R Gandhi: Disruptive innovation and inclusive growth – some random thoughts

Valedictory speech by Mr R Gandhi, Deputy Governor of the Reserve Bank of India, at the FIBAC 2015 "Inclusive growth with disruptive innovations", Mumbai, 25 August 2015.

* * *

Friends,

Disruptive innovation

- 2. By this time, I am sure, you all have heard any number of times through these two days what a disruptive innovation is. Let me make you hear that one more time that it is an innovation that helps create a new market and value network and eventually disrupts an existing market and value network over a few years, displacing an earlier technology.
- 3. The theory of disruptive innovation was invented by Clayton Christensen, of Harvard Business School, in his book "The Innovator's Dilemma". Mr Christensen used the term to describe innovations that create new markets by discovering new categories of customers.

Inclusive growth & disruptive innovation

- 4. The main theme of this FIBAC 2015 is "Inclusive Growth with Disruptive innovations". I am sure that you all had very good discussion on such innovations in the banking arena, both of international and domestic. Let me share with you my own thoughts on the subject.
- 5. To start with, I find a natural coherence and congruence between disruptive innovation and inclusive growth. Both the concepts, by definition, aim at impacting people at the bottom of the pyramid. Disruptive innovations usually find their first customers at the bottom of the market: as unproved, often unpolished, products, they cannot command a high price. Likewise, inclusive growth targets the hitherto excluded segments of the population. It allows a whole new population at the bottom, access to a product or service that was historically only accessible to a few with a lot of money or a lot of skill.

Financial inclusion and disruptive innovation

- 6. A key element of the inclusive growth is financial inclusion. Here is where we have been observing the power of disruptive innovations. This is partly by harnessing new technologies, primarily the information and communication technology, more specifically the mobile technology; and also by developing new business models like the Business Correspondent (BC) model and exploiting old technologies and procedures like lending in new ways like the micro finance.
- 7. The new business model also included new type of accounts, called the Basic Savings Bank Deposit Accounts (BSBD), besides the issuance of RuPay Cards. The results are encouraging. As at the end of March 2015, the Banking Outlets in Villages in Branchless mode, which is primarily through BCs were 5,04,139 and the urban BCs were 96,847. The BSBD accounts were 398 million and the balance in them was ₹ 438.3 billion. The Prime minister's Jan Dhan Yojana has given a special fillip to these.
- 8. A parallel development relates to the issuance of Aadhaar cards and ceding the cards to bank accounts. It is reported that more than 817.8 Aadhaar numbers have been issued by April 2015 and the number is still increasing. Of course, it is another matter that the recent Supreme Court interim judgment has put the scheme in a tight corner and we hope that it will soon be resolved.

9. Next element is the use of mobile technology. The great expanse of mobile coverage, the number of people having the handsets, the mobile banking products and services are all at a critical point for high leveraging to usher in financial inclusion and inclusive growth.

Financial inclusion and disruptive innovations in regulation

10. Now, let me present before you some of the disruptive innovations through regulation with the ultimate goal of furthering inclusive growth. These innovative initiatives, under the caption of differentiated banks, are primarily to further financial inclusion, which is an integral part of inclusive growth strategies.

