Too big to fail versus too small to be counted

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Abstract

Financial reform must not ignore the interests of small stakeholders – who must be regarded as too small to be counted. Making equity an explicit objective is delicate: it needs to be calibrated such that the vulnerable are not exposed to further risks. Policies outside the realm of financial regulation should support the aim of improving the lot of small stakeholders. Technology could be a game changer and the central regulatory authorities should usher in a policy that helps the inclusion agenda to embrace technology. The transaction costs could potentially be minimal and the fees charged to the vulnerable should encourage them to embrace formal financial systems.

JEL classification: D63, G01, G20, G21, G28

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Introduction

The regulation of the financial sector is complex. The financial sector is embedded in the larger economy and has implications for economic behaviour. However, the pre-crisis template for regulation of the financial institutions epitomised specific focus, not looking at the broader systemic linkages. The global initiatives underway to repair the financial system do recognise or address some of these inter-linkages within the financial sector in the interest of financial stability. The links between the financial sector and the real sector, though, still seem to be outside the realm of financial sector regulation and more in the realm of public policy. This disconnect tends to exclude the interests of small stakeholders.

This paper focuses on the small. We move from the doctrine of "too big to fail" and examine a new doctrine – "too small to be counted". It is argued that just as the financial regulation attempts to incorporate the imperatives of growth and stability, it needs to have equity as one of the explicit objectives. However, the nature of engagement of financial regulation with issues of equity needs to be calibrated appropriately so that the financial integration of the vulnerable does not expose them to further risks and uncertainty. It also needs to be

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supplemented with other supportive policies and institutional frameworks outside the realm of the financial sector.

We divide our arguments into eight sections. The first section examines different contours of financial exclusion inherent in the conduct of financial sector. The second section examines the philosophy of regulation and the required features of a forward-looking regulation. The third section looks at inclusiveness and why it is important to have an inclusive regulatory framework. The fourth section focusses on the interface between public policy and regulation. It also examines how the public policy concerns can be embedded in the regulatory framework. The fifth section diagnoses the problems that have come up in the financial sector using "horizons" as a base. We argue that businesses that exist for the purpose of turning profits tend to have short time horizons. Regulation being concerned with stability should have longer horizons. The sixth section examines how the modern world has moved towards providing solutions through 'paper' or financial instruments that are traded, without a strong association with the underlying economic activity. The seventh section discusses the opportunity that exists with technology and technological innovations. The last section is devoted to conclusions.

1. Contours of inequity

The have-nots are classified by varying degrees of handicap:

Identity is about how individuals, micro and small enterprises (MSME) deal with their existence. Informality depends on relationships, personal histories, memories, and networks. Formal systems embed memory in a retrievable codified form. With identity moving beyond photographs to biometrics, and technology becoming sophisticated, the costs of obtaining, establishing and maintaining identity escalates. This cost has to be absorbed somewhere.

Codified information on transaction history is not available as most information is informal and anecdotal. An entry-level problem in case of identity becomes a transactional problem once the client gets into the financial system. The poor suffer because of such codification. With technology and analytics taking deep roots in the banking system, Basel norms requiring an internal rating of portfolios to get the risk weights and capital adequacy, the reliance on machine generated codified data increases. As the financial institutions get more and more digitised, the barriers for the have-nots will only increase.

Safety nets help in insulating the entrepreneur from the enterprise. This is achieved through a limited liability clause. The poor individuals (household enterprise) and MSMEs (sole proprietorships, partnerships) usually have unlimited liability, which blurs the difference between entrepreneur and enterprise, transferring risks of the enterprise to the entrepreneur and vice versa. While unlimited liability (such as like personal guarantees) should be comforting, the danger of a personal downside affecting the enterprise weighs on the lender. Thus, these customers are perceived to be risky. If the risks underlying the activity are not covered then leverage is unknown. The liabilities from informal sources are opaque. The clients could even make a post facto informal deal, even if they are transparent ex-ante. When this category of clientele moves into the mainstream, they start with lightly regulated intermediary institutions. The leverage of such institutions is also unknown. It becomes complex when such institutions originate and sell their portfolio through market instruments such as CDOs or securitisation deals taking these assets off the balance sheet.

Access to bail-outs is available to the large players as they negotiate individually and resort to restructuring, settlement and other agreements. The small players will be taken note of when the crisis builds up to a systemic proportion. A single large player failing could pose a systemic risk. A large number of small players have to be simultaneously under stress to become systemic. Since the decision is about a collective, there is a moral hazard.

Write-offs may be seen as back-ending of welfare expenses. The state through its policy mandates the financial system to take exposure to vulnerable sectors, expecting them to operate on market principles. It then provides succour when it becomes impossible for the sector to continue competing on market principles. The write-off is a public policy weapon. The financial sector players must be insulated from public policy decisions having operational dimensions. However, with the movement towards market principles, the state seems to move towards one-time crisis management response, than pro-active welfare based responses.

Inability to cover the risk of an underlying economic activity: The ability to seek insurance cover – either because of the inability to identify the risk, or because of the infeasibility to assess the loss based on transaction size.

2. Philosophy of regulation: why are equity and inclusion important and why are they not at cross purposes with regulation?

In a profit- maximising world each player operates with a different horizon. In a scenario that is short sighted, there are tendencies to take from

- others – this could be: powerful versus the weak; developed versus developing regions;
- future – spending now before earning (for governments) and reporting profits from future incomes in current periods (for corporates)

Other arbitrages give advantage to one player over the other. A tightly controlled and highly regulated environment may lead to regimes while in a de-controlled environment the markets take over. Regulation smoothes the ups and downs created by asymmetries of the markets. Regulation should have longer horizons that help in regular self-correcting mechanisms to ensure that it does not result in a crisis situation. While regulation represents the spirit and signals how markets should behave, the players may use regulation literally, violating the spirit. It is important for regulation to be alert and agile. Thorat (2010)[2] argues that financial inclusion is not at cross-purposes with prudential regulation. Inclusion brings in a large number of clients, a diversified base both on the assets and liabilities and contributes to stability of financial institutions. This can be achieved without the provision of direct subsidies, if there is space for innovation, with adequate consumer protection.

The financial system is not equitous. The dimensions of inequity are extensively discussed in development literature. Understanding this from the regulatory perspective of financial systems provides a natural link between diagnosis and treatment. Intervention from the financial sector may call for subsidy. While subsidisation usually comes from the state, the financial sector can contribute by way of cross-subsidisation in the interest of public good and stability. The challenge of public policy is to design these subsidies.

Before the crisis of 2008, there was a cleavage between public policy and the financial sector. The functioning of financial markets, the approach to regulation reflected a disconnection with the socio-economic setting in which equity was an integral element. Linking financial sector policy-making to equity carried a pejorative connotation from the

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[2] Thorat, Usha (2010): Financial Regulation and Financial Inclusion: Working Together or at Cross-purposes. Speech delivered at the Tenth Annual International Seminar on Policy Challenges for the Financial Sector. Washington, June 2–4, 2010

markets-based view of the financial sector. Using the financial sector for addressing objectives other than enhancing the growth and depth of markets was said to be distortionary. Countries like India were advised to move away from such a distortionary system. A crisis in the western world and strained sovereign balance sheets has led to a reassessment. While there is no evident change, there is an increasing realisation that for a sustainable growth model, the financial sector cannot be oblivious of the public policy objectives.

Conservatism expects the worst and prepares a buffer. Extreme conservatism avoids dipping into the buffer even in a crisis. Such regulatory philosophy denies the benefits of consumption of current surpluses in order to be prepared for a dark day. The liberal regulatory framework spots the opportunities for the current benefits to be invested in growth in the hope that greater profits can be generated if we prop the base in the present. In a crisis, the liberal regulatory regime will stare at a collapse, but in the run up to the collapse it would have seen a phenomenal growth. The fall would be from a greater height and the pain would be greater.

A conservative regulatory regime will make greater attempts to save institutions than a liberal regime. While the liberal regime would offer bail-outs for systemically important institutions, it would be matter-of-fact when the market consumes a few institutions, if there are minimal contagion effects. Such a regime would be less insular. When a crisis hits, the larger players are affected and the smaller customers are affected much more. From the view of larger equity, we need safety nets around the poor to ensure that the bail-outs available in formal space are also available to the vulnerable.

Sections of the population may be continually vulnerable with an adverse event leading them to precipice. This group (like farmers) represents a low capital base, high leverage and volatile incomes. These attributes could be applied to speculative businesses as well. Regulation should provide for structured cross-subsidisation by managing earnings. A stable portion of the income provides for these shocks on the fringes at the institution level rather than the level of economy. Regulation should distinguish essential, but inherently risky/volatile activity and volatility on account of pure speculation.

