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# SHADOW BANKING IN INDIA: NATURE, TRENDS, CONCERNS AND POLICY INTERVENTIONS

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**Abstract** *While the origin of shadow banks may be traced to the 1970s, developing countries have witnessed a massive growth of shadow banks in more recent decades. India too has seen a similar growth in shadow banks; however, the recent 2018 collapse of IL&FS Group, a major shadow bank, disrupted the credit cycle, stalled investment and even affected overall GDP growth. With experts warning that shadow banks are susceptible to systemic risks and crisis, it becomes imperative to understand the shadow banking system better. In this paper, we use exploratory data analysis – both quantitative and qualitative – to draw attention to the need for definitional clarity in the concept of shadow banks and how they operate. Trends in Indian shadow banking are discussed using data drawn from secondary sources. Systemic risks in India's shadow banking sector are identified and policy interventions are discussed. The study is imperative for highlighting the importance of shadow banking in India, its growth and the evolving policy interventions regulating this important component of the financial system.*

**Keywords**: *shadow banks, non-banking financial companies, mutual funds, commercial paper, financial regulation, financial crisis.*

**JEL Classification**: *G21, G23, G28*

## 1. INTRODUCTION

Shadow banking, a financial institution that has often been accused of being a major contributor to the global financial crisis (GFC) of 2008 continues to

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expand rapidly and significantly since then. Presently, global shadow banks have assets worth US$57 trillion, a 75% increase since 2010 with the US and China commanding 29 and 16 percent of total assets respectively (Cox, 2019). In India, shadow banks, also referred to as non-banking finance companies (NBFCs), are in the news recently with the collapse of IL&FS group (Business Standard, 2019). With experts warning that shadow banks are susceptible to systemic risk and crisis, it becomes imperative to understand this system better.

In this paper, we begin with an examination of the various definitions of shadow banking and its nuances by carrying out a review of the literature. Following this, we explain different mechanisms of understanding credit intermediation in shadow banks. Finally, we delve into shadow banking and trends pertaining to some aspects of shadow banking in India, which essentially calls for greater regulation of the sector given its systemic risks and concerns over financial fragility.

## 2. DEFINITIONS OF SHADOW BANKING

Paul McCulley, former managing director of PIMCO, conceived the term "shadow banking" as recently as 2007. Multiple definitions of the term have since emerged, with no general consensus on its exact nature. To make matters more difficult, the term is used differently across countries, which makes it harder to relate theoretical discussions to specific institutional contexts. For instance, in Europe, lending by insurance companies is sometimes called shadow banking while wealth management products offered by banks in China come under its ambit. In India, lending by bank affiliated finance companies are also considered as shadow banks. However, a discussion of some important attempts at defining shadow banking enables readers to grasp its essential features across variations in its conceptualization.

Speaking at the 2007 Annual Jackson Hole Conference, McCulley defined shadow banking as "the entire alphabet soup of levered-up non-bank conduit systems" (Mehrling *et al*, 2013). The "non-bank" aspect in shadow banking is highlighted by the Financial Stability Board (FSB) in its 2013 report as "credit intermediation involving entities (fully or partially) *outside*[1] the regular banking system or nonbank credit intermediation for short" (FSB, 2013). These definitions depict shadow banking as institutions independent from the commercial banking system, instead connoting the shadow system as something feeding upon informal

[1] Italics our own for emphasis.

financial systems and/or as something “dark”, in particular, money laundering and tax evasion. However, shadow banking is not some troubling excrescence on the healthy body of traditional banking. Rather, it is the centrally important channel of credit for our times, which needs to be understood on its own terms. Guttmann (2016) and Mehrling *et al* (2013) have raised these issues who are argue that such nefarious activities are far from being the major components of shadow banking systems.

