sitharaman has already announced a financial stimulus of Rs. 1, 70,000 to fight this financial turmoil.

Following are some short-term sector wise recommendations for oiling the wheels of Indian economy:

Sectors	Recommendations
Automobile	• GST rat cuts on vehicles to incentivise buyers • Deferment of GST payments to boost liquidity • Extend the Bharat Stage VI cut off date • Income tax deduction on vehicle loan
Aviation and tourism	• Moratorium on all principal & interest payments for 6 months • Taxes on Aviation Turbine Fuel (ATF) should be rationalised • Waiver of various airport rental payments for 6 months • Sector to be included in priority sector lending to boost credit infusion • Promote hygiene standards through publications and assessments
Construction and building	• Deferment of payment of loans and interests for developers • Govt subsidy for 3 months to pay for the salaries of workers • NPA classification to be rationalised
Consumer and retail business	• Easing manufacturing regulations to speed up clearances • Moratorium of rental payments • GST waivers and tax incentives • Improving capabilities for direct to home logistics
Food and agriculture	• Allow essential food items with zero supply chain restrictions • State Govt to supply agricultural inputs free of cost for the approaching kharif season • Leverage on E-commerce logistics to deliver food and avoid panick buying and crowding markets • Health and life insurance for delivery personnel

Sectors	Recommendations
MSME	• Rationalisation of NPA norms • Banks to provide funds to support working capital requirements • Deferment of advance tax and tax refunds to be credited immediately • Trade receivable discounting to be materialised and all receivables should be cleared in next 15 days
Pharmaceuticals	• Single window clearances • Allow export of APIs which are in excess quantity • Encourage R&D investment • Reduce dependence on China for import of raw materials
Transport and logistics	• Banks to extend working capital loans • Price caps to ensure fair pricing of transport facility • Standard guidelines for hygiene

As India fears entering the third phase of coronavirus transmission i.e. community transmission, India's primary focus must be on 3Ts. i.e. Trace, Test and Treat. India needs to ramp up the healthcare system to accommodate the rising number of infections. In such scenario, Gov. should encourage private players to step up and join hands in manufacturing sanitizer, N95 masks, Personal Protective Equipment, etc.

==

JAPAN'S ECONOMY AND ITS INTERESTING CASE OF NEGATIVE INTEREST RATES POLICY (NIRP)

Author: Sawini Mital

(GRADE XII, SHIV NADAR SCHOOL NOIDA)

What if instead of a bank paying you to hold your money, you theoretically had to pay the bank to keep it there? It could happen with negative interest rates. They first appeared in 2009, when Sweden cut its rate to -0.25. The Bank of Japan (BOJ) adopted a Negative Interest Rate
Policy (NIRP) in January 2016. The BOJ adopted a "tiered" system under which it charges -0.1% interest only to a small portion of excess reserves that financial institutions deposit with the central bank. It applies zero or +0.1% interest rate to the rest of the reserves. Central banks impose the drastic measure of negative interest rates when they fear their national economies are slipping into a deflationary spiral.

DEFLATION VS NEGATIVE INTEREST RATE POLICY

Why would you spend 10 rupees today when the expectation is that it could buy effectively more stuff tomorrow? And why spend tomorrow when things maybe even cheaper in a week? During deflation more money is saved, further decreasing aggregate demand and hence dropping prices, which further decreases profits and lowers economic growth. A newer train of thought is for a country's central bank to go into negative rates. When NIRP is put into action, cash deposited at a bank yields a storage charge, rather than the opportunity to earn interest income. This move is designed to give incentives to banks to lend money while influencing businesses and consumers to spend, rather than pay fees to keep their cash in an account at a bank.

BUBBLE ECONOMY

Now let us take a quick look at the most important economic phase of Japan, the 'Bubble Economy'. In the 1970s Japan was grounded as a king of the global electronic industry and people were being very optimistic about the economy of Japan and started a trend of investing in 1985. Due to the high rising yen value, the net export had fallen, the Bank of Japan used low-interest rate policy and monetary easing, this action further stimulated the investing in Japan and it triggered the formation

Of the bubble stock market and land value started to thrive. The cycle sustained for four years until it reached the maximum point at which the land value couldn't rise anymore. Another while after, the bubble Loans that were given to the people became bad loans which seriously damaged the banking system and bursting of the bubble contributed to what is called the Lost Decade.

NIRP's PROs and CONs

Advocates of negative rates say they help weaken a country's currency by making it a less attractive investment than other currencies. A weaker currency gives a country's export a competitive advantage and boosts inflation by pushing up import costs. This is one of Trump's motivations for wanting negative rates on the dollar. Negative central bank rates also lower borrowing costs so businesses and households get even cheaper loans.

After the announcement of NIRP, bank lending rates declined significantly since negative rates narrowed the margin that financial institutions earn from lending. There are also limits to how deep central banks can push rates into negative territory, depositors can avoid being charged negative rates on their bank deposits by choosing to store actual banknotes instead of making deposits.

AGEING POPULATION

Japan has a shrinking labor force that affects the financing of capital. Due to an increasing share of the elderly there have been substantial transfers of income from the working to the retired generation through the tax and social security systems which affect both investment and savings. By 2030 nearly one-third of the population will be aged over 65. A negative rate policy punishes people trying to save for retirement. If all of a sudden a retirement savings account stops paying interest and instead reverses into destroying the value of the account, savers are left with less money than they expected to receive for retirement.

However to some extent aging society offers its solutions to the problem they create. Older societies tend to save a greater share of their income however this can change into corporate saving rather than household saving as companies adapt to a slower growth environment this goes into government bonds which help lower long term interest rates.

SHORTAGE OF DEMAND

The Japanese negative rate policy is implicitly based on a supply-side economic theory for growth and less importance to demand. Businesses in Japan are not going to invest in production and increase supply unless doing so offers the prospect of revenue and profit. The labor shortage is causing a price increase in consumer goods and services and with the fear for the unstable future consumers in Japan are increasingly becoming selective and mindful of their spending. To increase demand the central bank can increase money supply which increases the purchasing power of the consumers.

