Deloitte.



3rd Finance and Investment Summit Financial inclusion for reviving growth: Success stories, challenges & the road ahead



Theme paper November 2013

Contents



About CII	3
About Deloitte	4
Message from Chairman, CII Northern Region	5
Introduction	6
Summit theme	8
Foreword	9
Understanding Northern Region: Diversities and opportunities	10
New private sector banks and their potential role in promoting Financial Inclusion	15
Role of technology (mobile payments, direct cash transfers) in promoting Financial Inclusion	22
Tapping rural market – Role of insurance & pension fund industry	36
Financing the infrastructure development – Extending infrastructure to the last mile	47
Contacts	63

About CII

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering industry, Government, and civil society, through advisory and consultative processes.

CII is a non-government, not-for-profit, industry-led and industry-managed organization, playing a proactive role in India's development process. Founded over 118 years ago, India's premier business association has over 7100 members, from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 90,000 enterprises from around 257 national and regional sectoral industry bodies.

CII charts change by working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness and business opportunities for industry through a range of specialized services and strategic global linkages. It also provides a platform for consensus-building and networking on key issues.

Extending its agenda beyond business, CII assists industry to identify and execute corporate citizenship programmes. Partnerships with civil society organizations carry forward corporate initiatives for integrated and inclusive development across diverse domains including affirmative action, healthcare, education, livelihood, diversity management, skill development, empowerment of women, and water, to name a few.

The CII Theme for 2013-14 is Accelerating Economic Growth through Innovation, Transformation, Inclusion and Governance. Towards this, CII advocacy will accord top priority to stepping up the growth trajectory of the nation, while retaining a strong focus on accountability, transparency and measurement in the corporate and social eco-system, building a knowledge economy, and broad-basing development to help deliver the fruits of progress to all.

With 63 offices, including 10 Centres of Excellence, in India, and 7 overseas offices in Australia, China, Egypt, France, Singapore, UK, and USA, as well as institutional partnerships with 224 counterpart organizations in 90 countries, CII serves as a reference point for Indian industry and the international business community.

Confederation of Indian Industry

Northern Region Headquarters Sector 31 A, Chandigarh – 160 030, INDIA

Tel: 91 172 6510187 / 502 2522 / 260 7228

Fax: 91 172 260 6259 / 261 4974

Email: ciinr@cii.in Website: www.cii.in

Reach us via our membership helpline: 00-91-11-435 46244 / 00-91-99104 46244

CII helpline toll free no: 1800-103-1244

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

Deloitte provides audit, tax, consulting, and financial advisory services to public and private clients spanning multiple industries. With a globally connected network of member firms in more than 150 countries, Deloitte brings world-class capabilities and high-quality service to clients, delivering the insights they need to address their most complex business challenges. Deloitte has about 200,000 professionals, all committed to becoming the standard of excellence.

Deloitte's professionals are unified by a collaborative culture that fosters integrity, outstanding value to markets and clients, commitment to each other, and strength from cultural diversity. They enjoy an environment of continuous learning, challenging experiences, and enriching career opportunities. Deloitte's professionals are dedicated to strengthening corporate responsibility, building public trust, and making a positive impact in their communities.

In India, Deloitte is spread across 13 locations and over 20,000 professionals take pride in their ability to deliver to clients the right combination of local insight and international expertise.



Message from Chairman, CII Northern Region



Financial markets in India have acquired greater depth and liquidity over the years. Steady reforms since 1991 have led to greater integration of India's economy with the world economy. Consequently the global economic crisis has impacted India's growth as well with economic growth moderating to 5.0% during 2012-13.

Banks & financial institutions, acting as intermediaries and channelizing the savings into productive assets, have a very important role to play in reversing this slowdown. They need to widen their coverage in terms of the proportion of population they reach out to and also need to deepen their coverage in terms of increasing penetration levels of various products and services.

The Government of India's focus on this issue is quite clear and strong. In the Union budget, the Finance Minister announced the series of initiatives to further financial inclusion. These include setting up an all-women bank to empower women, interest subvention for farm loans for private banks, corebanking at post offices, medical insurance for rickshaw drivers, sanitation workers, and better access to finance for MSMEs.

In addition, opening up of the banking ecosystem with issuance of new banking licenses, and large reputed corporate houses in India are expected to enter and revolutionize the Indian banking industry, providing the much needed boost for financial inclusion.

Against this backdrop CII Northern Region is organising its 3rd Finance & Investment Summit, with the theme 'Financial Inclusion for Reviving Growth: Success Stories, Challenges & the Road Ahead'. The Summit aims to deliberate on increasing the reach of financial services to the currently unserved and underserved population.



Jayant Davar Chairman, CII Northern Region Co-Chairman & Managing Director Sandhar Technologies Ltd

Introduction Message from Summit Chair



I am very pleased to be chairing the 3rd Annual Summit on Finance & Investment. When we started conceptualizing the annual event in 2011, we had decided to have a different approach by focusing on the most relevant contemporary theme within the overarching domain of "finance and investment" which could help the Northern Region in particular. We were committed to inviting the best moderators and speakers to bring a rich content to the audience. We also decided to raise the bar for the audience as well, where we could have more quality interactions. I am happy that the event has gone from strength to strength each year. The feedback from the audience and the speakers has made us improve on the form and substance of the Summit for which we are obliged.

The year 2013 is vastly different from the previous year not only in terms of the challenges but also the reforms brought in by the Government. While high interest rates, slowing economy, lower foreign inflows, rising NPAs and higher subsidies are major challenges, the Government should be credited with bringing in insurance and pension sector reforms, a new Companies Act, empowering Competition Commission of India, direct cash transfers in some areas and brining agricultural productivity in a mission mode. The policy on new private sector banks stands out as being very succinct and precise. It remains to be seen as to how the financial sector will adapt itself to the new generation of banks and how these new generation banks will contribute to the national agenda of financial inclusion. Insurance and Pension will have to play an integral role alongside the banks in addressing the challenges

of financial inclusion as the interplay of the 3 sectors of banking, insurance and pension will determine the comprehensiveness and sustainability of financial inclusion.

We have designed a focused agenda around the new private sector banks for this Summit and hopefully bring out various dimensions, aspirations and cautions via the enlightened Panelists. The timing of the Summit is very opportune as the takeaways could serve to fine tune the approach of the new generation banks.

I look forward to an invigorating Summit.

home

Rajesh Srivastava

Chairman, CII Finance and Investment Summit 2013 & Chairman & Managing Director, Rabo Equity Advisors

Introduction Message from Summit co-chair

It is indeed my pleasure to Co-Chair CII's Finance & Investment Summit 2013. This year's summit attempts to focus on 'Financial Inclusion for Reviving Growth: Success Stories, Challenges & the Road Ahead' which is the key to the future of our nation and its growth.

In India, the focus of promoting inclusive growth is today a top priority for all including the financial regulator. This is stemmed by the fact that financial, economic, political and social stability lies in promoting financial inclusion to ensure that all strata of society get tangible benefit of the underlying economy. Efficient payment mechanisms, access to credit, cost efficient products are some of its benefits which unfortunately are not enjoyed by all for a variety of reasons.

In Northern India, while the GDP growth rate has kept pace with the overall Indian GDP growth and some regions even have posted growth ahead of the national average, there still states of Jammu & Kashmir, Punjab and Uttar Pradesh that are behind the national average. Inclusive growth in Northern India, tell a different story all together. It is far less than the national average. Statistically; financial inclusion index for northern India was 37.1 as compared to the national average of 40.1. In terms of the improvement over the last three years, the index has improved at a CAGR of 5.5%, which is the lowest as compared to other regions and overall India.

On banking coverage as well, there has been no improvement in the last few years. With a rural population of 70% the bank rural to urban ration is 40:60, the need and gap is obvious.

With eminent industry professionals as part of each panel discussion, I sincerely hope that this summit throws up thoughts on the collective challenge of promoting Inclusive Growth.

Any attempt to expand financial inclusion is essentially a small step in a longer journey and India needs to travel on this journey to become a global player. Inclusive growth will act as a source of empowerment and allow people to participate more effectively in the economic and social process.

Shachindra Nath

Shankender whether

Co-Chairman, CII Finance and Investment Summit 2013 & Group Chief Executive Officer, Religare Enterprises

Summit theme

The Summit aims at examining the core issues, challenges and opportunities that will act as catalysts in driving financial inclusion. The Summit provides a platform for recognized Industry Leaders to discuss and present their vision around this theme. The Sessions have been carefully chosen to dissect relevant topical issues leveraging the experience of the expert panel of speakers. The format is designed to provide for the panelists and participants to discuss, deliberate and recommend on the perspectives of the said areas that will be covered in the Summit.

Special plenary on financial inclusion for reviving growth: success stories, challenges & the road ahead

This session will facilitate a discussion on revival of economic growth and how economic growth in turn will facilitate inclusive growth. The focus will be on the role of banks and financial institutions towards broadbasing inclusive growth and financial inclusion as a tool to empower the currently unbanked population to participate and drive the growth of the economy. The session will also assess the success of non-bank account products in promoting financial inclusion, the potential role they can play and deliberate on the key enablers that need to be in place for these to be successful in achieving the goal. Lastly, the panel will discuss the role of technology and how Direct Cash Transfers will financially empower the masses.

Panel discussion I: New private sector banks and their potential role in promoting financial inclusion

RBI's guidelines on licensing to new private sector banks revolve around 'financial inclusion' focussed business plan as one of the key requirement for the players to obtain banking license. It is thus an important consideration for the new players to come up with innovative business models with a strong focus on financial inclusion that would be effective as well as efficient in delivering over 40% of their advances towards the priority sector as well as have 25% of their branches in tier V and VI towns. It is expected that such a provision would be a game changer and may change the widespread notion of financial inclusion from being as an obligation to becoming the next big opportunity in Indian banking. The session is expected to identify the role that new private sector banks are expected to play in promoting financial inclusion.

Panel discussion II: Tapping rural market – role of insurance & pension fund industry

While rural incomes have grown rapidly over the past few years, most insurance companies believe that it is expensive to operate in rural markets and instead focus on meeting the minimum regulatory requirements. To target the rural market, a few insurance firms have designed special products that include crop insurance, cattle insurance, rainfall index insurance, insurance to members of micro finance institutions among others. Similarly, the new age pension schemes are targeting the unorganized sector and rural population through pension benefit schemes including micro pension and other products.

The objective of this discussion is to understand what insurance and pension fund companies can do to fine tune their operating models, with specific focus on products and channel/ distribution management for the mass rural population.

Panel discussion III: Financing the infrastructure development – extending infrastructure to the last mile

Infrastructure development plays on multiple levels in assisting the development and up-liftment of the population at the bottom of the pyramid. At a macroeconomic level, the development of roads, railway, power, telecommunication etc. enables better accessibility and connectivity of the hinterland with the mainstream – the trickle-down effect of which benefits the excluded. At the same time, large scale infrastructure projects are also big employers of labourers providing employment opportunities and providing livelihood opportunities.

The objective of this discussion is to understand the impact of infrastructure development in creating employment opportunities and financially empowering the bottom of the pyramid population.

Foreword

The Indian Economy is currently going through a challenging phase as GDP growth has slowed down to nearly a decade low in 2012-13. Growth slowdown, coupled with other macroeconomic issues such as high public expenditure, depleting investment and saving levels, worsening current account balance, stubborn inflation, as well as depreciation of the Rupee have added to the economic pressures over-shadowing reforms introduced by the Government towards the later part of the year.

While the government is taking efforts to boost the economy, a cornerstone of the economic growth remains the vast untapped potential at the 'bottom of the pyramid'. To ensure that growth is 'inclusive', participation from all regions and all social groups is critical. One can argue that the next wave of growth lies within the bottom of the pyramid and it is important that the economy is able to tap into this segment of the population and convert it in to an opportunity. Financial inclusion will be a tool that will empower the currently unbanked population to participate and drive the growth of the economy.

The Indian government, regulatory bodies, banks and non-banks are joining hands and striving towards one common goal - financial inclusion for the masses. Significant steps and initiatives are currently underway to enable availability of banking, insurance and other payment related services for the people. The aim should be to ensure these initiatives are able to deliver the desired outcome and play a significant role in driving financial inclusion and supporting revival of the economic growth.

In this report, Financial Inclusion for Reviving Growth: Success Stories, Challenges & the Road Ahead, we look at some of such key initiatives more closely to assess their potential impact, key roadblocks and possible resolutions.

The new bank licenses will lead to emergence of new business models driving innovation on channels to reach the last mile. The corresponding increase in competition will help increase efficiencies and bring banking access to millions of underserved.

Role of technology solutions being a game-changer cannot be overemphasized. Mobile banking, Aadhaar enabled payment systems, white label ATMs are a few of the several new age technology based solutions that are expected to drive financial inclusion enabling direct access to customers. Each of these solutions will require deeper collaboration between various stake holders to achieve the scale and magnitude to drive financial inclusion.

In a similar vein, insurance and pension products will need to be customized and delivered through channels suitable for a rural audience to drive adoption and acceptance. Developing the winning strategies around the 4 Rs – Right Product, Right Channel, Right Place, and Right Time will help players penetrate the rural markets and achieve financial inclusion.

With all these at play, infrastructure improvement will serve to further boost financial inclusion by aiding delivery of financial and non-financial products/ services to wider population and creating better employment opportunities and providing further earning opportunities.

These topics are discussed in greater detail, and some new ideas are presented in this report. We hope you find this worthwhile.

Deepak Haria

Financial Services Leader and Senior Director Deloitte Global Financial Advisory India Private Limited



Understanding Northern Region: Diversities and opportunities

Introduction

Northern India, accounting for approximately 30.5% of the population and 31% of the land area, plays a pivotal role in the economy of the country. Northern India constitutes eight states and union territories (U.T.s): Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Delhi, Uttar Pradesh, Chandigarh, Rajasthan and Punjab. Though all these states are in the northern region in India, each differs in its climate, geography, population density, level of development and culture. In terms of the climate and topography, the northernmost states (Jammu and Kashmir, Uttarakhand, and Himachal Pradesh) are mountainous and have a cold weather, Rajasthan is hot and arid and has deserts, and Uttar Pradesh has large plains and plateaus. In terms of the population, some states / U.T.s such as Chandigarh, Delhi and UP are densely populated as compared to the states with hilly terrain such as Himachal Pradesh, Jammu and Kashmir and Uttarakhand. These states have traditionally been agrarian economies with a recent shift to the service industry.

Northern India also plays an important role in the politics of the country. Delhi is the capital and the political center of India. Almost 28% of the total seats in

the Lok Sabha are occupied by North India and UP is the state with the most number of seats.

In this section, we provide our perspectives on the overall state of economy of the northern region, the level of financial inclusion and various initiatives that have been taken to enhance the level of financial inclusion.

Economic Growth in Northern India

Northern region contributes ₹ 13.57 trillion (approximately US\$ 209 billion, considering the current exchange rate of 1 US\$ = ₹ 65) to the Indian GDP, which is 25.9% of the India's GDP. In FY 2007, it contributed ₹ 9.08 trillion, which was 25.5% in FY 2007. Its contribution to India's GDP has marginally increased to 25.9% in FY 2012. This clearly indicates that the growth in the northern region has kept pace with the growth of overall Indian economy. This contribution percentage may seem less when compared to the contribution to land area and population, both of which are more than 30%. Northern states will have to reduce this mismatch and aggressively grow over the next few years.

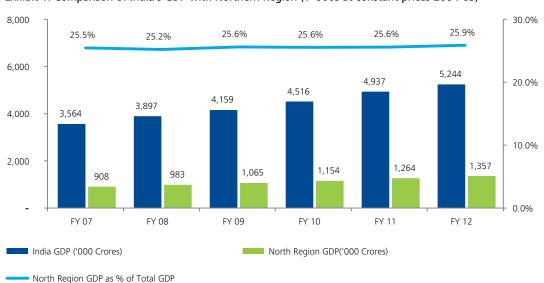


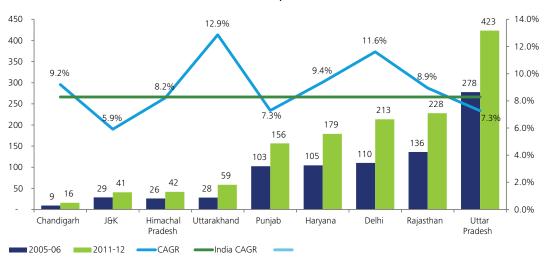
Exhibit 1: Comparison of India's GDP with Northern Region (₹ '000s at constant prices 2004-05)

Source: Data tables, Planning Commission, April 2013

Though the growth has kept pace with the overall growth of the Indian economy, the disparity of growth across northern states is apparent from the exhibit below. Some states have shown tremendous growth over the last six years and have grown at a much faster rate than other states. States and U.T.s such as Uttarakhand, Rajasthan, Haryana, Chandigarh, and Delhi have grown at rates faster than India's GDP. Uttarakhand and Delhi have shown a high growth in GDP of 12.9% and 11.6% over the last six years. This growth is comparable to other high growth states in other regions in India. Other states such as Jammu and Kashmir, Punjab and Uttar Pradesh are growing at a slow place.

