Innovations in Modern Banking and Innovative Financial Inclusion-Issues and Challenges

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Abstract

*Innovation fosters an organization to grow, prosper & transform in synchronization with the changes in the environment, both internal & external. Banking is no exception to this. In fact, this sector has witnessed radical transformation of late, based on many innovations in products, processes, services, systems, business models, technology, governance & regulation. The pervasive influence of information technology has revolutionaries in banking. Banking has become boundary less & virtual with a 24*7 model. Banks who strongly rely on the merits of 'relationship was banking' as a time tested way of targeting & servicing clients have readily embraced Customer Relationship Management (CRM), with sharp focus on customer centricity, facilitated by the availability of superior technology. Banking has become a part of financial services. We now see the evolution of many novel deferral products like credit risk management tools that enhance liquidity & market efficiency. Securitization is yet another example in this regard, whose strategic use has been rapidly rising globally. Various types of credit & debit cards & indeed e-cash itself are some more illustrious examples. It is very true that radical developments have taken place in banking industry. But whether the innovations in banking industry have percolated down to all segments of the people is a million dollar question. The innovations in modern banking, financial inclusion through banking and innovative financial inclusion are required for the growth of an economy especially developing economies. Innovative financial inclusion refers to the delivery of the financial services outside financial institutions (banks or micro finance institutions) by using information and communication technologies and non-bank retail agents (including post offices) and other institutional arrangements to reach those who are financially excluded. It is not limited to banking activity; it can include alternatives to informal payment services, insurance products, savings, etc. Emerging technologies such as mobile phones and innovations that enable banking services to be provided in post offices, neighborhood shops, and other convenient locations will create a historic opportunity to deliver affordable, quality financial services to the doorsteps of the world's poor. This research paper attempts a look at some such issues and challenges & provides insight into the impact of the driving forces, behind innovation, in Indian banks as well as innovative financial inclusion.*

Keywords : *Innovation, Financial inclusion, Customer Relationship Management.*

Introduction

Innovation derives organization to grow, prosper & transform in sync with the changes in the environment, both internal & external. Banking is no exception to this. In fact, this sector has witnessed radical transformation of late, based on many innovations in products, processes, services, systems, business models, technology, governance & regulation. A liberalized & globalized financial infrastructure had provided an additional impetus to this gigantic effort.

The pervasive influence of information technology has revolutionaries banking. Transaction costs have crumbled & handling of astronomical brick & mortar structure has been rapidly yielding ground to click & order electronic banking with a plethora of new products. Banking has become boundary less & virtual with a 24*7 model. Banks who strongly rely on the merits of 'relationship was banking' as a time tested way of targeting & servicing clients have readily embraced Customer Relationship Management (CRM), with sharp focus on customer centricity, facilitated by the availability of superior technology. CRM has, therefore, has become a new mantra in service management, which in both relationship based & information intensive.

Thanks to the regulatory changes & financial innovation, large banks have now become complex organizations engaged in wide range of activities. Banking is now a one-stop provider with a high degree of competition & competence. Banking has become a part of financial services. Risk Management is no longer a mere regulatory issue. Basel-2 has accorded a primacy of place to this fascinating exercise by repositioning it as the core banking. We now see the evolution of many novel deferral products like credit risk management tool that enhances liquidity & market efficiency.

The retail revolution with accent on retail loans in the form of housing loans & Consumer loans literally dominating the banking globally is yet another example of product & service innovation. Various types of credit & debit cards & indeed e-cash itself, which has the potential to redefine the role of monetary authorities, are some more illustrious examples.

WHY INDIA IS EMERGING AS AN INNOVATION CENTRE

■ INNOVATIVE APPROACH TOWARDS BUSINESS

Indians by nature are very innovative in their approach to whatever they do. In fact, that's also reflected in some unusual demands from corporate clients. Banks are now more receptive to innovation in order to get ahead of the competition. That's one reason why banks in India are testing and trying out newer ways of servicing both retail as well as corporate customers.