Now with the idea of printing lots of money, the question of inflation arises. Printing money is only inflationary if people spend it and as we have seen before that consumers in Japan spend less. However, if there is more money chasing the same amount of goods, firms will just put up prices and if that spending exceeds the economy's capacity to produce then there could be a rise in inflation and Japan can reach its 2% target of the inflation rate. In 2019 the inflation rate was 0.99%, this year 2020 it is 1.3% and it is expected to be in 2021 at 0.66%.

The reason behind the Bank of Japan not just going out and printing lots of money is that the bureaucrats at the Bank of Japan and the Ministry of Finance are still lost in the memory of the "Bubble Economy". They believe that loose monetary policy created that bubble and so they are afraid to increase the money supply now for fear of repeating the experience.

JAPAN'S INCREASING DEBT

The total amount of long-term debt of central and local governments reached 1,093 trillion yen (198% of GDP) at the end of Fiscal Year 2017. The Bank of Japan recently started targeting 2% inflation the problem with this is that Japanese investors had come to view falling consumer prices a deflation as a real return so when consumer prices fell by 1 percent per year and they got a nominal yield of 1 percent, they called it a 2 percent real yield but the Bank of Japan's new policy is going to flip the polarity of this calculation so even get back to where they were investors will have to charge the government a higher nominal rate, combine this with Japan's increasing reliance on external capital and you can see just how easily the average debt cost can dangerously increase.

Historical evidence of negative rates shows that they do not help reduce debt, they incentivize it. They do not strengthen the credit capacity of families, because the prices of non-replicable assets such as real estate skyrockets because of monetary excess, and the lower cost of debt does not compensate for the greater risk.

OVERALL CONCLUSION

There have been speculations that Negative Interest Rate Policy (NIRP) in Japan may have benefited Asian economies. This might have happened because local financial institutions faced a substantial stock price decline after the announcement of NIRP and lost their profit opportunities in domestic markets and hence they started exploring a new profit opportunity in emerging Asia.

Some economists suggest BoJ can stop hoarding of money due to NIRP by imposing a carrying tax on money or if cash were to be stamped periodically to lower its value, if the opportunity cost of holding money will be higher than depositing in the bank, then people will end up depositing their money, however, I think this will defeat the purpose of negative rates which is to encourage people to spend and not save.

The Japanese government is making all decisions very carefully due to fear of the bubble economy however acting just the opposite of what they did during that situation will not benefit them as this start of a new decade is not the same as the 1980s.Therefore the government has to make huge but smart moves to make Negative Interest Rate Policy more effective.

CORONAVIRUS: CHALLENGES AND OPPORTUNITIES FOR FINTECH

Author: Sourish Roy

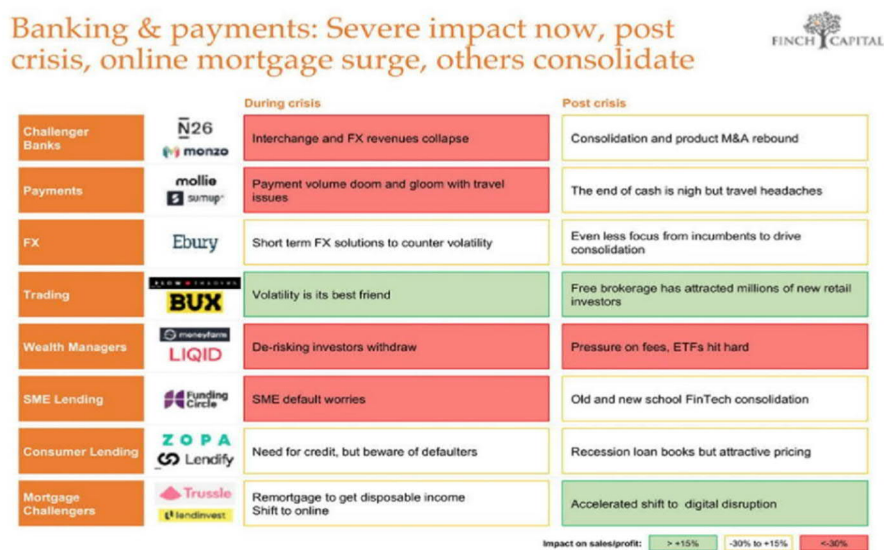
(NMIMS Mumbai)

The recent outburst of the Coronavirus has brought almost the entire world into a standstill. The virus has infected more than a million people and claimed more than 50000 lives all over the world. Apart from the disastrous impact on our lives, it has hit the world economy in an unprecedented manner. Analysts forecast a deep economic recession on a scale much larger to the financial crisis of 2008. While the economic impact of 2008 brought about a paradigm shift in business models giving way to the sharing economy with the rise of new age companies like Uber and Airbnb, the current state of affairs suggest practices such as social distancing, self-isolation, virtual meetings and work from home practises. The banking and financial services industry is facing one of the toughest challenges in modern times. In India, during the 21 day lockdown, the government announced measures to facilitate availability of essential commodities. Almost all the major banks had to transform their business in a matter of days to accommodate this and ensure availability of banking facilities to its customers. Fintech, a fairly new sector is well positioned to adapt to these challenges while coming up with creative solutions to modern problems like supporting customers, building relationships and future planning. Digital only is fast becoming the new norm in financial services which implies shifting to digital presents a larger challenge to traditional companies. Some of the *info graphics indicating the potential rise of the Fintech industry are shown below:*

Fig 1: Future of Fintech
Source: Agility PR Solutions

Fast adoption of mobile wallets gearing up for a cashless economy and adoption of integrated payment features would present a huge opportunity for the Fintech companies post the crisis. Consumers will use mobile devices to operate ATMs and terminals remotely without touching the screen. Technology providers should be focusing on alternative authentication methods through biometrics.