With lower forecasts for the growth of the overall Indian economy, the northern region will also face the heat and would grow at a lower rate. Northern region does have advantages as compared to the other regions. It has a demographic advantage as more than fifty percent of the under-15 population resides in five states in India, of which two, viz. Uttar Pradesh and Rajasthan, are in the Northern region. So, it has a pool of young workers available. Northern region also has reserves of coal and iron ore. It also houses India's new steel and power plants. These factors do foster a positive outlook for the northern region.

Exhibit 2: GSDP of northern states (₹ '000s at constant prices 2004-05) and CAGR



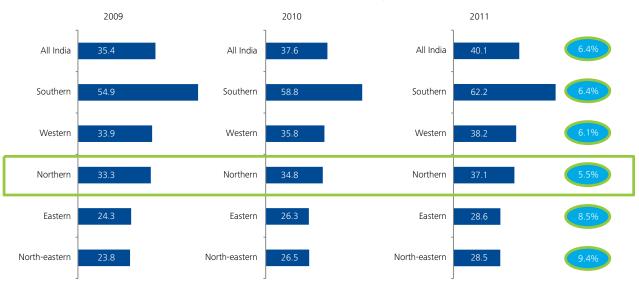
Source: Data Tables, Planning Commission, April 2013

Level of Financial Inclusion in Northern India

The level of financial inclusion in India is definitely less than desirable. With a population of more than 1.2 billion, there are only 684 million savings bank accounts. CRISIL developed financial inclusion index 'INCLUSIX'. The index rates every state and district on a scale of 0 to 100. Based on the index for 2011, India is at 40.1. We can see an improvement in the financial inclusion over the last three years as the index in 2009 was 35.4.

The financial inclusion in Northern India is much less than the national average. In 2011, financial inclusion index for northern India was 37.1 as compared to the national average of 40.1. In terms of the improvement over the last three years, the index has improved at a CAGR of 5.5%, which is the lowest as compared to other regions and overall India.

Exhibit 3: Financial inclusion index 'INCLUSIX' – Improvement over the three years



Source: CRISIL Inclusix Report, CRISIL, June 2013

Northern Region definition as per CRISIL for this index includes Madhya Pradesh, which is not a part of this report.

Currently, close to 40% of the branches are in rural areas. This percentage has remained the same for the last six years. With more than 70% of the population in rural areas, only 40% of the branches in the rural areas seem to be much lower than the ideal case. Over the last few years, banks have opened higher percentage of branches in urban and metro centers than in rural and semi-urban centers.

As RBI prescribes minimum 25% of the branches in rural areas (centers with population less than 9,999) for all banks, this percentage is expected to rise, especially as private sector banks will have to open at least 25% branches in rural areas.

Exhibit 4: Commercial bank branches in Northern Region



Source: Database on Indian Economy, RBI, 2013

Initiatives for Financial Inclusion in Northern India

Considering the low level of overall financial inclusion and the disparities among different regions, the regulator has encouraged multiple initiatives that are focused towards making financial services available, accessible, and affordable to people. Some of the initiatives that are expected to enhance the level of financial inclusion are discussed below.

New Banking License - Focus on financial inclusion

In the Guidelines for Licensing of New Banks in the Private Sector dated February 22, 2013, RBI stated that the proposed bank shall open at least 25 per cent of its branches in unbanked rural centres (population up to 9,999 as per the latest census). This move has clearly shown the central bank's focus on financial inclusion and increasing the number of branches in these underbanked and unbanked areas. Banking applicants after the submission date claim to have submitted an aggressive rural focused business plan. Issue of new banking license is definitely a move in the right direction to provide access to the rural unbanked customers. It is expected to enhance financial inclusion over the next decade. Many banking applicants have strong hold in the Tier 1, 2 and 3 centers in North India and we expect that they will leverage on this existing network to expand to Tier 4, 5 and 6 centers; Therefore, this is expected to increase the commercial bank branches in North India and make banking services available to its residents, thus enhancing the level of financial inclusion.

Mobile Payments – Leverage on the existing infrastructure and network

Financial Services players are already taking initiatives for financial inclusion in Northern Region States. Vodafone with ICICI Bank has launched the mobile payment services M-Pesa in close to nine circles viz. Kolkata, West Bengal, Bihar, Jharkhand, Rajasthan, Delhi, Mumbai, UP East and West through 25,000 agents. The services needs an initial registration fee and bills the customer based on each transaction. According to the Vodafone India Business Head, this service will help migrant workers who need to send money back to their families. This will help enhancing urban financial inclusion. Such mobile payments platforms will help leverage on the existing infrastructure and network and help us enhance the level of financial inclusion in the country.

White Label ATM Rollout – Increase access points Over the last few RBI have move from a captive model

to the newly introduced white label model. White Label ATM (WLA) Model will drive the next wave of the expansion of the ATM model. RBI has issued 12 licenses to operate WLAs to Non-Banking Financial Companies (NBFCs). RBI is considering giving 5 more licenses in the coming months. These 17 players together are expected to add around 1.5 lakh WLAs over the next 3 years. Number of WLAs in tier 5 and 6 centers is estimated to be greater than 7,500 expanding ATM penetration in financially excluded regions. WLAs will complement existing branch and ATM network of banks to provide cash access to financially excluded population. WLAs will also provide value added services, which will be its primary source of revenue.

Use of Aadhaar Number and Direct Benefits Transfer – Facilitating KYC, benefits transfer and financial inclusion

UIDAI, the body responsible for Aadhaar based Direct Benefits Transfer implementation, has included 37 (30.5%) districts from north region in the current roll out of 121 districts (11 in initial 43 and 26 in next 78 districts rolled out). The Ministry of Finance has also undertaken some initiatives to increase reach of financial services to every village with population above 1,600. The implementation responsibility of this initiative was given to the State Level Banking Committees (SLBCs). As of March 31st 2013, the implementation is near completion over 74,194 villages (of these 24,669 villages lie in north region) provided with basic banking services. Aadhaar is expected to lower the hassles of KYC, one of the important factors why people in rural areas are unable to use banking facilities. The introduction of the direct cash transfer scheme is expected to bring large amount of money in the formal banking system. It will also ensure that people use the bank accounts and will lead to a lower dormancy ratio, especially the non-frill savings bank accounts.

Conclusion

Over the next decade, there will be a huge thrust on financial services in India. As the government envisions inclusive growth, the next wave of growth can be achieved by including the rural population in the formal financial system and empowering them so that there is a significant increase in the average per capita income. Government policies coupled with the efforts of the financial services industry, both public and private, to look for growth will help enhance financial inclusion.

New private sector banks and their potential role in promoting financial inclusion in North



While conventional banks have been in existence for past several decades, a new era in banking was ushered in with granting of the new banking licenses in 1994 (10 in number) and 2003 (2 in number) that led to far-reaching consequences for the Indian banking sector. The new private sector banks created a distinguished value proposition of 'customer service' and 'technology' which did not get same level of focus in the business model of public sector and old private sector banks. It pushed the whole industry to embrace new ideas and explore newer opportunities, and led to an overall improvement in efficiency for the sector; supported with rapid technology adoption, growth in return on assets, better customer orientation, reduction in non-performing assets and fall in cost-income ratio. During the same period, Indian banking sector witnessed consolidation to some extent with total number of scheduled commercial banks falling from 101 in 2000 to 80 in 2009. This phase in the banking landscape evolution saw the emergence of relative efficient players and phasing out of inefficient ones. There have been instances from several other countries where a new category of players have transformed the entire conventional banking landscape and changed how banking was being done before - the impressive success of business correspondent model in Brazil and mobile platform-based banking model in Kenya are notable examples.

The New Banking License Guidelines, 2013

The Reserve Bank of India (RBI), on February 22, 2013, released the guidelines for "Licensing of New Banks in the Private Sector." In these guidelines, the one thing that stands out is the regulators' thrust on financial inclusion to be the central theme of any potential banking license that it shall grant in the near term. This is evident from the following conditions in the final guidelines:

- The business plan will have to address how the bank proposes to achieve financial inclusion
- The bank shall open at least 25 per cent of its branches in unbanked rural centres (population up to 9,999 as per Census 2011)

In addition, the RBI has provided several parameters relating to minimum capital requirements, corporate structure, ownership and governance, foreign shareholding, eligible promoters, specific provisions for Non-Banking Financial Companies (NBFCs), business modes or models considerations, etc. and outlined the application as well as the selection process. Through these guidelines, the objective of the regulator is to create banking entities which are financially inclusive, adequately capitalized, backed by a sound business model and robust corporate governance. Other key highlights of the guidelines are:

- Eligible promoters defined as entities/groups in the private/public sector, with sound credentials, integrity and backed by a track record of more than 10 years
- To improve governance and enable ring fencing of financial services business, new banks are intended to be set-up only through a wholly owned Non-Operative Financial Holding Company (NOFHC)
- The minimum capital has been pegged at Rs 500 crores, with the promoter of the NOFHC holding not less than 40 per cent of the capital with a 5 year lock-in period
- Initial foreign shareholding has been restricted to 49 per cent for the first 5 years
- The Board is envisaged to have minimum 50% independent directors to improve corporate governance
- Existing NBFCs are eligible to promote a new bank or convert themselves into banks
- Clearly defined targets for capital adequacy (13 per cent) and priority sector limits

Underlining its continued push towards achieving financial inclusion, the primary intention behind the guidelines is to promote banks which may focus on serving the financially excluded strata of the society and at the same time have a sustainable business model along with a sound capital and robust governance structure.

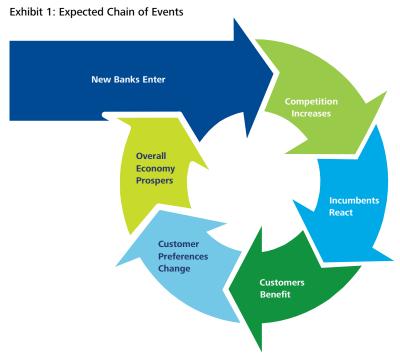
It is expected that this shall start a chain of events that may prove to be beneficial for the whole economy. While setting up their operations, the new banks are likely to bring in their learning, expertise and experience from various sectors and come up with unique business and operating models which may then prove to be successful not only in terms of providing last mile connectivity to the rural hinterlands but also in creating a sustainable, profitable business. Further, with the emergence of new players and new business models, the competitive intensity in the sector may increase with more players targeting the same potential customer base leading to significant changes in the overall financial services landscape. The incumbents may be tempted to or even forced to renew their efforts and refine or change their existing strategies to withstand the new competition. This in turn may lead to more number of banks focusing on areas such as product innovation, pricing models, alternate channels usage, data analytics, marketing and branding, etc. These initiatives in effect shall bring an improved sense of customer-centricity to the whole industry and as a result, may lead to changes in the customer attitude and behavior. Overall in the long run, the introduction of new banks may become a game changer for the whole ecosystem and may benefit all the participants of the ecosystem.

Key themes likely to evolve or be strengthened with the entry of new banks

Emergence of new business models

Despite sustained efforts by the banks, government, regulators and other institutions, close to 40% of households in India still do not have access to banking services and it may not be incorrect to assume that the current banking models of most of the existing banks have not been very successful in tackling this problem. Though over the years, there has been a rise in the number of households which have been "included" in the formal banking system, however, most of the progress may be attributed more to the regulatory push or intervention rather than the incumbents adopting a pure economic or business model. Most of these banks may even admit that they are yet to find a model that rewards their efforts that have to be made and the risks that have to be taken to reach out to this section of the society. Among the existing banks, only a few banks presently have a national reach, and the newest banks, though set up more than 10 years ago, have yet to establish a large footprint in the retail banking. While the newer banks have been at the forefront of innovation in terms of offering new and alternate channels and customized products, the state owned banks, which continue to account for more than three quarters of total banking business, have not changed significantly in their working model. These banks continue to have a business model that focuses on customer acquisition through branches, which remains the preferred mode of banking for a typical Indian customer.

However, banks have started realizing that the costs associated with the traditional brick and mortar banking model are higher and shall continue to pose a major hurdle in promoting financial inclusion. The regulator has stressed upon the need to have a cost effective model to promote financial inclusion. Various measures towards increasing the adoption of technology enabled and alternate channels have been introduced in the last decade, which include the introduction of Business Correspondents (BCs), the concept of Ultra Small Branches (USBs), relaxation of limits on transaction sizes through alternate channels, among others. Most banks in India have introduced these services and although slow, customer adoption has been lately on the rise.



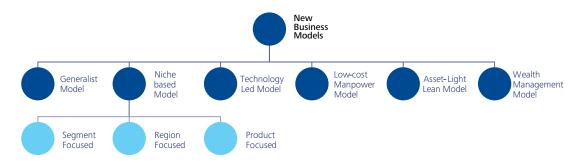
It is expected that while the new entrants in the banking sector shall bring in their learning and experience from other industries, they shall more or less have a clean slate to start with for their banking operations. These new banks are likely to adopt unique business and operating models that would be aligned with their vision and strategic objectives. With the guidelines specifying targets for Priority Sector Lending (PSL) and branch distribution in rural unbanked centers, it is expected that a new entrant shall have the "ends" it has to achieve but the "means" to achieve shall vary from player to player based on the current business or operational characteristics of the promoting entities.

Among the 26 applicants, while there are large corporate houses in the race to obtain a banking license, there are also some applicants with a strong presence in certain geographies and a potentially readymade customer base, who can be strong contenders. While the corporate houses, if granted a license, are likely to have national presence and will benefit from their "deep pockets", the smaller players are likely to begin operations with a focus on specific geographies, channels or customer segments to reduce their dependence on external sources of funding and cut down losses in the short term. Some applicants may

even utilize their existing staff strength and re-skill them suitably to build a more people intensive delivery model, and maintain their relationships with existing clients.

Some of the business models that can be expected with the commissioning of new banks in the private sector are mentioned below. Since these models are not mutually exclusive, there might be instances where banks adopt a combination of these business models.

Exhibit 2: Various business models and their potential plays



Business Model	Potential Plays	
"Generalist" Model	 Follow a universal banking model, catering to all customers segments through a nationwide presence and a wide product basket (likely to be adopted by large corporate houses) 	
"Niche" based Model	 Build expertise with a particular target customer segment in view. For example, focus on Small and medium enterprise (SME) sector and develop expertise to serve SME customers. Or, build expertise in 'Agriculture' financing through alliances with appropriate organizations Follow "Adopt-a-Region" model for banking based on geographic region, say a bank focusing on northern part of India Follow a product focused strategy, say a banking model based on specializing in retail financing products 	
"Technology-led" Model	 Use technology innovatively to improve cross-sell and reduce operational costs Leverage technology heavily for delivery focusing on a "Direct" banking model 	
"Low-cost Manpower" Model	Leverage low cost local manpower to reach customers e.g. using a door-step banking network (likely to be followed by NBFCs that convert to banks)	
"Asset Light" Lean Model	Heavy reliance on third party outsourcing for all non-core Redefining the core of a traditional bank	
"Wealth Management" Model	 Educate the customer about his needs and manage those needs (such as credit, savings, investment, protection, etc.) by providing various products and services Building a trusted relationship with customer and creating a self-sustaining demand model 	

Competition to hot up, Incumbents to strengthen

With the emergence of these new players equipped with new ideas and drive to succeed in the market vying for a part of the current customer base, the competitive intensity in the sector is bound to increase a few notches. The players shall have a near clean slate and a nimble organization with limited or negligible legacy issues. These players shall be able to take advantage of their dynamic nature and deploy their unique business models while competing with the existing players. As they start afresh in the banking business, new banking entities may usher in a new era of technology-led banking models. While, in the existing scenario, there are several banks that have a fully owned technology model, there has also been a growing trend of outsourcing their technology requirements. A slew of new entrants may accentuate this trend even further.

The focused nature of the new entrants' pursuit may make the competition more difficult for the incumbents. These incumbents may be tempted to or even forced to renew their efforts and refine or change their existing strategies to withstand the new competition. This in turn may lead to more number of banks focusing on areas such as product innovation, pricing models, alternate channels usage, extensive use of technology, data analytics, marketing and branding, etc.

