### **Future Ready Financial Sector- Issues and Challenges**

I am thankful to Mr. Srikanth for inviting me to this prestigious institution to speak at its flagship annual event. I am truly humbled standing before all of you as this podium had been shared by luminaries, virtually "who is who" of this great nation.

2. Given my background, a career central banker who is now Chairman of a large public sector bank, that is struggling to turn around, I must admit, as I am normally accused of, including by my wife, of not able to talk on anything except finance, and not to any audience other than bankers. So, I was indeed reluctant to accept this invite, but could not let go an opportunity to visit this iconic campus.

3. The theme of the conference India 2047 is interesting. To me more so, after I happened to listen to a discussion by author of a bestselling book, "21 Lessons for the 21st century"- Prof Yuval Noah Harari. To a question how one should prepare for the future, he makes some interesting comments. According to him, nobody knows or can predict how the world would look like in 2050, except that it is going to be very different from today. A new revolution is on us led by technology. While the world gloats over the powers of AI-artificial intelligence, it is the combined application of AI and bio technology that makes the change interesting, even alarming. While countries that missed out on industrial revolution took a century and half to catch up, Harari is of the view that nations that miss out on technology led revolution that is going to play out will miss out for ever.

They can never catch up. How should method of education change for meet the new realities? Drawing the example of dwelling places, he says while earlier method emphasised on stone houses, well built, deep and strong, the new ones would be like tents, foldable and movable quickly. In other words, most important qualities to develop would be emotional intelligence and mental stability because one needs to reinvent oneself repeatedly.

4. Given the above, how do I see changes in the financial sector spanning out and how the system needs to change to become future ready? If I look back, there are several milestone moments of policy making in the RBI since the beginning of the 1990s. These were decisions that changed the course of history of the Indian financial system, decisions that won the acclaim of the international financial community. But these were decisions taken without any certainty about the outcomes. While I do not want to go into details, let me bring to your attention the more important ones like moving from administered controls in the money, credit and forex markets to allowing the functioning of free markets albeit with some controls, allowing private sector and foreign banks a larger role, forcing technology into the banking system by setting up a closed user network and a dedicated institution for banking technology and research, allowing non-banking companies to freely function even with 100 per cent foreign ownership, setting up world class market infrastructure institutions like the National Stock Exchange and Clearing corporations, CCIL and NPCI which rest of the world is trying to mimic, transforming the indian payment system and bankruptcy code and finally the cleaning up of the banking system which is under way. These decisions were never easy. Policy making invariably involves taking measured risks in the face of uncertainty, for as Dr Rajan pointed out, "one has neither a prior template nor the luxury of indecision". So, central bankers who are often dubbed as "boring" always live in interesting times, facing continuously damn if do or damn if you don't situations. How did we go about then? It involved extensive research into other country experiences, what could work in India and what would not, engaging with other central banks, being a part of central institutions like the Basel Committee etc. Will the same approach work for future as well? A technology led system that innovates challenges classic central banking as there is no luxury of wait and watch policy. Given these, how should the system change to be future ready?

5. How has technology changed the landscape? I take the example of the financial sector but the lessons drawn here I am sure are equally applicable in any business government and defence establishment.

6. India is indeed at a critical point in its history. Demonetisation and the government drive is fast transforming India into a digital power house. A report by the McKinsey and Company "Mastering New Realities- A blueprint to transform Indian Banking" flags two major trends on the supply and demand side that are converging to drive a major transition viz. (i) surge in digital adoption on the supply side and (ii) shift in

customer expectations and behaviour on the demand side. These changes could trigger the emergence of 12 large eco systems in India like, transportation, travel and hospitality, Mobility, Housing, Digital content, Education, Health, Public services, Wealth and protection **on the retail side AND** B2C, B2B market places, B2B services and Global Corporate services **on the institutional side**.

7. Given this emerging scenario, what is the "new normal" as far as financial sector is concerned? According to the World Fintech Report 2018, it is the transformation of a rather homogenous, somewhat staid market place into a dynamic milieu of bar raising specialists. At the core of this transformation is the customer centric innovations in a bid to exceed their expectations of personalised services that is being taken for granted by modern day customers of financial services. While what triggered this transformation was the Global Financial Crisis of 2008, this is more a process that is playing out rather than a set of events. This calls for a new strategy on the part of traditional players, do they compete or collaborate?