The role of regulation is in putting safety nets that prevents a freefall. While the concept of "too big to fail" is understood, we need to see what happens to the mass termed as "too small to be counted". In the post crisis situation, inclusion is critical as a corrective measure.

We look at some initiatives taken by the governments in the post crisis scenario. The bail out of large players because of the systemic concerns is well known. We examine initiatives taken in favour of the poor. Why were these measures important? If they were important post-crisis, were they as important in a stable/growth scenario as well?

Box 1 highlights the problems of too small to be counted. There is insufficient data to take informed decisions and it is difficult to analyse the impact. The crisis brought out the vulnerability of MSMEs that were dependent on the larger economy because a drop in the demand for goods and services. The MSME and the poorer customer segment are more vulnerable to outer shocks. Very much the way the larger institutions (and economies) need to build up buffers (like reserves, capital adequacy and diversification of investible resources) that help overcome the sharp effect of a crisis, regulation should ensure that such buffers for the poor customers and the SME firms.

Sumarto, Suryahadi and Bazzi (2008)[3] argue that while the improvement in the macro-economic environment was necessary to reduce the vulnerability of the non-poor, the macro-economic upturns were insufficient to get the chronic poor out of poverty. The inclusive policy response in the post crisis scenario should be present even at stable state. This is evidenced by the Indian experience, where while the overall economic growth was spectacular, there were vulnerabilities in specific geographies and specific economic engagements. The suicides of farmers in parts of India are a case in point. Reddy (2010)[4] argued that de-regulation of financial sector was important to remove distortions and enhance efficiency, there was a case against excessive deregulation, where markets take over. Reddy argued that such freedom resulted in irresponsible lending exemplified by sub-prime in US and microfinance elsewhere.

Box 1

Rationale for Inclusion: Data for Decision Making

Do we have insular measures that minimise the impact of any crisis or measures that can be taken after a crisis? In a presentation at the Asia-Pacific Financial and Development Centre, Lucia Cusmano,[①] Senior Economist from the OECD, highlighted two important issues for SMEs:

1) a drastic drop in final demand for goods and services

2) a deterioration of credit conditions facing SMEs.

While these were identified, it was difficult for the policy makers to give a calibrated response, because these sectors did not have hard data that could monitor the effectiveness of the response. Inclusiveness has to be built during normal times, and data has to be gathered in normal course. Otherwise it is difficult for policy intervention.

Cusmano records the typical responses to such a crisis, where SMEs would: tighten the operating costs; exhaust inventories; and cut investments including innovation spending.

Such a response has an impact on the firms beyond the crisis period. It stunts their ability to be futuristic and continue to compete. Cusmano argues that such a response of banks is natural: they tighten credit the post-crisis scenario, while the state infuses liquidity as support.

A survey amongst the G-20 members' policy responses in 2009-10 (quoted by Cusmano) showed that various Countries adopted the following measures:

1. Government guarantees for working capital and investment credit
2. Strengthening of capital base by encouraging private equity and venture capital
3. Provision of direct credit
4. Export facilitation, credit, guarantees and capital to export support institutions
5. Credit mediation and monitoring.

① Cusmano, Lucia (2010): SME Credit Guarantee System: Support Structures, Best Practices and Responses to the Financial Crisis. Conference on SME Credit Guarantee Systems in Asia Pacific Region, Hangzhou, PR China June 16-18, 2010.

[3] Sumarto, Sudarno; Suryahadi, Asep and Bazzi Sami (2008): Indonesia's Social Protection during and after the Crisis in Barrientos, Armando and Hulme, Hulme (Ed): Social Protection for the Poor and Poorest Concepts, Policies and Politics Basingstoke: Palgrave Macmillan.

[4] Reddy, YV (2010): Developmental Dimension to the Financial Sector. Lecture delivered at The Sixth M.R.Pai Memorial Award Function, Mumbai.

In analysing the Indonesian crisis of 1998–2000, Sumarto, Suryahadi and Bazzi show the difference between handling the crisis situation aimed at preventing people from slipping into chronic poverty and the post crisis responses. During the crisis having targeted subsidy programs, unconditional cash transfers, provision of subsidised food, employment generation, and public spending were important. The post crisis measures included withdrawing subsidies and having conditional cash transfers instead of un-conditional cash transfers. The informal social protection and coping mechanisms in the pre-crisis included reducing expenditure, borrowing to increase income. The financial sector can play a constructive role in ensuring that financial instruments mimicking coping mechanisms could be made available and the response burden of the state could be decentralised.

Inclusion defies the logic of deregulated markets and gets into the realm of the state. The state is inappropriate to deal with financial instruments and products needed for the non-lucrative parts of the economy, to be served by the markets. In such situations two scenarios emerge:

First: Markets discover asymmetries and players skim the market as seen in the sub-prime or microfinance markets. The logic of competition fails when the players adopt irresponsible behaviour. Regulation will have to step in with measures of customer protection.

Second: The regulation makes inclusiveness a part of the business by mandating targets for serving certain sectors. By mandating this on all financial institutions, the regime creates a level playing field, and forces them to cross-subsidise across their own portfolios. Such measures may lead to innovation. With technology kicking in, inclusion could happen to the extent that the mandates have to be achieved.

Both responses show that inclusiveness and development have to fall within the regulatory realm one way or the other and it only creates a well-diversified buffer spread across individual players, the banking institutions and with the economy as a whole. Ensuring capital formation at the household level and ensuring that there is no overleveraging of the unorganised sector during normal times becomes the role of regulation.

3. Logic of inclusiveness: can an inclusive regulatory philosophy minimise the risks of a crisis and soften the blow of pro-cyclical behaviour?

The policy that practices exclusion suffers from multiple asymmetries. Inclusiveness is essential for good regulation. The data from this segment should feed into the regulatory frame. If the systems were not inclusive, it would be difficult to capture the extent of exclusion because there is no data on what is excluded and it is difficult to estimate without a base/starting point. Regulation is premised on addressing externalities and informational asymmetries. The concepts of institutional soundness, prudence, fairness and transparency are the core of a regulatory framework. The market centric Anglo-Saxon model of the financial system is entrenched in developed economies. The model ensures fair conduct of transactions and a fair assessment of institutional prudence. This is reflected in the prescription of economic capital for risks that an institution is exposed to. Limitations of this approach were evident during the crisis. Using examples with reference to the MSME sector, we find that post crisis responses were impeded by the fact that data about the sector was not available.

Boxes 2 and 3 show that the two instances remained inconclusive on whether these measures had a desirable outcome and impact. These measures are being taken in a data vacuum. The logic of inclusion should start by understanding the excluded, measure the contours of the problem and examine the impact of the crisis. The policymaking should be inclusive, and this should happen in even in normal course and not in a post crisis situation.

Box 2

Possible Measures in a Crisis Situation

A report by the OECD[①] examines the ability of countries to deal with the crisis as dictated by their fiscal and monetary policies. The measures are: ensuring that the markets for SME output remain vibrant; increasing access to finance through injection of funds and provision of guarantees; The Turin Round Table recommended that governments concentrate first on reducing those taxes that are "profit-insensitive", taxes that are paid regardless of whether the SME is making a profit. This increases the ability of SMEs to finance working capital internally.

These measures aimed at:

(a) maintaining liquidity by using multiple measures to shorten payment delays for public procurement (Australia, France, Hungary, Italy, the Netherlands, New Zealand, and UK) and enforce payment discipline (France);

(b) rationalising taxes, particularly taxes not related to results such as VAT (Czech Republic, France and Spain) and tinkering with income tax slabs (Japan, Netherlands, Canada), so that more resources and liquidity is available for the SMEs for reinvestment;

(c) ensuring continued supply of investment and working capital credit in the light of stressed balance sheets through extension of loans and guarantees, which ensures the ability of the SMEs to continue to do business development.

However, the report concludes that "time is too short to draw conclusions about what are the 'best practices' as emergency measures."

[①] OECD Centre for Entrepreneurship, SMEs and Local Development (2009): The Impact of the Global Crisis on SME and Entrepreneurship Financing and Policy Responses

Box 3

Specific Measures for SMEs in UK and EU in the post crisis scenario

In an accompanying paper, Milne (2011)[①] discusses the post crisis regulatory measures including the Project Merlin Agreements in the UK that mandated banks to increase their exposure to SMEs as a part of the package. Whether this measure represented a good or a bad outcome was unknown. Unless the overall economy recovered, this resulted in higher loan losses. He therefore concludes that we need measures *focussed on the practicalities of improving the supply of SME lending, and not on inappropriate aggregate lending targets.*

[①] Milne, Alistair (2011): Small business finance in the UK and the European Union: Before and after the crisis. CAFRAL Conference Paper. Mumbai.