Building on these initial conceptualizations, Mitchell (2016) identifies two broad definitional categories in the shadow banking literature. The first, called the “market view, focuses on securitization and market-mediated financial transactions. From this perspective shadow banks are like banks; both are simple intermediaries between savers and investors. The shadow banking system along with its traditional counterpart is the *disaggregated web of specialized financial institutions and vehicles* that channel funding from savers to investors through a range of securitization and secured funding techniques that works in an unregulated or under-regulated environment.

These disaggregated set of intermediaries perform four transformations (Kodres, 2013):

- Maturity transformation: short-term borrowing to long-term lending or what Mehrling et al (2013) state as “money market funding of capital market lending”.
- Liquidity transformation: using cash-like liabilities to buy “harder-to-sell” liabilities like loans.
- Leverage: borrow money to buy fixed assets to magnify the potential gains or losses from an investment.
- Credit risk transfer: taking the risk default of a borrower and transferring it to another party. However, while shadow banks conduct credit and maturity transformation similar to traditional banks, they do so without the direct and explicit public sources of liquidity and tail risk insurance via the central bank's discount window and insurance on deposit accounts like US Federal Deposit Insurance Corporation (FDIC) insurance.

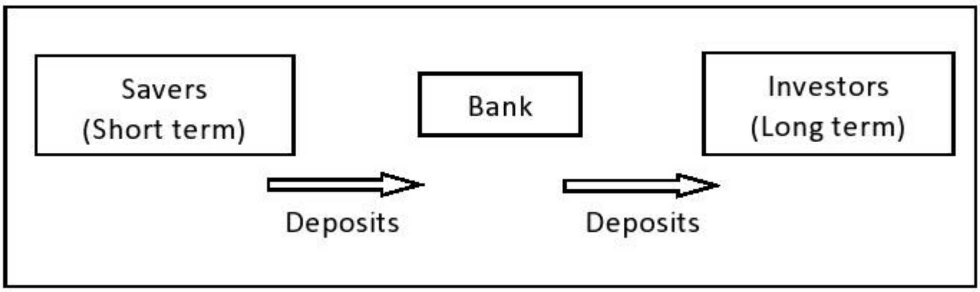
The other perspective, or “money view”, sees shadow banking as analogous to the (traditional) commercial banking system, which not only perform bank-like functions in maturity and credit transformation as simple market intermediaries, but also issue what is called as “near-monies” or “liquid short-term stores of wealth” (Mitchell, 2016:2). To Mitchell, traditional banking and shadow banks work in tandem; while the traditional banking system *endogenously* creates new credit money (McLeay, 2014), shadow banks enable this *(endogenously created)* credit money to be extinguished when savers exchange bank money for shadow bank liabilities that act as a "storage facility for credit claims, which exceed the capacity of traditional bank balance sheets." (ibid:3)

These definitions lead to subtle differences in understanding the process of credit creation and intermediation by shadow banks. The next section elaborates.

## 3. MECHANISMS OF SHADOW BANKING

The mechanism of how shadow banks operate from the "market view" perspective of shadow banking can best be described if we begin with plain and simple (vanilla) banks. Here vanilla banks are considered as intermediaries[2] between savers (lenders) and investors (borrowers).[3] As intermediaries, they provide the important functions bringing benefits from economies of scale and overcoming the problems of asymmetric information and high search costs in financial markets that would prevent savers and investors from making contracts. This is schematically illustrated in Figure 1.