■ SIZE

India is a large market for any bank. There are many people who don't even hold bank accounts, making the potential even greater. These two factors encourage banks to try out innovative strategies to increase their footprint in this market.

■ COMPLEXITY

India is one of the most complex markets in the world. For instance, Citibank's biometric initiative offers over half a dozen languages on the same platform. If Bangalore is the place to test a modern product, the interiors of Maharashtra or Karnataka are the best " laboratories" to test a biometric ATM.

■ IT SAVVY

India has a large pool of IT-savvy customers. So, it is cheaper and easier to test out new products here.

■ COMPETITION

There is cut-throat competition in the banking space in India. Foreign banks, which are highly (over) regulated, need newer, innovative products to wean away customers from Indian private and public sector rivals. And, since every successful new product gets copied, there is pressure to launch new, innovative products.

When Citibank launched a pilot version of its "Suvidha" account in Bangalore way back in 1997-98, it had no idea that it was scripting history of sorts. This scheme, which translates to "convenience", and designed specially for salaried individuals, offered some unique benefits like utility bill payments, automatic creation of fixed deposits, direct credit of salary reimbursements, etc. Over the next three years, the success of Suvidha prompted the bank to think of taking this scheme global—a first for a banking

product developed in India for the Indian market.

INFORMATION AND TECHNOLOGY IN BANKING

The advances in information and telecommunication technologies (IT) in the past 25 years have had a profound impact on the nature of banking and in the way in that banks and financial institutions are organized. A study of the technological progress in the banking sector is important because banks play an important role in providing financing and mobilizing savings, especially in emerging markets as compared to mature markets, where such functions are performed by the well developed capital markets. Technological efficiency can result in lower transaction costs and increased revenues for banks. For instance, technology can allow banks to cross-market new and existing products to customers.

The use of technology can improve/enhance systems for administrative control such as enabling better management of risk, which if disclosed in regulatory reports to supervisors and in annual reports to investors, can improve bank transparency and enable the banks to reduce their cost of capital. Hence, technology can be the key to differentiation, competitive edge, and institutional survival.

FINANCIAL INCLUSION

The case for financial inclusion is not based on the principle of equity alone - access to affordable banking services is required for inclusive growth with stability. Achieving financial inclusion in a country like India requires a high level of penetration by the formal financial system. Even in areas that are well covered by banks, there are sections of society excluded from the banking system. Political and social stability also drive financial inclusion. In the recent period, the government has been encouraging opening of bank accounts by providing government benefits through such accounts. ICT solutions have made such initiatives possible at relatively low cost.

Financial inclusion is not merely providing reliable access to an efficient payments system. Many discussions, especially in the context of mobile phone-led retail payments system, seem to focus on this aspect of financial inclusion. Financial inclusion is also not just micro-finance. Financial inclusion represents reliable access to affordable savings, loans, remittances and insurance services. We in India believe that financial inclusion primarily implies access to a bank account backed by deposit insurance, access to affordable credit and the payments system.

The key question is - What is the kind of regulatory and supervisory mechanism that will ensure that the formal financial system delivers affordable financial services to the excluded population with greater efficiency without compromising on acceptable levels of safety and reliability? The issues that merit attention are:

Is there a tradeoff between financial inclusion and financial regulation - are they at cross purposes or do they work in tandem?

i. What have been the various regulatory interventions in India to facilitate financial inclusion?

ii. What has been the approach to regulating non-bank intermediaries and entities providing innovative and low cost solutions for financial inclusion?

iii. What are the important consumer protection issues in the area of financial inclusion and what has been the regulatory approach? and

iv. Financial regulation and financial inclusion - is there a trade off?

Sound and reliable deposit taking entities, backed by deposit insurance for small deposits, accessible to all are, therefore, essential for financial inclusion. It is not possible to have sound and reliable deposit taking entities and a deposit insurance system without financial regulation. Hence, there is no doubt that financial regulation and financial inclusion work together - the former is a must for the latter.