Differentiated banks

- 11. The concept of differentiated banks was first discussed in 2007; but it was felt that the time was not yet opportune for such banks. Thereafter, the concept was once again discussed in a Paper "Banking Structure in India The Way Forward", brought out by the Reserve Bank in August 2013. The Paper looked into various aspects of the banking structure, licensing of banks, banking models and suggested a transition path for some banks.
- 12. In that Paper, we had noted that despite significant progress, one aspect of banking in India that required deeper analysis was the still inadequate coverage of the banking and financial sectors. We observed that even with the then 157 domestic banks operating in the country [comprising 26 Public Sector Banks, 7 New Private Sector Banks, 13 Old Private Sector Banks, 43 Foreign Banks, 4 Local Area Banks (LABs), and 64 RRBs], just about 40 per cent of the adults had formal bank accounts. Deepening the engagement of formal banking for low income households and providing access to the unbanked would require increasingly innovative approaches (including channels, products, interface, etc.).
- 13. Part of the improved engagement was to ensure enhanced access to credit for small and medium enterprises (SMEs), which were expected to be the major contributors to future growth and employment creation. Credit to SMEs would require an innovative combination of banks, private equity.
- 14. We said that with the broadening and deepening of financial sector, some banks may choose to operate in niche areas so as to reap certain obvious advantages in terms of managing business and risk management. Some countries, as we noted, have differentiated bank licensing regimes where differentiated licenses are issued, specifically outlining the activities that the licensed entity can undertake. With the broadening and deepening of financial sector in India, we saw a need that banks move from the situation where all banks provide all the services, to a situation where banks find their specific realm and mainly provide services in their chosen areas.
- 15. In September 2013, we set up a Committee headed by Shri Nachiket Mor, on Comprehensive Financial Services for Small Businesses and Low-Income Households to look into the issues relating to financial inclusion. The committee came up with two broad designs for the banking system in the country the Horizontally Differentiated Banking System (HDBS) and the Vertically Differentiated Banking System (VDBS) based on the functional building blocks of payments, deposits and credit.
- 16. In a HDBS design, the basic design element remains a full-service bank that combines all three building blocks of payments, deposits, and credit but is differentiated primarily on the dimension of size or geography or sectoral focus. In a VDBS design, the full-service bank is replaced by banks that specialise in one or more of the building blocks of payments, deposits, and credit. Among others, the Committee suggested licensing of Payments Bank and wholesale banks as differentiated banks.

2

- 17. The Nachiket Mor committee opined that in the Indian context it would be important to have the regulatory flexibility to approach payments, savings, and credit independently (the Vertically Differentiated Banking Design) and to bring them together when the efficiency gains are high and the other costs are low.
- 18. Taking into account all these recommendations and the feedback to the Discussion paper, we concluded that differentiated licensing would be a desirable step and accordingly in November 2014 we announced our intention to grant licenses to two types of differentiated banks viz., the Payment Banks and the Small Finance Banks.

Payment banks

- 19. Payment system has been proving to be the arena where new ideas, products and services have been successfully introduced. Starting from the Real Time Gross Settlement System (RTGS), the National Electronic Funds Transfer (NEFT) system, the Pre and Post Paid Instruments, the card present and absent transactions, the different types of e-wallets and to the mobile banking products, we have been experiencing a payment revolution in our country.
- 20. The next biggest contributor to this is going to be the payment banks. Just the other day, we, the Reserve Bank, have granted in principle approval to eleven entities to form payment banks. Payment Banks are a part of the disruptively innovative regulatory initiatives of the Reserve Bank for financial inclusion, which will lead to inclusive growth. These banks have been structured with the specific mandate to further financial inclusion. As we said clearly in the Guidelines for Licensing of Payment Banks, the objective of setting up of payments banks will be to further financial inclusion; the strategies will be by providing (i) small savings accounts and (ii) payments / remittance services to migrant labour workforce, low income households, small businesses, other unorganised sector entities and other users. The scope of the activities permitted for the Payment Banks included:
- a) Acceptance of demand deposits. Payments bank will initially be restricted to holding a maximum balance of ₹ 100,000 per individual customer
- b) Issuance of ATM / debit cards
- c) Payments and remittance services through various channels
- d) BC of another bank and
- e) Distribution of non-risk sharing simple financial products like mutual fund units and insurance products, etc.
- 21. As you can see, the scope has been carefully crafted to sub-serve the primary objective of furthering financial inclusion. We have also insisted that the Payment Bank should be a fully networked and technology driven institution. You will appreciate the relevance of this, if you will recall that when we had announced the policy guidelines for licensing new banks way back in 1993, one of the requirements was that they should be abinitio technologically driven banks and the resultant new era of information technology based banking that the country could enjoy in these twenty odd years. In the same way, we are confident that the Payment Banks will further revolutionise the payment arena.
- 22. The other day, someone compared emergence of payment banks to the emergence of telecom towers. He said in the telecom industry, every telco initially created its own tower system and it made it a high cost venture and the growth was limited to the affluent segment. Then came the trend of separating the tower infrastructure from the telco, and the tower became a market infrastructure where all telcos could ride on. What followed is the amazing and exponential expansion of mobile services, covering almost the entire population and at low and affordable cost, all the while continuously improving the quality and latest offerings as well. Similarly, we may be seeing with the advent of payment banks, the universal banks may shed of costly payment infrastructure which includes high cost physical locations and

assets and ride on the common, technology based, low-cost payment infrastructure that will be ushered by the payment banks, and this can bring forth exponential growth in banking services to the hitherto excluded population. The result will be financial inclusion and inclusive growth.