The Fintech companies already have their databases and developmental stacks in the cloud, allowing for operations to continue anywhere. Also, they are naturally adopted to work remotely in collaboration using various tools like Skype, Teams and Slack while maintaining the desired level of security. While the competition between banks and Fintechs facilitating payment services, challenger banks have remained fierce for a while, this is set to change as both banks as well as Fintechs see the benefit in collaboration and playing to each other's strengths. As banking partners face challenges to connect remotely and increase customer touch points catering to customer needs, Fintech actually makes it possible using its speed and agility. Also, the business continuity plans for Fintech include planning not only for technical system outrages but also for natural disasters and calamities such as these, which has helped them work remotely without any impact on customers.
Consumer and SME lending platforms are best suited to adopt to the new practices and deliver capital to key economic segments. Life insurance companies are fast shifting digital to minimise operational costs by removing intermediaries. Fintech enables like AI, Chatbors, loan automation soft wares, automatic KYC tools are in much demand at the moment.


Banking & payments: Severe impact now, post crisis, online mortgage surge, others consolidate

FINCH CAPITAL

		During crisis	Post crisis
Challenger Banks	N26, monzo	Interchange and FX revenues collapse	Consolidation and product M&A rebound
Payments	mollie, sumup	Payment volume doom and gloom with travel issues	The end of cash is nigh but travel headaches
FX	Ebury	Short term FX solutions to counter volatility	Even less focus from incumbents to drive consolidation
Trading	BUX	Volatility is its best friend	Free brokerage has attracted millions of new retail investors
Wealth Managers	moneyfarm, LIQID	De-risking investors withdraw	Pressure on fees, ETFs hit hard
SME Lending	Funding Circle	SME default worries	Old and new school FinTech consolidation
Consumer Lending	ZOPA, Lendify	Need for credit, but beware of defaulters	Recession loan books but attractive pricing
Mortgage Challengers	Trussle, lendinvest	Remortgage to get disposable income Shift to online	Accelerated shift to digital disruption

Impact on sales/profit: > +15% | -30% to +15% | <-30%

18

Fig 2: Impact on Banking and Payments,

Source: Finch Capital

Challenger banks with high valuations are under pressure as they would expect lower economic activity post the crisis. Payments and forex companies would also be hit hard due to lower customer spending and lower volume of transactions.

Enabling FinTech - During crisis delay in sales, post crisis surge for enabling techs that reduce costs

			During crisis	Post crisis
Crypto		Ledger, BITFURY	The sell off commences	Clear out of 90% of market
AI	Automate & analyse	UiPath	Never a better time to automate	SMEs shout for more
AI	Customer Service	PolyAI	Chat bot army mobilizes	Call centers start optimizing
AI	RegTech/ Security	PRIVITAR, fourthline	Work from home vulnerabilities exposed	E-Identity becomes norm
AI	"As-a-service" software	blend	No volume through the system	Lending and mortgages implementation breakthroughs
Open Banking		solarisBank, TRUELAYER	Fast tracking rescue packages	Challenge to update API standards
Blockchain	Trade Finance	TRADEIX	Defaults up and technology is last thing on mind	Fight for survival and execution
Blockchain	Real Estate Investment	Brickblock	New initiatives on hold, pressure on fees	Need to raise AuM cost effectively
Blockchain	Capital Markets	ripple	No trade, no remittance, XRP issues	No major push to the protocol

Impact on sales/profit: > +15% | -30% to +15% | <-30%

21

Fig 3: Impact on Fintech Enablers
Source: Finch Capital

Moreover, Fintech companies are uniquely positioned to assist small businesses. Restaurants and hospitality industry are also trying to enter into digital space, which indicates that Paytech is at the centre stage now. Many Fintech companies like Numerated, Agora Services have waived off setup fees and deferred billing for three months to help small businesses. Coronavirus has acted as a catalyst for leveraging mobile-first banking. Not only the retail customers, but companies transacting mainly online are contributing to the surge in online practices. There exists potential to thrive for online services, VR technologies, remote working platforms, sustainability-related businesses and also fintech companies which help customers embrace new, future-proofed ways of money-saving and management. The Fintech industries have grown multi fold during this crisis and the below picture shows an indication of the likely growth in China. A similar kind of growth potential exists in other economies too.

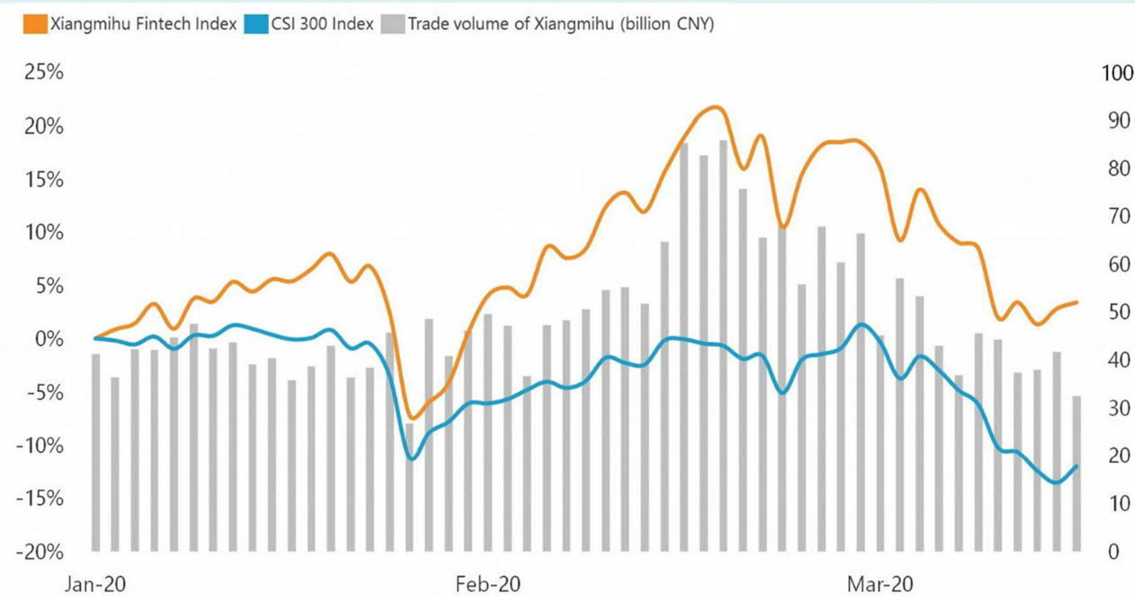


Fig 4: Fintech Industry Growth in China

Source: Equal Ocean

Also, with the current outbreak of Coronavirus and its deep economic impact, it might be a boon for Crypto markets. In fact, March has been a record month for new users of Crypto platforms worldwide, and their spend on the platform. While the fundamentals remain strong, there is a huge price potential after the Covid – 19 levels out. The current traditional banking infrastructure is not suitable for this adoption and required newer business models.