Another reason why there is convergence

between financial regulation and financial inclusion is that if financial intermediaries have to deliver affordable services, they need to take advantage of technology and economies of scale. Such growth is not possible without capital. Investors and lenders are comfortable with providing more funds only if such entities are regulated.

More recently, in the context of the global crisis, it is observed that undue reliance on borrowed funds can be a source of risk and a more stable retail base of deposits is good for both the bottom line and resilience. Similarly, a diversified asset portfolio lends to less volatility in earnings. Thus, financial inclusion which can promote such a retail and diversified portfolio - in assets and liabilities - also promotes financial stability.

Regulatory Interventions

The key message here is that the regulatory approach has not compromised with prudential norms for deposit taking entities. Only sound and strong institutions can deliver financial inclusion. Within the overall traditional prudential framework, what the Reserve Bank of India has tried to do is to have a system of incentives and disincentives that further the financial inclusion objective and while doing so balance the degree of the risk with the ability to achieve greater penetration.

Looking at the success of credit unions and community banks world-wide in providing financial services to local communities, it can be argued that smaller regional banks can be the answer for financial inclusion. However, our experience with local entities, such as cooperative banks, deposit taking non-banking financial companies and regional rural banks highlighted the risks of poor governance, connected lending, geographic concentration leading to vulnerability to natural calamities and downturns. Small entities also tend to absorb disproportionate share of supervisory resources. Besides, the adoption of ICT solutions that are essential for accessing mainstream payments system requires larger investments and these often prove to be too onerous for small entities and render them uncompetitive.

Under the current laws in India, every bank requires a license from RBI for opening a branch. This legal requirement has been used as a regulatory tool for furthering financial inclusion. Statutory approvals for branch licenses in more lucrative centers are linked to the number of branches opened in under-banked districts and States, as also other factors such as fulfilling priority sector obligations, offering no frills accounts and other parameters to gauge achievements in financial inclusion and in customer service.

Taking the view that access to a bank account can be considered a public good, in 2005, the RBI directed all banks to offer at all branches the facility of ‘no frills’ account to any person desirous of opening such an account. These accounts have nil or low minimum balances and charges, and have limited facilities. Since 2005, over 39 million no frills accounts have been opened. However, there are certain barriers that inhibit the active operation of such accounts like the time and cost involved in reaching the nearest branch where the accounts have been opened. Hence, the RBI allowed branchless banking to ensure that these accounts are more accessible to their holders.

One significant area, could be a challenge in achieving greater financial inclusion is in regard to Know Your Customer (KYC) norms. In a country where most of the low income and poor people do not have any document of identity or proof of address it is very difficult to have KYC norms that insist on such documents. At the same time, to ensure integrity of financial transactions, it is necessary that each customer is properly identified before accounts are opened. In rural areas, this is addressed by asking for identification by local officials and requiring a photograph of the account holder. Drives for financial inclusion locally have been achieved through active involvement of government in the identification

process. In big towns and cities where there are a large number of migrants who do not have any documents, fulfilling KYC norms and opening a bank account continue to be a challenge.

Recently, the Government of India constituted the Unique Identification Authority of India (UIDAI) to issue a Unique Identification Number (UID) with biometric recognition to every resident. It is expected that by latter part of this year, the UIDAI will begin issuing UIDs and roll out 600 million UIDs in a phased manner by 2014. UID enrolment will be done with the help of State Government machinery and other Registrars. Banks can benefit by synchronizing opening of bank accounts for those who will be enrolled through this exercise. This project is a unique opportunity to leverage UID, bank accounts and mobile telephony services. Using UID for fulfilling KYC for small value accounts will facilitate financial inclusion. In a country with deep penetration of mobile phones, this is expected to give a boost to the financial inclusion while ensuring the integrity of financial transactions.