While the deregulation process allowed market forces to play, the markets tend to be exploitative when exchanges are between unequals. The post crisis response has been inclusive – bail-outs to the big players while pump-priming the MSME segment to create jobs. This logic applies in normal situations. If regulation monitors the capital adequacy of MSMEs and encourages their leveraging with formal institutions, information asymmetry would reduce and aid forward-looking policy formulation. This approach is relevant in normal situations as it helps the players to build buffers and insularity. A conducive financial architecture for the MSMEs helps them to de-ancillarise and diversify into local and non-traditional markets by removing risk concentration. The plurality of institutional approaches allows small players to experiment and also accommodate the needs of the disadvantaged in prudential prescriptions.

In a recent paper, Mattenheim and Butzbach (2011)[5] argue that alternative banks outperformed commercial banks and were insulated from the financial crisis. Using multi-country examples they argue that the alternative banks survived because (by being not-for-profit entities) they were not chasing profits, had a stakeholder-based governance and practiced social inclusion. These banks were not relying on capital markets for their liability products. Social inclusion need not be seen as a virtue. Localisation insulates capital sources to local areas and protects banks from the global upheaval, as the portfolio is likely to be local, and stable. In this context, alternative banking appears like a solution. However, for the mobility of capital a mix of local and global banking channels was needed. Narrow banking, and insulation from payment systems and global capital markets are important aspects to be seen when we advocate plurality of approaches. This approach isolates the effects of a crisis. Local institutions look at local markets and are inclusive, it is desirable to promote such institutions.

Inclusion by itself is not a virtue. This is demonstrated by the experience of sub-prime housing loans in US and microfinance in India. When microfinance emerged in the private sector, regulation responded positively by providing a supportive environment: (a) on-lending to Microfinance Institutions (MFIs) from banks were considered as a priority sector; (b) banks were advised to make lending to MFIs easy without a cap on end interest rates and (c) considering group guarantees as collateral for the purposes of asset classification, prudential and provisioning norms. MFIs were carrying forward the agenda of inclusion, and were fully aligned with the banking system. Even though what hit the microfinance sector last year was not a result of the global crisis, a reason for problems might be in the soft regulation provided by the central bank.

Box 4 shows that the issues commonly identified as a problem both in case of sub-prime and MFIs were: slicing of portfolios, which were securitised and sold in the markets; and the dynamics associated with being integrated with the global financial markets bringing in predatory tendencies in these institutions. Beirne (2008) identifies predatory lending (triggered by the need for a quick turnaround of profits) as poor analysis of the ability to repay; aggressive marketing of high-risk high-interest loans; promotion of complicated loan products not understood by clients; opaque charges and fees; and payment of illegal kickbacks. While there is enthusiasm in chasing the inclusion agenda, even this will have to go through a calibrated regulation. In a recent paper, Reddy (2011)[6] admits that it was a mistake to adopt soft regulation on a for-profit firm just because they were in the business of inclusion.

Irrespective of the regulatory imperatives, the state would be interested in this space and would take a proactive role, sometimes getting the banking system unawares, therefore it is important to have a regulatory regime that works in tandem with the public policy aspirations and also manage the tensions between commercial and welfare aspirations.

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[5] Mettenheim, Kurt von & Butzbach, Olivier (2011):Alternative Banking: Competitive Advantage and Social Inclusion, Paper presented at the Society for the Advancement of Social Economics 23rd Annual Conference Universidad Autónoma de Madrid, June 23–25, 2011

[6] Reddy, YV 2011: Microfinance Industry in India: Some Thoughts. *Economic and Political Weekly*, XLVI (41), October 08,2011. pp.41–49.

Box 4

Microfinance and Subprime: Are there similarities?

As MFIs tried to achieve the goals of poverty alleviation and sustainability, multiple changes and interplays could have precipitated the crisis. There was a substitution of grant funds by investments from commercial investors. MFIs shifted goals, strategies and practices, with emphasis on efficiency and productivity as against impact. The organisational form was transformed to gain acceptance from investors and regulators. However, both MFIs and regulators were unprepared for the pace of growth. MFIs were not equipped to assess the credit profile of the clients and could not provide inputs for the productive utilisation of loans. What started as not-for-profit activity snowballed into a major intervention for inclusion with a few large private sector players and multiple small medium and third sector players. Exponential growth coupled with soft regulation paved the way for the current situation.

Beirne (2008)[①] identified similarities between the sub-prime and MFIs. These were: providing access to financial services to the unreached segments; rapid, unsustainable growth followed by deluge of commercial capital; high interest rates; product innovation not backed by data; and reliance on technology that facilitated growth but distanced clients. In the case of microfinance, this was pronounced because social capital and trust (between borrowers, between borrowers and field officers) were the premises for healthy repayment rates.

McKee (2008)[②] also looked at similarities between sub-prime and MFIs. The issues identified were: offering unsustainable products to borrowers through predatory lending; wishful thinking that the current performance (increasing housing prices in sub-prime and repayment rates for MFIs) would continue; the provider and the user being far removed from each other through complex financial instruments; and soft-touch regulation.

Kiviat & Morduch (2010),[③] however, did not agree with similarities, but argued that these two issues come from different contexts. That both markets grew at a fast pace, had high interest rates and served the underserved clients was not sufficient to draw parallels because they came from different premises of owning a home and using the loan for a livelihood.

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① Beirne, C. 2008. Subprime Lending: Lessons for the Microfinance Industry. MicroCapital White Papers. Retrieved October 01, 2011 from http://www.microcapital.org/downloads/whitepapers/Subprime.pdf

② McKee, K. 2008. Meditations on the US subprime crisis: Lessons and implications for the international microfinance industry Retrieved September 29, 2011 from http://www.microfinancegateway.org/p/site/m/template.rc/1.26.9143/

③ Kiviat, B. & Morduch, J. 2010. Is Microfinance the new subprime? HBR Blog Network. Retrieved September 29, 2011 from http://blogs.hbr.org/cs/2010/11/is_microfinance_the_new_subpri.html

The post-crisis reform lost an opportunity in questioning the fundamentals. The focus on repairs overlooked structural weaknesses in the system. A key issue is the disconnect between the real and financial sector. Skewed pre-dominance of the financial sector was a challenge but nothing has changed. Financial sector has reclaimed its pre-crisis stature. The post-crisis repair has focused on the North Atlantic world. The issues are different in emerging markets, which need financial intermediation and penetration. The crisis and regulatory framework provide lessons on paths to be avoided. The focus of an inclusive agenda should be to reduce cost of capital and cost of transaction.

Systemic focus is the lynchpin for the new regulatory framework. This has links with large stakeholders whose actions may have systemic implications, particularly those that necessitate a publicly funded bailout. In this framework, the small get marginalised. The policy for dealing with future crises, precluding a fiscal cost, leave a vacuum in addressing the impact on small stakeholders. In such a situation, public policy interventions save the larger stakeholders yet again.

In this context, the principle of inclusion is important. The G20, as part of its efforts towards supporting the needs of the most vulnerable, developed a set of “Principles for Innovative

Financial Inclusion" (Box 5). The G20 Seoul Declaration of November 2010[7] reflects the commitment of all member countries to put these principles into practice.There is agreement between our arguments and the above principles.

Box 5

G20 Principles for Innovative Financial Inclusion

Leadership: Cultivate a broad-based government commitment to financial inclusion to help alleviate poverty.

Diversity: Implement policy approaches that promote competition and provide market-based incentives for the delivery of sustainable financial access and usage of a broad range of affordable services (savings, credit, payments and transfers, insurance), as well as a diversity of service providers.

Innovation: Promote technological and institutional innovation as a means to expand financial system access and usage, including by addressing infrastructure weaknesses.

Protection: Encourage a comprehensive approach to consumer protection that recognises the roles of government, providers and consumers.

Empowerment: Develop financial literacy and financial capability.

Cooperation: Create an institutional environment with clear lines of accountability and co-ordination within government; and also encourage partnerships and direct consultation across government, business and other stakeholders.

Knowledge: Utilise data to make evidence based policy, measure progress, and consider an incremental "test and learn" approach acceptable to both regulator and service provider.

Proportionality: Build a policy and regulatory framework that is proportionate with the risks and benefits involved in such innovative products and services and is based on an understanding of the gaps and barriers in existing regulation.

Framework: Consider the following in the regulatory framework, reflecting international standards, national circumstances and support for a competitive landscape: an appropriate, flexible, risk-based Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT) regime; conditions for the use of agents as a customer interface; a clear regulatory regime for electronically stored value; and market-based incentives to achieve the long-term goal of broad interoperability and interconnection.

Source: Official Website of the Toronto G20 (http://www/g20.utoronto.ca/2010/to-principles.html)

In terms of action, equity received lesser attention in the post crisis period. The impact of the crisis on stability and growth was visible in the developed economies and the immediate focus was to address these. Equity is fuzzy and lends itself to multiple interpretations. We argue is that inclusive regulatory policies are important for two significant reasons.

