Shadow Banking:

'If it looks like a duck, quacks like a duck, and acts like a duck, then it is a duck. What about an institution that looks like a bank and acts like a bank? Often it is not a bank. It is a shadow bank'-Laura Kourdes, IMF.

Background

The shadow banking system has been in existence for at least many decades now but has come under the spotlight only after the global financial crisis of 2008. As yet, economists and regulators have not arrived at a consensus on its definition and in the absence of a standardized definition the exact measurement of the size of the shadow banking system has also become a subject of debate. The Financial Stability Board's (FSB) definition- 'credit intermediation involving entities and activities (fully or partially) outside the regular banking system' appears simple but has come under criticism from institutions like the IMF who suggest a more granular approach. Claessens and Ratnovski[1] (2014) offer a definition —"all financial activities, except traditional banking, which require a private or public backstop to operate" and claim that this could form the basis for more accurate measurement.

It might not be particularly rewarding in a forum on this to dwell on the nuances of the debate on definition but do a quick review of its dimensions instead. The FSB's latest report[2] uses its definition for a top-down 'flow of funds' estimation approach and arrives at a size of 71 trillion USD for 2012. This is about half the banking system's assets and 117 per cent of global GDP. This masks the enormous variations across geographies –Spain for instance saw a decline of 11 per cent in 2012 while China saw growth of 42 per cent. In fact, emerging economies saw the largest increase in non-bank financial assets with 20 per cent growth in four of them. However, a couple of things need to be borne in mind. First, the shadow banking system is continuously evolving and the type of shadow banking activities of concern in 2008 is not the same as in 2013. Second, the discussion on shadow banking tends to be US-centric and is relatively silent about other forms of shadow-banking in other parts of the world. In China, a plethora of wealth management products are referred to as shadow banking , in Europe certain products offered by insurance companies and in India the so-called NBFCs come under the shadow banking umbrella.

The relevance of the US

However, the emphasis on the US in the literature need not necessarily make it entirely irrelevant either analytically or from a regulatory perspective for economies like India. The structures that constitute the US shadow banking system – SPVs that facilitate securitization, money market mutual funds (MMMFs) that fund corporations and banks through the commercial paper route or the extensive use of repo mechanisms already exist or are bound to make an entry in a market like India. To take an example, money market mutual funds that subscribe to commercial paper of companies are competing with bank

[1] IMF Working Paper "What Is Shadow Banking?" prepared by Stijn Claessens and Lev Ratnovski, February 2014
[2] Financial Stability Board report "Global Shadow Banking Monitoring Report 2013", November 2013

deposits. They could develop both in size and complexity. The US experience should be useful in our approach towards monitoring their evolution and regulating them.

Second, with the large needs of sectors like housing and infrastructure, securitization will have to be used more actively in the Indian context. More extensive use of this funding channel will become imperative in India in the absence of a developed corporate bond market and the additional capital needs of banks entailed by the adoption of Basel-III norms that could curb lending. Again the US experience with securitization is essential to understand in this context.

Finally the problems of the US and similar developed markets and the regulatory responses offers some possible elements of a 'universal' template of regulation and these could act as a guide for regulatory reforms in other markets. The UK's experiment involving a shift from an integrated regulatory body (FSA) to a more disaggregated regulatory with distinct 'functional' responsibilities is likely to provide useful inputs in the process of recasting the regulatory system in an emerging economy like India.

It might help at this stage to divide the problems and challenges of shadow banking into two categories. First, the problems and solutions of the US challenges (a number of developed markets would share their essential features) that could potentially pose challenges to emerging markets as their financial structure moves in that direction. Second, there are problems that are idiosyncratic to other economies that demand specific regulatory solutions.

The great crisis of 2007-2008

No paper or survey of shadow banking is complete without some discussion, however cursory, on the role of shadow banks in the financial meltdown of 2008. During 2002-2007 the US financial system used structured credit securities as collateral for raising short term money market finance, both from money market mutual funds and long only institutions like cash rich pension funds that captured deposits away from traditional banks. This in turn allowed credit to be extended directly to borrowers without bank intermediation. Investment banks used structured instruments as collateral to lever up their balance sheets through repo borrowings or through the issue of short term paper (the infamous Asset Backed Commercial Paper or ABCPs). High returns from these transactions encouraged investors to increasingly ignore the quality of the assets underlying the complex credit instruments that they were investing in leading to a classic problem of asymmetric information. They kept growing until there was a 'sudden stop' in mid-2007 when large defaults on underlying mortgages, a shock to house prices and the awareness of the opacity of the market and structure of financial instruments led to a sudden loss in faith in structured products related to mortgages.