APPROACH TOWARDS NON-BANKING ENTITIES

Non-banking entities can be either non-banking non-financial entities or non- banking financial entities. In case of non-banking financial entities, we have had to deal with two issues. The first is the question of allowing non-deposit taking financial companies registered with the RBI, especially micro-finance companies, to provide savings facilities and deposit products for their clients. The argument put forth is that these entities are innovative and nimble footed and have shown their ability to provide loan products to the poor. Considering the difficulties is ensuring effective supervision of large number of small deposit taking entities and the constraints in extending deposit insurance to such entities, the regulatory approach in India has been to restrict deposit taking activity to banks while promoting the branchless banking model for areas not served by bank branches. Hence fresh approvals to NBFCs for accepting deposits are not considered, while capital, liquidity and leverage requirements have been tightened for those already permitted to do so.

The second issue is that of allowing non-banking financial companies especially micro-finance companies to act as business correspondents of banks for branchless banking. The argument put forward is that this would enable their clients to access insured deposits, national payments system and remittance services. There have also been demands that large 'for profit' companies having a wide network of outlets especially in rural areas could be allowed to act as business correspondents of banks as there could be significant synergies if such networks are leveraged upon. This issue is currently under examination and in doing so the possible risks such as conflicts of interest, co-mingling of funds, misrepresentation and other agency related risks would need to be weighed against possible safeguards for consumer protection.

Non-bank non-financial entities have emerged as active players in financial inclusion in that they have helped banks in offering customized payments and remittance services to their customers based on innovative ICT solutions. Any role enhancement of non-banks to become principals in provision of financial services implies that these non-bank entities would have to be brought under financial regulation and this could inhibit their other activities. Combining financial and non-financial business is also something the regulator may not be comfortable with as there could be conflicts of interest.

Subsequent to the notification of Payment and Settlement Systems Act, 2007, the payment services have been opened up in India for non-bank service providers also. The broad regulatory approach of RBI towards non-banks has been to permit these entities to provide payment services which are fee-based without access to funds of the customers. Indian regulations clearly spell out the role of telecom operators as service providers.

However, keeping in view the penetration of mobile telephony in the country, they have been permitted to enable 'm-wallet' facilities up to Rs.5000 in the interest of small retail payments.

Financial inclusion primarily represents access to a bank account backed by deposit insurance, access to affordable credit and the payments system. The Indian experience demonstrates that financial inclusion can work within the framework of mainstream banking within a sound regulatory framework. Fair and transparent code of conduct enforced through an effective grievance redressal system and facilitated by financial literacy and education are the cornerstones for ensuring consumer protection which is an overarching objective of financial regulation in the context of financial inclusion.

e-FINANCIAL INCLUSION

To define e-Financial Inclusion, one could state as innovative applications of ICT for delivery of financial & payment services and adequate credit where needed, at an affordable cost to the vast section of disadvantaged and low-income groups, who currently are unbanked."

UPA Govt. has given highest priority to the goal of achieving inclusive society as could be seen from President's address to Parliament on 4th June 2009, and also to the nation on the eve of Independence Day and so also emphasis in Union budget 2009-10 to deepen and broaden the agenda for inclusive development. Govt. has already set up the Unique Identification Authority of India (UIDAI) for improving the delivery of public services. Also, in the agenda for first hundred days "revamping banks and post offices to become outreach units for financial inclusion complemented by business correspondents aided by technology".