The practices of open banking will see a larger number of customers on board, as we would see a willingness to embrace and accelerate usage of technology. Also, the huge expenditures in IT and infrastructure have always been a pain point for the banks and financial services. The current outbreak has forced incumbents to move data from heavily localised IT systems to the cloud which clearly indicates the limitations of traditional IT infrastructure. These factors also provide space for Fintech firms to concentrate on cloud services. The figure below shows the kind of growth we can expect in financial services cloud in the coming years in China.

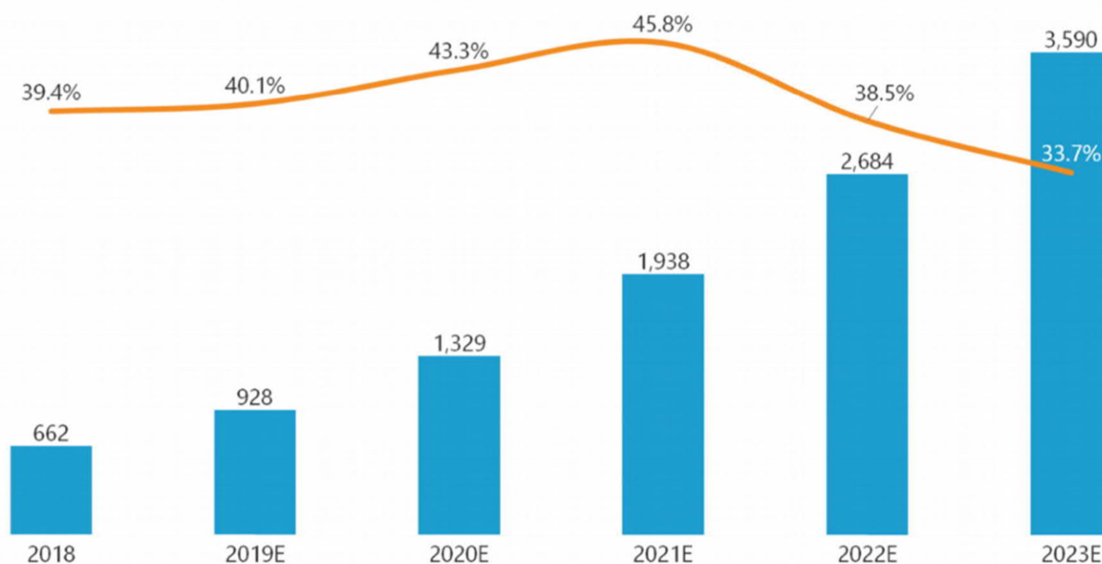


Fig 5: Growth in Financial Cloud Services, Chin
Source: Equal Ocean

Coronavirus has presented a unique opportunity for all businesses. While these are challenging times for most, only the ones who lead the change and adapt their business models accordingly will survive.

The Fintech is one of those industries which promises a huge growth potential in the future and the success lies in collaboration.

CAPITAL MARKET SCAMS

Author: Rahul

(MASTERS IN BUSINESS ADMINISTRATION: IIM KOZHIKODE)

The general definition of the capital market is that it is a market where individuals and organizations raise capital through selling of bonds, stocks, debentures and other types of securities. Complexities that exist in this financial mechanism have attracted a lot of scams. Cases like Mehta, Nirav Modi are reminders that the capital market is extremely vulnerable to manipulation. To illustrate how the capital market scam works, we will look into the Harshad Mehta case.

Harshad Mehta's Securities Scam led to the stock market crash in 1992. It is during this time the Indian economy opened up to the world market, thus paving the way for prosperity. Adjusted with inflation today, Mehta scam was around 24000 crores rupees over three years. He joined a stock market brokerage firm in 1981 and made connections with influential brokers of the Bombay Stock Exchange. He became a BSE broker and started his firm Grow More Research asset management company.

Mehta had the lust for money and started exploiting loopholes in the banking system. During that time, Indian Banks are required to keep 38.5 % of their Demand and Time Liabilities in the form of government securities. This is called statutory liquidity ratio securities. Large banks had no trouble in keeping SLR and they had surplus SLR so they were ready to lend. Weak banks that could not maintain the adequate level of SLR had to borrow from these big banks. This is called a ready forward deal. RF deal is usually mediated through a broker who charged commission from both parties.

Two banks which are involved in the RF deal did not even know each other which due to blind trust kept on brokers by the banks. Mehta who is among the reputed brokers during that time used the lead time between the transaction between two parties to his advantage. Once he gets the money from the small bank, he would invest that in selected stocks aggressively and push its price so high till other investors also follow his lead. After that, he would withdraw the money from the market at a higher price and hand over to large banks in exchange for securities. Once he got a higher number of clients, he rotated money so that he does want to take all the money out of the stock market.