**Figure 1** – Banks as financial intermediaries



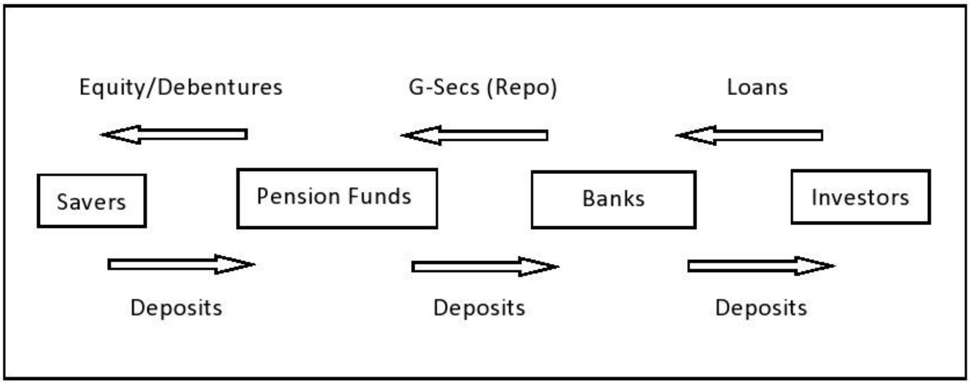

This model suffers from several problems arising from a mismatch of characteristics of assets and liabilities of the bank. First, the asset held by the bank

[2] Banks are not considered creators of money as in the case of endogenous money theory (McLeay *et al*, 2014).

[3] Throughout this paper we use a more proper terminology of economists. Savers are lenders of money and investors are typically firms and household who purchase real (investment) goods. This vanilla view of banking is how banks are depicted in the circular flow model elaborated in introductory economics textbooks.

(loan to the borrower) may be long-term while the liabilities of the bank (deposits[4] held by lenders) can be withdrawn on demand (short-term). Moreover, guaranteeing repayable deposits at *par* even when there is default by borrowers implies need for strict enforcement of capital adequacy norms and maintenance of reserves. The lender too may not benefit from the deposit as it may earn no interest as in the case of current accounts or a very low rate considering the risks to be absorbed by the bank. To overcome some of these problems a more disaggregated financial system may be conceived where shadow banks act as intermediaries between lenders and the bank, as shown in Figure 2. These shadow banks may be pension funds or insurance companies which collect deposits from lenders and lend to the bank, which then lend to the final borrower. To provide adequate security to the shadow bank, the bank enters into a repurchase (repo) agreement with the shadow bank wherein a government security is sold to the shadow bank in exchange for the deposit with a promise to repurchase it back at a later date for a deposit. In case of default by the bank, the shadow bank can sell the government security in the market and realize its value. This not only protects the lender but also yields an income flow since the sale price and repurchase price in the repo contract are not the same.

**Figure 2** – The emergence of shadow banks with repo arrangements



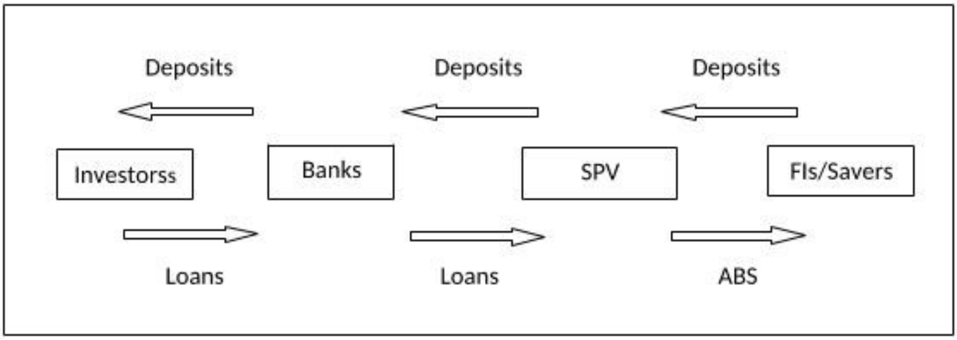

This arrangement also allowed banks to better match maturities of assets and liabilities although it called for mark-to-market monitoring of the government security price and adjustment of contracts between the shadow bank and commercial bank. However, more than this task, it was the lack of availability of

[4] "Deposits" are the liabilities of commercial banks and can be converted into cash at *par*.

government securities – due perhaps to the resentment against fiscal deficits in the 1990s – that induced financial institutions to look for novel mechanisms to replace government securities in repo agreements.