Small finance banks

- 23. A parallel major disruptive innovative change for inclusive growth will be the advent of Small Finance Banks. As we observed in our 2013 Discussion paper on Banking Structure mentioned earlier, country-level studies show that small banks may perform very differently from large banks. Greater access to local information, greater commitment to local prosperity, differences in costs and risk management, and competition policy could explain the specific influence of such type of banks on local economic development. In developing countries where economic development is hampered by insufficient and inadequate access to financial services in rural areas, small banks could improve financing opportunities to small and medium size enterprises and encourage entrepreneurship.
- 24. Consequently, we announced in November 2014 that we would grant licenses to Small Finance Banks, a new set of differentiated bank. The objective of setting up of small finance banks, like the payment banks, is also to further financial inclusion; however, it is sought to be achieved through a different set of strategies viz., (i) provision of savings vehicles primarily to unserved and underserved sections of the population, and (ii) supply of credit to small business units; small and marginal farmers; micro and small industries; and other unorganised sector entities, through high technology-low cost operations.
- 25. One may say that the Small Finance Banks, or the Payment Banks are not the first set of differentiated banks; the country had tried and tested, with differing degrees of success, the concept of differentiated banks and in particular the small banks, though they were not called so then, in the form of Regional Rural Banks, way back in 1974 and the Local Area Banks in 1996. However, while these small banks had the potential for financial inclusion, performance of the RRBS and LABs had been unsatisfactory. There were fundamental weaknesses inherent in the business model of such small banks, like the narrow capital base, restrictive geographical jurisdiction, lack of diversification in source of funds and the concentration risk.
- 26. Therefore, as you will see that we have carefully crafted the scope of Small Finance Banks to sub-serve the primary objective of furthering financial inclusion, thereby inclusive growth. The small finance bank, in furtherance of the objectives for which it will be set up, shall primarily undertake basic banking activities of acceptance of deposits and lending to unserved and underserved sections including small business units, small and marginal farmers, micro and small industries and unorganised sector entities. It can also undertake other non-risk sharing simple financial services activities, not requiring any commitment of own fund, such as distribution of mutual fund units, insurance products, pension products, etc. with the prior approval of the Reserve Bank and after complying with the requirements of the sectoral regulator for such products. The small finance bank can also become a Category II Authorised Dealer in foreign exchange business for its clients' requirements. There will not be any restriction in the area of operations of small finance banks. It is expected that the small finance bank should primarily be responsive to local needs.
- 27. It will be required to extend 75 per cent of its Adjusted Net Bank Credit (ANBC) to the sectors eligible for classification as priority sector lending (PSL). While 40 per cent of its ANBC should be allocated to different sub-sectors under PSL as per the extant PSL prescriptions, the bank can allocate the balance 35 per cent to any one or more sub-sectors under the PSL where it has competitive advantage.
- 28. The maximum loan size and investment limit exposure to a single and group obligor would be restricted to 10 per cent and 15 per cent of its capital funds, respectively. Further,

in order to ensure that the bank extends loans primarily to small borrowers, at least 50 per cent of its loan portfolio should constitute loans and advances of upto ₹ 2.5 million.

