**Emerging issues in Banking and Finance in a Technology Driven Economy***

(*Inaugural speech by G.Gopalakrishna, Director, CAFRAL,Mumbai at the National Conference organized by Department of Humanities, Social Science and Management, National Institute of Technology Karnataka, Surathkal on 20th February 2015*)

Dr. N K Thingalaya, Prof. Aloysius Sequeira, Prof. Swapan Bhattacharya, Director, distinguished speakers, delegates and friends. I am first of all thankful to the NITK organizing Committee for having invited me for this Conference of national importance.

The banking system in India has evolved over several decades and has helped to serve the credit and banking services needs of the economy. It plays a major role in the mobilisation of savings and deployment of these resources and this role played by the banks has helped in significant economic development of India. Since the Indian economy is dynamic, the banking system needs to be flexible and competitive in the emerging milieu.

**Global Financial crisis and after effects**

2. The global financial crisis (2008) has led to significant changes in the regulatory architecture of the banking system worldwide. There is now real appreciation of the fact that while it is a necessary condition to have prudent micro prudential policies, it is not a sufficient condition for systemic stability. To achieve systemic stability there is a need for having in place effective macro prudential policies as well. Further, it is now realised that capital adequacy with low equity share in it would not be able to prevent solvency issues, as capital should be in a position to

absorb losses in a going concern. Also, there is a need to supplement the risk based capital adequacy requirements with a non- risk weighted leverage ratio and banks have to have sufficient liquidity to prevent problems arising out of illiquidity issues. All this has led to BCBS revising the capital adequacy requirements with Basel III requirements which not only enhances the quantity but also quality of capital and further it is supplemented by leverage ratio and liquidity standards.

3. Functional autonomy and operational flexibility were the keywords in Narasimham Committee report and accordingly banking sector reforms have been initiated in India since 1992. But it is now that the Indian banking scenario has been changing so rapidly. We are now witnessing opening up of door to many new players including foreign banks, changes in the banking structure like differential bank licensing and possibly on tap licensing, small banks, payment banks alongside universal banks, etc. Deregulation process has been in progress for some time and with the deregulation of savings bank interest it has almost reached a full cycle. Also, banks have been the major players in the financial sector performing their important role as an intermediary and have borne the major responsibility of financing real sector including priority sector, export sector and infrastructure sector. Of late, banks have been using technology extensively – whether to achieve better financial inclusion, reduce the operating costs by encouraging customers to adopt net banking, build up core banking system, faster money transfers, reduce dependence on brick and mortar branches, etc.

***Indian banks – way forward***

4. Over the years, as visualized in the Discussion Paper on 'Banking Structure in India – The Way Forward', released by the Reserve Bank in August 2013, We are

now witnessing opening up of door to many new players including foreign banks, changes in the banking structure like differential bank licensing and possibly on tap licensing, small banks, payment banks alongside universal banks. The first tier may consist of three or four large universal Indian banks with domestic and international presence along with branches of foreign banks in India. The second tier is likely to comprise several mid-sized banking institutions including niche banks like Payment Banks with economy-wide presence. The third tier may encompass old private sector banks, Regional Rural Banks, and multi state Urban Cooperative Banks. The fourth tier may embrace many small privately owned local banks and cooperative banks.

***Use of technology***

6. Given rapid advances in technology and evolving customer behaviour Indian banks, especially private sector and foreign banks, have started leveraging technology for achieving higher levels of efficiency. Public sector banks however are lagging behind their counterparts. The biggest barrier to wider adoption of technology remains security concerns and complexity product offerings by banks. However, overall digital and online banking penetration in India remains lower than that of most Asian countries and developed economies.

7. Technology has transformed the way banking is carried out and is set to further transform the way banking is done in India. Cash deposits and withdrawals through deposit machines and Any Time Machines (ATMs) have become a common way of banking now. This has made the life of customers easier and

banking hours have lost their relevance. Also, with ATMs, there is less disruption of banking services now when the bank employees go on strike. The recent focus on technology by banks is mainly on account of the innovative ideas used by few PSBs and new generation private sector banks. As a result, even the normally less technology oriented public sector banks are forced to adopt technology if they have to stay competitive. Banks are also entering into relationship with other mobile companies like Vodafone and other online payment solution providers like Paytm and Oxigen Services.