In Figure 3 we begin with borrowers[5] who approach a bank for loans against deposits/cash. The bank complies. It then sets up a special purpose vehicle or SPV (a distinct entity from the bank) which buys these loans from the bank, repackages them and sells them as asset backed securities (ABS) to lenders in the market, which could be financial institutions (FIs) like mutual funds, pension funds or insurance companies. We now have a more disaggregated banking system, each institution performing functions in which they would be specialized in.

**Figure 3** – Emergence of a disaggregated shadow banking system




While there may be nothing wrong in the system as a means of bringing lenders and borrowers together *per se*, there are always concerns over the quality of the ABS, especially since the banks could become complacent in evaluating the quality of borrowers as it passes on the risk to the SPV and then further down the line. This indeed happened during the GFC that took the world into a Great Recession, from which some parts of the economy are still struggling to completely recover from.

Before we delve into the Indian scenario, we briefly present below (Figure 4) the money view of shadow banking. This views conceives of shadow banks as institutions which temporarily close the *money circuit* by substituting deposits (liabilities) on the banks' balance sheets with the loan liabilities of borrowers (asset to shadow banks).

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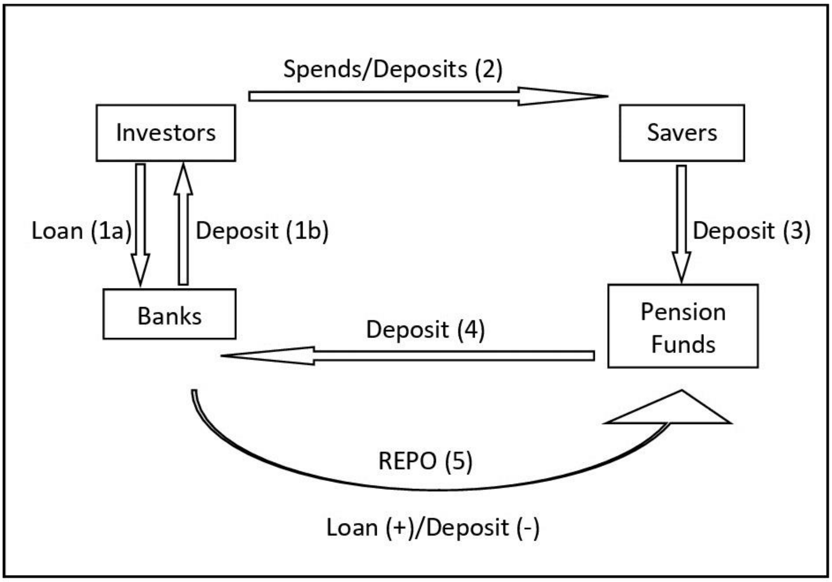
[5] This considers that credit is demand constrained unlike the view that credit is supply constrained as in Figure 1 and 2.

In the money view banks create money *endogenously* (Step 1a and 1b), which passes from the borrower back into the economy and finally into the hands of savers or the owners of the factors of production (Step 2). Shadow banks collect these monies (savings), which are then credited in deposit accounts held in banks (Steps 3 and 4). These deposit accounts (liabilities of banks) are swapped for "loans" by the banks with the shadow bank; the "loans" are backed by the original loans issued by banks (assets) to the borrower in Step 1. This swap is done through a repo transaction between the bank and the shadow bank (Step 5). In this was the money created by banks (deposits) are destroyed by the repo transaction and will not appear as money on the balance sheet of banks until the shadow bank reverses the repo transaction.

**Figure 4** – The money circuit view of shadow banking




While the money view has important theoretical implications, the market view offers an operational definition of shadow banking that allows for a qualitative analysis of the nature of shadow banking in India as well as quantitative basis to study its growth.