For any 'e-' to proliferate to rural areas, be it be e-learning, e-governance, e-health, e-agriculture and the like, the first thing is connectivity and any low-cost would mean " to get more deliverables (including financial services) out of the e-infrastructure already in existence or have been planned to be in place in very near future". Creation of new infrastructure cost money and the cost would need to be amortized over a period of time. Moreover, e-Financial Inclusion prima facie should be viewed as "money at the bottom of the pyramid" and business models may be so designed to be profit-making in the long run or at least self-supporting. e-infrastructure of the Indian banks is rapidly expanding and the visible benefits of ICT in day-to-day banking are well known. Common man is becoming quite used to ATMs; internet banking etc, are gradually finding its acceptance. RBI has been placing a lot of emphasis on financial inclusion covering, inter alia, no-frill accounts, rural bank branches, etc. Further, many pilot projects have been initiated in various States by different banks using smart cards for opening & operating bank accounts with biometric identification at people's doorsteps. Here, the link to hand-held connecting device ensures that the transactions are recorded at the bank's books on real time basis. Nevertheless, how much these are facilitating financial inclusion for unbanked or rural poor need to be analyzed.

e-infrastructure of Mobile Network Operators (MNOs), has seen phenomenal growth in recent times. Total number of mobile phones as on April 30, 2009 was 403 million out of which 187 million (46%) do not have a bank account. Already grown to a total number of 479 million by July, 2009, growth rate of acquisition of mobile phones in rural area far exceeds the growth rate of opening of new bank accounts. Insofar as Indian post offices (which has very large rural reach) network are concerned, the Instant Money Order (iMO) service is a good example. The smart card enabled facilitating mechanism now available in post offices in every State capital enables money transfer between two resident individuals of India besides saving time with regard to clearing of outstation cheques. Further, another initiative e-post meant for those do not have internet and e-mail could get benefits of this (sent online but delivered by mail). Innovative way of lying-up

with those having rural PO saving bank account but not having a bank account, iMO and e-post could help facilitate e-Financial Inclusion. Further under NeGP, there is a scheme for establishing 100000 + Common Service Centers (CSCs), primary in rural areas of the country. There Centers would be broadband internet enabled and would provide all government and private services at the doorstep of the citizen. The Scheme is being implemented in public private partnership. CSCs have significant potential to accelerate e-Financial Inclusion.

In recent times, since growth of mobile phone has been phenomenal and it has emerged as an ubiquitous convergent device (anybody, anytime, anywhere appliances), mobile banking & m-payment has attracted a lot of attention globally. Realizing its potential for e-Financial inclusion, Department of Information Technology (DIT), Govt. of India, in April 2007, prepared a state-of-the-art study on international best practices on mobile payments thereafter organized a brainstorming session of stake-holders to chalk-out future course of action and then joined hands with another emerging initiative in the form of Mobile Payment Forum of India (http://www.mpf.org.in). The MPFI website contains a lot of useful materials on mobile payment.

SELECT CONCEPTUAL ISSUES & CHALLENGES IN FINANCIAL INCLUSION

Designing Products: Simplicity and Complexity

In the wake of the "subprime crisis," there has been a lot of discussion about the complexity and simplicity of products, and how this affects usage and outcomes. The school of thought that places the onus of financial literacy on the customer is in a "race to simplify." However, from a financial inclusion perspective, we worry that this significantly undermines the true potential of finance. Consider the following examples.

Two of the ways for a farmer to finance her sowing operation could be through a crop loan payable in equal monthly installments or through a crop loan where principal and interest payments are linked to the amount of rainfall obtained in her region. Clearly, for the provider, the first product is simpler to design, provide, and communicate. The latter is complex because it combines a loan with insurance-like features and will require the lender to hedge the rainfall risk at its level. At the time of disbursing the loan, the provider in the second instance would not be able to give the farmer a "simple" fixed repayment schedule. However, from the perspective of the functionality required for a farmer to manage volatile income streams, the latter appears to be a much superior alternative because the financial products absorb the volatility. In the first case, the volatility for the farmer is perhaps exacerbated by adding a fixed outflow to a very volatile cash flow, making the farmer worse off. In the second case, the provider uses its expertise to integrate a solution for the farmer, which she or he otherwise might not be able to create without such expert support.