The incumbents may look at newer avenues for top line growth and refine or revise their business models to capitalize more on the traditionally low focus areas such as transaction banking and expand into areas that they did not venture before due to large amount of investments required or simply, lack of motivation. With increasing competition, this may also lead to a few incumbents shifting their focus to the financially excluded population, trying to serve the unserved and underserved. These incumbents shall also initiate cost reduction or optimization programs as well as various outsourcing models and reconsider the level of use of technology in their organization to achieve greater cost efficiency. Some of the incumbents along with the new entrants may move towards adopting a "total technology outsourcing" model where apart from the non-core functions, they may consider areas that were supposed to be "core" some time back, right from core banking systems to network security, disaster recovery and business continuity management systems.

Further, with the banking regulator highlighting the need to provide banking services to people in far flung areas where setting up branches might not make business sense, the role of technology shall increase radically in the sector. With the average cost of a banking transaction carried out through a branch being several times more than that through a technology enabled channel, the granting of a license to newer players is only going to provide greater thrust to "branchless banking". And, over time, it may become difficult for the incumbents to compete with these new banks unless they make similar moves in time.

With a greater number of players, including both the incumbents as well as the new entrants chasing the same customer base with a new found focus and efforts using the latest technology, the sector is set to witness a new improved sense of customer-centricity. With this, it is expected that the chances of bringing a previously excluded customer into the formal banking system may improve dramatically.

Benefits in store for the Customers

One of the key reasons, besides the low availability of banking infrastructure, that has been impeding the progress of financial inclusion is the lack of financial literacy. While in their bid to achieve further financial inclusion, the banks have been opening no-frills accounts, more than 70% of such accounts remain dormant. This is a classic case of financial exclusion even when there is adequate availability of facilities. One of the reasons why the Business Correspondent (BC) model in India has not been able to replicate its success in Brazil, for example, is that people are either not aware of the benefits of availing of finances from formal sources or they are simply agnostic to such means of finance. Although the first reason seems more intuitive, there is a general tendency among such sections of the society to place more trust on sources that are known to them vis-à-vis a BC or other formal sources. This only creates a negative spiral, where banks do not see much business sense in opening branches/ ATMs in such regions, nor do they treat this customer segment as a profitable one, which leads to lower demand and lower branch/ ATM density, and so on.

That it is unviable to have a branch in every settlement to serve the needs of people from a cost efficiency perspective, has emerged very clearly in the past decade. The next logical step towards increasing penetration or usage of formal financial services among the currently excluded population apart from providing access seems to be spreading awareness and educating them about their financial needs. It will help this segment develop confidence, knowledge and skills to better manage their financial needs, enabling them to have more control over their present and future circumstances. It shall also help this segment protect themselves from the risky exploitative financial schemes and high interest rates charged by local moneylenders.

Banks have already started taking such initiatives through various avenues, the results of which are sure to make an impact in the long run. The latest wave of banks shall be aware of the need to educate their prospective customers about the benefits of availing products/services from the formal financial system, and one of the key business strategies shall be based around spreading financial literacy among the masses, educating them about importance of availing financial services as well as familiarizing them with their various products and services.

Most of the financially excluded population does not have any productive avenue to save its earnings with. Some that do save, either save with chit funds or post office savings schemes, the former being susceptible to various kinds of risks. After the interest rate deregulation, some banks offer attractive interest rates, matching the effective rates of some term products, which can act as a catalyst for bringing the hitherto financially excluded population under the formal banking fold. In addition to offering plain vanilla savings products, banks, both new and incumbents, shall graduate to a larger portfolio of basic products or even a combination of basic products - credit, investment, protection, plan, money transfer to retain and expand their customer base, and to meet their ever expanding financial needs. There is likely to evolve a concept of a financial institution that would act as a one stop shop for various financial needs such money transfer, insurance, pension, etc. apart from the regular savings and credit products, which the banks may provide through third party arrangements. Thus, usage of alternate channels and availability of right products, basic or otherwise, to suit specific financial needs, coupled with increased sense of identifying such financial needs, shall improve overall access, availability and quality of such services. This shall subsequently increase the convenience of transactions and facilitate

"anytime, anywhere" banking facility. Therefore, it is expected that the impending introduction be immensely beneficial for the customers at large and may catalyze a marked change in the current banking landscape.

A Win-Win situation

With the introduction of new banks, everyone is expected to be a winner – the customers, the regions, the banking system, the players, the markets, the society and the economy at large.

The hitherto unserved and underserved customer base shall get access to reliable financial services. The overall population shall benefit from the reduction in servicing costs as the higher scale of operations and focus on low-cost delivery channels shall lead the players to rationalize their costs and universally pass on the benefits.

The focus on rural and poor geographical areas may lead to growth in these areas giving opportunities to local population to finance their dreams and build future capital. This may trigger a growth wave in the region and may help in lowering of regional imbalances.

The banking system shall be a winner in terms of innovative business models, product innovation, new low-cost channel delivery, a larger customer base, etc. The new entrants are expected to catalyze a chain reaction where the whole system is expected to grow and mature over time. The increased competition may lead to better utilization of capital and make the sector in general, more efficient in acquiring and servicing a customer.

The players, both new and existing, shall benefit from the cultural shifts and the larger customer base where they can exhibit their specific expertise and woo the customers. The larger scale of operations, focus on new avenues of growth and introduction of various cost optimization measures shall make them more nimble and dynamic, along with fetching them higher returns on their investments. Further, chasing the same customer base in the future may lead to better customer conversion ratio as well as efficient allocation of capital.

With the regulator mandating a certain minimum capital requirement, the players have to necessarily inject this capital in their ventures. To combat the new competition, many of the incumbents may need

more capital as a part of their business reorganization or technological up-gradation activities or for simply chasing new growth avenues. All these shall lead to more activity in the markets on both equity and debt sides. Also, with the mandatory dilution over time, the markets shall continue to see such activity in the future as well. This may have a favorable impact in terms of providing volumes to the equity markets and possibly deepening the nearly non-existent debt markets in India.

With the latest wave of new banks expected to change the way the population is going to be served, it is likely that over a longer term, this may spark a cultural change at large. People may feel encouraged and more comfortable to move from an informal savings culture to formal savings culture and even, to investment culture, from cash culture to electronic culture and from "brick and mortar" to "branchless" as the preferred media for transactions. This may lead to the whole society to mature and develop in terms of financial education and awareness over time.

Overall the economy shall benefit in multiple ways. The fresh capital injection may spark a series of investments for the larger benefit of the population. In effect, this shall lead to allocation of private money into socially inclined investments. Further, this may also encourage people to put back their money in the formal banking system rather than alternate investment destinations such as gold and real estate. With the regulator expected to grant multiple licenses, there would be several players who would be looking to establish their banking operations and depending upon their business models, expand their network and reach. This shall lead to a significant demand for manpower at all levels and create a chain of both direct and indirect employment opportunities.

While it may take some time for most of these benefits to materialize, the fact that the wheels of change have been set in motion as a result of the impending introduction of new players in the banking system in India, is a "win-win" for everybody. In a nutshell, we may say that the granting of new banking licenses shall provide an impetus for the next level of growth and has the potential to become a 'game changer' for the banking sector.



Role of technology (mobile payments, direct cash transfers etc.) in promoting Financial Inclusion in North

"Technology" as a game changer for Financial Inclusion

The decade long growth story of Indian economy has come to a halt due to slowdown in the global economy as well as domestic growth roadblocks. The average annual GDP growth has fallen to 7.1 per cent during FY08-13 compared to average of 8.7 per cent during FY03-08. The GDP growth for India was at 6.2 per cent and 5.0 per cent during the years FY12 and FY13 respectively¹. Within North Indian states, Uttarakhand, Punjab and Rajasthan have the lowest GDP growth rates for FY12. The slowing pace of GDP growth is compelling the government as well as the corporates to find newer avenues of growth in particular at the 'bottom of the pyramid'. It is a well understood fact that to push the next wave of growth of the Indian economy, an 'inclusive growth' is now an imperative rather than a mandate.

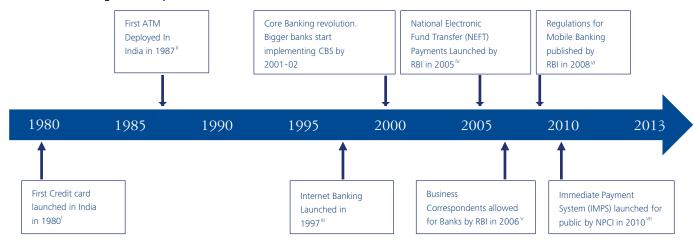
Among the many socio-economic factors which are obstructing the inclusive growth, 'financial exclusion' is often cited as the key impediment. Indian financial services industry has been trying to address this issue for quite a while now and have developed innovative models over the years to extend the reach of financial services. In the recent past, 'technology', has been a

key enabler for financial services industry to further the penetration in unbanked regions. Key benefits of technology led models for financial inclusion include:

- Reach: New technologies such as mobile and internet help expand the reach of financial services which is restricted in case of traditional asset heavy models (such as branches) as their set-up and maintenance in rural hinterlands is a cumbersome task
- Availability: Unlike branches which operate during fixed hours, new technologies provide 24X7 availability of services through ATMs, internet and mobile
- Lower cost of delivery: Financial transactions conducted on channels such as mobile cost much lower than those conducted through bank branches
- Efficiency: Replacing cash with plastic/electronic/ mobile money increases efficiency by reducing cost and time involved in cash management and preventing leakages
- **Security:** Cash management often has higher security concerns which are reduced to a great extent through the use of cashless modes

Technology has been evolving radically over past years resulting newer ways to access financial services.

Exhibit 1: Technological developments in financial services in India



 $I. Central\ Bank\ of\ India\ Website,\ https://www.centralbankofindia.co.in/site/MainSite.aspx?status=26menu_id=128menuu_id=128menuu=id=128$

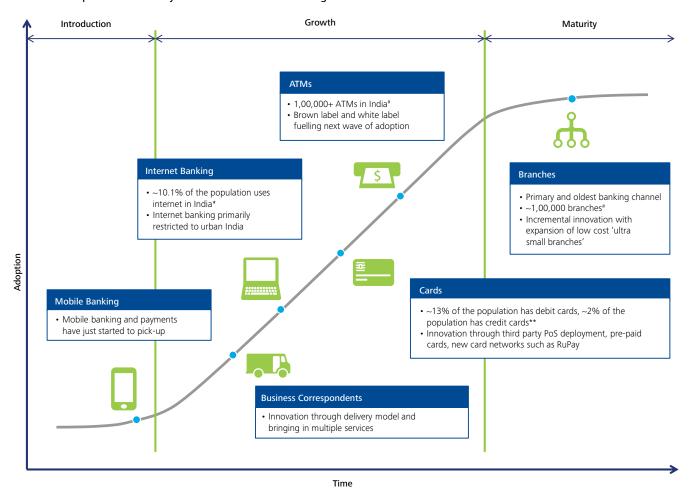
II HSBC Website, http://www.hsbc.co.in/1/2/miscellaneous/about-hsbc/150-years-in-india

III ICMR India, The Indian Internet Banking Journey, http://www.icmrindia.org/free%20resources/casestudies/The%20Indian%20Internet%20 Banking%20Journey-Case%20Study.htm

IV RBI notifications, February 5th, 2010, http://www.rbi.org.in/scripts/NotificationUser.aspx?Mode=0&Id=5489 V RBI Circulars, January 25th, 2006, http://www.rbi.org.in/Scripts/BS_CircularIndexDisplay.aspx?Id=2718 VI RBI notifications, October 8th, 2008, http://rbi.org.in/scripts/NotificationUser.aspx?Id=4524&Mode=0 VII NPCI Website, http://www.npci.org.in/aboutimps.aspx

 Data Tables, Planning Commission of India, March 15,2013. http:// planningcommission.gov.in/ data/datatable/index.php In terms of technology sophistication, financial services industry has come a long way from card and Point of Sale (PoS) payments, ATMs to mobile financial services. Every new technology has ensured a more convenient, user friendly, low cost access to financial services which has resulted in furthering the reach of financial services. While some of these technology initiatives such as ATMs are expected to reach maturity in next 5-6 years, other services such as mobile banking and mobile payments are still in nascent stage and yet to experience growth and mass market acceptance.

Exhibit 2: Adoption and maturity of financial services technologies



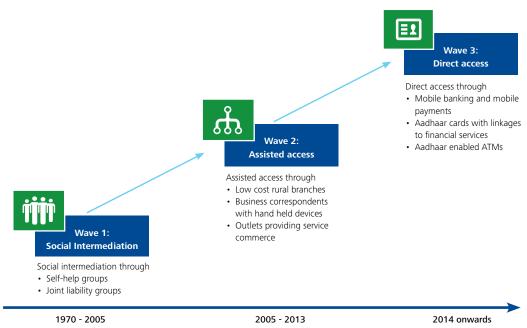
^{*} World Bank DataBank . 2011

[#] RBI Monthly Data Figures, March 2013
** Dun and Bradstreet Report on Indian Banking Industry, 2011

Technology initiatives have helped financial inclusion to advance from a traditional self-help group/joint liability group based model to an assisted model driven by low cost branches and business correspondents. The key success of this model has been bringing in more financial services such as loans, deposits, withdrawals, payments to customer's doorstep in more secured, convenient and low cost manner. Going forward, the

newer technology initiatives such as 'Aadhaar' and 'Immediate Payment System (IMPS)' shall continue to innovate the newer ways in which financial services reach the end customers and usher us in the next wave of financial inclusion wherein people will have a direct access to all financial services through Aadhaar enabled ATMs, mobile financial services etc.

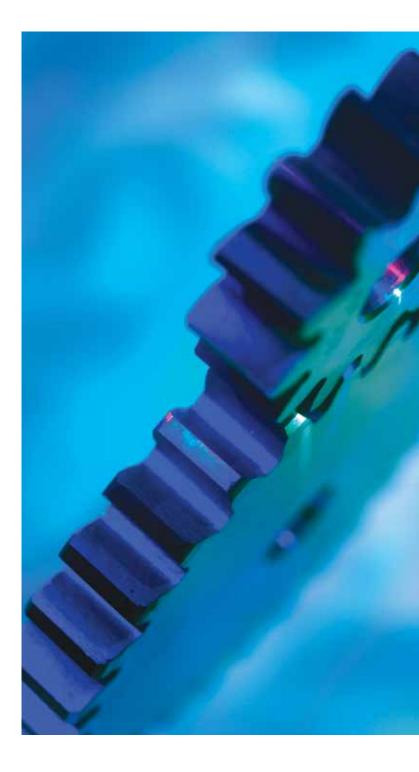
Exhibit 3: Business models for financial inclusion



The scale, technology sophistication, efficient delivery of new technology initiatives has the potential to create a sea change in the livelihood of people, especially rural and weaker sections of the society. While industry shall continue to innovate newer ways to enhance access to financial services, we believe that following six initiatives supported by a sound technology-led business models have the potential to become 'game changers' and change the course of the financial inclusion journey of India.

Exhibit 4: Technology led financial inclusion initiatives





Leverage your identity: Aadhaar enabled financial services

Aadhaar is a nation-wide initiative launched by Unique Identification Authority of India (UIDAI) to create a central identification repository of all citizens of the country. Government in partnership with UIDAI has drawn an ambitious plan to facilitate direct transfer of benefits (such as MGNERGA wages, LPG subsidy, scholarships, benefits of Targeted Public Distribution System (TPDS) etc.) into the beneficiary's bank account by using unique Aadhaar number provided to each individual. Currently over 40 crore Aadhaar numbers have been issued by UIDAI. While it is still far away from covering the entire population, it plans to cover 60 crore population by 2014.²

Impact

Currently, Aadhaar based transfers are being piloted in select districts in India only for few government subsidies. Since launch in January 2013, total disbursements by Aadhaar were ₹ 50.30 crores across 121 districts³. Another Rs 139 crores have been disbursed under DBT for LPG implemented across 20 districts by the end of July 2013⁴. Going forward, the government plans to bring more districts and more government subsidy schemes under direct benefit transfers. The end goal of the government is to disburse a total of ₹ 3 lakh crore of annual subsidies through Aadhaar based transfers⁵.

The rollout of Aadhaar based transfers is not uniform among states within North India. Some states like Himachal Pradesh, Delhi and Chandigarh have more than 50 per cent districts covered while states like Jammu and Kashmir, Uttar Pradesh and Haryana have less than 15 per cent districts covered by Aadhaar based transfers. However, on an overall scale, North India has 30 per cent districts covered under Aadhaar based transfers⁶.