8. As technology adoption deepens in the financial sector, the key issues to be understood here are: a) which actor manages the customer relationship or interface, and b) which actor ultimately provides the services and assumes risk?. World over the entry of fintechs has produced interesting outcomes. The Financial Times spoke to more than a dozen bankers, consultants and fintech executives and have grouped the strategies that banks adopted under 5 categories:

## a) Digital attackers

This group who have the skilled staff and technical capabilities set up their own digital banks. (e.g. Digi bank of DBS). Similarly, Goldman Sachs launched a consumer digital savings and lending operation two years ago. Dutch bank ING adopted a similar approach when it launched Yolt offering customers a way to collate all their financial information in one place, track their spending and saving and get prompts to save money on utility bills. Yono of SBI could perhaps also be included in this category.

## b) Acquisitions

This strategy is adopted as banks often find it easier to buy or invest in a start-up that has built a digital platform from scratch. Spain's BBVA, Simple in the US and Atom in the UK followed this strategy with success.

### c) Partnerships

Sometimes banks chose to partner with Big Tech groups. In Asia, Standard Chartered has teamed up with China's Alipay to launch a digital remittance service, using blockchain technology to send money across borders quickly and cheaply. The duo has also teamed up with GCash, the mobile payments arm of Globe Telecoms in the Philippines, to allow people to send money between Hong Kong and the Philippines using their mobile phones. The plan is to expand the service to other markets. Another example possibly in the making is the potential partnership between JPMorgan Chase and Amazon, which would bring together the US's biggest bank and the largest US e-commerce company.

### d) Diversification

While their core payments and lending businesses may be under pressure from digital competitors, some banks are using new technologies to move into new markets. Examples of banks that have followed this route are, Royal Bank of Canada, Barclays and Commonwealth Bank of Australia.

### e) 'If you can't beat them, join them'

Sometimes banks decide that the threat from digital competition is so great that they just have to amend their business models. for instance, the executive chairman of Spain's Banco Santander, confessed to FT that it was seeing her son using a rival service in order more quickly and cheaply to transfer money overseas, that persuaded her to make Santander the first international bank to launch a cross-border payments system based on blockchain. Another example is Hello bank launched by BNP Paribas.

9. There is another important aspect that we should never lose sight of as far as our country is concerned. Fintech related innovations in developed jurisdictions is primarily to enhance customer experience. But in many developing jurisdictions, while enhancing customer experience is indeed an important consideration, the more important one is to enhance customer reach- financial inclusion. In India, for a long time authorities sought to achieve FI in a bundled form, ie, savings, credit, insurance and payments and hence concentrated on bank led financial inclusion through multiple channels. Market was more interested in unbundling these and playing the niche segments. So, in a way enormous growth of fintech in India in recent times can be attributed to markets getting their way in the matter. I would argue this success was also partially facilitated by the banking system which approached FI in a dogmatic manner, offering products which they thought suited the masses rather than ascertaining and offering what the excluded wanted. The change was also made possible by the authorities proactively trying out different possibilities like permitting non banks into credit and payment markets and offering differentiated banking licensing for entities. But the success of fintech and FI continued to be uncoordinated and sketchy. For instance, although India recognised mobiles as the most important tool of FI and enabled mobile wallets and mobile linked banking from 2008, the fight over who owns the customer and who assumes risk led to silos developing and volumes remaining muted. Then something dramatic happened over the last 5/6 years that changed the script altogether and transformed the financial landscape. It was not demonetisation alone. That was, Jan DhanYojana, Aadhar, Mobile phone- What came to be popularly known as JAM trinity. JAM unleashed a slew of financial innovations, the most notable being the Unified Payment Interface or UPI.

10. UPI is often characterised as the What's App moment of Indian financial landscape. UPI which provides seamless interoperability based on a virtual address was i would say superimposed on what India (NPCI) had earlier implemented earlier called the Immediate Payment Service (IMPS), a 24\*7 interoperable real time retail payment system. IMPS ranks ahead of several

real time retail payment programs around the world. IMPS today runs through UPI and is ranked No 1 on the Faster Payment Innovation Index put out by US based financial services tech company FIS. Australia's New Payments Platform and Singapore's Fast and Secure Transfers Service received 4+ rating in a scale of 1-5, whereas IMPS secured 5, the only service to get 5 rating. We should be proud of this. UPI has been clocking exponential increase in volumes. Last I looked at it was clocking close to 600 million a month. (it was about 10 million in May 2017!!!!! And clocked 3 billion 2018) A mammoth achievement.