First: The nature of the problem is to be understood. Unless financial systems are inclusive, the dimensions of the problem will not surface and the policy responses would operate in a vacuum, without scope for analysis on the effectiveness.

Second: Inclusion provides a natural diversification for the financial sector. Since the poorer segments of the economy and the smaller firms usually operate in local markets, this segment is most likely to be insulated from the larger market vagaries.

[7] Leaders' Declaration, The G20 Seoul Summit, November 2010 (*www.g20.org/documents 2010/11/seoulsummit_declaration.pdf*)

Inclusiveness and development are in the regulatory realm. The sub-prime and the MFI experience shows that inclusion in itself is not sufficient. If the regulatory systems do not recognise the insular nature of inclusion, then it exposes the vulnerable sections to global volatility. Soft regulations encourage a large number of players to compete in the market. The power balance between the providers and users (who are vulnerable) is not equal, encouraging predatory practices. Regulation should recognise the motives of the institutional players. The for-profit players should be subjected to strong regulation that involves client protection, while the alternative banking channels whose governance is locally embedded could be subjected to softer regulatory regime. The experience of the European alternative banks has been good but it is not true of India. The governance structures of the alternative banking channels have to be deeply embedded with the local stakeholders. We should look at each player from the point of view of the expected behaviour than purely the form of incorporation.

4. Regulation and its interface with public policy: How do elements of public policy, markets, and regulations outside the purview of a central bank treat inclusiveness?

The regulation of the financial system can be a multi-targeted approach. Already, regulation is being imbued with a macro-prudential focus to address systemic risks. The monetary policy framework is modulated to incorporate signals from the financial sector. This can be extended to influence the design of financial regulation for furthering equity. This could be done without an explicit subsidy element. An inclusive regulatory regime should typically include an institutional and legal framework for a healthy credit culture even for inherently vulnerable segments with decentralised monitoring and heightened buffers. We recognise that certain portfolios (like agriculture) are risky because of the vulnerability and volatility of the underlying income streams. From the perspective of financial regulation and public policy, this portfolio should be with the banking system. We recognise that this portfolio will have a higher default due to the riskiness and require institution level buffers. The Indian experience shows that the mandating of inclusion of such portfolios through hard targets has worked but resulted in unintended consequences.

Box 6

Examining the quality of Interventions

In 2004–05, the Government of India directed that credit to agriculture should be doubled in 3 years, and the banking system pay attention and grow the “non-lucrative” sector. This was accompanied by an interest rate subvention of 2 per cent. The lending targets were achieved. However, there was no associated growth in agricultural production and productivity. Was the increased finance filling a latent gap, replacing costlier borrowings or being adversely used?

In 2008–09, a year after the doubling plan, the Government of India announced a write-off of agricultural loans amounting to around US$15 billion, thereby partly cleaning up the balance sheets of the banks. This raised the following questions:

(a) Did these two events have a causal relationship?

(b) What was the impact on the credit culture?

(c) What were the benefits for the banking system?

(d) Was there a better mechanism to use these resources more efficiently as not only public policy intervention that manifested itself through a regulatory regime?

The instance (Box 6) shows an imprudent policy intervention, affecting the performance of banks. However, if banks were carrying non-performing assets (NPA) where the exposure was taken by mandate, then these consequences had to be met by the state. By writing off loans and injecting liquidity, the state took the NPAs off the books – a back-ended subsidy to the vulnerable; a desirable public policy measure. But it affected the business of the banks system by influencing the credit culture. Policy interference in institutional credit has not always yielded positive results. Vaidyanathan (2008)[8] argues that borrowers expect loans to be written off, building a culture to default. Subsequent to such waivers, banks are cautious in disbursing fresh loans as seen after the write-off (Aiyar, 2008).[9] Cole (2009)[10] found that agriculture credit increases by around 5–10% in an election year, without a corresponding increase in output. Cole also finds evidence of targeted forgiveness immediately following elections, with a decrease in overdue repayments in agriculture credit, suggesting that write-offs are occurring.

On the positive side, such portfolios help in the diversification of risks, are insular to global economy and economic cycles. The activities depend on extraneous factors of productivity. The financial system should learn to deal with the peculiar cyclicality of the portfolio.

Inclusion is also about providing a payment & settlement system that does not impose heavy costs on the smaller customer, with graded fees; providing interoperability between channels and institutions; making remittances simpler; and having regulations to safeguard interests of the disadvantaged in transactions between unequals. With the technology backbone available to the banking system globally, this is achievable. Technology could be democratic when it comes to variable costs per use. Public policy should support such architecture for inclusion.

Regulation should provide a level playing field by mandating all institutions to deal with certain segments of the economy (such as agriculture, small industry, education, and housing). This ensures that market-based players cross-subsidise the mandated segment with profits from the other segments of their business. The state should constantly review the institutional architecture and provide support where necessary.

Managing volatility in variables such as interest / exchange rates is important. The ability of the vulnerable segment to absorb volatility is limited. For the small stakeholders, certainty about their present and future cash flows is critical in managing their finances. Volatility in extraneous exposes them to risks that they cannot manage. Interest and exchange rates have an impact on small businesses and they need viable derivative markets to hedge their risks.

State-directed solutions were inefficient and open to corruption, while the solutions from the market resulted in rent seeking. Both are to be addressed in the context of inclusiveness.

- Economic reform and de-regulation opened opportunities for smaller firms to grow. The barriers to entry were removed. The Statist approach made existing players with "rights" show monopolistic streak. Reform broke this logic.
- Market-based solutions were not always the best in the interest of inclusion. The markets operate for profit maximisation. A deal between two unequal players in the

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8 Vaidyanathan, A. 2008. Farm loan waiver: a closer look and critique. The Hindu, March 06, 2008; Retrieved October 28, 2011 from http://www.hindu.com/2008/03/06/stories/2008030654731100.htm

9 Aiyar, Swaminathan, S.A. 2008. Loan waiver: Not an election winner. The Times of India, March 09, 2008. Retrieved October 28, 2011 from http://swaminomics.org/?p=227

10 Cole, Shawn. 2009. Fixing Market Failures or Fixing Elections? Agricultural Credit in India. American Economic Journal: Applied Economics, 1(1), January 2009, pp. 219–250(32)

market results in the vulnerable being exploited. In profit maximisation one of the parties is in a better position to seek rent.

- The vulnerable need ammunition to bring them to the negotiating table. This needs some safety nets on the "downside"; a power to stay while negotiating.

Inclusiveness ensures that the "excluded" are provided smaller windows/doors to access the services of the mainstream; the entry barriers are graded; it does not shut somebody from acquiring the strength to negotiate. It is about providing safety nets to the small not only in a post crisis situation but also in normal course.

Inclusiveness recognises people excluded at the frontiers. It is about proactively getting them on to the mainstream; recognising the difference between integration and inclusiveness. Integration is about passing the risks and rewards. When retail investors take direct positions and institutions do transaction and information intermediation (issuer/arranger/ rating services), it is integration – the investors lose the cushion of a regulated financial institution in between. In this approach the most vulnerable link is exposed to the risky part of the chain. In inclusion we believe that there should be systems of insularity and safety nets.

The regulation of the financial sector cannot operate in isolation of public policy. Public policy may ignore the logic of the financial system, when populist measures are taken. Bail-outs, write-off support from the exchequer, are political decisions. The challenge of a regulatory regime is to insulate the financial sector from idiosyncratic political decisions, and calibrate the policies according to the public policy moves. Public policy space can be engaged better with data if we recognise the public policy imperatives.

The public policy favours an inclusive system. Banking operates on commercial principles. While there could be mandates on inclusiveness that requires cross-subsidisation in the bank system, the challenge of the regulation would be to mandating the banking system on certain measures of inclusion that engages the public policy discourse in a desirable direction.

A critical issue in this regard is the functional efficacy of cross subsidisation in a free market enterprise, where the financial institutions may not want to lend to the poor and look only for public policy intervention. In this context it is important to recognise that the effective functioning of the financial sector requires an entire set of institutional, legal and infrastructural support which are inherently provided as part of public policy. The institutions, therefore, need to recognise this subsidy element and pass on part of it in the form of cross-subsidies to achieve the objectives of inclusiveness.

5. Horizons: how does the regulatory system develop long-term horizon to stay invested in the "poor"?

The incentive structures in the corporate and the banking world have shifted towards a significant element of variable pay linked to performance (and to the performance of the markets). The variable pay element can also take the form of instruments embedded in the market. With disintermediation in the financial sector, the shock absorbers are getting thinner. We find individuals, instruments, institutions all directly or indirectly invested in the market place. The horizons of the markets got shorter as the euphoria of announcing quarterly results gained pace. In general the business horizons will be shorter than regulatory horizons. Therefore market players have an in-built incentive to enhance profits/performance. The incentive to take profits from the future is stronger when the cash in performance is measured immediately and incentives can be encashed in a very short horizon. This is a recipe for a bubble build up.