## SHADOW BANKING IN INDIA

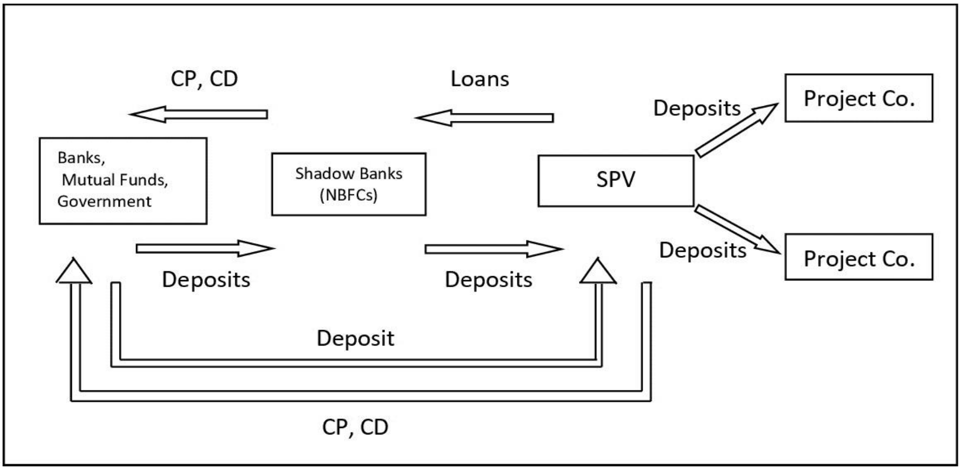
### 4.1. Nature of shadow banking in India

Unfortunately, shadow banking in India has come to be associated with the "dark" side on account of some recently unearthed large-scale scams; more specifically, the collapse of Infrastructure Leasing & Financial Services Limited (IL&FS). However, before we delve into concerns arising from this specific case, we present below the definition of shadow banks in India and their *modus operandi*.

According to India's central bank, the Reserve Bank of India (RBI), shadow banking pertains to activities of the Non-Banking Financial Sector (NBFC), which includes companies engaged in loans and advances and sale and purchase of securities/bonds as well as rotating savings and credit association or chit funds as they are called in India (Acharya *et al*, 2013) The peculiarity of India's credit system lies in the existence of a large informal system, organized around systems of kinship, caste and trust. However, the kind of organizations for which data is available largely falls in the purview of the formal sector, and it is their activities that we will be examining.

Following the market-view, India's shadow banks or NBFCs are a network of intermediaries connecting savers to investors, their vital service being credit transformations, more specifically, short-term borrowing through issue of commercial paper (CP) for longer-term lending in infrastructure projects like roads and highways, power plants, ports, real estate and so on. The availability of funds and cheaper costs of short-term borrowing rather than issue of long-term bonds and equity drives this activity. Figure 5 schematically shows the basic *modus operandi* of Indian NBFCs.

**Figure 5** – The mechanism of Indian NBFCs



Lower interest rates and scarcity of government bonds are driving savers to NBFCs in search of higher returns albeit with higher risks. To substantiate, the RBI's benchmark repo rate have shown a steady decline since 2012, from 8.5 to 5.40 percent currently[6] while the public debt to GDP ratio has decline from 69.6 to 68.7 percent during the same period.

## 4.2.The growth of shadow banking in India

Several factors have contributed to the phenomenal growth of shadow banks in India; however, the trigger would be 1991 economic which saw the implementation of the three pillars of the IMF's structural adjustment program – liberalization, privatization and globalization. With financial deregulation, India saw the rise of NBFCs in the formal sector, which hitherto was widely found in the informal economy. The process of liberalization also allowed the interconnection among as well as between shadow banks and traditional commercial banks. The opening up of financial markets in India also encouraged competition in the commercial banking sector with the entry of private banks (Mohan, 2017), which were now actively seeking new avenues for lending money.

On the demand side too, the structural reforms of 1991 triggered the need for alternative sources of finance to commercial banking and informal sources of finance. The shifting on India's growth trajectory, industrial expansion, lack of availability of formal credit to small and medium enterprises, the growth of housing and automobile finance, the shift towards the private sector as the main engine of growth, curbing of fiscal deficits and private-public partnerships for infrastructure projects meant a greater need to channelize credit into productive investment.