Aadhaar based direct benefit transfer is expected to bring a sea change in the Government to Person (G2P) benefits payout. Some of the benefits of Aadhaar based transfers include:

- Quickness in processing of beneficiary payouts of crores of rupees every day on a real-time basis
- Efficient payout system as money directly reaches the beneficiary's account eliminating cost and time involved in the cash transfers

- Minimum leakages as funds are transferred directly from the government to beneficiary eliminating the handling by the intermediaries
- Better monitoring as data of benefit payouts is available in Aadhaar Enabled Payment System (AEPS) and can be easily accessed by the concerned officials

G2P Direct Benefit transfer is just a starting step for Aadhaar based financial services. Apart from this, Aadhaar can be leveraged for host of financial services in the areas of Person to Person (P2P), Person to Business (P2B), and Business to Person (B2P) payments. Some of the examples include Aadhaar based money transfers, insurance premium payments, claim payouts, ATM access, loan disbursals and repayments. However, this will require extensive collaboration between UIDAI, government and financial services industry to create secure payment mechanisms through Aadhaar.

Key Issues

Aadhaar, although still in its implementation stage, is facing difficulties with implementation of the system due to scale as well as complexity of the operations. Some of the key challenges that are being currently faced include:

- Data Management: Issues related to data loss, data duplication, incorrect mapping of the collected data as well as incorrect data collection are leading to delays in implementation of Aadhaar based direct benefit transfers.
- Stakeholder alignment: Multiple stakeholders such as National Payments Corporation of India (NPCI), UIDAI, State government, MGNERGA, LPG distributors, TPDS and other central government bodies are required to come together to finalize the process of direct transfers for various types of benefit schemes. Aligning all these stakeholders is progressing at a slower pace thereby delaying the implementation.

Way Forward

Sheer scale of this initiative requires large scale effort to implement once the process has been finalized. Training of the individuals at grass-root level involved in data collection, data entry, data checking, benefit disbursal monitoring, grievance management shall require significant amount of time to ensure that the process of direct benefit transfers runs smoothly. More efforts need to be undertaken to educate people about the progress made by Aadhaar and ensure greater participation levels from the people.

- 2 Press Information Bureau, "More than 40 crore Aadhaar numbers generated till date", August 17 2013, http://www.pib. nic.in/newsite/erelease. aspx?relid=98323s
- 3 Press Information Bureau, "More than 40 crore Aadhaar numbers generated till date", August 17 2013, http://www.pib. nic.in/newsite/erelease. aspx?relid=98323s
- 4 Press Information Bureau, "Direct Benefit Transfer for LPG (DBTL) Scheme commences in Mandi today; all 20 phase-I districts covered", August 1 2013, http://pib.nic.in/newsite/ erelease.aspx?relid=97540
- 5 Report of the Task Force on an Aadhaar-Enabled Unified Payment Infrastructure, Ministry of Finance, February 2012, http://finmin.nic.in/ reports/Report_Task_Force_ Aadhaar PaymentInfra.pdf
- 6 Press Information Bureau, "PM approves expansion of Direct Benefits Transfers (DBT)", 5 April 2013, http:// pmindia.nic.in/press-details. php?nodeid=1593

Anytime and Anywhere: Immediate Payment Service (IMPS)

In recent years, many mobile network operators, financial institutions and banks have introduced a variety of financial services on mobile. These included mobile banking introduced by host of banks and m-wallets introduced by prepaid instrument issuers. One such mobile based payment service launched in North India is m-Pesa by Vodafone in partnership with ICICI Bank. However, this service is limited to the states of Rajasthan, Delhi and UP East within North India.

To bring mobile financial services on a common platform across the nation, National Payments Corporation of India (NPCI) created Immediate Payment Service (IMPS), which is a system offering instant, secure, 24X7 payments even on a simple mobile phone. NPCI has extended IMPS on internet and ATMs to increase its adoption and usage. IMPS can be used by customers for fund transfers as well as merchant payments with immediate confirmation received through SMS.

Impact

Some of the key advantages of IMPS over other channels are shown below:

Exhibit 5: Benefits of IMPS over other payment systems

Impact of IMPS	Other payment systems
Reduced time, instant money transfers	Cash: Require mutually acceptable meeting times between two parties NEFT: Batch process that runs every hour
Always available – 24X7X365	Cash: Storing large amounts of cash is risky and hence reduces availability NEFT: Available only during 8 AM – 7 PM on weekdays and 8 AM – 1 PM on Saturdays
No more sharing of bank account details	NEFT: Requires exchange of bank branch and account details
Safe and secure – Requires M-PIN to authenticate transaction	Cash: Carrying large amounts of cash increases risk of theft
High accessibility; can operate even from a feature phone by using SMS syntax. In addition can be accessed through internet as well as ATM	NEFT: Requires internet access through a convenient medium (computer/mobile) Cash: Requires visit to ATM/bank branch to withdraw cash

By enabling payment on a feature phone, IMPS will touch over 860 million mobile subscribers with more than 40 per cent among them being in rural India as on 31 March 2013⁷. Riding on the telecom wave, IMPS will not only extend financial services but shall also improve access, security and ease of usage for the excluded population.

NPCI has started on-boarding banks on IMPS platform so that banks can issue IMPS identifiers (Mobile Money Identifiers - MMIDs) and passwords (MPINs) to its customers. So far, 59 scheduled and co-operative banks have joined IMPS platform including leading public and private sector banks. These member banks have already issued over 5 crore of MMIDs. Total value of transactions under IMPS grew from ₹ 18.25 crores in August 2012 to ₹ 407.94 crores in July 2013. Total volume of transactions for the month of July 2013 was ₹ 7.01 lakh, a jump of over 200 per cent as compared to August 2012⁸. Considering massive addressable market of retail payments, this is just a starting of the revolution that is expected to significantly change the way payments are done in India.

Key Issues

The major challenge in driving IMPS usage is to change the customer mindset and make him/her migrate to mobile payments from traditional cash based as well as well-established card based or NEFT based payments. Also, IMPS is not being marketed by banks or NPCI adequately to create awareness about its benefits among end users including merchants.

Apart from customer education and marketing, another major issue with IMPS is the syntax for transactions. The syntax consists of nearly 30-35 characters including mobile number of recipient, MMID of recipient, user's MPIN, amount and Bank's short/long code. Remembering and typing out this syntax for each transaction is a cumbersome process limiting its usage.

Further, transaction limit in IMPS is different across different mediums (which include SMS, Unstructured Supplementary Service Data (USSD), Mobile Apps, ATMs etc.) as well as across different banks. The inconsistency is hampering the customer experience thus, inhibiting its adoption.

Way Forward

Players in the IMPS ecosystem need to make concerted efforts to create awareness about this initiative and encourage its usage. The usage guidelines across all banks and all mediums are required to be standardized to enhance experience of end customers. IMPS is also required to add features such as 'cash-outs at ATMs' and 'easy face to face payments' to increase its acceptance. In addition, IMPS systems can be leveraged in the G2C payments where benefit pay-outs shall reach the end beneficiary instantly. Potential of IMPS to take financial services to the very last mile of the country by enabling the end users to directly access financial service over mobile phones should be harnessed properly to realize the envisaged benefits.

⁷ TRAI, Performance Indicator Report, July 2013

⁸ IMPS, NPCI, http://www. npci.org.in/impsVolumes. aspx

Competitive collaboration to extend access to cash: White Label ATMs

Traditionally, ATMs in India were setup as well as managed by banks. Gradually, banks in India started moving away from owned ATMs to partly outsourced models (Managed Services and Brown Label ATMs) and further towards completely outsourced model i.e. White Label ATMs (WLAs). It is expected that WLAs shall drive the next wave of expansion of ATM channel. RBI guidelines on WLAs have ensured that the players establish WLA network on large scale (minimum 6000 WLAs over a period of 3 years)9. Currently, RBI has issued 12 licences to operate WLAs to Non-Banking Financial Companies (NBFCs). RBI is considering giving 5 more licenses in the coming months. These 17 players together are expected to add around 1.5 lakh WLAs over the next 3 years¹⁰.

With the total number of ATMs in India expected to reach, 3.5 – 4 lakh in next 3-4 years¹¹, WLAs are expected to add around 50 per cent of total ATMs

addition. The total investment that shall be contributed by WLA operators is expected to be ₹ 9,000 crores¹². Number of WLAs in tier 5 and 6 centers is estimated to be greater than 7,500 expanding ATM penetration in financially excluded regions¹³.

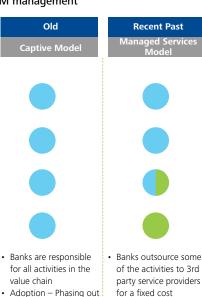
Impact

WLAs shall create a significant impact in furthering reach of financial services in unbanked and underbanked regions due to following factors:

- Complimentary network to the existing ATM network of banks as RBI guidelines have mandated a certain proportion of total WLAs to be deployed in rural areas. Setting up WLAs in these locations shall complement existing branch and ATM network of banks to provide cash access to financially excluded population
- Value Added Services (VAS) shall be provided by the WLA operator as it is its primary source of revenue. These VAS may include bill payment, loan application, insurance application, premium payment, claim filing which will further the financial inclusion

Exhibit 6: Models for ATM management





Pricing – Fixed per

service per month or

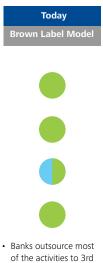
combination of fixed

Adoption – Currently

most of bank owned

ATMs are on this model

and transaction based





Future

White Label Model

party service providers Pricing - Transaction based

Adoption: New rollouts from FY12 and onwards 3rd party service providers set up the whole ATM infrastructure and bank makes payment on transaction basis without any right of branding or ownership

- 9 RBI Guidelines on White Label ATMs, 20 June 2012, http://www.rbi.org.in/ scripts/NotificationUser aspx?Id=7286&Mode=0
- 10 MoneyControl.com article, "RBI gives 17 licenses for White ATMs, TATAs to open soon", 5 April 2013, http://www.moneycontrol. com/news/business/ rbi-gives-17-licences-forwhite-atms-tatas-to-opensoon_847904.html
- 11 Business Standard, "As 300 mn ready to enter banking net, ATM makers prepare for the party", March 27, 2013, http://www.businessstandard.com/article/ economy-policy/as-300-mnready-to-enter-banking-netatm-makers-prepare-for-theparty-113032700014_1. html
- 12 Secondary Research, Deloitte Analysis
- 13 RRI Guidelines on White Label ATMs, 20 June 2012. Deloitte Analysis

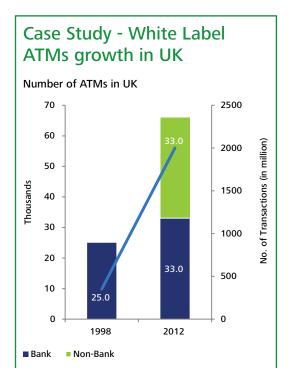
Key challenges

While WLAs shall drive the next wave of ATM expansion in country, the following issues need to be considered to derive maximum benefit out of this initiative:

- Viable Business Model: Deployment of over 1.5 lakh WLAs with an estimated investment of ₹ 9,000 crores will require a highly viable business model which allows the players to achieve breakeven as early as possible and invest in further deployment of WLAs. The key to ensure this shall be identification of profitable locations in rural areas and ensuring right pricing for services.
- Co-ordination between banks and WLA operators for implementation of ATMs: WLAs are envisaged by RBI as a complimentary network to the ATMs deployed by banks. Hence, both banks and WLA operators may work together to develop an expansion plan that complements each other creating a win-win situation for both

Way Forward

WLAs will serve as a key channel to provide cash as well as other financial services in rural areas. Banks will need to take into consideration the deployment plans of WLA operators while deploying their own ATMs especially in rural and semi urban regions. Currently, WLAs have just started to be deployed and are expected to capture share of 30-35 per cent of total ATM network in next 3-4 years¹⁴. In case, WLAs achieve a viable business model, India could witness 50-55 per cent of ATM network from WLAs similar to some of the western countries such as USA and UK¹⁵.



Prior to 1998, UK had 25,000 ATMs. Out of these, 6,000 were off-site ATMs with remaining at bank branches. In December 1998, the first independently owned and managed ATM was deployed by Bank Machine (a non-financial institution). This ATM allowed for cash withdrawals for a small charge to end customer. Since then, the number of non-bank ATMs have grown at much faster pace than Bank ATMs as shown in the adjoining figure. Currently, independently owned and managed ATMs have 50 per cent share in total ATM network in UK.

Over the last 15 years, competitive ATM expansion between third party and banks has driven the growth of ATM transactions and penetration in UK. Penetration of ATMs for UK rose from 4.27 to 10.44 per 10,000 people during the period 1997-2012. This is far higher than existing penetration of ATMs in India which stands at 1.00 ATM per 10,000 people. The increase in penetration was due to setting-up of third party ATMs in areas which were not penetrated by bank ATMs before.

Source: Insights into IAD Business Model in Western Europe, Ron Delnevo, ATMIA: ATMs in Russia and CIS, May 2012 Link Statistics, UK ATM network, Data as on September 2nd, 2013, http://www.link.co.uk/AboutLINK/Statistics/Pages/Statistics.aspx

World Bank Databank, Deloitte Analysis

¹⁴ RBI, News Articles, Deloitte Analysis

¹⁵ RBI, News Articles, Deloitte Analysis

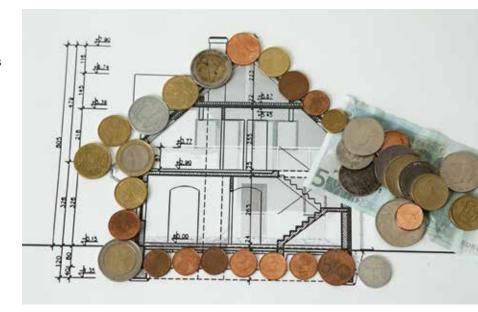
'Brick and Mortar' yet 'cost effective': Common Service Centers (CSC)

As part of National eGovernance Plan of the Government of India, 1.5 lakh Common Services Centers (CSCs) were planned to be established in rural India as a means to access services offered by government, public and private sectors over electronic channel¹⁶. These centers are being established by Service Centre Agencies (SCAs) in a Public Private Partnership model. Apart from government related services, CSCs have also become points for delivering financial services such as bill payments, money transfers, tax payments, insurance premium payments etc. in rural areas. Till now, around 1.26 lakhs of CSCs have been rolled out across the country¹⁷.

Impact

CSCs are expected to create a significant impact in financial inclusion by taking financial services to villages in a convenient 'brick and mortar' yet cost effective model:

- Grass-root reach: There is at least one CSC in every
 4-6 villages at present creating a massive network in
 rural India second only to India Post. This network
 may expand further as business model and profitability
 of CSCs is established and government plans to
 roll-out more CSCs to increase their penetration.
- Lower cost: A common service point for multiple services results in lower cost per transaction as overheads and establishment costs are shared over large number of transactions in financial services as well as non-financial services.



¹⁶ Common Service Center Scheme, Department of Information Technology, 31 March 2013, http://csc.gov. in/cscstatus/cscstatus.html

¹⁷ Common Service Center Scheme, Department of Information Technology, 31 March 2013, http://csc.gov. in/cscstatus/cscstatus.html

Key Issues

Though a national level initiative combining multiple services over a single platform, it is plagued with numerous macro as well as micro issues. The key issues affecting the implementation of this initiative are described below:

Exhibit 7: Macro and micro issues affecting the deployment of CSCs

Macro Issues

Lack of uniform model: Although a national initiative, ownership of the scheme has been kept in hands of state governments. This has resulted in different models and different services being offered at CSCs. implemented in different states.

Lack of awareness among implementation agencies: Many state government departments as well as private sector entities implementing CSCs are yet to understand the benefits that could be achieved by this initiative. This has resulted in CSCs being established with limited service offerings.

Due to numerous issues, the number of CSCs that are operational is 70,000¹⁹ which is less than 50 per cent of the total of 1.5 lakh CSCs as envisaged under National e-governance plan.

Way Forward

CSCs have been aimed to become a common service points in villages. However, to support this initiative achieves its envisioned state, the government needs create high awareness among all government departments, corporates as well as rural population about the benefits that can be achieved through CSCs. Also, government, regulators and industry need to collaborate to bring multiple financial services on CSC platform as quickly as possible. CSCs could be gateway to financial services bridging the gap between banked and unbanked in rural areas.

Micro Issues

Lack of skilled staff: Though, rural India has a literacy rate of 67.8 per cent, it is highly uneven across all states resulting in dearth of skilled manpower to operate CSCs in certain states¹⁸. Further, private sector players are not being incentivized to invest in training and skills development at rural level.