Often there are underlying assumptions about product pricing and design that the client may not be aware of, and the client's decision may become impossibly complex to make. One example would be financing the retirement stage. The client would like to fulfill the function by entering into mechanisms that help him save money during times of income and invest it in a combination of assets so that an adequate amount is available during the retirement stage. He also would want to manage longevity risk and heath risk after the retirement, because both these risks may render the savings inadequate. There is expected selection bias priced into mechanisms to manage either of these risks. An annuity would be priced to take into account the fact that a person who is not well would not want to purchase it, while the health insurance is priced with the opposite logic, that is, a person who is likely to fall ill is more likely to purchase it. Both are selection biases that offset each other to some extent and bundling an annuity with health insurance (or long-term care

insurance) should bring the price down for the household. So, even though it is simple for the provider to sell stand-alone health insurance (or long-term care insurance) products, most clients would not be able to understand the underlying logic of product design and actuarial calculation, and therefore would not be able to enter into the appropriate financial contract.

Fixing Responsibilities: Provider's and Client's Responsibilities for Outcomes

There is a need for a detailed assessment of the extent to which the different stakeholders could be held accountable for the client outcomes. In addition to the clients, there are four categories of stakeholders that could be held accountable:

v. Advisors and/ providers of financial services, who interface between clients and the financial system;

vi. Risk aggregators and fund managers, who manage client portfolios;

vii. Third party agencies like rating agencies, which minimize the market information asymmetry; and

viii. Regulators and the central bank, which are responsible for the overall stewardship of the system

Several debates on financial literacy have placed the onus on the customer to understand the intricacies of financial mechanisms, but there is insufficient emphasis on the capability of the provider and its preparedness for counseling customers on financial choices. How well trained is the customer representative of the provider in helping customers navigate complex life cycle finance choices? There is a case for placing much greater importance on provider and distributor financial literacy to ensure good customer outcomes.

Instead of passing the responsibility entirely onto the clients, frontline finance workers could take the responsibility of analyzing household typologies based on risk profiles (high dependence on wage income, high volatility of cash flows due to rainfall risk), and use automated expert systems that match these profiles with financial portfolios (combinations of savings, investments, loans, and insurance mechanisms). The providers could use their expertise to build systems to implement a comprehensive process and support the financial decisions of their clients.

Communication about Product Features

Most clients are not trained in finance, and the increasing complexity underlying the product contracts is difficult even for trained people to understand. Moreover, the product contracts have not done much to help the clients make the right choices. For example, credit card contracts have become so incomprehensible that the cost of understanding them may be quite high. These challenges will be faced by those who are going to be financially included. Understanding the process of communication between the provider and the client is important. There are essentially four ways in which the provider can communicate with the customer:

ix. information: explaining the product features;

x. computation: helping the customer understand implications of a certain product or set of products in the specific context of the household;

xi. advice: offering an integrated financial proposition to the client as an advice; and

xii. decision: deciding on behalf of the client.

In the first instance, the provider may just share appropriate product details with the clients in a transparent, easy to understand format. However, even if these details are provided, the household still faces the task of estimating the impact of certain product decisions on its life. This is primarily a challenge of estimation (of optimal liquidity requirements at different stages of life) and computation (the math about implications).

In the second way of communicating with a customer, the provider may help the customer understand the implications of specific product decisions by doing the computation and

simulation based on inputs received from the household. In the preceding section's discussion on the responsibility of providers, a detailed example of such a computation and simulation tool is presented. Both of these kinds of communication exist in the product menu–driven approach to product design.

The third kind of communication entails the provider developing an integrated financial proposition on behalf of the client, offering it as advice, and letting the client decide. In this alternative, the onus will be on the provider to explain the rationale for the advice. This kind of communication necessarily builds on "computation" that supports the development of advice to be given to the clients.