NBFCs in India have been classified in various categories including deposit (108) and non-deposit taking as well as in terms of risk, as for instance, non-deposit taking NBFCs (9806) out of which are systemically important (276)[7]. There are different requirements for these categories of NBFCs in terms of statutory liquidity ratios (SLRs), capital adequacy, non-performing assets and foreign ownership. NBFCs are also classified sector-wise; microfinance, infrastructure,

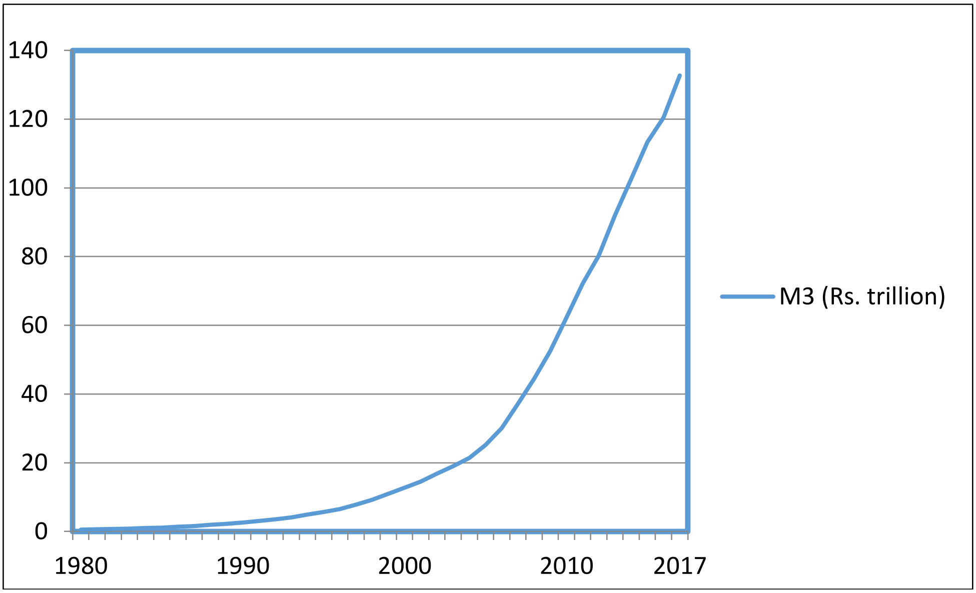
[6] Source: https://tradingeconomics.com/india/interest-rate

[7] Figures in parentheses are numbers of NBFCs as per RBI in end December 2018.(https://m.rbi.org.in/Scripts/PublicationsView.aspx?id=18745)

asset finance, and so on. In this paper, we do not delve into these categories, but look at the overall development of NBFCs.

India's first phase towards economic reforms began in the 1980s; until then borrowing was largely for production, and the returns from investment were used to repay loans, ensuring that the rate at which money and output grew was roughly the same. However, from the 1990s, money grew faster than the GDP with acceleration from the late 1990s. In 50 years, this ratio roughly tripled. Thus, banks had new instruments to expand their balance sheets, and the need for consistent liquidity created this growth spurt in broad money (Figure 6).

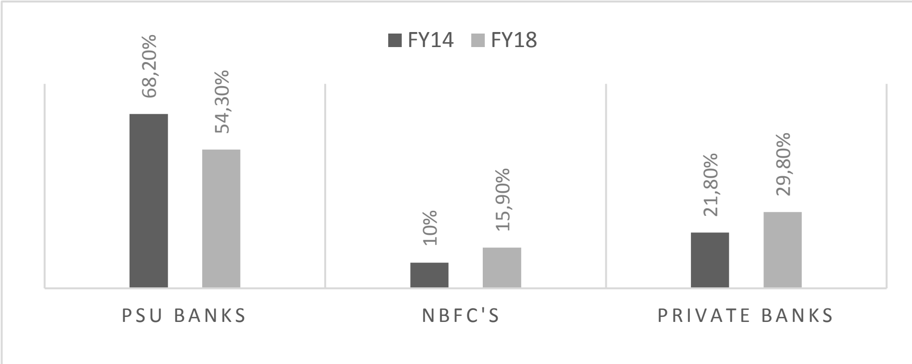
**Figure 6** – Growth of broad money M3 in India since 1985




***Source:*** *https://fred.stlouisfed.org/series/MABMM301INA189N#0*

During this phase, Indian public sector banks (PSBs) lost their share in the total market for credit to NBFCs and private sector banks (Figure 7).