The emerging accounting policies indicate a move towards fair value and mark to movement. The IFRS standards on recognising property and equipment at fair value, removes the intent of a going concern recognised by the principle of conservatism. While there merits in fair value accounting with the associated disclaimers, this adds to the subjectivity on non-fructified transactions. The Basel III norms on capital adequacy ride on the IFRS valuation of assets. With subjectivity being employed on provisioning, prudential write off and coverage of non-performing assets, an added subjectivity makes the balance sheets of the banking system more opaque. These norms impose pressure in a crisis when the underlying markets slump and institutions book losses and lose capital adequacy for non-operational reasons.

If we consider the distortions in the shares of the real sector versus the services sector and the rate of growth of the services sector, the shift in the balance from "performance" the "reportage" is evident. Pure market based solutions, polarise the world between those who can (entrepreneurs) and those who cannot. Regulation cannot work under such assumptions. There is enough literature on the concept of financialisation and its effects as demonstrated by the complexity in which the sub-prime mortgages were entangled. In India for instance the growth of the software services sector got disproportionate rents of the efficiency induction into the real sector demonstrating the shifting power balance. Blackburn (2008)[11] argued that the regulatory machinery mimicked the developments in the market by endorsing the new instruments and engaging with the innovations rather than applying breaks on the related developments in the financial sector. An early warning signal from the economy came from the dotcom sector a decade earlier. However, the financial sector remained detached from the happenings and assumed that such a phenomenon would not hit the financial sector.

The regulatory horizons need to be longer and consider long-term implications. For instance, let us look at the implication of debt restructuring plans in two contrasting industries:

- In the airline or similar industries, when regulation permits a debt restructuring, there is a cyclical/counter cyclical performance logic that will generate optimism that the industry will recover because of other measures that will prop up the industry/firm.
- When we apply this logic to sub-prime or MFI loans, will the underlying economic activity recover or it results in postponing the haemorrhage? If it is an inevitable bad news, we only make the current management look good.

We argue that (a) the compensation and pay off structure of the financial structure has aligned with market indices; (b) the accounting standards and policies have provided options for recognising gains/losses that are not consummated through transactions for certain purposes, including that of capital adequacy; and (c) the crisis emanating out of an economic phenomenon that hits a particular industry is dealt through restructuring, basically postponing the problem to the future. The assumption of recovery might not be equally valid for all sectors and this has to be applied after understanding the nature of the underlying activity.

These are illustrations that inflate current profits and put the firms into multiple problems of profitability, capital adequacy and a resultant liquidity in case of a crisis. The crisis will also have a contagion effect when there is no insularity and the assets are sliced and dealt to other finance players in the market place. We need to address how this affects equity and inclusion. The answer for such a question is a bit circuitous but we shall attempt to give one.

If the horizons are shorter, institutions book higher quarterly profits. Every time profits are booked, the benchmark for a higher recognition of profits goes up. In such situations, firms become conscious of the transaction costs and the return on each deal. Investing and staying with poor customers takes longer to break even. These portfolios tend to be taken

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[11] Blackburn, Robin (2008): The Subprime Crisis, *New Left Review,* No.50, March–April 2008. pp.63–106.

out of the transactional portfolio. The smaller clients in any case do not have a voice or the power to negotiate, and get left out. This is a result of regulation getting nearer the markets.

This situation is corrected with the state mandate. The markets also find arbitrage opportunities. In both the cases, it would make sense for the banks to engage with this segment directly. Specialised firms that deal with the segment emerge, operating in niche markets, and bundling the transactions. These bundles will find their way to the secondary markets. The state-mandated obligations and paper available as a result of an arbitrage due to market failure both emerge. The institutions hold papers that they trade at shorter horizons, but the underlying portfolio is looking for a longer horizon engagement as in case of housing mortgages. This mismatch in horizons creates tensions. In small crisis situations it is covered through rating, insurance and restructuring exercises that address the symptom. However, when the bubble builds, it is too large for the system to deal with, inviting a public policy intervention.

Box 7

Nudge and Push

In achieving the balance and including "have-nots", how do we ensure that regulation does not become repressive? We examine the difference between nudge and push. Push is a strategy where hard targets are set and players are penalised. The mandate to lend to the priority sector including agriculture and weaker sections in India is an instance of push. Nudge, on the other hand, opens regulations for innovation. Push controls rates; assigns areas for coverage; mandates connectivity through a prescription. Nudge encourages markets.

The concept of nudge can be seen through the example of microfinance in India. The regulatory intervention for MFIs started in 1999 by setting up a Task Force on Supportive Policy and Regulatory Framework. In 2000, a special cell was set up in the RBI to encouraging microfinance following the monetary policy announcement. In 2002, the RBI constituted multiple informal groups to examine delivery of microfinance. On the recommendation of these groups, banks were advised to provide linkage with Self Help Groups (SHG); incentivise branches financing SHGs; and make SHG financing hassle free. In 2005, the Khan Committee proposed a Business Facilitator and Business Correspondent (BC) model for expanding outreach, with a soft regulatory approach. In 2008, the Rangarajan committee recommended that MFIs should have greater legitimacy, accountability and transparency to have better access to funding (equity, debt and savings). In 2009, the Raghuram Rajan Committee recommended the entry of private well-governed deposit-taking small finance banks offsetting their higher risk from being geographically focused by requiring higher capital adequacy, a strict prohibition on related party transactions, and lower allowable concentration norms, relaxation of the BC model regulation, so that financial services can be provided by a wide range of local agents. It also recommended decontrol of Interest rates. The Economic Survey 2003–04 said that regulatory reforms to integrate MFIs with the formal financial architecture might help as would develop the concept of agent banking. The Economic Survey of 2008–09 recommended that microcredit should be extended to cover production, consumption and other credit needs such as housing and debt swapping. None of these reports or Committees mandated the banking system on anything specific, but were recommendatory, signalling where the central bank would wish the sector to move.

If the public policy mandates the banking system on inclusion, should such target be achieved through a lightly regulated leveraged agent? Are market-based solutions replacing welfare expenses? What were the purposes for which the clients were borrowing and were these purposes a function of the states' failure in delivering welfare? Institutions that fall under a regulatory framework are being mandated to serve these customers. These institutions are subject to the rigors of prudence – asset classification, provisioning and capital adequacy. However, the horizon problem pushes the players to aggregation and looking at regulatory arbitrage. They trading in mandates – a phenomenon that we discuss in the next section.

The regulatory approach of continuous modulation preventing short termism would be relevant. One externality caused by market solutions is the subservience to market movements. The more efficient the market, the greater the dependence. Accounting standards, regulatory guidelines and institutional behaviour all place value on the immediate. Small stakeholders suffer most since their engagement is seen as a charge on current profits, irrespective of long-term gains. It is important for financial sector regulation to accommodate a long-term perspective in designing policies for financial institutions.

Regulatory horizons have to work in tandem with public policy and expand horizons. Mundane accounting measures, which are rule-bound, should also keep this perspective to recognise earnings on the basis of 'form' rather than 'substance'.

6. 'Paper' Solutions: How do we look at exotic financial instrument innovations that are built on the portfolios of the poor and its relation to the real economy?

The last two decades have seen a shift in the discipline of finance. Though financial innovation has been associated with economic history, (Tuffano (2003),[12] Goetzmann and Rouwenhorst (2005)[13]), recent innovation was qualitatively different from its earlier variants. Translation of academic contributions into reality coupled with increase in computational power defined innovations. These innovations were aided by benign regulations. Even before the crisis, the influence of innovation on economic development was not settled. The crisis demonstrated the downside of unfettered innovation and strengthened the case for 'responsible innovation'. In the non-financial world, innovation is considered a virtue. However, the financial sector is different for three reasons: (a) the financial sector leverages on public funds; (b) the financial sector inherently has asymmetric payoffs; and (c) deep interconnectedness leads to an extremely sensitive contagion. All these accentuate the adverse outcomes of innovation.

Regulation has to distinguish between different sorts of innovation. The risks of unanticipated consequences tilt the balance of regulation in favour of conservatism. Disallowing unhealthy innovation must be the driving objective, even if it implies prevention of some useful innovation.