8. Smartphones have revolutionised the way banking business is done and transacted. Lots of routine banking activity can now be done by using smartphones in the comfort of your home or office. Checking your account balances, transferring funds from account to account and through geographies has become so much easier and faster. You would have seen that now even public utility payments or train bookings or movie ticket bookings can now be done so easily, which saves huge amount of your time as well as bank's time. This has also been instrumental in bringing down the inefficiencies of earlier era. The use of credit and debit cards for payments brings down the dependence on cash payments. The idea of a 'mobile wallet' to eventually replace the physical equivalent holds great promise with banks, payment service providers and card companies promising initiatives in this regard. In Kenya the success of M-Pesa has demonstrated how mobile payments can be used effectively to transfer money to millions of people not having access to financial system and also tide over the safety problems involved with physical transfer of money. Thus mobile banking is gradually proving out to be a superior alternative to traditional banking channel.

9. Banks have also started launching e-wallets which can do everything that a payments bank can do. e-Wallets is a mobile application, which can be used to send money, pay utility bills, book movie tickets, send gifts and share expenses. One can use this service even if one does not have an account with that bank and using the app one can open a zero-balance account. According to RBI regulations, the maximum amount a consumer can keep in the e-wallet is Rs 10,000. Incidentally, Payments banks can accept deposits up to Rs 1 lakh, offer current and savings account deposits, issue debit cards and provide internet banking.

10. Nowadays on account of use of technology banks are privy to huge amount of data which facilitates them to understand the spending behavior of people, their preferences in brands, the repayment pattern, etc. Big data therefore can prove to be a boon if such data is mined and analysed properly. Foreign banks and private sector banks are using big data quite effectively to understand the risks, behavioural patterns of their customers and also use such data for customer acceptance. Nowadays big data provides so much information about you to outside world that your credit worthiness can be assessed easily by lenders. This can be used by banks as part of their credit risk management process, including expeditious sanction of retail loans. Institutions like you should target courses/topics on "Big data" in your syllabus so that banks and financial institutes would find easy to employ students with knowledge of big data analytics.

11. Technology can also be used to facilitate credit – for example, MSMEs usually get delayed payments most of the time by their large buyers. These delays in realisation of dues could impact the repayment ability of MSMEs to lenders. However, if the MSMEs could sell their claims on their large buyers in the market

and get the money quickly, it would not pose them any liquidity constraint and the lenders would also get a claim on the better rated large buyer instead of holding a claim on the MSME. The large buyer could get a better price for his purchases. All this requires setting up a Trade-receivables Exchange, which the RBI has been discussing with market participants. The key is to reduce transaction costs by automating almost every aspect of the transaction so that even the smallest MSMEs can benefit.

13. The RBI's Technical Committee on Mobile Banking has recommended, among others, the need for a standardized and simplified procedure for registration/authentication of customers for mobile banking services, a cohesive awareness program to be put in place, the adoption of a common application platform across all banks to be delivered to the customers independent of the handset being used, along with use of SMS and USSD technology for providing necessary level of security (through encryption) for such transactions.

***Financial inclusion and use of technology***

14. Financial inclusion is about (a) the broadening of financial services to those people who do not have access to financial services sector ; (b) the deepening of financial services for people who have minimal financial services; and (c) greater financial literacy and consumer protection so that those who are offered the products can make appropriate choices. The imperative for financial inclusion is both a moral one as well as one based on economic efficiency. The Reserve Bank of India has made sustained efforts to increase the penetration of formal financial services in unbanked areas, while continuing with its policy of ensuring adequate but viable flow of credit to priority sectors of the economy. RBI has adopted a

structured, planned and integrated approach towards financial inclusion which is focusing on improving access to financial services and also encouraging demand for financial services through financial literacy initiatives.

***Banking - issues and challenges***

16. However, banking does pose some risks alongside due to uncertainties in business cycles, external factors like global crisis and slowdown in domestic economy, asset liability mismatch issues, inadequacies in risk management and governance, human resource challenges etc. Therefore, as correctly thought of in your sub-themes for the conference some issues arise, which I would like to briefly dwell upon:

**Risk management**

17. Risk management is a complex function and requires specialised skills and expertise. Of late, many banks have been moving towards the use of sophisticated models for measuring and managing risks. As the banks adopts Risk Management systems prescribed by the Regulators, banks would have to develop necessary expertise and skill in managing various types of risks in a scientific manner. It is also important to know that while we may be talking about credit risk, market risk and operational risk as separate risks, risks for all purposes are inter related and cannot be looked in isolation. Implementation of sound Risk Management system in Banks require availability of trained staff with expertise in quantitative techniques and analytics. Institution like NIT should create large

number of students equipped with quantitative techniques and business analytics who could be recruited by banks and financial institution and use them without much training.

