

Systems Design Choices for Financial Inclusion

By

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Introduction

Financial inclusion is an important objective for the financial system for a variety of reasons including: better alignment of financial sector signals and real sector with respect to allocation of resources, allowing people to smooth consumption across time and enable diversification of risks for households. However it needs to be achieved in a manner that it does not impair the systemic stability of the financial system and its ability to offer a high degree of depositor protection

The **objective function** may therefore be defined as: maximise (financial inclusion) subject to a high degree of depositor protection and systemic stability. The two constraints are in turn a function respectively of solvency of financial institutions and liquidity in the financial system and alternate designs for financial inclusion would need to be evaluated using these two dimensions.

Solvency and Increased Financial Inclusion

Adverse selection (AS) and moral hazard (MH) are real challenges for lenders in an environment where collateral does not exist or loss given default is very high on account of enforcement challenges. Information assets like credit information sharing / credit bureau could significantly mitigate AS and MH. However, this will take time to acquire significance because a lot of the current household borrowing is informal and if the threat of credit denial / rationing upon default has to be credible, there has to be more integration with the formal financial system. And countries where these information assets have typically proved to be useful have been those where financial inclusion is already at a high level and therefore maintaining a high credit score is seen to be valuable because otherwise credit lines could simply dry up. Also in those countries typically the levels of poverty and income uncertainty are such that it is possible for an individual to maintain a good credit record and not have their entire savings swamped by the impact of health or other income shocks.

Since in any case in India these Information assets are in their infancy, until they acquire salience there will need to be other ways to manage AS and MH. Proximity to the customer and the resultant access to qualitative information as well as strong local monitoring capability may be good interim ways to deal with AS and MH for lenders. This potentially gives smaller, regionally focussed institutions an advantage when it comes to solvency. Also, traditional diseconomies with respect to origination by small sized financial institutions are disappearing because of the emergence of ASPs and cloud computing. However, these small sized institutions have severe diseconomies with respect to systematic risk management. A rainfall shock for example can be much better weathered by a large diversified institution than a small regional player. It is possible however that using a number of insurance and other mechanisms the smaller player could protect itself from the impact of these shocks.

Ultimately, asset quality at an institutional and systemic level is synonymous with solvency. Different institutional structures have different capabilities to manage this and concerns such as institutional moral hazard, soft budget constraints and non-transparency / under-capitalisation would need to be kept in mind as we think about design.

Liquidity and Increased Financial Inclusion

While solvency concerns typically originate inside institutions and then spread outwards, liquidity risks typically originate at the systemic level and then move inwards to impact institutions.

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However, no matter where they originate, ex-post, insolvency and illiquidity become mutually reinforcing and lead to systemic collapse. Lender of Last Resort functionality of the Central Bank is indeed available to stem a liquidity crisis but a rapid diagnosis of the origins of the crisis is needed followed by early action. A misdiagnosis of a crisis as a liquidity crisis when the true origins are insolvency could exacerbate the crisis in the short-run and in the long run create severe moral hazard at the institutional level.

Transparency in general is a very good tool to stamp out incipient signs of insolvency but given the very genuine inability of depositors and market participants to separate illiquidity from insolvency and their natural risk aversion, transparency can be very pro-cyclical and exacerbate even a mild liquidity shock and convert it into a full-blown crisis. This is particularly likely to be the case when institutions are interacting with each other in shallow markets and where no market makers exist such as the LAF corridor of the RBI.

Implications for Financial Systems Design

Illiquidity can threaten systemic stability and sometimes as in the case of the US credit crisis of 2008, can trigger macro-economic events such as recessions. However, when judiciously used and in a timely manner, instruments like the Lender of Last Resort can act quickly to stem this crisis particularly when used early. However, insolvency is a far bigger challenge. From the above discussion it can be seen that insolvency is largely predicated on asset quality and has the most direct link to depositor protection. Use of Deposit Insurance as a tool or the Lender of Last Resort functionality with ensuring good asset quality could pose enormous challenges even in the short run and a lot of moral hazard in the long run. In our view ultimately there is no protection against large scale insolvency that is driven principally by low asset quality in the entire financial system. Any design of the financial system has to carefully weigh these two risks before arriving at a conclusion what the optimal design may be.

Using this broad insight as a starting point, we try to trace the evolution of the Indian financial system using the lens of this framework of liquidity and solvency to understand the choices we have historically made in relation to inclusion and then to think about future pathways that the financial system could take to achieve the objective of financial inclusion.