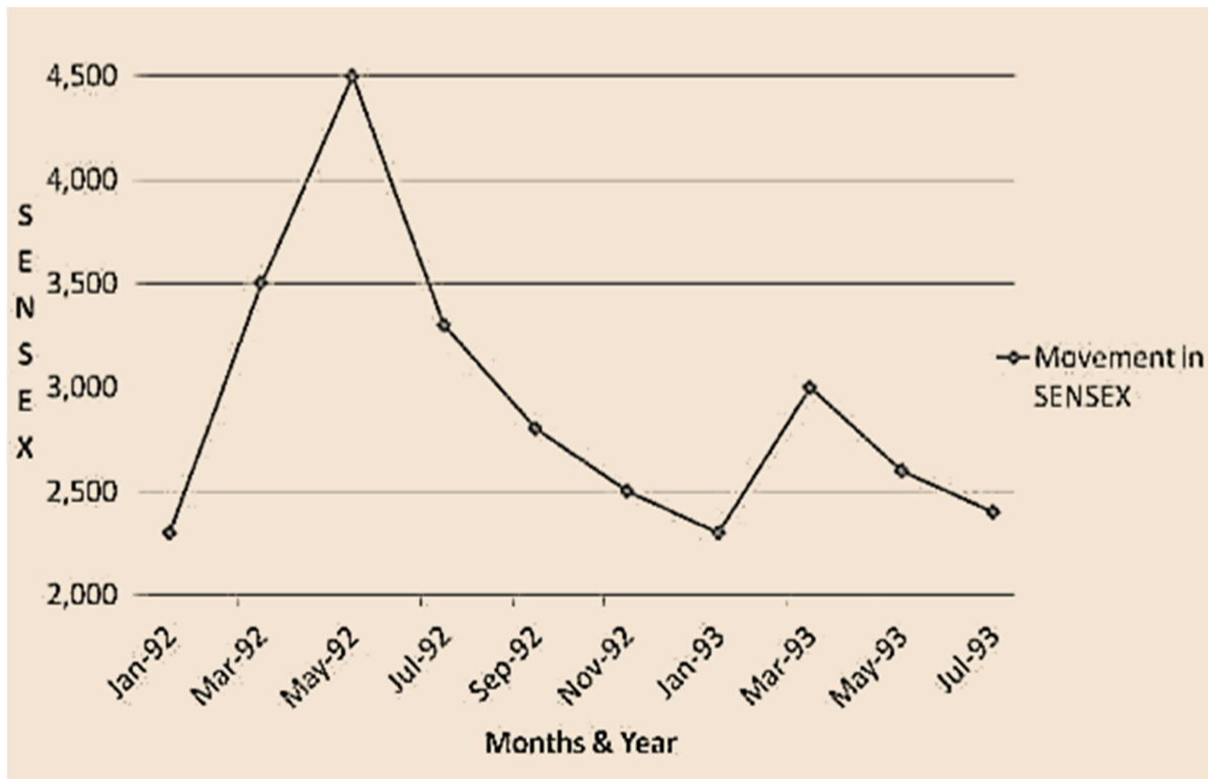


Fig 1: Impact of Scam on Market

Mehta persuaded Bank of Karad and Metropolitan Cooperative Bank to issue fake bank recipients which were not backed by any government bonds. He sold these bank receipts to banks in exchange for money. This money was used to invest in stocks and drive up the prices. For Example, ACC stock was pushed by him from 200 to 9000 thousand rupees. No one could figure out this scam. Later it was Sucheta Dalal article in Times of India exposed the loopholes in the financial markets and banking system. As soon as the scandal was exposed, markets crashed and banks started demanding their cash. This time Mehta could not repay the amount since the stock market prices were low. Thousands of investors were hit due to this crash and many bank officials were fired. Later Bombay High Court sentenced him to 5 years imprisonment.

It is extremely difficult to detect all kinds of capital market frauds given the complexity involved in a financial institution. Based on the records, capital market frauds and market abuses can be classified into 12 types,

1. Accounting frauds: Satyam Computers 2009 scam, Vikas Metal and Power 2012 scam

2. Promoter - Broker - operator nexus: Sanjay Dangi 2010 scam, Dinesh Singhania scam

3. Demat scams: IDFC IPO 2005 scam, Yes Bank IPO 2005 scam, Jet Airways IPO 2005 scam

4. GDR frauds: Seven Companies 2011 case

5. Insider trading: HUL – BBLIL 1998 case, Reliance Petri Investment Ltd 2007 scam

6. (Unfair) Delisting: Frensenius Case

7. Market Manipulation: Harshad Mehta 1992 scam, Sunil Mehta 2009 scam

8. Mis-leading disclosures: Zenith Infotech Limited 2011 case, Zylog Systems Limited 2012 case

9. Mis-selling ULIPs: UTI scam

10. Ponzi schemes: CR Bhansali (CRB) 1996 scam, Anubhav Plantations 1998 scam

11. (unfair) Buybacks: Sterlite Industries Limited 2002 case, Godrej Industries Ltd 2002 case

12. Violation of take over guidelines: Titan International 2012 Case.

Particulars	Investigations Taken Up		Investigations Completed	
	2017-18	2018-19	2017-18	2018-19
Market manipulation and price rigging	40	84	120	60
"Issue" related manipulation	1	2	9	1
Insider Trading	15	70	6	19
Takeovers	1	6	0	3
Miscellaneous	60*	32	10	27
Total	**117**	**194**	**145**	**110**