Lack of infrastructure and connectivity: Many of the CSCs are not able to function properly due to lack of power supply and internet connectivity.

Lack of awareness among end users: Despite a CSC being operational in nearby villages, rural populace remain unaware about the services being offered at CSCs. Lack of awareness campaigns conducted at village level are considered as primary reasons for the same.

¹⁸ Census of India, 2011. http://www.censusindia.gov. in/2011census/PCA/PCA_ Highlights/pca_highlights_ file/India/Chapter-3.pdf

initiative, "Number of operational CSCs unclear", July 31, 2013. http:// egovreach.in/social/content/ number-operational-cscsunclear

Promise to pay: RuPay

RuPay is an Indian domestic card payment network developed by NPCI established to drive the usage of cards among semi urban population of India. At the end of June 2013, the number of credit cards were mere 1.91 crore (1.7 per 100 people) while number of debit cards were 35 crore (31 per 100 people)20. RuPay is also designed to provide smaller Indian banks (e.g. cooperative banks) with an opportunity to launch their own cards which are unable to do so due to non-fulfillment of guidelines laid down by global card payment networks.

Impact

RuPay is expected to significantly impact card payments in India. Some of the key benefits offered by RuPay are as below:

- Lower Interchange costs: Interchange cost of RuPay is expected to be lower than other international card payment schemes such as VISA/MasterCard. Lower costs shall result in lower fees being levied on merchants accelerating the adoption especially in smaller merchants.
- Inclusion of local banks: RuPay will also provide card service payment option to many local banks that are currently not eligible for card issuance under the eligibility criteria of international card schemes. Some of the co-operative banks from North India who have already tied up with RuPay's card network are Gurgaon Gramin Bank, Himachal Pradesh State Co-operative Bank and Gramin Bank of Aryavart etc.

Key Issues

The major challenge for RuPay lies in increasing usage in a market dominated by global card payment networks like VISA/MasterCard. Although RuPay cards involve lower transactions costs, they do not have wide acceptability like VISA/MasterCard and hence end customer will not prefer to have a RuPay card in place of VISA/MasterCard. Also, while RuPay debit cards have only recently gone online, RuPay still does not have credit cards under its purview.

Way Forward

In near future, RuPay shall focus on enhancing the acceptability by merchants across India in order to drive usage of RuPay cards among customers. RuPay can also look at tying up with regional rural banks to issue cards which shall give a significant boost to cards usage in rural areas. RuPay can also tie up with pre-paid card issuers as pre-paid cards are mainly used in semi urban areas where both customers and issuers are price sensitive. RuPay can also tie up with banks to provide ATM cards to no frill account holders and benefit the rural ecosystem by providing lower transaction costs thus driving financial inclusion.

Case Study – Success of China **Union Pay**

In 1990, commercial banks in China launched their own payment cards, which had limited acceptance by other banks and their merchants. This urged banks in China and the government to come together and establish a domestic payment network which would accelerate adoption of credit and debit cards in China. With this objective, China Union Pay (CUP) was established in 2002.

CUP had a massive effect in increasing the penetration of cards and PoS. The number of merchants accepting card payments reached 16 lakh by 2009 which was 10 times more than that in 2001, before CUP was established. The PoS terminals increased 10 times to over 24 lakhs during 2001-10. The total transactions reached RMB 7.7 trillion (USD 1.1 trillion) which was 83 times as compared to those in 2001.

After becoming a 'standard' of card payment in China, CUP expanded to increase its acceptance globally. Currently, CUP cards are accepted in over 141 countries across the globe. The support from government, support from local banks, sound technological standards and most important, right value proposition for the ignored regional banks is the key to the success of CUP.

Source: China Union Pay website, Innovation in Payments, Edgar, Dunn & Company, 2009

> 20 RBI Website Bank-wise ATM/PoS/Card Statistics as on June 2013



'Build scale to profit': Third Party PoS terminals

Third party PoS terminals are debit/credit card processing machines which are installed at retailer's outlets by entities other than credit/debit card issuing banks.

Currently, there are more than 10 lakh PoS terminals in India issued by various banks compared to over 1.6 crore merchants accounting for only 6.25 per cent penetration²¹. Installation of PoS machines involves a significant cost for banks. There is also cannibalization in terms of merchant acquisition where multiple banks employ their PoS terminals at a single merchant. Third party PoS terminal providers shall deploy a single PoS machine at every merchant which shall be used for all credit and debit card transactions at a given merchant.

Impact

Major impacts of third party PoS terminals are summarized below:

- Reduced costs: A single PoS machine at merchant location shall leverage economies of scale bringing down per transaction cost as cost of merchant acquisition, installation and marketing shall be spread over higher number of transactions.
- Wider reach: Enabling a third party PoS services provider will help banks acquire more merchants and therefore reach more customers for card payments.

 Reduced Cannibalization: Same merchant will not be acquired by multiple banks thus reducing cannibalization and boosting profitability of the merchant acquisition business.

Way Forward

Currently, the concept of third party PoS terminals is still in its formative stages with adoption only by public sector banks. Public sector banks have planned to deploy 20 lakh PoS terminals by engaging a third party vendor for PoS deployment²². However, this decision is still under consideration. If implemented, this may pave way for private sector banks to look for outsourced model for PoS deployment as they compete with PSBs in terms of cost and service. Third party PoS providers may also consider tie-ups with card networks like RuPay in order to lower the interchange costs hence ultimately benefiting the end customers. This initiative is likely to result in large scale PoS deployment as banks come together to reduce costs and realize scale benefits creating a massive impact in furthering financial inclusion.

- 21 Euromonitor, "World Retail Data and Statistics 2008-2009", Deloitte Analysis
- 22 Times of India, "RIL Company, Atos in race to man PSB 'swipe' ", February 22, 2013. http:// timesofindia.indiatimes. com/business/india-business/ RIL-company-Atos-inrace-to-man-PSB-swipe/ articleshow/18618156.cms

Conclusion

Each of the aforementioned initiatives has their own strengths and shall definitely make a meaningful contribution in furthering financial inclusion. However, it is critical to address the overarching issues to ensure that expected results out of these initiatives are achieved to the desired scale as well as within a desired time.

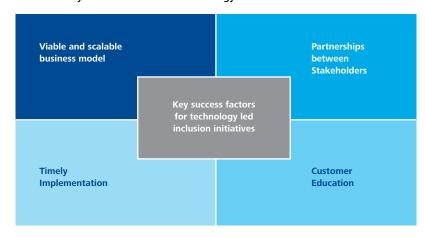
The key to success for all these initiatives are essentially four elements in the following order – developing a viable and scalable business model, forging appropriate partnerships among key stakeholders, ensuring timely implementation and investing in consumer education.

Developing a viable and scalable business model is the founding stone of success of these initiatives. Without it, these initiatives will not be able to achieve massive scale required to further financial inclusion in the excluded hinterlands. The integral elements to ensure viable and scalable model shall be developing innovative service delivery and balancing profitability with penetration.

Technology led initiatives require multiple stakeholders (including government, regulators, telecom operators, financial services firms, technology service providers, industry associations etc.) to collaborate with each other to drive the vital initiatives at national level paving the way for faster implementation. The key issues such as transaction security, interoperability, availability of enabling infrastructure can only be solved if all the stakeholders come together to deal with these as a single entity with an objective to eradicate financial exclusion.

Implementation of some of these initiatives has already exposed significant gaps in the objective to be achieved and preparedness of the implementation machinery. A more robust and resolute approach is required to ensure that these initiatives are implemented as planned. Apart from a separate governing body monitoring these initiatives, it is required that every institution from grass root level to national level is aligned and guided by a

Exhibit 8: Key success factors for technology-led initiatives



common set of end goals to achieve the desired success. Also, success of these initiatives is greatly dependent upon creating awareness among the targeted population. This requires focus on imparting financial literacy through counseling campaigns for the excluded population. Low literacy in states of Rajasthan, Jammu & Kashmir and Uttar Pradesh (less than 70 per cent) would pose a major challenge in driving customer awareness campaigns in North India²³. Apart from creating awareness, it is required to handhold people initially so that they develop trust in these initiatives. Also, younger generation needs to be enabled initially so that they translate the knowledge to older generation to boost the adoption.

Although some of these initiatives may take longer to execute than expected, the impact of these on the financial services landscape of this country will be everlasting as it will bring financially excluded population into the mainstream financial services. These technology led initiatives promise us that a futuristic vision of accessible, affordable and accountable financial services is not a distant dream for this country.

Tapping rural market – Role of insurance & pension fund industry in the region

Overview of Insurance market in India

The Indian insurance sector has evolved significantly post liberalization in 1999 which resulted in the entry of new private sector players with significant growth aspirations and capital commitments. In 2012, India ranked 10th in the global life insurance premium market of USD 2,621 billion, representing a market share of nearly 2.3%. In the non-life (general) insurance segment, India ranked 19th in a global market of USD 1,992 billion. Even though, India stands low in the global ranking in the non-life insurance segment, India witnessed a growth in premium of 10% in 2012, significantly higher than the global average of 2.6%. It is expected that the life insurance segment will rebound in 2013 and the general insurance segment will continue to grow strongly.

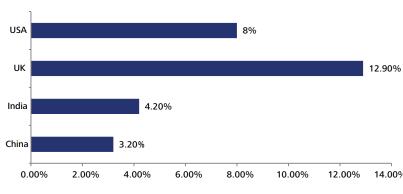
Low levels of insurance penetration and density

The level of development of insurance sector in an economy is measured by insurance penetration and insurance density. The uptake of insurance is low in India. The life insurance penetration (defined as ratio of premium to the GDP) was ~3.8% in 2011, much lower than developed economies' levels of 6-9%. Penetration of non-life insurance is at 0.71% currently. Insurance density (ratio of insurance premium to population) dropped for the first time since liberalization in 2011. Insurance density of insurance business was USD 49.0 in 2011 significantly lower than other developing and developed markets. Low levels of insurance density indicate that the contribution of insurance products is low as compared to other investment options like bank deposits and provident funds.

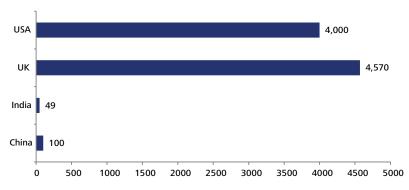
Northern Region in India remains a relatively underpenetrated market. North Indian states such as Uttar Pradesh and Rajasthan who contribute ~22% of the country's population but less than 15% of the Insurance business present vast opportunity for insurance sector players to tap. In 2010-11, Life Insurance industry collected ₹ 83,000 Crores premium income in new policies issued to Indian population out of which ₹ 22,800 Crores was contributed by Northern Region. Considering the under penetration, Northern Region has potential to play critical role in the growth of India's Insurance Sector.

The life insurance penetration percentage and life insurance density of individual new business are 1.03% and USD 25 respectively for northern India states –

Exhibit 1: Penetration and insurance density (2011-12) global comparison



■ Penetration (Premium / GDP)



■ Insurance Density (Premium/ Capita in USD)

higher than India's life insurance density and penetration figures of new business of 0.78% and USD 10.7 respectively, but low at an overall level. Life insurance players have a fair representation in northern India as out of total 131 districts in the north, 123 districts have offices of Life Insurance Corporation (LIC) and other private players. The life insurance agents per office (2,160) are slightly higher in the north than the rest of India (2,060). This could be attributed to the relatively high income levels of customers in northern region particularly in Delhi and Chandigarh.

Under penetration coupled with strong growth underlines the inherent potential of the Northern Region and offers significant opportunities to insurance sector. However, players will be required to understand diversities within Northern region and suitably tailor their strategy as well as business models to tap these opportunities. With 30.5% population living in the region, financial inclusion in Northern region shall give a big push to financial inclusion initiative of the country.

Significant potential in rural areas for insurance

The penetration rate varies significantly across various segments (urban and rural) in India as well, denoting that insurers see rural population as a difficult proposition and serve them to meet the necessary mandate imposed by the Insurance Regulatory and Development Authority (IRDA). Currently, insurance products coverage extends to only 47 % of India's urban population, while it is at a dismal 27 %, in rural areas. In rural areas, life insurance penetration in the banked segment is estimated to be about 40%, while it is marginal at best in the unbanked segment. Given this distinct urban bias, it is time the insurance industry looks at rural markets as a massive opportunity. The rural landscape is changing and rural populace is shifting from agriculture based economy to non-agriculture based economy. Programmes such as the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) have had significant impact on rural wages and incomes. In fact, the last five years have seen the highest ever increases in real wages, partly on account of the MGNREGS. The increase in per capita expenditure in rural markets (19.2%) was higher that what was seen for urban markets (17.25%) over 2009-12. Consumption in rural areas is shifting from necessities to discretionary goods and lifestyle products such as mobile phones, TV sets and two-wheelers. However, when it comes to financial services, it is seen that there is significant difference in the uptake of these as compared to the reach of the telecom and consumer goods products.

Exhibit 2: Adoption rates across product categories

Parameter	Number	%age of population
Television	500 mn	42%
Mobile phone users	601 mn (National)	50%
	151 mn (Rural)	20%
Two wheeler owners	184 mn	16%
Insurance buyers	23 mn (non-life)	2%
	138 mn (life)	12%

Initiatives taken by the Government and IRDA to promote insurance coverage in India

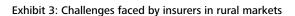
The Government and Insurance Regulatory and Development Authority (IRDA), the regulator of insurance industry in India have taken various initiatives to improve the insurance coverage specifically in rural areas. Some of the schemes and initiatives are discussed below.

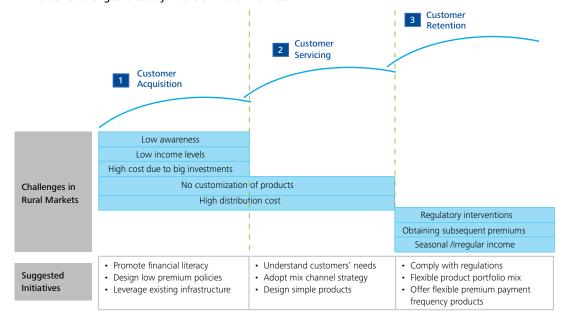
- Awareness Campaigns: IRDA has been taking various initiatives to increase the awareness and financially educate the customers about insurance products. In 2011-12, IRDA carried out various awareness campaigns in several languages English, Hindi and other vernacular languages via both print and vernacular media. In addition to campaigns, IRDA also introduced Consumer Education Website to inform customers (particularly in rural areas) in simple languages about benefit of using insurance products. IRDA has also been supporting 'Kar Lo insurance. Kar Lo Rewind' by the General Insurance Corporation. Private players could also undertake similar initiatives and seek IRDA's support, if needed, to educate rural customers about insurance products.
- Mandatory social sector obligations/ selling to rural customers: In 2005, IRDA laid down the regulatory framework to expand the coverage of insurance in rural India. It mandates issuers to sell a specified percentage of policies and underwrite specified percentage of gross premium annually

- to rural and social sector. During 2011-12, all 23 private sector life insurance companies and non-life insurance companies (except one) complied with their obligations.
- · Rashtriya Swasthya Bima Yojana (RSBY): It was introduced by Ministry of Labour and Employment, Government of India to provide health insurance coverage for Below Poverty Line (BPL) population. The objective of this scheme is to provide protection to BPL households from financial liabilities arising out of illness which involve hospitalization. The government allocated ₹ 1,097 crore (USD 219 million) towards RSBY scheme as part of 2012-13 Union budget. This initiative has been popular among rural population as over 35.7 million BPL families (more than 55% of total BPL families in the organized sector) have enrolled in this scheme. More than 7,500 private hospitals and over 3000 government hospitals are already empanelled under this scheme, which indicates the huge interest levels of the hospitals in this scheme.

Challenges for insurers in rural areas

While several steps have been taken by the government, the IRDA and the insurers in reaching out to the rural market, insurers are facing significant innate challenges in these markets. These challenges are spread across various stages of the customer life-cycle as shown in the exhibit and exist at both the demand side and the supply side





The demand side issues are discussed below in detail:

- Lower income levels of rural customers: Customers in rural areas have lower income levels which result in limited spending on products such as insurance. While in urban areas, the population buys insurance as a tax saving instrument, there is no such motivation for the rural customer. To add to it, most insurers extend the same product they offer to their urban customers, to the rural customers. While urban customers can pay regular premiums, such features are not suited to the rural populace who often has seasonal/ fluctuating incomes.
- Low literacy and awareness levels: One of the major reasons behind low levels of insurance penetration and density in rural India is low awareness about benefits of using insurance products. While people do understand what insurance is, they do not see it as a need for themselves. This is counter intuitive as they are the most exposed to risks such as illness or death, as their income levels are low and they sometimes end up spending their life's savings in such situations. It has also been observed that rural populace is more comfortable investing their savings with informal channels such as chit funds (as has been proved by the recent scam in West Bengal) as compared to resorting to formal channels of savings such as banks and insurance companies. While insurers have undertaken initiatives and campaigns to educate customers in rural areas so that insurance could be marketed as 'pull' rather than a 'push' product in rural areas, this has not seen the desired success.