One way to view the US crisis[3] was a banking panic centered on the repo market and the markets for short term paper. As the market for structured products collapsed, depositors panicked, liquidity shrank, 'haircuts' on repos and repo rates spiked up sharply. Other mechanisms such as re-hypothecation (the re-use of collateral to raise further repo funds added to the problem and manifested in a complete

[3] Brookings Papers on Economic Activity "Regulating the Shadow Banking System" by Gary Gorton and Andrew Metrick, Fall 2010

collapse of the system. In summary, the financial crisis was about the sudden and somewhat dramatic discovery that short term instruments –repos, MMMF shares etc- that were considered safe and money-like were imperfectly collateralized.

Arbitrage, forbearance or genuine economic need?

It is legitimate, without being facetious, to claim that the use of the word 'shadow' to describe these financial activities plays a part in the suspicions that surround them. This is not entirely fair. It is important to recognize that these are not always the result of regulatory arbitrage but a response to a genuine economic demand that helps financial deepening. Securitization is an example. The fact that 'simple' securitization shorn of the complex over-engineering that was the hallmark of the US crisis offers some economic benefits cannot be disputed[4]. It is also important to remember that securitization was an accepted form of generating liquid collateral from illiquid loans for many decades before the crisis. Three of the economic benefits of securitization could be highlighted to make the point.

- First, securitized instruments are 'bankruptcy' remote in that the insolvency of the originator does not have any impact on the SPV (say through a 'claw-back').

- Second, the design of the SPV is such that there is no default on the Asset Backed Securities issued by an SPV in the case where the underlying portfolio does not generate enough cash to make the contractual coupon payments on the outstanding bonds. Instead, there is an early amortization event with the available cash being used to pay off the principal rather than continue.

- Third, there is a strong argument that while the quality of (simpler) portfolios of SPVs is not exactly easy to gauge, they are far more transparent than the 'financials' of the originating bank.

Besides, one must also recognize that excessive regulatory forbearance rather than nimble regulatory arbitrage also played a role in precipitating the crisis that emerged in shadow banking, particularly for mortgage related instruments. A quote from former Fed Chairman Alan Greenspan could help underscore this point, "I was aware that the loosening of mortgage credit terms for sub-prime borrowers increased financial risk," he wrote in his memoirs, 'The Age of Turbulence: Adventures in a New World'. "But I believed then that the benefits of broadened home ownership are worth the risk."

The upshot of this discussion is that 'shadow banking' could be an important adjunct to the conventional banking system and efforts to over-regulate it without understanding the reasons for its growth could affect financial deepening and growth. Given the enormous capacity of the financial sector to innovate the attempt to stifle this parallel financial 'ecosystem completely' could create other instruments that are far less efficient and perhaps more difficult to innovate. The quest must thus be for sensible regulation through micro and macro-prudential norms to avoid both individual agency stress as well as

[4] Brookings Papers on Economic Activity "Regulating the Shadow Banking System" by Gary Gorton and Andrew Metrick, Fall 2010

systemic risk based on an accurate measurement of shadow banking activity and understanding their economic rationale and operations.

Placing India's approach in the global regulatory context

At this juncture, it might be useful to discuss the different 'sets' of regulatory approaches towards shadow banks that have emerged[5]