In the fourth approach to communication, the provider decides on behalf of the clients. This alternative is actually not rare. It is crucial to highlight that defaults in products and bundling of products have advice built into them, in a manner that decisions are made on behalf of the clients. This is conceptually different from offering customized financial propositions wherein the proposition is provided as an expert's "advice" and the decision is made by the clients. The rationale for last approach is often put in terms of the household's limitation in making the right decisions. For example, self-control bias is given as a rationale for putting defaults in saving plans. Similarly, the microfinance institutions that bundle the life insurance product with the loan presume that the client would not purchase it and thus leaver the lender and family exposed to mortality risk.

Since the household's decisions may be shaped significantly by the method of communication, this issue is an important one when considering financial inclusion.18 Though the product menu–driven approach based simply on information may be easier for the provider, the client perspective needs to be carefully considered. Just providing information on products leaves the entire process of computation and (self) advice with the clients, who often lack the expertise or time to fulfill these functions comprehensively. In the integrated proposition approach, the providers would need to modify their client communication strategy by expanding the scope of communication from just offering product information to providing computational support and advice to clients. The decision itself may left with the clients, but the support from the providers would enable more optimal decisions.

Behavioral Issues in Product Design and Delivery

There is some evidence indicating that individuals may not be perfect consumption smoothers. People may not be smoothing consumption over individual lifetimes but rather letting it track income through the life cycle, spending more when earning more and spending less when earning less, even over the short term. Various reasons have been cited for this observed suboptimal pattern. An increasing body of literature argues that clients' behavioral biases lead to suboptimal outcomes for them, challenging the assumption that individuals make perfectly rational decisions given their observable constraints. One of the most prominent of these is the self- control bias that leads to suboptimal saving and borrowing decisions for the client. Such behavioral biases also may lead to suboptimal outcomes from financial access, even when the providers have ostensibly done their job.

Presuming for the time being that certain behavioral biases do exist, what then can be the response of the financial system? It could be argued that even when individuals do not behave in their own best interests, institutions may evolve to offset this behavior and produce a net result that is equivalent to the individuals behaving optimally. This could be done by designing products and processes that respond to the behavioral biases in a manner that induces individuals to select the right products that suit their behavioral profile. For example, commitment savings products and welfare-enhancing defaults in products may work for individuals facing self-control problems.

Notwithstanding the potential merits of these possibilities, there are challenges inherent in this approach. It often entails making certain decisions on behalf of clients, and every such decision would require taking a normative stand on what will improve outcomes for individuals. For example, it is not obvious that reduction of consumption to increase savings is necessarily a good thing, and it is difficult to estimate when that would be the case without having a clear understanding of discount factors specific to individuals. Since there is diversity in the client group, clients should always be given a choice to self-select the right option.

Between the two alternative approaches to financial services delivery discussed earlier on, the integrated proposition approach seems more capable of customizing solutions that would fit the characteristics of the household. Just like the provider would assess the risk preference of the household, it could also find ways to interact with clients who are sophisticated about their biases and offer solutions that help these clients manage their portfolios in an optimal way. An individual who is sophisticated about his or her biases could benefit from such arrangements, but those who are naive about their biases may end up using these mechanisms sub optimally, and may even give the provider opportunity to exploit that naiveté, with adverse effects on the client's welfare. This is a much debated issue in the realm of financial services delivery and requires some kind of resolution for defining the role of the provider in ensuring effective financial inclusion.

Defining the Household's Portfolio: Human Capital and Financial Capital

The current frameworks of financial planning and portfolio allocation are almost always limited to financial assets. However, the financially excluded are often also the financially poor, for many of whom the most important asset for much of their lifetime is their human capital. It would be important to formally recognize the value and risk characteristics of human capital in portfolio allocation decisions. A landless laborer's human capital will be very different from that of a school teacher, both in terms of economic value and risk profiles. The human capital of many workers in rural areas may be fairly uncorrelated with the stock market trends, and this provides diversification opportunity for the household. At the same time, the worker's return on human capital is usually quite volatile, with equity-like features (but with low average returns as well), thus making it better for the worker to invest in debt instruments.