The supply side issues are discussed below in detail:

- Absence of simple and customized products for rural markets: Insurers sell the same stable of products in rural India that they do in the more lucrative urban markets, without expecting to turn much of a profit or build substantial market share. In order to capture the huge rural market, it is imperative for insurers to understand rural customers' needs and design simple and affordable insurance products.
- · High cost of distribution with inefficiencies involved: Another critical reason behind low insurance penetration in India is lack of effective and efficient distribution channels. Trying to build an independent distribution channel can prove to be a daunting task for any insurer, considering the non-availability of the required skill set and costs involved in reaching out to the customer. Reaching and winning trust of rural customers involves deployment of both insurance agents (both individual and corporate) and organization set-ups such as banks SHGs, NGOs and other organizations/ entities who have an understanding of the rural market. The rural insurance industry is also facing challenges in acquiring and retaining (internal and external) channel teams considering the huge gap between the demand and the supply of dependable and skilled personnel, resulting in high cost of customer acquisition and operations. While insurers do need to look at a multipronged distribution strategy they need to be careful about the channel alignment based on the customers' needs and preferences.



Case Studies on successful rural strategies: A robust, profitable rural business model around new, tailored products and services for customers in the hinterland

One of the leading life insurance players undertook a policy to increase their focus on rural customers in 2008 and introduced the range of products which were suited to cater to the needs of the rural customers. Some of the key features of their rural strategy have been:

Extensive Research on understanding the rural customer's behaviour: The insurer conducted extensive research on the behaviour and preferences of rural customers to ensure that they have a sound strategy in place to reach out to the rural masses. Their research indicated that 78% of rural Indians were aware of insurance, but less than 19% of rural households owned a policy. While rural consumers were keen to build up their savings, apprehensions such as uncertainty about the documents needed for opening a savings account came in their way of purchasing an insurance cover.

The insurer understood the needs of their rural customers before designing their products. Easy to understand policies which did not require regular payments, option to withdraw money for emergencies with little or no penalty and investment opportunities alongside guaranteed life protection were understood to be the preferred products for these customers.

Customized products to suit rural customers:

Introduced products have an 'as and when' payment option which helps their customers to pay for the premiums as per their income flow and helps customers earning as low as ₹ 500 per month buy an insurance cover, thus extending the customer segment to which the product can be sold to. The insurer does not require policy holders to make monthly; quarterly or annual payments and enrolment premiums are as low as ₹ 1000.

The actual process of purchasing and managing the insurance products is also easy and policies are sold over-the-counter at small, local retail stores.

Different rural channels suit different customer segments: The insurer has deployed a local sales force dedicated to rural customers. It currently employs 600 rural sales managers, with each having about 10 local agent advisers reporting to him. While the advisers work

on a purely commission basis, the sales managers have a variable component in their salary depending on the number of policies his advisers sell. While the company did employ a multi-pronged distribution approach it realized that different channels were better suited to target different customer segments. For instance while it had tied up with NGO's, it realized that its products were more suited for the customer segment above the ones targeted by NGO's in general. Therefore, the company has now dropped NGOs from its distribution channel and has also stopped selling its policies through retail chains as well. It had to struggle in terms of not having a strong distribution network as it does not have backing of a banking partner as compared to other large insurers with banks as their promoter or in the group.

This initiative by one of the leading life insurance players is an example of an insurer taking a focused approach to design its strategy around the unique needs of the rural populace in terms of product features, pricing and channel delivery and not replicating what is sold to urban.

Index Based Weather Insurance for Smallholder Farmer Credit in Malawi: Mitigating the hardships of farmers against incidence of adverse conditions of weather parameters

Weather risk is pervasive in the Malawian agricultural sector and is one of the major constraints limiting farmers from accessing loans necessary to expand their production and improve productivity. Priorto 2005, only ~ 50,000 small-scale farmers in Malawi receive agricultural credit for purchasing seed, fertilizer or related agricultural inputs each year with over 90% of this credit provided by the Malawi Rural Finance Company (MRFC). The larger commercial banks are unable to provide agricultural credit to small-scale farmers due to the high costs of administering these loans and the perceived high risks of default. Threequarters of agricultural credit to small-scale farmers is provided for tobacco inputs – largely because this crop has a well-established marketing channel allowing stop orders for loan repayment. When production fails, lenders commonly find it politically and practically difficult to call in loans or reschedule loans and add these liabilities to the next year's portfolio. These risks are reinforced by lack of collateral, and the high costs of monitoring and enforcing repayment across thousands of farmers. The end result is that credit access was limited, and interest rates were high.

Indexed insurance product linked with credit supply to small scale farmers was developed on pilot basis by World Bank in association with Malawi Rural Finance Company and Opportunity Bank of Malawi. Groundnut was chosen because the crop is relatively drought sensitive, farmers were reluctant to invest in adopting new varieties because of the high costs of seed, and a marketing system was to be established, facilitating loan recovery at the point of sale. Payout was linked to deviations from historical average rainfall. Payouts were automatically made when the index crossed the specified contract threshold at the end of the contract period.

As a result of this, payout depends upon independent variable and does not vary from case to case as for individual policy holders. Claims processing and claims settlement becomes a simple and efficient process.

Winning Strategies for Insurers/ PF providers in rural India

While most insurance players look at serving the rural customers as a mandate, some insurers such as Max New York Life, Aviva Life Insurance, New India Assurance, Future Generali, Bajaj Allianz and others have realized the potential of this customer segment and have made significant inroads into the hinterlands of India. While these players have had to overcome the unique challenges posed by catering to rural India and their investments have just or not yet started to show returns, these strategies can prove to be game changers for them in the medium to long term.

Insurers can adopt the 4R framework of winning the rural insurance game which encompasses touching the rural customers at the right place, at the right time, with the right product and through the right channel.

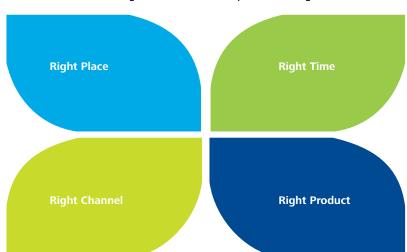
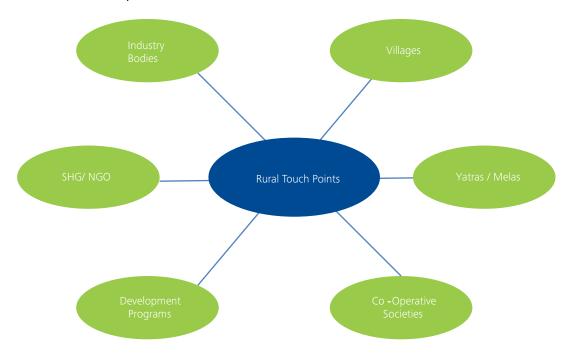


Exhibit 4: 4 R's of winning the rural insurance/ pension fund game

Exhibit 5: Rural touch points



Right Place: Leveraging existing rural ecosystem to reach the customer

Rural areas are characterized by dispersed population, low penetration of technology and low awareness about financial services in particular insurance. Insurers need to tailor marketing initiatives suited to rural ecosystem.

An insurer can touch a customer at various touch points in the rural ecosystem be it at the villages, yatras and melas, through industry initiatives such as ITC E choupals, Hariyali Kisan Bazaar and Tata Kisaan Sansar (TKS), co-operative societies, national initiatives such as MGNREGA, Common Service Centers, and through SHGs, MFIs and NGOs by using their own agency force or leveraging the channels provided by these touchpoints.

Rural marketing at villages

Marketing at locations such as local taparis (tea shops), weekly bazaars, bus stands, primary healthcare centers would be extremely effective since marketing at such places encourages discussion among villagers. Key points to make rural marketing effective is marketing in local language and use of local influencers (doctors, teachers, credit society members etc.) to create awareness among villagers

Rural marketing at Yatras and Melas

Insurers can also look at marketing their products in yatras and melas. These usually have a large footfall and few FMCG's have experimented with targeting customers at these and have seen success.

Using rural organizations to sell rural insurance

Industry Initiatives

ITC e-choupal

- Developed as farmer centric information center
- Benefits to farmers as e-choupal eliminates middlemen
- Managed by 'ITC Sanchalaks' who assist farmers in accessing variety of services provided by e-choupal
- Farmer community has a high degree of trust in services provided by e-choupal and in particular its Sanchalaks

Hariyali Kisaan Bazaar (HKB)

- Serves as an interface between farmers and rest of the ecosystem
- Take initiatives to improve the quality of life by providing urban facilities like ATMs, door step service and modern retailing
- \bullet Farmers have trust in the advisors at HKB and rely on their advice

Tata Kisaan Sansar (TKS)

- Provide end-to-end solution to farmers
- Provide access to knowledge about modern farming technologies
- GIS mapping systems are used to record, and analyze maps and census data of the districts they operate in are utilized to provide total solutions to the farmer

Co-Operative SocietiesSugar, Dairy, Primary Agricultural Societies, Indian Farmers Fertilizer Co-operative

- Rural regions have very low penetration of banks and other major financial
 institutions. This has led to creation of many local level co-operative societies which
 fulfill the financial services requirements of farmers. Primary agricultural credit
 societies are an important channel in providing short term and medium term credit
 to farmers
- Apart from financing institutions, co-operative societies have been formed to fulfill farmer needs such as buying fertilizers, selling agri/dairy outputs. These include IFFCO, Sugar co-operatives and dairy co-operatives

Using government development programs to sell rural insurance

Using MGNREGA to market insurance to non-farm labourers in rural areas

- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was introduced by the Government to provide employment opportunities to the rural population
- Several insurers have tied up with MGNREGA as it has a ready base of customers with savings accounts where the salary of the workers is credited

National e-governance plan (NeGP) planned CSCs (Common Service Centers)

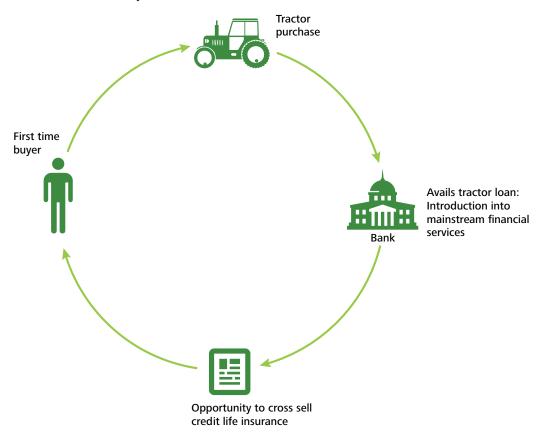
- National e-governance plan (NeGP) aims to build rural hubs for host of services in villages
- These hubs are expected to provide agriculture, financial services, health services, education, bill payment, e commerce and government payments

Right Time: Educate and convert a customer early in his life stage

An insurer needs to understand that they have to be a part of the financial ecosystem which creates financial access and takes financial services to the customer. Poor rural people need access to a wide variety of financial services, not just credit. They need a range of options including credit, savings, money transfer facilities and insurance. For example, the first time a farmer avails

a loan to buy a tractor is the time when the earlier financially excluded farmer is now a part of mainstream financing and this opens a sea of opportunity for the financial services firms (insurance, pension fund providers, banks) to educate and offer him their products and services. An existing insurer who reaches the customer through motor insurance can leverage its presence to cross sell further to the customer to increase his share of the wallet.

Exhibit 6: Customer life cycle



Right Product: Tailor product design to rural customer's needs

Product design needs to be catered to the needs of the rural populace. Insurers can look at introducing products exclusively for the rural market. Products such as Jan Shree Bima Yojana, Universal Health Insurance Scheme, Aam Admi Bima Yojana, Crop Insurance, etc. introduced for the benefit of poor and needy populace in the country indicate the success of having specific products for the rural populace. Insurers have to ensure that irrelevant policies and relatively higher premium policies are not sold to the rural populace. A focus area for insurers can be Micro insurance for SMEs. Group insurance is well suited to cater to rural customers as rural customers usually follow the mentality of their group/ community and it offers an inexpensive option for insurers owing to the low cost of distribution, lower overhead costs, easy underwriting norms and support of nodal agency in remittance of premiums, filing claims, etc. Other options can be products for girl child education/ marriage. Product features should be flexible to suit the rural customers' income levels with premium payment frequencies aligned with the income trends of rural populace.

Appropriate customer segmentation (based on income levels, premium paying capacity, occupation etc.) and accordingly pricing and selling the products (including low premium policies/ flexi premium payment frequencies) would help insurers target the rural population.

Insurers should look at simplified underwriting and claims guidelines to improve customer servicing. Rural community insurance groups can be formed which sell policies, collect premiums and settle claims for rural communities in which they reside in return for commissions.

Right Channel: Align channel interactions with customer segment preferences/ needs

Finding effective partners already working in villages brings down marketing and distribution costs considerably. While most insurers look at a multipronged distribution network, they should align the channel interactions based on a customer's need and preference. Some players have used network of co-operative and regional banks, while others have developed a local agent force. Affinity group distribution can also be a good option and few insurers have used NGO's, SHG's and MFI's. Some others have explored tie ups with India Post and other entities with large distribution networks. For example Life Insurance Corporation and ICICI Prudential Life Insurance have tie-ups with retailers such as Suvidhaa Infoserve, which runs 13,000 kirana stores. DLF Pramerica Life has a partnership with Srei Sahaj E-Village to reach some 27,000 villages. Few insurers have also recruited local women with some level of education and decent communication and leadership skills by providing 100 hours of insurance and product training. Rural call centres can also be a channel for customer acquisition. Farmer training centres, welfare trusts and fertilizer distributors can also be effective channels to use in rural India. Insurers also need to develop an incentive structure of agents which ensures that agents do not focus on large ticket policies due to high commission; as such policies are not suited for the rural customers and often lapse.

There is talk of allowing banks to act as brokers in order to improve the penetration of insurance in rural areas. Currently, banks can act as corporate agents of only one insurer and this limits their ability to utilize their vast network of branches in taking insurance to the hinterlands. Currently < 25% of the banking network in India is utilized for selling insurance. The strong network reach of banks in India in rural and semi urban areas and the poor insurance penetration in these areas make a good case for the success of the bancassurance model in India. Since banks have a large database of customers, tying up with more insurers would increase competition between insurers, thus benefiting customers in the long run by presenting him the right choice of policy, insurance company, as well as pricing. A Broker model is expected to foster healthy competition which augurs well for the industry and the customers.

Technology can enable insurers reach the rural customer in a cost friendly yet effective way. Insurers have experimented with providing tablets and hand held devices to their agents, to ensure issuance of policies at the point of sale. The newer technology initiatives such as 'Aadhaar' and 'Immediate Payment System (IMPS)' are expected to ease the KYC requirements and shall introduce newer ways in which financial services reach the end customers and usher in the next wave of financial inclusion wherein people will have a direct access to all financial services through Aadhaar enabled ATMs, mobile financial services etc.

Conclusion

While there is ample opportunity for insurers to achieve a new era of growth by focusing on the hinterlands of India where 70% of the population resides and is currently underpenetrated, initiatives and attempts by the regulator, the government and the insurers in the past have not achieved the level of success that was anticipated. Players willing to invest in the rural areas will have to understand and appreciate the uniqueness of this vast base of customers in order to reach them effectively in terms of products, pricing and customer service. Investments in rural India, while may take some time to show returns, can be potential game changers for insurers, the customers and the economy as a whole.

Financing the infrastructure development in North - Extending infrastructure to the last mile



Introduction

Infrastructure plays a pivotal role in the development of the economy. The fast growth of the economy in recent years has placed increasing stress on physical infrastructure such as electricity, railways, roads, ports, airports, irrigation, urban and rural water supply and sanitation, all of which already suffer from a substantial deficit in terms of capacities as well as efficiencies. While infrastructure development has always been on the top agenda for India, considering the current global economic dynamics as well as domestic growth imperatives, it has emerged as one of the single largest imperative which could seriously compromise the economic growth trajectory.