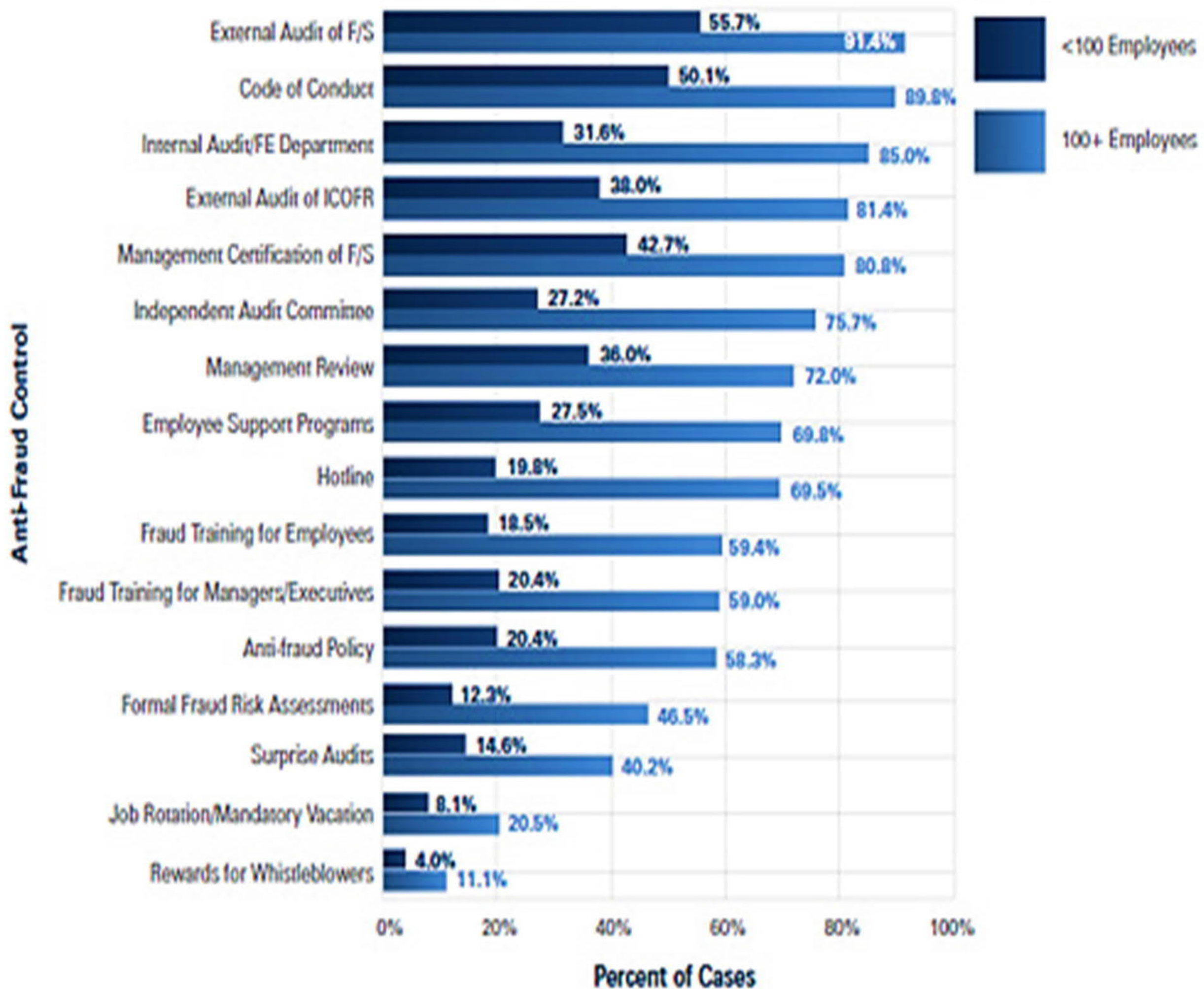
Category-Wise Nature of Investigations

Regulatory Action approved by Competent Authority	No. of entities	
	2017-18	2018-19
Administrative warning	322	40
Proceedings under Section 11 of SEBI Act, 1992	1,195	498
Proceedings under Intermediaries Regulations	1	7
Adjudication proceedings	1,256	15,910

Type of Regulatory Action Initiated

Fig 2: SEBI Report 2019

Fig 3: Detecting the Scams



There are multiple techniques to detect the fraud, so an exhaustive list is published by the Association of Certified Fraud Examiners report in 2012. These are some of the tested methods which were useful in determining the past capital market frauds.

In India government has set up various institutions like NSE, SEBI etc to act as regulators. But only through increase coordination between the Department of Company Affairs, RBI and Ministry of Finance with SEBI will ensure greater success in detecting the capital market frauds.

Few research papers have sighted that technologies will offer better solutions in identifying these frauds. Technology, as such, cannot be classified as boon or bane, it is what humans do with it. Introduction of Blockchain and Cryptocurrencies is seen as the birth of new age of finance where

there is a higher level of transparency, the privacy of individuals is protected, high-level security through cryptography and no government interventions. But in 2016, $50

million worth of Ethereum was stolen by a programmer by exploiting the vulnerability in the code. Bitcoin prices spiked to an all-time high of $20,000 in a day (December 2017) and then kept falling drastically. Etherium also suffered high price volatility in June 2017 when its price

fell from $319 to 10 cents. All these examples indicate that when the world is moving towards greater adoption of technology in capital markets, there is a new kind of financial fraud that is going to get invented on the way. So the existing fraudulent detection techniques may go obsolete. Instead of creating full proof fraudulent free system, we should focus on minimizing the damages caused by any fraudulent actions.

YES BANK CRISIS

Author: Karan Bhatia

(Founder: Fund Vesting)

Banks play a pivotal role in the economic growth of the country. Failure of a bank, irrespective of the ownership, private sector or public sector, can impact everyone. Hence, neither Government of India nor Reserve Bank of India (RBI) never lets a bank
– facing troubles in its financial position
– to fail.

Yes Bank Ltd, one of the major private banks in India, has been facing the problem of rapidly deteriorating financial position. This necessitated Reserve Bank of India (RBI) to take immediate action in the form of a reconstruction scheme to protect depositor's money.
Yes Bank, started in 2004, is one of the new generation private banks that were allowed to start banking operations by Reserve Bank of India in the post-liberalisation era. The bank was founded by Rana Kapoor and Ashok Kapoor. YES bank is, currently, India's fifth-largest private sector lender.

Loans not repaid is a major issue of most banks in India. These bad loans are called Non-Performing Assets (NPA). The Gross Non-Performing Assets of YES Bank was 7.4% of the gross advances at the end of September 2019 as the bank engaged in high-risk lending, providing loans to those who could not raise funds elsewhere.

The crisis at YES Bank started when the huge NPA issue at YES Bank became public. The founder Rana Kapoor had personal connections with most of the high-level industrialists who sought his help for loans, which went not repaid.