11. In this scenario, what are the important challenges I see for the regulators?

A) Continuously increasing pace of technology changes impacting current financial service products, processes and business models and time available to understand, plan for policy and implement the same with existing available resources at hand.

B) Increasing global risks across financial services and implications of events of one country or one large global entity across the regulated domain. Systemic risk may arise even from domain or geography which is not under regulators' jurisdiction.

C) Change Management processes at the regulator end itself while the external environment is changing how does regulators' internal

structure, processes and talent is keeping up to date with the dynamic environment.

12. In this regard, I would argue that regulations that have emerged in India that still keep banks at the centre stage would need review as Fintech revolution marches on. Prima facie, regulations need to create a level playing field for non-banks. To me, this is a matter of 'mindset change' across the key decision makers. In most cases the stated intent of creating level playing field and actual policies have huge gap. Further it may happen that the teams working on the policy may not be convinced of creating the level playing field on account of past understanding which would be the barrier in achieving the same. Just one more thought in this regard. Often regulators agonise a lot about what is known as "regulatory arbitrage". Always there is a conflict between regulatory arbitrage and level playing field and it is important to understand the difference between the two in achieving the desired results. (In this regard, I feel sometimes, it is good to allow arbitrage till it becomes a systemic issue).

13. The focus of regulators as technology pervades the financial sector is also changing. No longer are regulators in many countries solely seeking to prevent the previous crisis. Instead they are looking at how to support future market developments whilst maintaining financial stability. They are also looking to facilitate innovation through early interaction with Fintech startups. Called the "Regulatory Sandboxes", countries like UK, Hongkong, Singapore, Australia have led this not only to understand the regulatory hurdles faced by FinTech companies, but also complemented it with an innovation hub to interact with and support innovative start-ups from a nascent stage. The effort and resources regulators are putting into understanding the FinTech sector is perhaps surprising, particularly as they are to some extent revisiting the same questions and risks identified over 15 years ago with e-banking. In India also as some of you may be aware a report on setting up a Regulatory Sandbox has been submitted by Tarun Ramdurai to the FSDC who set up the working group. We need to move quickly in this as in a technology driven sector "too small to care" institutions and models can become "too large to ignore" as MMFs in China demonstrated.

14. What I have tried to convey is that regulations are being re-looked at so as to maximise economic welfare by benefitting business and society. It is now recognised that for achieving this, the regulations must be principle or risk based rather than product based, should be proportionate and should be consultative and agile. More importantly, it cannot become retrospective, retrograde and inward looking. Scaling up in a technology led scenario is rapid, geometrical and swift. Any lethargy in ensuring compliance or lack of clarity in the scope of regulations can lead to disruptions when clarifications get issued with delay. Another matter on which India needs to position itself correctly is in the matter of its data. Data is power in a technology led world. It is my belief that data war could prove to be as or even more disruptive as trade war. We must be careful not to mix up data and privacy. The two decisions that India took with regard to e commerce recently and data localisation earlier in my view could have far reaching implications. This raises the question how can regulatory architecture be reimagined to facilitate innovation and ease of doing business? Indian regulations have to become more consultative and take into account all policy options including self-regulatory, co-regulatory and non-regulatory approaches and choosing the one that generates the greatest net benefit, periodically reviewing to ensure that they remain relevant and proportional over time. In the Indian context, we could also consider add that an appellate mechanism in respect of decisions which affect entities that are not banks or more generically commercial or nonregulator licensed entities. Such a system will make regulatory system even more responsible, responsive and qualitative.

### Is the RBI mandate and the governance structure future ready?

15. There are three issues that have been over debated already. Is RBI having too much reserves? Is RBI having too much autonomy? Is RBI having too many mandates? I shall not get into any discussion on the first issue as Bimal Jalan Committee will soon come out with its studied recommendations. As regards the second question which put differently is whether RBI should become a Board driven institution, my comment is it was not meant to be by the forefathers who wrote the RBI Act, but if that has to change then the Board constitution also has to change to avoid conflict of interest. The third issue, whether RBI has to be sliced and diced to me sound more cosmetic than material. It does not matter

who regulates the payment system for instance, unless the principles of payment regulation as specified in the new Bill is followed whether within RBI or outside RBI. At a general level, I am a believer in a strong, pragmatic and consultative single regulator rather than multiple regulators for the fear of ten blind men (read multiple regulators) and elephant (read financial system) playing out.