Even in the case of vulnerable segments of the population, the financial system thinks of financial instruments. Financial sector regulation can mandate targets but this should go hand in hand with a reality check. What, for instance, is the implication of mandating health insurance coverage to the poor? How does this play out, when the health centres are not functional? A study by Banerjee, Deaton and Duflo (2004)[14] showed that the poor in Rajasthan would use private doctors or local mendicants for treatment. The qualifications of the 'private doctors' showed that about 82% of them did not have a medical qualification. Providing a health cover for which the poor pay would be a dis-service as they cannot be

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12 Tufano, P., (2003): Financial Innovation, in G. Constantinides, M. Harris and R. Stulz (eds.), Handbook of the Economics of Finance (Volume 1a: Corporate Finance), New York, Elsevier

13 Goetzmann W, and Rouwenhorst G, ed. 2005. The Origins of Value: The Financial Innovations that Created Modern Capital Markets. New York: Oxford University Press

14 Banerjee, Abhijit; Deaton, Angus and Duflo, Esther (2004): Healthcare Delivery in Rural Rajasthan. *Economic and Political Weekly.* 39(09) Feb 28, 2004 pp.944–949.

compensated for a financial outflow. The innovations in the financial sector have to be meaningful and calibrated with the public policy.

Regulation in India does not permit non-banks to collect deposits. However, in an experiment undertaken by Kshretriya Grameen Financial Services [KGFS] in Tanjavur District of Tamil Nadu in India, the poor were offered Money Market Mutual Funds packaged as savings products[15]. If the banking system has not penetrated, is it fair for the poor to have access to liquid instruments such as money market mutual funds? How does regulation draw the line between selling a market-based product for want of basic services? How should the regulatory system deal with such an innovation? Should the poor be subjected to such solutions?

The logic of originate to sell is that the poor do not have access to financial instruments from the mainstream – deposits, loans, cash transfer facilities and it is necessary to find last mile service providers and integrate them through refinancing/ securitising/ outsourcing portfolios. If the players are lightly regulated, the regulatory arbitrage consists of:

- Negotiation on prudential norms (provisioning, capital adequacy, leverage) with a short-term horizon, thereby producing paper profits.
- The entire sub-prime superstructure was built on investors far removed from the users and there were layers of complex papers based on codified information.
- Vulnerable sections get sucked into the global financialisation machinery. Beyond stability is the objective of buffering the vulnerable. Connecting the real and financial sector is the most significant aspect of furthering the equity agenda.

Defending alternative banks and local institutions Mettenheim and Butzbach (2011)[16] argue that they had stability and better performance because they were rooted in the context and originating-to-hold than to-distribute. Berndt and Gupta (2009)[17] argue that a secondary market in loans creates moral hazard and adverse selection. The banks selling loan books in secondary markets did not outperform the peers in risk-adjusted abnormal returns.

The problem with originate-to-sell as a strategy in achieving inclusion is financialisation of the chain. The banking system intermediates between savers and borrowers. With the originate-to-sell model, the banking system, while performing the role, is transferring risks off its books to a player who is interested in juggling portfolios and not in the end-use. This superstructure distances the client from the provider of resources through a chain of paper – that is rated, evaluated, insured and traded. The paper so traded for all practical purposes should be brought to a closure by the institution interfacing with the ultimate borrower. However, the paper does not reside in the books of that institution:

- The institution dealing with the clients is over-leveraged on the assets under management. Prudential requirements are circumvented, by holding the portfolio off-balance sheet.
- The buyers of the paper represent funds from individual/ institutional investors.

The links in the chain are independently regulated without convergence, and the portfolio is lost in the complexity of evaluation, rating, insurance and trading. This is needed for complex multi-country, multi-year transactions needing intellectual prowess to evaluate and predict

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15 Rajshekhar, M [2010]: The Local Touch *The Economic Times, July 22, 2010*

16 Op.Cit.

17 Berndt, A. & Gupta, A. (2009), "Moral Hazard and Adverse Selection in the Originate-To-Distribute Model of Bank Credit", *Journal of Monetary Economics*, vol.56 n.5: 725–743

the future. It is not necessary for simple loan transactions with the micro enterprises and entrepreneurs with short tenor relative certainty in the underlying activity.

In introducing complex transactions, the distance between the provider and user of resources (both of whom could be local) is stretched through a complex chain of transactions – each link seeking its rent, adding to costs. A better approach is to diversify risks through insulation rather than integration of such portfolios. From the perspective of equity, we argue that:

- Mandated lending for the poor undertaken by one type of institution (say banks) should not be tradable, in order to ensure that the mandates for the channel are met;
- If they are tradable, then the products should be available to the customers on the same terms that are available directly without passing on the channel costs to the customer.

The smaller the customer, the more difficult it is to negotiate with the financial system and thus it is the responsibility of the regulator to negotiate with the financial system. At each stage, regulation must examine if intermediary instruments are resulting in leveraging of the unregulated players, creating regulatory arbitrage, creating multipliers not related to the real economy and resulting in financialisation. Subject to these caveats, the portfolios should be insulated from the markets. While it is attractive to open the up-sides of a seamless global market, the smaller players need safety nets from the vulnerabilities of the downside, till they have buffers to manage it themselves or till they remain poor or marginal.

7. Technology as a Game Changer

An inclusive financial sector effectively allocates capital, lowering the cost of capital (Sarma, 2008)[18]. An underdeveloped financial sector impedes growth by limiting access to funds, especially to small entrepreneurs. Equitable growth over longer periods is possible only if accessible financial services are provided to all, irrespective of social or economic standing.

Technology is a critical game changer in providing access to financial services. It can significantly alter delivery channels and provide viable, cost-efficient solutions to reach out to all sections across geographic and demographic divides. Already, different models are being experimented in countries like Philippines, Brazil, Kenya, India, South Africa and Mexico. Apart from the costs, technology is a great leveller that removes biases in physical modes. The critical contribution of technology in serving the small stakeholders is in accurate targeting of customers on the basis of data. Advanced data management tools make it possible to analyse customers across multiple dimensions. Such analysis helps in enhancing product design, pricing and risk management on exposures to the small stakeholders.

In the past decade, the use of technology in the financial sector has grown manifold. Technological developments have led to innovations and development of alternate channels for inclusive financial service delivery. See Box 8 for innovative examples of ICT usage in Financial Inclusion. These branchless banking models reduce the transaction costs of providing services to remote areas, and making it easy to handle large transaction volumes. Examples of the products and services provided under the branchless banking model are:

[18] Sarma, M. 2008. ***Index of financial inclusion.*** Working paper No 215, Indian Council for Research on International Economic Relations.

Box 8

International experiences in use of ICT in financial inclusion

Correspondent banking in Brazil:

Brazil: Correspondent banking was introduced in 1973, but it gained legal acceptance only in 1999 through a resolution passed by National Monetary Council (Ansón & Gual, 2008).[①] This model was adapted to address the barrier of physical access where many municipalities did not have a bank branch. Capillary networks and agent points such as post offices, pharmacies, neighbourhood stores, lottery kiosks and other retailers have been used to extend the reach of financial services (Ansón & Gual, 2008).[②] The Central Bank of Brazil enabled the growth of this model by allowing regulated financial entities to hire agents anywhere in the country. It provided clearing services that could be delivered by the agents; the necessary guidelines on contracts; and the reporting requirements to the Central Bank of Brazil.

BancoPostal, a financial services organisation, was established by Correios (postal service provider) and Bradesco, a private bank. Bradesco leverages Correios' network to improve its outreach. Smart cards and PoS terminals are used for the transactions.

The Philippines: In the Philippines, technological and institutional innovations enabled the growth of two models of mobile financial services: the bank-based Smart Money and the non-bank-based G-Cash. It was permitted by the Central Bank of the Philippines on a "test and learn" basis, when little relevant regulation was in place. Both models continue under regulation on the issuance of electronic money. The Filipino e-money circular, tailored to the risks involved with the types of financial services, creates a level playing field for both bank and non-bank providers, while maintaining the integrity and stability of the financial system. Beyond the flexibility shown in permitting the original launch of Smart Money and G-Cash, the Central Bank of the Philippines has made space for innovation, entering into dialogue with industry to allow mobile financial services to evolve.

South African Bank of Athens's Wizzit (South Africa)

Wizzit operates in South Africa. Its mobile money system offers a set of basic features: cash in/out, payments, and airtime top-up. In addition, Wizzit provides debit cards that allow its users to interact with a range of POS devices and ATMs. Wizzit deploys over 800 "WIZZkids", previously unemployed individuals as sales agents. These agents engage in financial capability education when they also talk about the risks of cash transactions.