For instance, YES bank – DHFL bribery case came into news recently, whereby CBI carried out searches in connection with the YES Bank scam. It was of the opinion that Rana Kapoor (CEO of YES Bank) entered into a criminal conspiracy with Kapil Wadhawan (promoter of DHFL) and others for extending financial assistance to DHFL. It also mentioned that during April to June 2018, YES Bank invested Rs 3700 Crore in short term debentures of DHFL. In lieu of this, Kapil Wadhawan allegedly paid Rs 600 crore bribe to Rana Kapoor and his family members.

The Bad loans of Yes Bank are estimated to be around Rs.17000 crore. As per the latest estimates by financial agencies, the NPA of Yes Bank may have increased to 10-11% of the total loans given.

As the bank had a lot of bad loans (in tune of Rs.10, 000+ crore), it needed fresh capital to manage its operations. The bank's failure to raise capital led to rating downgrades, which made capital-raising even more difficult.

All the above factors led the RBI to conclude that there was no credible revival plan from the end of YES bank and so, in public interest and the interest of the bank's depositors there was no alternative but to place the bank under a moratorium till April 3. It has also appointed deputy managing director and chief finance officer of State Bank of India, Prashant Kumar, as an administrator of the bank and has imposed limits on withdrawals to protect the depositors.

It recently stated that State Bank of India (SBI) has expressed its willingness to make an investment in Yes Bank Ltd. and participate in its reconstruction scheme. From the Appointed date, the Authorised Capital of the Reconstructed Yes Bank shall stand altered to Rs. 5000 crore and the number of equity shares will stand altered to 2400 crore. The capital of the reconstructed bank at Rs.2 face value per share would be Rs. 4800 crores.

The investor bank (Eg: SBI) can purchase up to 49% in the reconstructed YES bank. The investor bank should purchase each share at price not less than Rs.10 (i.e. at a premium of Rs.8). So, if SBI is purchasing 49% of 2400 crore YES Bank shares at Rs.10 per share that would mean it will be investing Rs.11760 crores to purchase 1176 crore shares of the private bank. (The Investor bank is not allowed to reduce its holding below 26% before completion of three years from the date of infusion of the capital).

Existing shareholders own 255 crore shares, and they will end up with a roughly 11% stake in the company. The balance 40% stake will presumably be held by other institutions and investors, who will need to infuse roughly ₹ 9,600 crores, assuming the acquisition price is ₹ 10 per share.

The current deal of SBI with Yes Bank is not a merger rather an equity investment by SBI in YES BANK. The government or RBI has no plans to shut down Yes Bank. Rather, it attempts to formulate a plan to revive the private bank to its old glory. If the reconstruction scheme is properly implemented, the crisis would hopefully end. From the depositor's perspective, their hard-earned money may get locked up for a few more weeks. However, as assured by the Finance Minister, their deposits will be protected.

In the end I would like to add that taking effective remedial steps to ensure good health and credibility of the Indian business and banking system is crucial to fulfilling India's ambitions as a rising power. And for this, the process needs to start now.

REGTECH 3.0 – FUTURE OF FINANCIAL ECONOMICS

Author: Soumya Kesharwani

(*Christ (Deemed to be University), Bangalore*)

The financial crisis of 2008 led to many technological innovations in the financial sector in order to increase the financial sector regulations. This eventually led to the development of RegTech - A technology managing the various regulatory processes in the financial industry. With the help of advanced analytics, automated robotic process and cognitive computing, it helps to achieve regulatory outcomes in an effective and efficient manner. RegTech's digital disruption in not only about better efficiency in current processes but about a completely new framework altogether. RegTech consists of cloud computing companies that form a group through Software as a Service (SaaS) and help the businesses to comply with all the regulations in an effective and efficient manner. Some key elements that RegTech can help to achieve are-

1. Give valuable insights of the business
2. Ensure better and faster services for customers
3. Provide enhanced protection to customers
4. Mitigate the risk by strengthening the compliance

RegTech 1.0 and 2.0 have already been launched and evolved and the newest member in this family is RegTech 3.0. RegTech 1.0 was a pre-2008 paradigm when the financial institutions were introducing the use of technology to monitor and analyse risks of particular regulations and processes. While RegTech 2.0 has been in use over the past decade helping the companies to conform to the rules and improve their supervision activities. The main focus of 2.0 was on Know Your Customer (KYC) in order to improve the customer satisfaction. The regulatory framework for 3.0 is currently in the rethinking stage. RegTech 1.0 and 2.0 mainly focused on the digitization of regulatory procedures while RegTech 3.0 is all about development of a regulatory system for the digital era. Its main focus will be to shift from 'Know Your Customer' to 'Know Your Data' segment as the financial institutions have begun to see risk and regulations as data and believe that the prediction problems faced can be addressed through this technology. It is the time to shift focus from money digitalization to monetization of data in order to make a framework to accommodate new concepts like algorithm supervision and data sovereignty. The basic requirement for the same is sequential development of FinTech with RegTech.

The fundamental obstacle for RegTech's growth is not only technical constraints but also the capacity of regulators to process the large quantities of data produced by the technology itself. The Regulators need to adopt a coordinated approach to harmonize financial regulations and to support the continued development of RegTech.

For the development of RegTech 3.0, regulatory sandboxes are used as the testing grounds. Sandboxes here refers to the virtual environments which serve as a base to test and examine in isolation the impact of new innovative processes and technologies. With Project Innovate Unit, the UK Financial Conduct has already made progress in this area. It attempts to achieve the objectives like reduction in time to market, improved financial access and the promotion and encouragement of innovation.

RegTech is beneficial to both industrial sector as well as the regulators. It can allow financial institutions to manage costs and risks efficiently for business, liberate regulatory surplus resources and create new opportunities for FinTech companies, consulting and tech firms. For regulators, it enables the development of continuous monitoring software to detect problems as they grow and minimize the time it takes to investigate violations of compliance; it also promotes the development of simulation systems and sandboxes which can predict the possible effects of potential changes and new approaches.