19. The recent problems faced by large international banks on account of heavy fines imposed by US and UK regulators over LIBOR and Forex rate rigging are a case in point that operational risk could have catastrophic results if all risks are not managed properly. It is reported that the tally of fines agreed with 5 major international banks is already close to the $ 6 bn. The penalities paid so far over the LIBOR rate rigging probe and the total amount paid to US regulators in 2014 to $ 56.5 bn, making it the most expensive years for banks since 2007. Further, another big international bank was fined USD 8.9 bn after pleading guilty to processing billions of dollars of transactions for groups in few countries thus violating US sanctions against these countries. Therefore, banks should ensure that risks are not managed on a 'silos' basis but managed on an enterprise wide basis.

21. The growing number of cyber-attacks in the financial sector has underlined the need for banks to have strong standards on cyber security as these attacks are sophisticated with the impact likely to be severe. Customer confidentiality issues, legal issues and reputational risk arising on account of breaches in cyber security due to hacking etc. could have significant after effects for a bank. Banks should therefore invest not only put in place preventive controls but also take steps to improve detection, response and resilience to such attacks.

22. There is a greater emphasis on "conduct risk", and the need is growing for institutions to reassess the way they conduct their business and how regulatory risks and expectations are managed. This will challenge firms not only to deal with regulatory obligations but also to look at how they to monitor, analyze and manage their customer relationships. Banks internationally have had to pay billions of dollars in claims for the shortfalls which have resulted from the negligence toward customers. So, effective operational risk management system has to be put in place by banks wherein technology is extensively used to minimize breaches in controls. Of course, an organisation's culture becomes an important element because while regulations tell banks as to what they can do, values tell them what they should do.

23. Basel II and recently Basel III require banks to maintain adequate economic capital to meet unexpected losses on account of both Pillar 1 and Pillar 2 risks. In view of the implementation of Basel Capital Regulations, banks in India need to improve and strengthen their capital planning processes.

**Governance issues**

24. The Committee to Review Governance of Boards of Banks in India (Nayak Committee) has recently recommended that there is a need to upgrade the quality of board deliberation in public sector banks to provide greater strategic focus. According to the recommendation, there are seven themes which appear critical to their medium-term strengths comprising Business Strategy, Financial Reports and their Integrity, Risk, Compliance, Customer Protection, Financial Inclusion and Human Resources. Among the seven themes identified for detailed

board scrutiny, a predominant emphasis needs to be provided to Business Strategy and Risk by banks.

**Compliance and KYC/AML**

26. As part of adherence to AML and KYC regulations, banks are required to report any suspicious transaction in their customers' accounts to the Financial Intelligence Unit (FIU - India). Since there will be millions of transactions in customers' accounts unless banks use proper technology, identifying such transactions becomes highly difficult. Also, use of technology reduces the errors of judgment – intentionally or unintentionally. Internationally, the penalties for non- adherence to AML/KYC guidelines are huge and therefore our banks having international presence have to bear this in mind. Since regulators penalizing banks with huge fines because of lapses in adhering to AML guidelines, international banks have started investing in new systems and sophisticated models to detect suspicious activity.

***Conclusion***

It is said that any crisis provides tremendous opportunities for carrying out improvements. This has been the case with the banking system too - the global crisis has resulted in improvement and harmonization of capital and liquidity regulations, introduction of macro prudential regulations, recognition of the higher systemic risk posed by bigger banks or systemically important financial institutions (SIFIs) and address this higher risk by way of higher and countercyclical capital requirements. In India also we are witnessing significant changes in the banking structure with RBI thinking of on tap and differential licensing. So, universal banks, small banks and payment banks will coexist and compete with each other which I think would go a long way in achieving customer satisfaction and financial inclusion. Further, use of more and more technology will lead to introduction of new and innovative products to take care of evolving customer needs.

With this, I conclude my address and wish this conference a great success!

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