Two Distinct Historical Phases

The first phase was, pre-1994, before the arrival of the new generation private sector deposit taking institutions (DIs). During this phase the system was dominated by the Public Sector Deposit Taking Institutions (DI) who each tried to achieve financial inclusion largely through branch-based efforts. While researchers (Pande and Burgess) found clear impact on poverty wherever branches were opened for a variety of reasons the impact on the overall challenge of financial inclusion was very limited. In addition, overall asset quality/solvency and cost-to-serve were serious challenges and led to even to Indian Bank in the south ending up with negative Net Worth. These solvency problems were however, not visible to depositors since all the institutions were largely government owned and were almost automatically recapitalised. Liquidity was not much of a challenge due to limited inter-DI trading and liquidity transfers happening within various internal divisions of the DI.

In the second, post-1994 phase, several new generation private sector banks were sanctioned. There were some improvements in inclusion, particularly for the middle classes through products such as home loans, through a combination of branch-based efforts as well as through a few specialised intermediaries. There was however limited progress on the inclusion of low-income

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households. During this phase there were distinct improvements in asset quality and solvency on account of the fact that there were more DIs that were closer to the customer and some degree of inter-DI transfer of assets creating visibility on asset quality. However for this very reason and because of the fact that the government was no longer the sole owner, there was a definite increase in the risk of liquidity shocks. This was made most visible by the ICICI Bank's Valsad event.

These experiences need to be borne in mind as we think ahead on which directions we wish to pursue if we want to significantly impact inclusion of low-income households while ensuring depositor protection and systemic stability are not compromised.

Some Future Pathways

In our view there are three broad choices that we have as a financial system:

1. Preserve status quo and make some incremental changes.
2. Substantially increase the number of DIs.
3. Aggressively use the services of formal NDIs.

We will attempt to demonstrate that which path we take is critically dependent on how quickly we want to deliver on the goals of financial inclusion as well as on how seriously we view the relative risks of systemic illiquidity and insolvency.

In the incremental changes approach we could grant a few more licences to new DIs just as was done in 1994 and the DIs then try to achieve inclusion through branches and agents such as SHGs and Business Correspondents. In our view, given low informational assets, use of agents and other informal structures for lending to low income households could result in massive asset quality issues. Signs of strain already emerging for the SHG and KCC portfolios of banks and were clearly visible even earlier when agents were being used for offering unsecured loans even to middle class families and individuals. In addition, as dependencies between DIs continue to grow, risk of system-wide liquidity failure is increases albeit gradually. A potential outcome of this approach could either be system wide failure on account of insolvency or most like very slow progress on financial inclusion.

In the scenario where many new DIs are permitted, there is a possibility of good financial inclusion along with good asset quality due to specialisation (by region or segment) and the use of good local substitutes for other informational assets like credit bureau. However, given limited regulatory capacity, risk of institutional moral hazard is high. There is also a much higher exposure of depositors to systematic risk, which could be traded out but in the presence of moral hazard there may be reduced incentives to do these trades. To make this approach work there will be a need for a much higher degree of monitoring by the Central Bank particularly when it seeks to use tools such as Deposit Insurance and Lender of Last Resort functionality to ensure depositor protection or to ward of a liquidity crisis. However, even if this is not a good next step for us in India, this may be a good long-term end-state to drive towards because it has a number of informational and relationship benefits.

The third design alternative available to us is to stay with status quo as far as DIs is concerned but to allow the aggressive use of non-deposit taking institutions (NDIs). Here too, as in the previous case, there is a likelihood of strong improvements in asset quality due to specialisation (by region or segment) and good use of substitutes in place of other "hard" informational assets such as credit bureaus. In this scenario regulatory capacity can remain focussed on the limited number of DIs and since liquidity to the NDIs can only come from the DIs, strong counterparty supervision by DIs will

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complement the lighter direct regulatory oversight of NDIs. Under this scenario, depositor protection not compromised for the DIs and there is better systemic ability to manage failures – NDIs are not too big to fail and neither are they permitted to accept public deposits. However this approach is not without any downsides. Low barriers to entry for NDIs and easy access to leverage may create challenges on KYC/AML fronts. Events like the Andhra Pradesh Ordinance Crisis could freeze liquidity for a particular category of NDIs across the board without necessarily threatening systemic stability.

Conclusions

The choice of which direction to take as a next step, is critically dependent on the analysis of the principal risks that aggressive attempts at financial inclusion would give rise to. If the view is that the challenges are only those of the desire to act on the part of the banks and that moral hazard and adverse selection are not big issues then the current approach with limited changes is the best one because it ensures that regulatory capacity is not too stretched and minimizes the scope for liquidity shocks.

However, in our view this is an incorrect conclusion and that there is clear evidence that asset quality is a very significant challenge as is moral hazard on the part of institutions. Our own thought would be that while the eventual end-state would be to have many more DIs offering a full suite of financial services to their clients the aggressive use of NDIs may be a good interim step. In this process the poor quality and the ill intentioned players would be weeded out and then those that survive may be permitted to become full-fledged DIs.