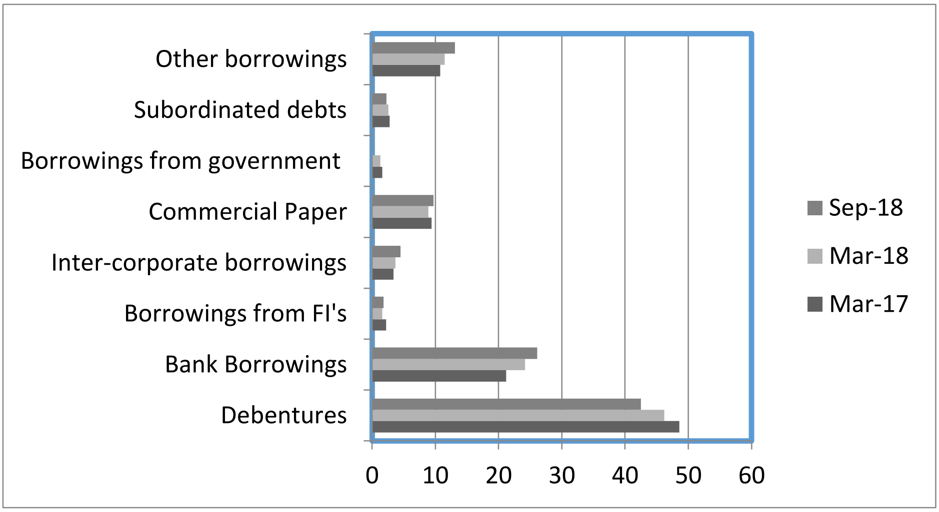
**Figure 7** – Credit share of Indian banks and NBFCs, Financial Year (FY) 2014 and 2018




***Source:*** *http://www.businessworld.in/article/NBFCs-Backs-To-The-Wall/30-10-2018-163195/*

However, an important source of funds to the NBFCs in India is commercial banks. There has been a steady increase in the share of NBFCs in total bank credit as well as the *growth* in advances from banks in the share of NBFC sources of funding (Livemint, 2018). The share of bank finance in NBFC's lending is around 26 percent (Figure 8), although there has been a decline in 2019 on account of the IL&FS crisis. This establish the close nexus between bank and NBFC credit; the latter becoming a conduit for commercial bank lending.