#### Are banks in India future ready?

16. Governance issues are starting to hurt the sector badly. When debate started on this issue, even till very recently, we thought it was a public sector bank issue. But recent happenings in the private sector banks and exit of high-profile CEOs probably makes one conclude that in the Indian Financial Sector, governance issues are ownership neutral. In fact, I would claim that in the PSBs, given the checks and balances that have been build up over years, and in a negative sense, absence of incentives to differentiate between the act of commission and omission, the things that can go wrong is limited. It was pointed out by many that Board is not independent in the public sector and even the independence of the so-called independent directors was questioned by many. Privatisation of banks was touted as one stop solution to all their ills. But today perhaps more time and energy are being spent in addressing governance issues in the private sector banks and NBFCs rather than public sector banks. This raises the issue of role that Board ought to be playing and what constitutes a constructive conflict between the Board and Executives rather than

Board members being picked up from among the Yes men or where the Board members are not playing the role expected of them. Let me flag another issue. Today Senior Bankers are living in constant fear of being brought to book in connection with bad assets in the system. We are talking about literally who is who of the Indian corporate world in many cases. Does it not again raise the issue of governance in these institutions? Suffice to say that the entire governance structure in the Indian Corporate world has received a wakeup call that needs to be addressed expeditiously. Running around after the tail is on fire will lead us nowhere.

#### Is our Consumer Awareness and Protection best of the breed?

17. The new risks that digital financial services entail to consumers could be market driven that can include misuse of unfamiliar (or new types of) products or misselling to uninformed consumers; new types of fraud, often taking advantage of consumers uncertainty in the digital environment; а lack of security, privacy and confidentiality of data; inappropriate or excessive use of digital profiling to identify potential customers and exclude unwanted groups; rapid access to high-cost/short-term credit or essentially speculative products (e.g. initial coin offerings), etc or **Regulation** and supervision driven that could encompass uneven levels of (e.g inadequate protection within disclosure redress and mechanisms) and across countries (e.g. variety of providers, cross border selling, regulatory arbitrage) or **Consumer driven** that relate

to growing digitalisation not necessarily matched by increasing digital and financial literacy levels or This is **Technology driven** relating to increasing use of algorithms, which can affect decisions about credit, insurance or investments leading to denial of access to certain services or inappropriate charges.

18. While these risks can have a negative impact on both consumers and entrepreneurs, and can result in a range of negative outcomes, these also provide the basis for a number of overarching considerations that policy makers should take into account when implementing or applying financial consumer protection approaches in the digital environment. In the financial sector, let me share with you that India led the world in implementing two factor authentication for digital transactions. While the world is trying to mimic India, in India there is heavy lobbying to dismantle the measure. We also need to have counter measures to protect the customer from common mistakes rather than expecting the customer to understand every new technology that gets implemented. To me that system is the best where all changes for the better happen at the back end and customer is hardly aware but gets better protected. Further, where this is not feasible, continuous and incremental literacy campaigns are a sine gua non in a technology led system. I am not aware how those things work in other sector but this is an important issue that cannot be lost sight of.

### Is Cryptocurrency the future currency?

19. As the final part of my address let me touch upon the issue of crypto currency. Less than 10 years after their inception, cryptocurrencies have emerged from obscurity to attract intense interest on the part of businesses and consumers, as well as central banks and other authorities. They garner attention because they promise to replace trust in long-standing institutions, such as commercial and central banks, with trust in a new, fully decentralised system founded on the blockchain and related distributed ledger technology (DLT). But there are challenges. If traditional money as Crowther says performs the following functions: "money is a matter of functions four: a medium, a measure, a standard, a store", then given the current behaviour of Bitcoin it is difficult to foresee it emerging as the future currency of the world. For instance, cryptocurrencies have exhibited periods of extreme volatility. If you purchased Bitcoin in December 2017 at a value of over \$19,000, your electronic claims would be worth close to less than quarter of that today. Indeed, Bitcoin's value has been known to fluctuate by one-quarter in one day alone. Such extreme fluctuations limit an asset's ability to fulfil two of the classic functions of money: to act as a stable store of value that people can hold and use predictably in the future, and to serve as a meaningful unit of account that can be used to assign a comparable value of goods and services. Occasionally, it can fail to serve as a medium of exchange if participants refuse to accept it as an asset to square of a liability. Cryptocurrencies also raise important investor and consumer protection issues. The lack of strong governance and questions about the applicable legal

framework for some cryptocurrencies may make consumers vulnerable to mistakes, thefts, and security breaches without much, or any, recourse.