- Merging shadow banks into the conventional banking system and expanding the perimeter of the banking regulator to allow this 'convergence'. However, shadow banks are more pro-cyclical, low margin and could compromise the banking system's stability. It also goes against the spirit of some of the current proposals like the Volcker rule that curbs certain trading activities of banks.
- Sever links with the traditional banking system particularly systemically important financial institutions, create firewalls and leave them relatively unregulated or create a specialized regulator that monitors some critical functions. The Vickers proposal to separate retail banks from other activities of the bank – the so called separation of high street banks from the 'casino activities' of their investment arms – and leave the retail banks with adequate capital buffer. However, this does not address the issue of the macroeconomic and systemic implications that the shadow banks by their sheer size entail.
- Regulate the supply of assets that shadow banks provide to regulated entities with special charters, curbs on the degree of innovation or narrowly funded banks and narrow savings banks that the Group of Thirty has proposed. The Narrowly Funded Banks (that relate to securitization) would be the only entities that could buy Asset Backed Securities (ABS). These would have to meet prudential guidelines and be regulated by an NFB regulator that would determine the kind of ABSs that they can buy. They would not be able to indulge in any other activities such as deposit taking, making loans or do trade on its proprietary book. Investors can only buy the liabilities of the NFBs and the bank will be allowed to raise funds through repos.

India's approach to regulating its shadow banks principally the Non-bank Finance Companies has been somewhat eclectic. It recognizes that they play an important economic role in certain niches ***particularly in extending financial inclusion***. It also recognizes that there are strong arguments both for and against convergence. ***It chooses a middle path in that it imposes regulatory norms similar to banks (in terms of capital adequacy ratios, risk-weights for assets) without converting them into 'exact' banks.*** [i] ***It draws lessons from the liquidity shortage that emerged during the 2008 crisis, particularly the run on NBFCs and Mutual funds in August 2008 to lay down stringent liquidity norms in terms of mandatory holding of cash and liquid securities.***

The Indian situation: a closer look

[5] IMF Staff Discussion Note "Shadow Banking: Economics and Policy" prepared by Stijn Claessens, Zoltan Pozsar, Lev Ratnovski, and Manmohan Singh, December 2012

The Indian shadow banking system provides a classic example of the peculiarities of this structure in emerging markets. The India financial landscape is dotted with a bewildering array of financial entities – Nidhis, Chit Funds, commodity Trade financiers, plantation companies, pawn brokers, and gold loan companies and so on. However, while the implosion of any of these entities can cause local distress (the recent Sharada Chit Fund collapse in West Bengal for example), it can be argued that they are not systemically important. ***This is not to suggest that they need to be regulated more closely and there is a conscious effort to build greater regulatory capacity for this.***

The regulatory challenge in India comes largely from the Non-Bank Finance Companies (NBFCs) that can be broadly classified into a) Deposit taking NBFCs b) Non-deposit taking NBFCs and c) core investment companies. In 1998, new regulations and prudential norms were prescribed particularly for deposit-taking NBFCs. In 2006, new norms were introduced for systemically important NBFCs, both deposit taking and non-deposit taking, the definition of systemically important being minimum asset size of Rs 1 billion or more. Capital adequacy requirements were imposed and were raised to 15 per cent in 2012. Thus the Indian shadow banking system appears healthy and well regulated. More regulatory conditions were placed in 2012 by the RBI following the recommendations of the Usha Thorat Committee[6]. Thus there are increased Tier-I capital requirements, classification and provisioning of NPLs, mandatory liquidity norms, stringent corporate governance standards and increased risk weights for these.

Analysis of the run on NBFCs during the financial crisis of 2008 that spilled over to mutual funds forcing the RBI to offer liquidity support to both these entities provide an insight into the complexities and regulatory challenges facing the Indian financial system

The current debate in India

The current focus in India revolves around who should regulate the shadow banks. The FSLRC recommends that non-deposit taking NBFCs should be regulated by a super-regulator (the Unified Financial Authority) instead of the RBI while deposit taking NBFCs should be converted into banks and come under the purview of the banking regulator. This involves a qualitative judgment on the relative abilities of the two to monitor the NBFCs and does not appear to involve a strong economic rationale or recognition of the nuances of the Indian financial system. In fact one could argue that given the fact that the link between banks and NBFCs is a major source of systemic risk, having a common regulator. Besides the need to keep prudential norms broadly in line with the banking system also makes a case for retaining the RBI as 'shadow bank' principal regulator.