The real transformative potential of RegTech lies in its capacity to enable financial markets to be monitored in real time, thereby facilitating the reconceptualization of financial regulation. Markets are now relying more on data. The RegTech 3.0 would provide a regulatory framework that is as data centric as it monitors the markets. As the market moves from relying on KYC type information to a KYD paradigm, with consequently transformative effects on finance and its regulation, the evolution of this new form of financial service provider will demand further development of RegTech.

With the development of RegTech 3.0, agent based modelling techniques and economic analysis can be used to stimulate new policies. RegTech would be beneficial in the near future when the regulators will be in pressure to adapt to the newly fragmented market which would include banks, tech firms and start-ups. RegTech would help the authorities to monitor as well as regulate the industry participants and would help them to identify when to do so. This way it is of utmost importance to the industry as well as to its regulators. RegTech is at the verge of a revolution which has the potential to change the industry's enforcement approach and generate additional value. RegTech 3.0's potential is backed by regulator support, impetus for digital change, rising investment levels and a proliferation of start-ups who seek to meet demand along with the big tech firms. Thus, the development of RegTech is very crucial for the financial sector for its expansion and growth.

GLOSSARY

- **Arbitration:** Arbitration is a proceeding in which a dispute is resolved by an impartial adjudicator whose decision the parties to the dispute have agreed, or legislation has decreed, will be final and binding.
- **Bureaucrat:** an official in a government department, in particular one perceived as being concerned with procedural correctness at the expense of people's needs.
- **Catalyst:** In the financial media, a catalyst is anything that precipitates a drastic change.
- **Credit crunch:** A sudden sharp reduction in the availability of money or credit from banks and other lenders.
- **Crypto currencies:** It is a digital asset designed to work as a medium of exchange wherein individual coin ownership records are stored in a digital ledger or computerized database using strong cryptography to secure transaction record entries.
- **Decelerating:** Slower demand.
- **Deflationary:** characterized by or tending to cause economic deflation
- **Ethereum:** Ethereum is an open source, public, block chain-based distributed computing platform featuring smart contract functionality.
- **Financial Assistance:** Official help given to a person or organization in the form of money, loans, reduced taxes, etc.
- **Fraudulent:** unjustifiably claiming or being credited with particular accomplishments or qualities.
- **Incumbents:** The term incumbent refers to an individual who currently holds a set of responsibilities within a specific office as part of a corporation or within a branch of the government.
- **Interventions:** interference by a state in another's affairs
- **Liquidity trap:** The liquidity trap occurs when interest rates are at or close to 0%, but people still hoard cash instead of spending or investing it.
- **Moratorium:** A temporary prohibition of an activity.

- **Negative Interest Rate Policy:** This monetary policy tool is used to strongly encourage borrowing, spending, and investment rather than hoarding cash, which will lose value to negative deposit rates.
- **Opportunity cost:** the loss of other alternatives when one alternative is chosen.
- **Paradigm shift:** A fundamental change in approach or underlying assumptions.
- **Post-liberalization era:** Period before 1991
- **Speculation**: the forming of a theory or conjecture without firm evidence.
- **Statutory liquidity ratio:** It is the Government term for the reserve requirement that commercial banks are required to maintain in the form of cash, gold reserves, Reserve Bank of India-approved securities before providing credit to the customers.
- **Synchronized slowdown:** The global economy is now in a synchronized slowdown. This means that growth this year will fall to its lowest rate since the beginning of the decade.
- **Tax buoyancy:** Tax buoyancy explains this relationship between the changes in government's tax revenue growth and the changes in GDP, In other words, it measures the responsiveness of tax mobilization to economic growth.

References:

1. https://www.sebi.gov.in/reports/annual-reports/jul-2019/annual-report-2018-19_43670.html
2. http://www.jctindia.org/oct2016/v11i2-8
3. https://www.acfe.com/rttn-conclusions.aspx
4. Crisil Research Report – Covid 19 Impact Note
5. Monetary Policy Report – October 2019
6. https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=19331#III1
7. Going full tilt -Monetary Policy Review - March 27, 2020
8. https://www.theindiaforum.in/article/understanding-india-s-economic-slowdown
9. https://www.livemint.com/news/india/15-ways-to-define-india-s-slowdown-1565715613762.html
10. https://www.thehindu.com/opinion/op-ed/a-road-to-economic-revival-runs-through-agriculture/article29611772.ece
11. https://www.business-standard.com/article/opinion/new-fiscal-mindset-key-to-reviving-growth-119070201179_1.html
12. https://www.business-standard.com/article/opinion/confronting-macro-challenges-119061300056_1.html
13. https://www.business-standard.com/article/opinion/facing-another-slowdown-119061100048_1.html
14. https://www.ey.com/en_in/tax/how-india-can-revive-economic-growth
15. Arner, D. J. W. B. (2017). FinTech and RegTech in a Nutshell, and the Future in a Sandbox. Retrieved from https://www.cfainstitute.org/research/foundation/2017/fintech-and-regtech-ina-nutshell-and-the-future-in-a-sandbox
16. Arner, D. W. (2016, October 1). FinTech, RegTech and the Reconceptualization of Financial Regulation by Douglas W. Arner, Janos Nathan Barberis, Ross P. Buckley: SSRN. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2847806
17. Steele, C. (2018, September 17). RegTech: The revolution is coming. Retrieved from https://home.kpmg/uk/en/home/insights/2018/09/regtech-revolution-coming.html

STUDENT EDITORS

AAKARSH DHALL

TANVI JAIN

DRISHTI MALHOTRA

NALIN GOYAL

SHIVANI GUPTA

INDER MOHAN

GENERAL INFORMATION

01 "A+" Grade Accreditation by NAAC in Year 2017 ('A' Grade in Year 2004 & 2011)

02 12 (b) Status by UGC

03 29 Constituent Units

04 3 Research Institutes

05 12 Streams

06 40 BOS

07 290 Programmes

08 26th April 1996 established under Section 3 of the U.G.C. Act 1956