Exhibit 1: State of infrastructure in India and other countries

	Electric Power Consumption (kWh per capita)	Telephone mainlines (per 100 people)	Roads paved (per cent of total roads)
China	2,332	26	71
Hong Kong	5,899	59	100
India	542	3	47
Indonesia	566	13	55
Malaysia	3,667	16	80
Singapore	8,514	38	100
South Korea	8,502	-	77
Thailand	2,055	10	98
UK	6,120	54	100
US	13,652	51	65

Source: World Development Indicator, World Bank, 2010

The pattern of inclusive growth of the economy can be achieved only if this infrastructure deficit can be overcome and adequate investment takes place to support higher growth and an improved quality of life for both urban and rural communities.

Role of infrastructure in the development of the economy

The development of infrastructure has a five-fold impact on the economy i.e.

- 1. Creating better access to employment and providing further earning opportunities leading to financial inclusion.
- 2. Increasing production efficiency.
- 3. Creating access to previously inaccessible commodities and services.
- 4. Time saving which can be better utilized in productive activities.
- 5. Better health and physical condition of the population.

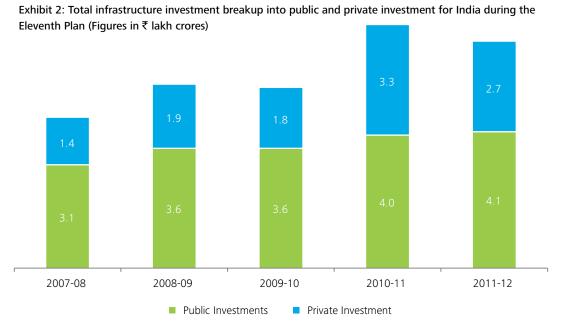
According to the World Bank a one per cent increase in the stock of infrastructure is associated with a one per cent increase in GDP across all countries. Regions with higher investments in infrastructure tend to have a higher growth rate e.g., China invested roughly 9 per cent of its GDP in infrastructure in the 1990's and 2000's, whereas most Asian emerging economies invested only 5 per cent of their GDP on average in

infrastructure assets. This considerable investment gap allowed the Chinese economy to grow at near optimal conditions while many South American, South Asian and African economies suffered from various development bottlenecks: poor transportation networks, aging power grids, mediocre schools¹.

The Government of India realizes the importance of accelerating the investments in infrastructure to boost the country's slowing economy. Therefore, it has set a massive target for doubling investment in infrastructure from ₹ 29 lakh crores (Eleventh Five Year Plan - FYP) to ₹ 51 lakh crores during the Twelfth plan period, i.e., 2012–2017.The share of infrastructure investment in GDP is panned to be increased to more than 10 per cent by the end of the Twelfth FYP. This investment, if it materializes, is expected to propel India's economic growth to a higher trajectory.

Current Landscape of Infrastructure Investment in India

In Eleventh Plan, a total investment of ₹ 29 lakh crores (at 2011-12 prices) was made towards infrastructure development which is 7.2 per cent of GDP (average). This represents a significant shift from 5.02 per cent of GDP (average) invested during the Tenth Plan. This sharp increase in total infrastructure investment was largely due to the rapid rise in investment by the private sector especially in power and telecommunications.



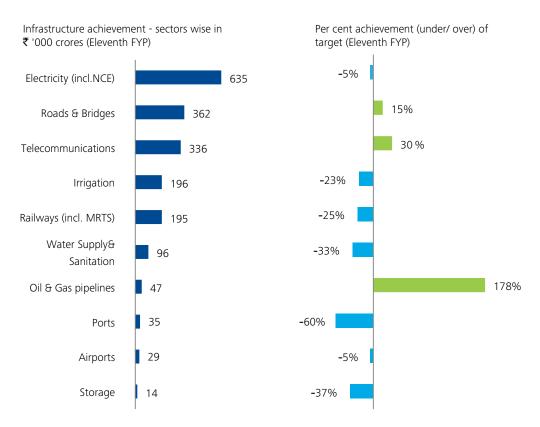
 $Source-Interim\ report\ of\ the\ High\ Level\ Committee\ on\ Financing\ of\ Infrastructure\ (Planning\ Commission)-Aug\ 2012$

M. Nicolas Firzli &
 Vincent Bazi (Q4 2011).
"Infrastructure Investments in an Age of Austerity:
 The Pension and Sovereign Funds Perspective

As indicated in Exhibit 3, a substantial private investment in Telecom sector helped in over-achieving the target during the Eleventh Plan. A combination of private and government funding gave oil & gas sector a massive push resulting in significant over-achievement against targets. Power sector also saw a major investment from private sector.

Ports, railways, storage and water supply sectors lagged behind in development and did not meet their investment targets. There may be a greater need to enable private funding for these sectors to meet investment targets for next five year plan.

Exhibit 3: Total infrastructure investment achieved across sectors for the Eleventh FYP

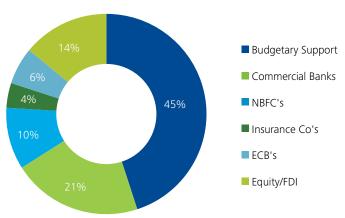


Source - Interim report of the High Level Committee on financing of infrastructure (Planning Commission) - Aug 2012

Sources of funds

Budgetary support constituted 45 per cent of the total infrastructure spending during the first three years of Eleventh Plan. 41 per cent of the funding was provided by Commercial banks, Non-Bank Finance Companies (NBFCs), Insurance Companies and External Commercial Borrowings (ECBs), whereas equity and FDI contributed the remaining 14 per cent.

Exhibit 4: Sources of funds for first 3 years in Eleventh FYP



Source - Infrastructure Funding Requirements and its Sources over the implementation period of the

Exhibit 5: Sources of funds

Туре	Domestic Sources	External Sources	
Equity	Domestic investors	Foreign investors	
	Public Utilities	Equipment suppliers (in collaboration with domestic or international developers)	
	Dedicated Government Funds	Dedicated infrastructure funds	
	Institutional investors	Other international equity investors	
Debt	Domestic Commercial banks (3-5 year tenor)	International Commercial banks (7-10 year tenor)	
	Domestic term lending institutions (7-10 year tenor)	Export credit agencies (7-10 year tenor)	
	Domestic bond markets (7-10 year tenor)	International Bond markets (10-30 year tenor)	
	Specialized infrastructure financing options such as infrastructure debt funds	Multilateral agencies (with more than 20 year tenor)	

Infrastructure investments until the mid-2000s was largely funded by budgetary allocations and there was no major demand from the financial system to fund infrastructure investment as it was fairly low - (around 3-5 per cent of GDP). In the Eleventh FYP, however, infrastructure spending picked up substantially with an important role played by the private sector and greater recourse to the financial system. Banks, NBFCs, and ECBs, and insurance companies provided most of the debt funding. Private Funding flows from the following sources:

Commercial Banks

The financial system was able to respond to the rapidly rising demand for credit by infrastructure companies largely because banks stepped up lending by unwinding their excess investments in government securities maintained as statutory liquidity requirements (SLR). It is estimated that banks were able to provide about half the debt finance needs of infrastructure investment. Banks have prudential exposure caps for infrastructure sector lending as a whole as well as for individual sectors. Most of this funding has been provided by Public Sector banks. Most of the banks have almost reached the prudential caps for power sector; other sectors like roads may not be far behind, thus constraining any further lending to these sectors.

Infrastructure NBFCs

NBFCs also increased their lending sharply as the credit demand for power, telecom and roads expanded. NBFC's contributed 10 per cent of the total investment during the first 3 years of Eleventh FYP. The outstanding credit from infrastructure finance companies (IFCs) to infrastructure sector has increased at a CAGR (2007-2010) of 28 per cent. The Power Finance Corporation (PFC) and Rural Electrification Corporation (REC) which together constitute 80 per cent of the lending by IFCs have had their outstanding credit grown at 27 per cent per annum (p.a.).

Life insurance Companies

Life insurance companies are required to invest at least 15 per cent of their Life fund in infrastructure and housing. Although the Asset Under Management (AUM) of life insurers in the Life fund increased at a CAGR (2007-2010) of 16 per cent, the share of infrastructure investments increased only marginally (CAGR of 1.25 per cent). Investment by life insurance companies in 2012 has only been 10 per cent of insurance life fund AUM which indicates further potential to utilize insurance companies to fund infrastructure development. Moreover insurance penetration is estimated to continue to rise, with the insurance premium growing from the current approximate 4 per cent of GDP in Eleventh FYP to 6.4 per cent of GDP by the end of the Twelfth FYP. This will generate further potential for infrastructure funding however it will be subject to management of prudential and regulatory constraints in the sector.

External Commercial Borrowings (ECBs)

Infrastructure companies also tapped external credit markets. The share of infrastructure investments in overall ECBs has been steadily falling. This could be a reflection of the way regulatory environment is viewed by the international investors. They are not keen on making long term investments in environments which have regulatory peculiarities. Under-developed financial markets/products may have also contributed to this drop in ECB funding.

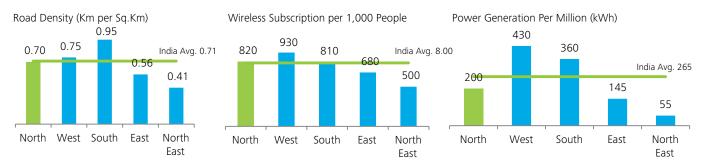
Equity & FDI

The equity/FDI during the first three years of Eleventh FYP were approximately 14 per cent of the total investments made towards the infrastructure building whereas the overall debt contribution was 41 per cent implying a debt equity ratio of 2.9:1. A large part of equity investments relies on foreign investments with domestic investment institutions not showing significant interest for taking equity in infrastructure projects. Regulatory changes which will make projects commercially attractive are needed to draw adequate equity capital to infrastructure sectors. Also other changes like amendment in pension/ provident funds (PF) regulations to allow investments in equity markets will be critical.

State of infrastructure in the North

The state of infrastructure in North is better than East and North East India. However, it lags as compared to the West and South India.

Exhibit 6: Comparison of infrastructure across various regions²



Source: Ministry of Statistics and Programme Implementation (MOSPI)

There are various projects that are currently being undertaken in the North India including the, Dedicated Freight Corridor, Jammu- Baramulla Railway line, Jaipur Metro Rail project, etc. These projects will propel the infrastructure development in the North and lead to economic development of the region. Some of the major projects are indicated in Appendix .

2 East includes Andaman, Bihar, Chhattisgarh, Jharkhand, Orissa and West Bengal North includes Chandigarh, Delhi, Haryana, Jammu & Kashmir, Punjab, Rajasthan, Uttar Pradesh and Uttarakhand South includes Andhra Pradesh, Karnataka, Kerala, Pudducherry and Tamil Nadu West includes Dadra and Nagar Haveli, Daman and Diu, Goa, Gujarat, Madhya Pradesh and Maharashtra North East includes Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura

Issues and Challenges faced by **Infrastructure Sector**

Although there are various projects that are planned, the primary measure of success of infrastructure plans is achievement of physical targets. Physical targets have not matched the aggressive investment targets laid in previous FYPs. The Working Sub-Group on Infrastructure³ notes that "although physical capacity targets will not be met, overall financial investment will be close to the original projection." Achievement of physical targets has been hampered by multiple issues, which delay implementation of projects. Most infrastructure projects commissioned during the last two Plan periods witnessed time and cost overruns. There have been significant project delays across all sectors as indicated in Exhibit 7. 276 out of 566 infrastructure projects monitored by the Statistics and Programme Implementation Ministry were running behind schedule in December 2012. Among the sectors, the railway and port sectors are most afflicted by delays. Both sectors have around seven times as many projects being delayed as project being on schedule.

Structural weaknesses in the country's investment climate remain considerable, and project execution in the infrastructure sector is being hampered by a host of issues such as land acquisition and environmental clearances, be it roads, rails, urban rails, airports, ports and power plants. Some of the major challenges faced by the infrastructure sector are

- 1. Land acquisition and environmental clearances
- 2. Lack of co-ordination between government agencies
- 3. Long tendering process
- 4. Limited depth of the Indian debt markets for long term funding requirement
- 5. Highly regulated investment norms

Financing of the infrastructure projects will also be a major challenge during the current five year plan.

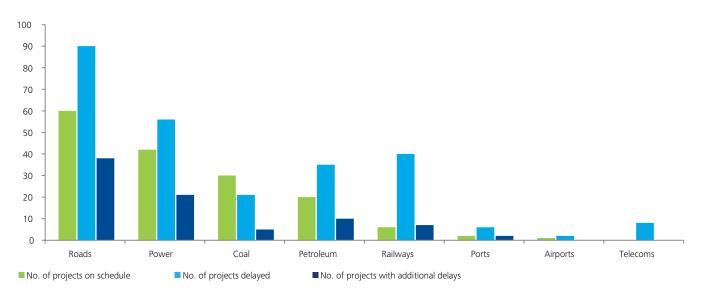


Exhibit 7: India outstanding infrastructure projects (over ₹ 1.5 bn) by sector, Dec 2012

Source: MOSPI, Business Monitor International

³ Report on 'Infrastructure **Funding Requirements** and its Sources over the implementation period of the Twelfth Five Year Plan

Infrastructure Financing required during the Twelfth Plan

The Twelfth FYP continues the thrust on accelerating the pace of investment in infrastructure as this is critical for sustaining and accelerating the growth. Accordingly, the Twelfth FYP has projected an investment of ₹ 51 lakh crore in infrastructure during the Plan period (2012-17), which is almost double the investment of ₹ 29 lakh crore during the Eleventh FYP (2007-12). Traditionally, infrastructure has been funded through public investment. However, in view of scarcity of budgetary resources and lack of capacity within the government to implement these ambitious programmes, the strategy of the government relies significantly on promoting investment through a combination of public investment and private participation. A substantial part of the investment in infrastructure sectors such as rural infrastructure, irrigation and water resources management, inland waterways, and in the

economically or situationally disadvantaged regions would have to come from the public sector. It is, therefore, essential to rely on private participation for funding the financially viable infrastructure projects in order to bridge the financing gap. While the share of public investment is projected to decrease to 53 per cent from a level of 62 per cent in the Eleventh Plan, the share of private investment is projected to increase to 47 per cent of the total investment as compared to 38 per cent in Eleventh Plan.

Private investment is projected to grow in all the infrastructure sectors with Railways, Water Supply, Storage and Ports projected to grow at greater than 200 per cent whereas investment in other sectors is projected to grow at greater than 100 per cent. Overall private sector investment will be a key to success of infrastructure development under Twelfth FYP.

3.1
3.7
4.6
5.7
7.1
4.4
4.9
5.4
6.0
6.7

Public Investments

Private Investment

Exhibit 8: Projections for investment in infrastructure for the Twelfth FYP (₹ lakh crore)

Source - Interim report of the High Level Committee on financing of infrastructure (Planning Commission) - Aug 2012

Funding Gap

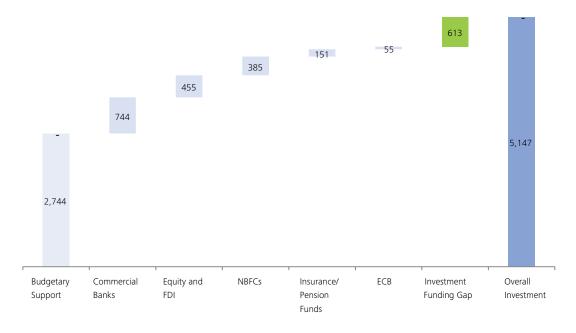
Planning commission is projecting an investment of ₹ 51 lakh crores during the Twelfth FYP. About 53 per cent (₹ 27 lakh crore) of this is expected to be funded through budgetary support and rest will have to come from private sector funding.

The Twelfth Plan, based on estimated funding flows from various sources and the incremental investment required, will have a huge funding gap and will need to channelize an additional private sector investment of about ₹ 6.13 lakh crores over the duration of the plan. This is assuming that budgetary support remains

same. In case the budgetary support is lower than that assumed above, the funding gap forecasted above would also increase by corresponding amount. In the given macro-economic environment, this will be huge challenge and will not be possible without the radical reforms.

In order to mobilize the private funding for infrastructure development a multi-pronged reform process needs to be pursued. In addition to significantly improved enabling environment focused systemic changes and interventions will be required to be implemented.

Exhibit 9: Estimated funding gap (Rs ₹ 000 crore)



Source - Interim report of the High Level Committee on financing of infrastructure (Planning Commission) - Aug 2012

Infrastructure Financing Options

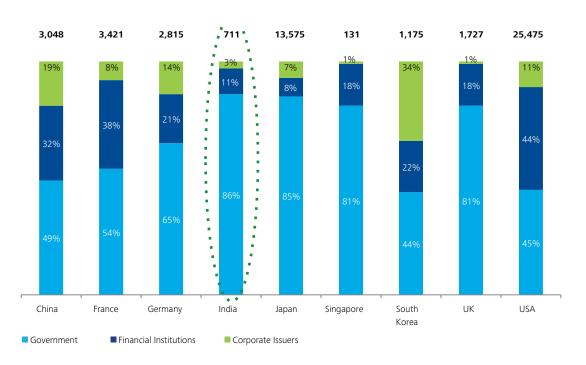
A few interventions which may help improve sourcing of private funding for new and existing infrastructure development projects.