How are these Small Finance Banks going to be game changers? Let me explain our thought process. First, whom are we targeting to form the Small Finance Banks? The Guidelines for Licensing Small Finance Banks indicated that resident individuals / professionals with 10 years of experience in banking and finance and Companies and Societies owned and controlled by residents will be eligible as promoters to set up Small Finance Banks. The Guidelines also said that existing Non-Banking Finance Companies (NBFCs), Micro Finance Institutions (MFIs), and LABs that are owned and controlled by residents can also opt for conversion into small finance banks. We received 72 applications and as you would have noted, 41 among them are existing NBFCs, MFIs and LABs and 12 are individuals / professionals. The MFI-NBFCs registered with us are 65 and their resources are limited to their own equity, borrowing from banks and market borrowings. They are not permitted to access low cost or why, even any deposit. Despite such constraints, they have serviced 25.5 million accounts / customers and had a credit portfolio of ₹ 277.34 billion as at end March 2015. Likewise, the NBFCs also typically depend on their own equity, bank funding and market borrowings for their resources. Out of the 11,842 registered NBFCs as at end March 2015, as many as 11,622 cannot accept deposits. The credit portfolio of these NBFCs stood at ₹ 11,169.24 billion as at the end of March 2015. The LABS, as of now, cannot expand their services beyond the few districts permitted for them. Their credit portfolio amounted to ₹ 13.18 billion as at the end of March 2015. These entities are in the financial inclusion arena - MFIs by definition and the NBFCs and LABs by serving the unserved or underserved segments of population and economy. If these MFIs, NBFCs and LABs could achieve this level of penetration with such constraints as they operate today, if such established entities would become Small Finance Banks, with access to low cost deposits, all-India operations and the discipline of banks can cater to much wider unserved, underserved and excluded segments. With their USP of service at door step, flexible times. cash-flow based credit assessment, minimum documentation, continuous monitoring, handheld manual ATMs, these Small Finance Banks can totally alter the face and definition of banking. Post their success, I am sure, text books will redefine the concept of banking, reflecting these entities functioning, than the brick and mortar universal banks.

Undesirable and questionable disruptive innovations

- 30. While so far we have discussed certain disruptive innovations which we support, we also need to discuss certain other innovative developments which have the potential to be disruptive of course, but not of so desirable, or of questionable, relevance, or at least we need to be carefully monitoring and be vigilant. In particular, I want to discuss two developments digital money or crypto currency and crowd funding.
- 31. What is crypto currency? Crypto currency is a digital currency in which encryption techniques are used to regulate the generation of units of currency and verify the transfer of funds, operating independently of a central bank.
- 32. What is crowdfunding? Crowdfunding is the practice of funding a project or venture by raising monetary contributions from a large number of people, typically via the internet. Crowdfunding is a form of alternative finance, which has emerged outside of the traditional financial system.
- 33. Are these disruptive innovations for inclusive growth? Both these developments are based on leveraging technology in unusual way, so they are innovative; both have the great potential to be disturbing the standard ways in which currency and credit systems are operated, and so are disruptive. Do these developments have potential implications for financial inclusion? Yes, of course; they both can assist financial inclusion and therefore inclusive growth. Crypto currency can support activities which do find difficulties in settling such transactions in the normal ways. The crowdfunding can help some funds needy person

or entity, in searching and locating those who have the particular aptitude and willingness to help that person or entity, as only such people / entities respond to the crowdfunding call. This way both can support financial inclusion.

34. Then, why do I say that they may not be desirable? Why do I say that they may be questionable? For one thing, they both hope to operate in a regulator free environment. In matters financial, it is a quintessential received wisdom of several centuries that unregulated financial system has immense scope for depriving ordinary public of their hard earned money and therefore highly risky to be permitted to grow. It doesn't stop there; there will be no enforcer as well. This is extremely risky, especially when such a system operates internationally. It is true that in crowdfunding there will be a platform which does have the role of an enforcer. However, its effectiveness is questionable and mostly one-sided. Secondly, both have the potential to support criminal, anti-social activities like money laundering, terrorist funding and tax evasion. While we do not have any reported instances of crowdfunding in this respect, crypto currencies have been widely suspected to finance criminal activities. We have to be carefully and critically watching these developments. That is why I said these innovative developments which have the potential to be disruptive, may not be of so desirable, or may be of questionable, relevance and merit.

Conclusion

- 35. To conclude, we find that several disruptive innovations in the financial sector have immense demonstrated potential to further inclusive growth through financial inclusion. Country is getting fruits of such labour. Financial regulations also are supportive of disruptive innovation and they also employ the same. However, we need to be cautious about certain other disruptive innovations which have potential to be highly risky and can be destabilising.
- 36. Thank you all for patient listening!

6