Some features the Indian shadow banking system need to be understood:

- First, public deposit taking by NBFCs is unlikely to be a source of likely systemic risk. Public deposits taken by NBFCs have been declining and in 2013 were just about 0.21 per cent of overall bank deposits and 1 per cent per cent of the total liability of the NBFCs

[6] The Reserve Bank of India report "Report of the Working Group on the Issues and Concerns in the NBFC Sector"**,** chaired by Smt. Usha Thorat, August 2011

- NBFCs are important in providing credit especially in non-urban areas (NBFC-MFIs) to Small and Medium Enterprises (SMEs) and in key markets like vehicles loans, particularly second –hand vehicle loans . Credit disbursed by NBFCs was 12 per cent of credit disbursed by banks in 2013.

- Specialized infrastructure NBFCs enjoy special concessions such as access to foreign currency loans

- Bank loans are a key source of funding for NBFCs and are around 21 per cent of total funding in 2014. Banks also subscribe to NBFC debentures that constitute 32 per cent of the latter's funding and buy securitized loan portfolios

- Until 2012, banks had an incentive to lend to lend to NBFCs partly because of their Priority Sector commitments since indirect exposure to priority sector assets through NBFCs enable banks to meet their mandated targets. This was however removed subsequently. However banks use this vehicle to 'penetrate' segments that

- Public sector banks (that still dominate the banking system with about 70 per cent of assets) typically have strong non-urban branch networks and have use the NBFC channel much less than private banks.

- The share of bank exposure to NBFCs has been growing and while it is not large is not exactly insignificant at about 5.4 per cent of total non-food (commercial credit). This might be a source of risk for the banking sector , especially since NBFCs have exposures to 'risky' sectors like agriculture, SME and cyclical sectors like commercial vehicles

- There is a perception that public sector bank deposits are government guaranteed and thus any escalation of risk aversion could see a flight of deposits from the private sector banks. This was at the heart of the severe liquidity crisis for NBFCs in August 2008 where there was a sharp movement of deposits away from private banks.

- About 4 per cent of the NBFCs funding comes from the issuance of short-term paper and since mutual funds are significant investors in this any stress for NBFCs manifests in a stress for Mutual funds. Thus in August 2008, the withdrawal of deposits from private banks manifested in a liquidity crisis on NBFCs than in turn spilled over to mutual funds.[7]

- Special liquidity windows were created through banks and a large financial institution (IDBI) for NBFCs in 2008. This did not work smoothly as banks were unwilling to lend as they were uncomfortable with the repayment capacity of NBFCs. Thus a direct liquidity backstop from the central bank is desirable although this would naturally create moral hazard problems

[7] "The Growth of a Shadow Banking System in Emerging Markets: Evidence from India" by Viral V. Acharya, Hemal Khandwala and T. Sabri Öncü, 2013

Conclusion

As we have discussed above, India has taken an eclectic approach to regulating its shadow banks and has recognized that their expansion is imperative to meet India's financial needs. It has simultaneously made an effort to correct some of the distortions in the system that has bred risks in the system.

The fact that the shadow banking system in each economy has its own specific character makes co-ordination in the sense of seeking a common template for regulation some futile. Yet there are 'universal' lessons and principles that can be drawn from recent history. The regulation of shadow banking is still work very much in progress and instead of always letting the idiosyncrasy of each system drive an insular approach to regulation, there has to be an effort to share the results of and learn from each other's experiments. The G-20 is an important forum for this.

To a degree the broad consensus across economies to follow the Basel-III guidelines across economies could itself check the excesses of shadow banking. Excessive risk taking is ultimately all about leverage and the checks on leverage by banks is itself a guard against bubbles blowing up in the shadow system. Again, there has to be a coordinated effort to ensure that member countries adhere to adopt the core principles of the Basel-III guidelines

Ultimately there is no holy grail for regulation and the choice of regulatory structure becomes a political choice often involving conflict between institutions. The G-20 should ensure that these choices are in the best 'economic' and 'social' interests of member countries and not just based on the dominance of a particular interest group. In an age of globalization of which the most intense manifestation is the inter-linkage of financial systems, the collective good lies in the individual members taking the best decisions in their own interests.

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[i] The Reserve Bank of India report "Report of the Working Group on the Issues and Concerns in the NBFC Sector"**,** chaired by Smt. Usha Thorat, August 2011