Safaricom's M-Pesa (Kenya)

In 2007, Safaricom, launched M-PESA a mobile money service. M-Pesa features money transfers, airtime, and bill payment services. Over 7 million people, a fourth of Kenyan adults, use the service. Safaricom's initiatives are centred on influencing usage patterns of their existing customers. M-PESA was the first non-banking mobile network offering financial services to its clients. Before getting permission to operate M-Pesa as a separate payments system, not covered by banking law, the Central Bank reviewed the technology platform to ensure it was secure and safe. It was ensured that all the customer funds would be deposited in a regulated financial institution and the interest accumulated on these funds has been allotted to a not-for profit organisation (Safaricom Trust), (Mas & Radcliffe, 2010).[③]

(Drawn from the Report of Financial Inclusion Experts Group)[④]

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① Ansón, José & Gual, Laia Bosch. 2008. Financial Access and Inclusion through Postal Networks: Evaluating the Experience of Brazil's Banco Postal. In José Ansón and Joëlle Toledano (eds) Postal Economics in Developing Countries, Universal Postal Union. Berne (Switzerland).

② Ansón, José & Gual, Laia Bosch. 2008. Financial Access and Inclusion through Postal Networks: Evaluating the Experience of Brazil's Banco Postal. In José Ansón and Joëlle Toledano (eds) Postal Economics in Developing Countries, Universal Postal Union. Berne (Switzerland).

③ Mas, Ignacio& Radcliffe, Daniel. 2010: Mobile Payments Go Viral:M- PESA in Kenya Retrieved October 30, 2011 from http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/M-PESA_Kenya.pdf

④ G20 Financial Inclusion Experts Group, "Innovative Financial Innovation: Principles and Report on Innovative Financial Inclusion", May 2010

1. Financial services through post offices (savings, remittances) in Brazil, India or China;
2. Card-based no-frills savings accounts which can be accessed at post-offices and points of sale like supermarkets (eg MZANSI accounts in South Africa).

The role of public policy is that of an active facilitator. It may not be possible for financial institutions to bear the burden of technological investments at the scale required, and public funding for creating the backbone would serve the cause of inclusion.

The introduction of technology and its widespread usage leads to reduced outlays and reduced transaction costs, replacing the human interface and making it attractive for large players to participate in the inclusive market for the poor. The following issues need to be considered:

- As technology evolves from computerisation of banks to transactions involving ATMs to Internet and mobile-based transactions, some of the fixed costs of technology get externalised, with the banking system incurring only the handshake technology costs. Unlike investment in software and hardware for computerisation that was fully borne by themselves, banks could ride on investments made for communication facilities through the Internet, where they could bear only a part of the fixed and marginal costs and ride on the technology that was not designed exclusively for the banking system.
- When we move to mobile technology, even the costs of instruments at the point of sale (POS) are transferred to the customer, for whom, this is a smaller incremental cost because the instrument serves multiple purposes. It also reduces the handling of currency.
- The challenge for the regulatory system would be to reduce final use of cash, with settlements happening on a non-cash basis. While transactions are settled electronically, the instances of residual cash settlements are still high, particularly with that segment of the population that does not have access to technology. This must change.
- The recording of transactions itself is shifted to the customer, a cost advantage. The size of the transaction becomes irrelevant for the banks.
- The role of regulation is to provide interoperability, evolve operating and security standards, monitor payments systems and ensure that user charges are favourable. The benefit of the sunk costs on technology must be structured in favour of the poor.

Implications and Challenges for Regulation

In Brazil, the government channels its compulsory cash transfer programs through bank accounts and has stipulated that bill payments are to be considered as regulated banking activities, ensuring that the banking sector plays a role in financial inclusion (Mas, 2009)[19].

Kenya is an example of technology innovation and regulation working hand-in-hand to develop a model that offered adequate ‘prudential comfort’ to the regulator (Mas & Radcliffe, 2010). However, this regulation did not ensure a level playing field – banks in Kenya are not

[19] Mas, Ignacio. 2009 “The Economics of Branchless Banking” Innovations, 4(2) (Boston, MA: MIT Press, Spring).

permitted to utilise agent networks for customer transactions (Mas & Radcliffe, 2010), thus placing Safaricom at a perceived unfair advantage.

The Brazil model and Kenyan model throw up two distinct lines of arguments with respect to regulation – one in favour of involvement of banks in mobile and branchless banking services and other supporting diverse networks for encouraging innovation. Both these models however, have to be regulated by the banking and / or telecom regulations as the case may be. These models also give rise to concerns about bringing non-bank agents under the umbrella of financial sector regulation. Most of the mobile banking services are also subject to anti-money laundering acts of the respective countries. The Indian approach of going for a bank-led model was informed by two key considerations – security issues and the float. Allowing mobile companies as banking correspondents was intended to optimally leverage the footprint advantage that mobile companies have.

The final challenge is that clients can become easy targets for banks, banking correspondents and mobile network operators for cross-marketing their products and services. There are also regulatory challenges associated with mobile payments, issues related to client protection, financial awareness among the low-income. Unbanked groups have the potential to derail inclusion efforts. A rigid regulatory framework stifles innovation and restricts ease of access, undermining the financial inclusion goals. A lax regulatory framework may induce moral hazard and lead to failures and crises.

Most countries have explicitly laid out Know Your Customer (KYC) norms where the customer has to register / apply for mobile financial services through correspondents. National IDs are used where available (eg Kenya). Countries issuing national IDs are at an advantage when launching branchless or mobile banking services, as the cost of complying with KYC norms significantly comes down.

Subjecting customers across all segments to the same KYC norms may not be appropriate. Regulatory frameworks may have to define transactional limits below which customers can be exempted from KYC norms or be subjected only to a limited set of requirements.

8. Conclusion: what should be a stable state regulatory approach and philosophy be, given the learnings from the crises of the past?

The post-crisis reform process has been criticised for its potential impact on financial access, particularly in view of the cut in welfare expenditures because of strained fiscal balance sheets. The additional costs imposed on financial institutions to make the financial system safer are seen as impacting the access to finance by the small stakeholders. This paper argues that financial access is a multi-dimensional issue having nuanced dimensions and needs to be cohesively integrated into the broader financial sector regulation. While at one end, financial regulation addresses stability, it should engage intensely with the small not merely as a developmental objective, but more critically towards creating a systemic, well-diversified buffer spread across individual players, individual banking institutions and the economy.

The above framework requires a shift in the approach to financial sector regulation. The hitherto dominant paradigm of market-based regulation has limitations in integrating non-market objectives into the framework – be it stability or equity. Financial markets are one critical element of the financial system but they cannot encompass financial regulation. Financial regulation needs to have a broader mandate driven by the imperatives of all key elements – stability, growth and equity.

Regulation cannot be at cross-purposes with public and monetary policy. Internal cross-subsidisation and expansion of portfolios embracing the excluded might reduce the risk of a public policy override. It is necessary to constantly monitor the portfolio of the vulnerable to ensure that there is no build-up that threatens the credit culture and the balance sheets of the players.

Inclusion could be mandated through either a push strategy (by setting hard targets) or through a nudge strategy (but creating an atmosphere for the players to look at the markets). In case the regulatory regime adopts a market-friendly nudge strategy, care should be taken to ensure that predatory practices do not reign, and consumer protection norms are in place.

The regulation needs to be inclusive to ensure that there is enough insularity from global volatility. To the extent possible, regulation should provide safety nets to the vulnerable. Risk exposures faced by small stakeholders need to be managed as part of public policy at a macro level. The framework for the functioning of markets needs delineation by the overarching regulatory umbrella. The greatest contribution of regulation to improving the lot of small stakeholders would be to enforce the grounding of the financial sector in the real sector.

Financial innovation, particularly the kind that involves the portfolios of the poor, cannot be unfettered and should be bound by regulatory prescriptions. International standard setters need to provide sufficient space to national authorities to address issues of small stakeholders in their given context.

Technology could be a game changer and the central regulatory authorities should usher in a policy that helps the inclusion agenda to embrace technology. The transaction costs could potentially be minimal and the fees charged to the vulnerable should encourage them to embrace formal financial systems.

Appendix 1

Review of the RBI approach towards financial sector regulation

Approach of the RBI in addressing the equity issues in the financial sector

Banks in India have played an active role in perusing 'social objectives'. The central planning and development model called upon the banks to contribute to these objectives, in the form of sectoral credit allocations, directed credit and regulated interest rates. It resulted in much inefficiency. The key focus during the reform process for the 1990s was to correct some of these inefficiencies without losing sight of the fundamental objectives. Even as the banking space was to align with the imperatives of modern banking, the connection with the real macroeconomic imperatives was to be maintained. It has been a big challenge on how to nuance/modulate prudential regulations, which inherently derive from a market-based model epitomised in the Basel principles, to align with the intended outcomes in terms of equitable growth. The priority sector guidelines, for example, have been revisited many times to ensure achievement of the intended objectives. Having such a mandate embedded in a market-based interest rate regime and non-dilutive prudential norms is no mean achievement.