20. Having said that the underlying technology- Blockchain or Distributed Ledger Technology (DLT) used in Bitcoin could become the technology of the future. We often confuse DLT with Bitcoin. They are different. Bitcoin perhaps cannot do without DLT but this is not so the other way around. Even if cryptocurrencies prove to have a very limited role in the future, the technology behind them is likely to live on and offer improvements in the way we transfer and record more traditional financial assets. Distributed ledger technology could also facilitate other applications that could improve the way we share information, validate possessions, and handle logistics. Some of the emerging uses of Blockchain and DLT are in the following areas:

- Cross border payments-remittances-cheap, fast and safe
- Trading and settlement of shares and bonds eliminating brokers and exchanges depositories, custodians and clearing houses/corporations?
- Cross border trade Elimination of letters of credit?
- Execution of commercial transactions and agreements automatically.
  Smart contracts. Relevant for trade finance, property deals and mortgages
- Online identity management

21. Before I conjure a skit for financial sector as the conclusion of my address, let me address one more technical issue that Mr. Srikanth had

specifically asked me to address as my role today is that of a commercial banker. Given the problems that banks are running how does infrastructure needs of the country get addressed? World over these needs have been addressed by Bond markets which has long term players and not banks who generally operate in the short end. In India, we compounded the problem by closing down infrastructure lending institutions precisely when the country needed them. A perfect example of perfecting wrong timing! But that is not say the problems that banks ran into in infrastructure financing was on account of getting into a sector they should have never got into. Delays in completion of infra projects in India has more to do with administrative delays rather than wrong financing models. But is also a fact that banks that went head long into this sector were woefully short of expertise in assessing these projects. In this connection, I happened to listen to a scholarly lecture by Nobel laureate Prof Merton recently who had an excellent suggestion to achieve the twin objective of decent pension receipts by the pensioners and solving infra funding problems by issuing what he calls SelFIES Bonds( Standard of living indexed Forward starting Income only Securities). The natural issuers of these bonds are governments who have VAT receipts who have a natural hedge according to him as payouts to investors are indexed to both inflation

and standard of living. It also addresses the challenge of financial literacy as the bond pays an equated amount from a future date. Interesting suggestion from a world-renowned Master. But there could be other models as well. By 2047 we might well be full capital account convertible. We also therefore need to think about the market reforms that we need to undertake to make India attractive for long term international capital. But that also pre-supposes project are undertaken and completed as per international standards.

#### 2047 financial sector: A dream skit

22. Digital processing in a broad sense is the key science which has revolutionised the way we are managing our day-to-day life with so many gadgets, be it image processing, crossing space-time barriers, analytics etc. It is said that Moore's law is no longer valid. (Michio Kaku). It could well happen that in the years to come, intertwining of three fields i.e. Quantum Computing, Augmented Reality & Virtual Reality together with AI would completely disrupt everything not just banking. Quantum computers with quantum network, specifically quantum internet, would disrupt every industry. Good news for data security is, it would be impregnable but bad news is that cracking today's toughest encryption standards set by super computers would be child's play. But equally heartening news is that already research is underway in quantum encryption. So, when quantum computers become commercially available, the most complex computing ability would be standard norm

which is required to be adopted in the financial industry. Augmented Reality, AR, and Virtual Reality, VR, have taken significant strides in the last couple of years. Current ARVR gadgets come in the form of head set devices but in the near future it could come in the form of say, even goggles. Microsoft is working on "Mixed Reality", a device that is to blend the real and virtual worlds. Oh, what can you do with these? For e.g. virtual site visits of real sites without going there. Imagine, these kinds of technologies leapfrogging in the next three-four decades! Al has taken the classic computers by storm. Amongst many branches of AI, the most relevant ones are natural language generation, speech recognition, machine learning, virtual agents, decision management, Text analytics and NLP, image recognition, cyber defence and compliance. Looks awesome, is it not? How will financial sector look like in this kind of a world?