Developing long term Bonds Market

An active bond market can increase the flow of long-term funds and reduce reliance on banks. The Indian corporate bond market, though one of the largest in Asia, is still at an early stage of development.

Despite the numerous initiatives taken by the RBI, SEBI and Government of India, the Indian corporate bond market is still underdeveloped. A combination of institutional, regulatory and legal factors has held back the development of the corporate bond market in India. Some of the factors that make bonds a more expensive way of financing debt are: banks prefer loan financing as they do not have to mark-to-market loans unlike bonds, there is an absence of strong bankruptcy laws, a limited investor base, and a limited number of issuers.

Exhibit 10: Status of corporate bond market in India and other countries



Source: Domestic Debt Securities: Bank for International Settlement, 2011

As the Indian financial sector remains excessively bankcentric, a vibrant corporate bond market is essential to diversify risk and attract long term players like pension and provident funds who can absorb long tenure paper. This is critical for the emergence of a yield curve which helps better price discovery. The market will also be able to attract long term funds that could be picked up. The creation of a deep and robust debt capital market is a key to making available long term debt instruments for infrastructure. The domestic bond market continues to be dominated by public borrowing and does not address the needs of the corporate sector as in the case of other emerging markets.

International pension funds are also looking for long term investments in the emerging economies which have good yields and stable regulatory environment. These pension funds have a huge corpus of funds which they are willing to invest for a quarter of a century or more as this will align with their pension payouts.

One of the options which could be considered is the INR denominated bonds to be issued in the international market. These bonds will be denominated in rupees, while the principal and the coupon will be settled in USD. This will limit the risk of foreign currency fluctuation as all the cash inflows and outflows will occur in USD but the payment will be calculated with reference to Indian Rupee. The issuing company will need to have a credit rating from an international rating agency as required for such debt issuances and will be settled through an international clearing mechanism. These bonds will also be listed on a recognized stock exchange outside India.

Credit Default Swaps (CDS)

The introduction of Credit Default Swaps would help banks to manage exposures while increasing credit penetration, and lending to infrastructure and large firms without being constrained by the extant regulatory prescriptions in respect of single borrower gross exposure limits. The CDS is a guarantee in which the buyer of a credit swap receives credit protection, whereas the seller of the swap guarantees the credit worthiness of the product. By doing this, the risk of default is transferred from the holder of the fixed income security to the seller of the swap. With effect from November 30, 2011, the Reserve Bank of India

has also permitted CDS on unlisted but rated bonds of infrastructure companies and unlisted/unrated bonds issued by the special purpose vehicles (SPVs) set up by infrastructure companies. A calibrated approach that focuses on product safety and systemic stability issues can limit excessive leverage and build-up in risk positions and at the same time can ensure credit risk mitigation. Transparency in the CDS market which was major concern in other markets during the financial crisis can be ensured through mandatory reporting of trades by market makers on the CDS trade reporting platform coupled with periodic dissemination of information by the trade repository to the market and also to the regulators. These measures shall provide fillip to bonds issued by infrastructure companies

Credit Enhancement

One of the major obstacles in attracting foreign debt capital for infrastructure is the sovereign credit rating ceiling. Domestic investors are also inhibited due to high level of credit risk perception, particularly in the absence of sound bankruptcy framework. A credit enhancement scheme would provide partial credit guarantee to enhance the rating of the infrastructure project thereby enabling channelization of funds from various sources which were earlier restricted from investing in the infrastructure project due to its lower ratings. A credit enhancement mechanism can possibly bridge the rating gap between the investment norms, risk perceptions and actual ratings. Ideally, the credit enhancement should not be provided by the banks as they are already over-exposed to the sector. There are other mechanisms involving national or supranational support. Working towards this direction, recently Asian Development Bank (ADB) has offered to partially guarantee infrastructure bonds issued by the Indian companies. A credit enhancement facility functions as an intermediary and is expected to reduce such risks for the lenders.

Credit enhancement through guarantees can address issues related to credit gap rating and risk perceptions and can also help in the development of the corporate bond market and channelize funds from untapped sources such as insurance companies and pension funds. IIFCL is presently undertaking pilot transactions under its Credit Enhancement initiative. Under this scheme IIFCL provides partial credit guarantee to enhance the ratings of the project bond issue thereby enabling the

channeling of long term funds from largely untapped sources, such as insurance companies and pension funds towards infrastructure sector. Asian Development Bank is participating in this endeavor by committing to support IIFCL by providing backstop guarantee facility up to 50per cent of IIFCL's underlying risk. The Credit Enhancement Scheme will help project developers to raise funds at a reasonable rate from the bond market and consequently help to develop the corporate bond market in India.

Securitization

Securitization involves pooling of homogenous assets and the subsequent sale of the cash flows from these asset pools to investors. The Securitization market is primarily intended to redistribute the credit risk away from the originators to a wide spectrum of investors who can bear the risk, thus aiding financial stability and provide an additional source of funding. Securitization offers two kinds of opportunities for catalyzing financing of investment in the infrastructure sector:

- 1. Securitizing loans extended to infrastructure projects and
- 2. Securitizing receivables accruing or to accrue to an infrastructure project.

Traditionally, residential mortgages, auto loans, consumer loans, credit card receivables, lease trade credits, corporate bonds and so on have been securitized to provide liquidity and help recycle the funds.

Loans to infrastructure projects can be securitized in two ways:

- 1. Refinancing of the loans extended by the banks/ Financial Institutions themselves
- 2. Pooling and securitizing the loans due to infrastructure project developers.

In both the cases, the outstanding loan can be sold to an SPV, which would then issue securities to investors. Securitization of project finance loans could not only help project promoters to secure finance at a lower rate but also make the funds available to lenders for lending to other infrastructure projects. Securitization arrangements provide significant benefits in terms of enhanced credit ratings and market liquidity for infrastructure projects.

Securitization is particularly appropriate when the project has completed the construction phase and is generating income from operation activities. The reduction in risk of the project makes it acceptable to a larger pool of investors. Receivables accruing or to accrue to infrastructure projects are spread over a long period of time and are usually backed by a concession agreement or a power purchase agreement. Further, partial risk guarantees by the government or the multilateral institutions help address the credit risk concern of investors.

Exhibit 11: Investor perspective on securitization

Investor Types	Investor Needs	Structuring Needs
Insurance & Pension Funds	 Long term rated AA & above rated Significant spread to G-sec 	Senior Tranche with higher rating PO Strips, Subscribe to Longer Tenor Tranche
Foreign Institutional Investors	Exchange rate RiskSignificant spreadEasily Tradeable	Pill to use IRS and ERS to transfer the risk to thei home currency Mezzanine tranche to provide greater returns desired by FIIs Shorter Tenure Tranches
Mutual Funds & Bank Treasury, Corporate	AAA RatingMarketabilityHigher Yield	Credit enhancements for achieving AAA Listing and Market Making
Retail Investor	Fixed Rate ReturnTax Benefits (preferred)Branding	Invest in Securitized paper through Mutual Funds / IDFs

Securitization structures in the Indian context are limited by the RBI guidelines. Originators can securitize only portfolio's compliant with the respective MHP (Minimum Holding Period) guidelines and continue to maintain MRR (Minimum Retention Requirement)

Take-out finance is a good way to manage asset liability management (ALM) as well as exposure norms for the banking sector. The pooled 'taken-out' loans can also be securitized to bring in long term investors with appropriate safeguards.

China has recently allowed banks to securitize loans made to local governments under a pilot program to help ward-off potential risks in the banking sector. Other examples include, use of securitization by Brazil in the port sector where the Brazilian Federal and State Governments lack funds for investing in port infrastructure.

First Loss Default Guarantee Funds (FLDGs)

A first-loss protection mechanism refers to any instrument designed to insure the amount of capital which is exposed first should there be a financial loss on a security, including equity, debt, and derivatives instruments. First-loss protection mechanisms can address several financing risks and may be structured in several different ways. This is helpful in situations where the overall supply of funds is adequate but there is a constraint in the supply of total risk capital and the government is seeking to operate within its fiscal limits. As a concept it requires governments to

- a) Stop spending the money required for projects;
- b) Focus on eliminating the effects of uncertainties caused by it and;
- c) To the extent that uncertainties remain, provide risk capital in a manner that preserves the incentives of all the other players to act in a consistent manner.

FLDGs seek to provide non-event specific partial credit guarantees to lenders, are limited to only a part of the loan (say 25 per cent) and operates on a first loss basis (i.e., in case of 25 per cent FLDG the first 25 per cent of the loss would be absorbed by the Fund). This manner of providing capital is in many ways superior to recapitalizing existing intermediaries or creating new ones with Government capital.

Currency & Derivatives Market Development

In order to attract and sustain a large inflow of foreign debt capital into the sector, currency markets need to be further developed. Availability of foreign exchange hedging instruments needs to be strengthened as foreign debt investors are wary of betting on the currency of a developing economy for long tenure.

Derivatives-While credit derivatives are needed to ensure sharing, transfer and pricing of risk, regulatory safeguards need to be put in place considering the experience of the recent financial crisis. There is a need to deepen the interest rate futures market. Market based lending (MIBOR linked loans) will attract issuers and investors to hedge in the futures market.

Banking & Regulatory Interventions

Review ceilings and caps imposed on insurance companies to mobilize funds for infrastructure development. Government of India should relax its majority ownership of public sector banks or provide commensurate capital increases in the public sector banks. With poor deposits growth and BASEL III norms coming into play, there would be additional pressure on banks to reduce their exposure to infrastructure credit thus impacting the flow of funds for infrastructure development.

To make syndication of loans more effective, appraisal capacity needs to be strengthened in most banks. Banking consolidation could also ease the exposure constraint for individual banks (as many small banks do not have any infrastructure exposure).

Conclusion

There is a huge investment target for the infrastructure sector that needs to be achieved during the current Twelfth Plan period. This target is achievable, provided prompt actions and active monitoring is carried out. This needs to be supported by initiating policy measures and other reforms that create a conducive environment for private investment in infrastructure and thus impact infrastructure development in long-run. In this tight fiscal environment, private sector participation is seen as a means to bridge the funding gap. This is currently hampered by the significant challenges and risks faced by private sector. Due to change in BASEL III requirements and too much concentration of risk on their balance sheets, public sector banks may want to reduce their exposure to infrastructure funding in the near term. This would require encouragement of other funding sources (e.g. insurance) and introduction of new instruments to accelerate flow of funding. The government should therefore play a pivotal complementary role of a facilitator, enabler and regulator to allay down the apprehensions of the private sector. It should introduce innovative financial instruments for risk mitigation and should more closely align the nature of infrastructure development with funding sources. This will encourage private sector investment in infrastructure.

Appendix - List of major infrastructure project in North India

State	Category	Project Name	Description	Value(US\$ Mn)	Engagement Period
Chandigarh	Airport	Chandigarh International Airport	International airport in Chandigarh	N/A	2012 onwards
	Power	Coal fired power plant	Power plant in Chandigarh (800 MW)	2,200	2011-2017
	Railway	Metro railway project	Metro railway project connecting Chandigarh, Haryana, Punjab (37.69 KM)	1,700	2012-2018
	Roadway	Six-lane expressway	Expressway connecting Chandigarh-Ludhiana-Delhi (357 KM)	3,732	2013 onwards
Delhi	Airport	Indira Gandhi International Airport	Modernisation and management of airport; 34 Mn Passengers	2,600	2007-2034
	Railway	Regional Rapid Transit System	Five corridors connecting Delhi, Gurgaon, Alwar, Rohtak, Hisar, Shahdara, Baraut, Ghaziabad, Meerut, NCR	13,000	2012 onwards
	Railways	Western Dedicated Freight Corridor	Multi-modal High Axle Load Dedicated Freight Corridor (DFC) between Delhi and Mumbai (1,483 KM)	N/A	2007-2019
	Roadway	Expressways	Eastern Peripheral Expressway around New Delhi (135 KM)	603	2012 onwards
Haryana	Power	Coal fired power plant	Coal fired power plant at Jhajjar (1,320 MW)	N/A	2012 onwards
	Railway	Metro Rail Infrastructure development project	Delhi Metro Line 5 extension project from Mundka [New Delhi] - Bahadurgarh [Haryana] (11.18 KM)	370	2012-2016
Himachal Pradesh	Power	Parvati Hydro Power Project	Power plant on Parbati river near Pulga (1,200 MW)	N/A	2012 onwards
	Railway	High Speed Railway PPP Project	Long railway project connecting Leh to Bilaspur (498 KM)	520	2011 onwards
	Roadway	4-Lane road widening project	Widening of roads spanning Parwanoo- Shimla section on NH 22 (156.5 KM)	445	2012-2015
Jammu & Kashmir	Power	Hydel power project	Expansion of 240MW Karthai-l hydropower plant to 400MW	N/A	2011 onwards
		Hydel power project	Rattle hydropower project (850 MW)	1,100	2010-2017
	Railway	Regional Rapid Transit System	Jammu-Udhampur-Katra-Qazigund- Baramulla railway line (345 KM)	3,590	2011-2013
		Railway Bridge	Chenab River Bridge (1,315 meter)	116.6	2012-2017

Punjab	Power	Talwandi Sabo Power Project	Thermal power plant at Mansa district (1,980 MW)	2,160	2010 onwards
	Railway	Eastern Dedicated Freight Corridor	Dedicated freight corridor starting from Punjab, (1,840 KM)	8,000	2011-2017
Rajasthan	Power	Jaisalmer Wind Farm	Development of Wind Farm at Jaisalmer (50.4 MW)	N/A	2012-2013
		Bikaner Power Plant	Thermal power plant in Bikaner (250 MW)	481	2011 onwards
	Railway	Jaipur Metro Rail Project	Corridor 1 from Sitapura to Ambabari and Corridor 2 from Mansarovar to Badi Chaupar (34.6 KM)	1,800	2010-2013
Uttar Pradesh	Airport	Agra International Airport	Airport in Agra	N/A	2012 onwards
		Kushinagar International Airport	Airport catering to 1 Mn Passengers	64	2013 onwards
	Railway	Metro Rail project	Second phase from Ghaziabad to Dilshad Garden (9.41 KM)	300	2012 onwards
	Roadway	8 Lane Expressway	Expressway connecting Agra and Lucknow (365 KM)	NA	2012 onwards
Uttarakhand	Power	Alaknanda Hydro Power Project	Hydro power plant (330 MW)	878	2011 onwards
		Haridwar power plant	Gas fired power plant in Haridwar (350 MW)	250	2012 onwards
	Roadway	Road Project	Conversion of road connecting Rampur and Kathgodam from 2 lane to 4 lane (90 KM)	170	2011 onwards

Source: Business Monitor International (BMI) key projects database

Contacts

Deepak Haria

Financial Services Leader Email: hdeepak@deloitte.com

Bimal Modi Senior Director

Email: bimalmodi@deloitte.com

Monish Shah

Senior Director

Email: monishshah@deloitte.com

M. S. Mani

Senior Director

Email: msmani@deloitte.com

In addition, the following Deloitte professionals were involved in preparing the report:

Alpesh Patel, Sandeep Sonpatki, Inderjit Singh, Anurag Kumar, Chirag Fadia, Nachiket Limaye, Meenakshi Khurana, Rahul Palwe, Arpit Garg, Vivek Sharma, Anubha Chamadia, Prashant Suralkar and Paridhi Choudhary

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms. This material and the information contained herein prepared by Deloitte Touche Tohmatsu India Private Limited (DTTIPL) is intended to provide general information on a particular subject or subjects and is not an exhaustive treatment of such subject(s). This material contains information sourced from third party sites (external sites). DTTIPL is not responsible for any loss whatsoever caused due to reliance placed on information sourced from such external sites. Request the reader to understand the privacy policies of such external sites before any use. None of DTTIPL, Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the "Deloitte Network") is, by means of this material, rendering professional advice or services. The information is not intended to be relied upon as the sole basis for any decision which may affect you or your business. Before

No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this material.

making any decision or taking any action that might affect your personal finances or business, you should consult a qualified

©2013 Deloitte Touche Tohmatsu India Private Limited. Member of Deloitte Touche Tohmatsu Limited

professional adviser.