These human capital characteristics should be incorporated in any portfolio allocation decision. The design challenge is how to ensure that this happens. If the menu-driven approach is taken, the household is expected to factor in the human capital characteristics while making the portfolio allocation decisions, whereas in the customized proposition approach, the characteristics would be understood by the provider and incorporated into the proposition. Even though the household is in the best position to understand its own human capital, it may not have the expertise to understand how this capital rates with financial capital and how it can optimize the overall portfolio. The household may not have access to the data and tools that could help establish the relationship between various components of its portfolio, including human capital. Here again, expertise may be required to understand the characteristics of the household's human capital and advise the household on the basis of the overall portfolio it is managing, thus offering a customized financial proposition.

Features of the Delivery Channel

Though the functions of finance may be stable, the products, channels, and institutions required to fulfill these functions keep changing. The exact features of the ideal channel may change based on the combination of functions and product to be provided, but there are certain features of the delivery channel that may be synonymous with high-quality financial inclusion. It is almost axiomatic that the financial services channel should be able to provide the

services in a convenient, flexible, reliable, and continuous manner. Convenience and flexibility are required to make sure the delivery channel "fits" the needs of the clients. For example, low-income households have significant short-term consumption-smoothing needs, which could be fulfilled if they had convenient access to credit or saving facilities. Low-income clients also seem highly time sensitive and often prefer to pay relatively high interest rates for convenient and "doorstep" services. Reliability and continuity help the clients actively use the channel for implementing long-term financial decisions, especially when the clients are taking a risk on the institution (investment, insurance).

IN THE PIPELINE

These are a few innovative products developed in India that may hit the global markets soon:

- **Standard Chartered Bank**

BUYER FINANCE

The bank offers credit to channel partners (dealers and distributors) on very attractive terms as a reward for their long standing association with the company or take an insurance wrap to cover the risk.

INFO MANAGER

For trade services (exports or imports), you no longer have to call your banker or wait for the data (to be transmitted to your computer) as 'Info Manager', which is an internet-based trade reporting and enquiry tool, takes care of the reporting. You just need to log on to the net from any part of the world and upload your trade-related data from the bank.

- **Citibank**

WEBCAM BANKING

You no longer have to go to meet a banker face to face to sort out your queries as Webcam Banking allows you to talk to your banker anytime anywhere. This technology, undergoing pilot testing, is very costly; so, the bank is working on making it economical. This product is ideally suited for Citi's most mature markets in the West.

BIOMETRIC ATM

It's the simplest and most innovative way to reach out to people in the rural heartland. The biometric ATM allows rural folks to undertake self-service banking by using their fingerprints for identification purposes. This product can find application in countries like China where Citi is aggressively spreading its wings.

- **Deutsche Bank**

CREDIT CARD BASKET

You don't have to buy different cards to get the best value as the bank studies your spending pattern (travel, dining, etc) and provides a switching facility to half a dozen other schemes on a single card. This not only saves customers money by getting them the best deal but also saves them the trouble of carrying separate co-branded cards for travel, petrol or dining.

PAYERID SOLUTION

If you have thousands of dealers and multiple operations across distant locations (like an HUL or an ITC), it becomes a Herculean task to dispatch goods. PayerID enables companies to identify the paying parties without the need to maintain multiple bank accounts (of dealers or suppliers), thus the easy dispatch goods.

Conclusion

Despite the current difficulties and challenges, financial innovation will continue to play an important role in promoting global growth, especially in emerging markets and developing countries. For growth to be truly inclusive, banking must reach out to many more people than it reaches now. Technological changes in the form of Information Technology and mobile banking greatly expand the potential reach of the banking system. Developing and under-developed economies all over the globe are looking for new modes and means to cub poverty

and include their citizens in the financial system. One of the important factors that would help achieve this vision is to ensure total financial inclusion.

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