### Banking & Bankers:

- There will be nothing called KYC. The moment a citizen's name is added to the common lenders database, it is clear for loan processing. All civil & criminal offences will be profiled dynamically, updating from police and court records
- Financial profiling of all loan seekers would be available on a common lenders' platform, which will be dynamically updated with every single transaction happening anywhere in the globe.

- The default probability, either of individual borrower or of corporate, would be dynamically calculated with every single payment or default, transaction by transaction on a real time basis.
- Any loan sanction will be within the same working day
- Insolvency, recovery and winding up will be within 30 days
- Unaudited financial results will be released within a couple of hours of annual financial closing of accounts
- Most meetings, including follow up customer meeting will be through ARVR. VR room will relegate board room; want to undertake stock verification? Commute virtually to the factory or godown instantly
- No corporate can hide unsold stock or inflate sales; every damn piece will be traced to ultimate consumer; financial profile will be indexed to the shelf life of the unsold products; cost of borrowing will increase or decrease accordingly and the entire banking community would know this; so, no use in switching facility from one bank to another
- Cash handling will come down by at least 70-80%. Number of ATMs may be one-tenth of that today in urban places; in rural it could marginally increase
- Digital transactions would be biometric, and payment by just winking at the Pay button!!

- Branch expansion will be only in rural areas, urban branches can fold up or merge
- Compensation will be partly fixed standard income and partly variable pay for income and variable deduction for NPAs!!

## Common Man:

- Visit bank physically first time for opening account or applying for a facility
- Then on, talk or meet the bank staff only over the ARVR mode
- No cash, no RTGS/NEFT, all instant personal biometric triggered instant credit and debit
- Profile of any borrower would become an open chapter for any lender; all lenders would know the financial 'kundali' of any borrower; he/she can't hide any damn penny or dark record
- Social security network will handle all personal financial defaults and payment stress; this will increase the cost of borrowing from the very next day of default; no 90+ days of grace period of default. Pay now or pay more tomorrow, at a compounded rate
- No wrangling on excess charges, debits, small prints etc; Robotic Ombudsman will intervene even before the account holder realises; customer grievance would emerge only if Robo is programmed to dupe the customer

# **Regulator**:

- Digital regulation would overtake banking regulation
- NPA norms would go for toss; depending upon the category of industry, norm would vary; consumer or retail loans, weekly basis, corporates monthly; no NPA norm more than a month except for infra industry
- No universal Capital adequacy norms; each bank different adequacy.
- No solvency adequacy but only liquidity sufficiency
- Robotic surveillance and inspection; only high- level discussion with the regulators in person
- Nothing as payment and settlement systems as institutions; only architecture in principle
- All payments will be instantly settled unless new electronic instruments come with timed maturity and automatic payment
- All contractual obligations will automatically trigger payment and settled immediately as per the contract; no need to initiate any transaction
- Transparency and confidentiality will go hand in hand
- Control electronic gateway to narrow down the business of a risky bank; access will be automatically denied

- Any customer grievance, meet the regulator in the ARVR room instantly; result by the end of the day
- the number of dissatisfied customers will be less but this would come at a sizeable cost

23. From the foregoing, it is amply clear that the juggernaut of technological innovation is unstoppable and impacts every sphere of modern and increasingly complex life. That said, technological innovations are not, unmixed blessings and they do have unintended Let me once again refer to Yuval Harari who in his book side-effects. Homo Deus, containing lucid insights into human society's future pointed out, "as we accumulate more data and increase our computing power, events become wilder and more unexpected. The more we know, the less we can predict." This brings to fore the issue of security of financial transactions that should be paramount as we embrace technology. However, it needs to be appreciated that ensuring, a safe and robust financial sector cannot be an effort from an individual or a single organisation. It is a big stage, like a huge opera. Perfect coordination is called for to achieve a successful outcome. This is because the concept of financial sector has undergone complete make over. Banks, financial institutions, payment system providers, nonbanking financial institutions, primary dealers, stock exchanges and

bourses, mutual funds, insurance institutions, all of them now form part of the financial sector. An attack in part of a sector can possibly have a domino effect. Are we ready?

Thank you for your patience.

\*Talk delivered by G Padmanabhan, Chairman, Bank of India, at National Institute of Advanced Studies on January 10, 2019. Assistance rendered by Mr. A Madhavan in the preparation of this address gratefully acknowledged.