The regulatory approach recognised that the objective of equity inherently involves subsidy. While subsidisation is a fiscal matter, the financial sector also contributed to cross-subsidisation in the interest of public good and financial stability. This element of cross-subsidisation was introduced in discreet/indiscreet forms – in monetary policy, prudential regulation, payment and settlement systems and in currency management and market regulation.

Monetary policy is guided by the key objectives of financial and price stability. Irrespective of the operational framework, these objectives have been a constant.

Prudential regulation has tightly regulated deposit taking institutions and systemically important financial sector segments. The other segments can be differentially regulated. The microfinance sector was regulated based on this approach. Even the revised approach was focused on ensuring that the interests of the vulnerable section are protected.

The non-banking finance companies (NBFC) initially expanded in an unregulated space. As it grew big and problems with regard to deposit taking companies surfaced, a regulatory framework was put in place. Deposit taking entities outside the banking space were restricted. Non-deposit taking finance companies grew significantly, leading to issues of regulatory arbitrage between banks and NBFCs. The regulatory approach was accordingly nuanced to focus on large systemically important non-deposit taking entities.

The cooperative sector had complex problems, including the existence of deposit taking entities registered as banks. There were regulatory overlaps between the central bank and the provincial laws. A unique arrangement for a joint oversight through an MoU between the central bank and the state governments was formulated. The central bank also committed to taking up the responsibility to train the personnel.

India has a stated policy of 'improving access' to payment and settlement services across all geographical/demographic sections. The ability to transact through non-cash modes has been acknowledged as a key game changer in financial inclusion. It is acknowledged that electronic payment removes the biases in physical modes making access easier. Numerous initiatives have been taken in this direction.

Prudential policy measures have been articulated with a larger objective of inclusion. The credit deposit ratio has been a key policy variable and is used as an indicator for addressing regional disparities in bank credit. In applying prudential guidelines, a differentiated approach is adopted for agriculture, MSME and small value housing loans for applying risk weights.

Under the Priority Sector Lending (PSL) Scheme, commercial banks in India are required to lend 40% of their advances to identified sectors – agriculture, MSME, microcredit, education, small value housing. There are sub-limits to be complied with, including a requirement of 10% of total advances to the weaker sections.

Under the Differential Rate of Interest (DRI) scheme, all commercial banks are required extend loans at concessional rate of 4% per annum to low-income groups for productive purposes. Borrowers with an annual family income of less than Rs.18,000 in rural areas and less than Rs.24,000 in urban areas are eligible to avail of the facility.

Financial Penetration has been used as an effective instrument for equity. Banks are free to open branches in habitations with population of less than 50,000 without restriction. At least 25 percent of the new branches have to be in unbanked centres. To improve banking penetration in the North-East, a relatively unbanked region, the RBI has offered to fund the capital and running costs of branches for five years, if the State Government is willing to provide premises and appropriate security. Banks have been given full freedom to open branches in this region without any restrictions. Banks in this region get a subsidy of up to Rs. 12,000 (~USD 240) per month for implementing satellite connectivity in their branches.

Under the banking correspondent model, a bank may use NGOs, retailers, corporates, or individuals for (i) disbursal of small value credit, (ii) recovery of principal / collection of interest (iii) collection of small value deposits (iv) sale of micro insurance/ mutual fund products/ pension products/ other third party products and (v) receipt and delivery of small value remittances/ other payment instruments. Banks will leverage ICT based solutions for this model.

The *Electronic Benefit Transfer (EBT) Scheme* gives a designated bank the mandate to disburse government payments to the beneficiary, using biometric smart cards, hand-held devices at the locations of BCs of the bank.

The *Financial inclusion Plan* envisages the provision of banking access to all habitations with population of 2,000 and above by March 2012. All banks have formulated a three-year financial inclusion plan with self-set targets for brick-and-mortar branches and business correspondents. The implementation of these plans is being closely monitored. To achieve greater financial inclusion, all banks should provide a basic banking 'no-frills' account with 'nil' or very low minimum balance as well as charges. This provides accessible to a vast population.

Customer service measures include mandating the calculation and payment of interest on savings on a daily product basis; all banks to reimburse customers, wrongfully debited on account of failed ATM transactions, within 12 days of the customer complaint (failure to re-credit the customer account within a stipulated time attracts a compensation of Rs.100 per day to the aggrieved customer); mandating interoperability of ATM/debit across ATM networks without any usage fees subject to a cap of Rs 10,000 per withdrawal and a maximum of five transactions per month in third party transactions; additional authentication/validation based on information not visible on the cards for all on-line card transactions; a system of “online alerts” to the cardholder for all types of card transactions irrespective of the amount and channel used and directing banks to provide to the facility of exchange of soiled notes, payment of taxes, disbursement of pension. The non-adherence to these directions is covered under the Banking Ombudsman Scheme. In addition, banks are required to make printed material used by retail customers available in trilingual form in English, Hindi and the concerned Regional Language. The banks are required to pay Suo motu compensation for delayed credit under electronic clearings, provide collateral free educational loans, and have guidelines on transparency in loan processing.

Strengthening institutional mechanisms for the cooperative sector: in keeping with the heterogeneity of the sector, the co-operative banks that are in various stages of computerisation need to be helped. In the MOU signed with the state governments, the RBI has committed to providing IT support to the sector. The minimum level of IT infrastructure should have: (a) a computerised front-end ie customer interface; (b) an automatic back-end accounting (through software); (c) computerised MIS reporting; and (d) automated regulatory reporting.

Market regulation included guidelines on derivatives explicitly providing that in case of all OTC derivative transactions, the onus of establishing suitability and appropriateness of a client for any product lies with the seller. All pension funds/cooperative banks/mutual funds are allowed access to NDS-OM directly or through a Constituent SGL account for buying/selling Government bonds instead of access through an intermediary bank/broker.

Crisis measures undertaken by RBI included providing a sum of Rs.25,000 crore (as temporary liquidity support for financing agricultural operations) under the Agriculture Debt Waiver and Debt Relief Scheme to scheduled banks and NABARD. This amount was to be reimbursed later. SIDBI and the NHB were allocated Rs.2,000 crore and Rs.1,000 crore, respectively, against banks' estimated shortfall in priority sector lending in March 2009.

Appendix 2

Financial Inclusion through payment systems: measures taken by the RBI

The importance of empowering the financially excluded population can be traced to the mission statement for payments systems wherein one of the component is "Accessibility" – to reach various payment systems at reasonable cost to all segments. The social and economic imperative for broader financial inclusion is central to RBI. This has paved the way for finding innovative ways to empower the poor.

It has been well recognised that inclusive growth manifests itself as an effective developmental tool. Technology makes accessibility easier. RBI has encouraged payment systems that are ubiquitous. Scalability to accessibility to every section is the underlying philosophy. Following these, RBI has introduced several measures.

1. *Mobile Banking*: The operating guidelines for mobile banking were issued in late 2008 and relaxed in December 2009. This facilitated mobile banking transactions up to Rs.50,000, both for e-commerce and money transfer. Banks were permitted to provide money transfer facility up to Rs.5,000 from a bank account to beneficiaries not having accounts with cash payout facility at an ATM or Banking Correspondent.

2. *Pre-paid Payment Instruments*: Guidelines for issuance of pre-paid payment instruments in India (up to Rs.50,000) were issued to provide a framework for the orderly growth of this market. After the enactment of PSS Act, most of the non-bank entities who have received authorisation to operate a payment system are in this business segment. These entities have the capacity to reach out to the vulnerable and excluded population.

3. *Domestic Money Transfer*: Domestic money transfer through the formal banking channels was possible only when one had a bank account. This resulted in migrant population who could not open a bank account due to non availability of documents satisfying the KYC norms to resort to informal means remittances. To overcome the hurdle and to give impetus to financial inclusion following fund transfers were permitted (a) through cash pay in scheme wherein the remitter does not have a bank account but walks into a bank and request for a fund transfer to a beneficiary having a bank account. (b) through cash pay out scheme wherein the fund transfer is effected by the remitter from his bank account to a beneficiary who does not have a bank account (c) card to card (credit/debit/prepaid) P2P fund transfers up to Rs 5,000 per transaction subject to a cap of Rs 25,000 per month subject to certain conditions.

4. *Permission to Post offices to issue co branded cards with banks*: To take advantage of the reach of the 1,50,000 post offices in the country for delivery of financial services RBI permitted the Post offices to issue prepaid payment instruments co-branding with banks.

Approval given to NPCI to operate the Aadhaar Enabled Payment system(AEPS) and Aadhaar Bridge Payment system (ABPS) wherein the Aadhaar enabled identity under the UIDAI could be considered for verification at the various delivery channels. The AEPS includes the biometric authentication for any transaction processing the ABPS considers the UID number mapped with the bank account. Both ensure that the benefits under various social welfare schemes of the Government reach the intended beneficiary.