**Figure 8** – India's NBFC sources of funds

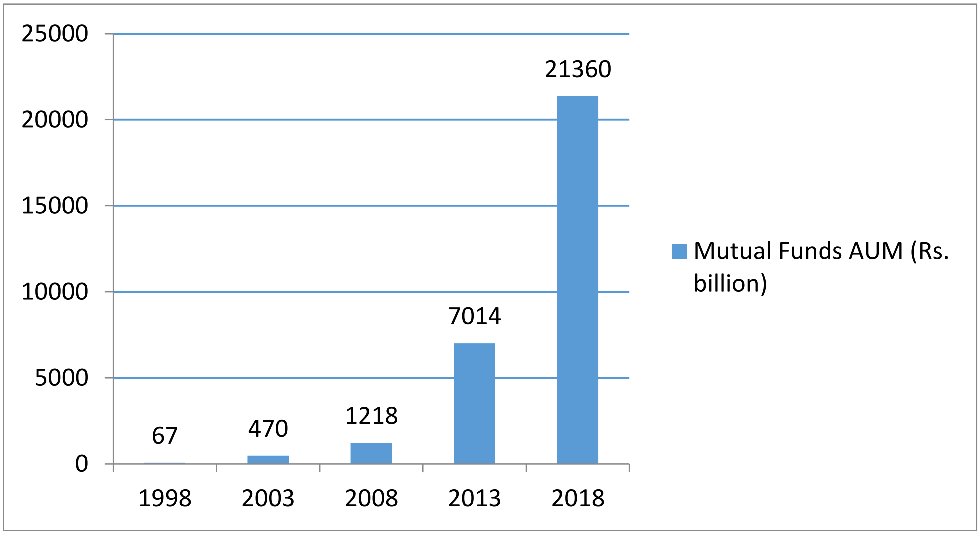



***Source:*** *https://economictimes.indiatimes.com/industry/banking/finance/banking/for-nbfcs-2019-may-be-the-year-of-reckoning/articleshow/67342932.cms*

Apart from banks, the major lenders of funds to NBFCs are mutual funds (MFs), which stood at about Rupees 2,300 billion (US$33 billion[8]) as at March-end (2018). While the exposure to NBFC papers as percentage of debt AUM (assets under management) of MFs works out to around 18 percent, the same will be much more if we exclude government securities[9].

The growth of the MF industry, in particular the private sector, is closely linked to the rise of NBFCs and requires some elaboration. Until 1993 India's public sector held all the mutual fund assets, and it was not until the late 1990s that private sector mutual funds began to grow. Their rise since then has been meteoric, with the 2000s seeing public sector mutual funds exiting the industry while almost all-new mobilization was by private mutual funds (Figure 9). This dramatic reversal in the MF industry corresponds to the period of liberalization and financialization, the deregulation of financial markets and the growth of shadow banking.

**Figure-9** – Rise and growth of India's mutual fund industry, 1988-2018

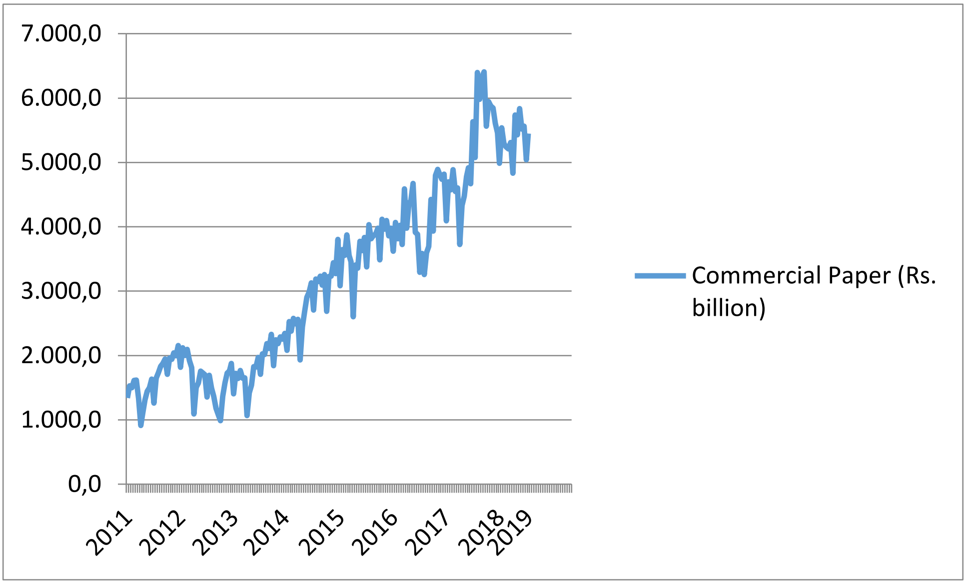



**Source:** *https://www.amfiindia.com/research-information/mf-history; https://www.relakhs.com/top-mutual-fund-schemes-2019/*

[8] The exchange rate is currently approximately Rs.70 = $1.
[9] Source: https://www.moneycontrol.com/news/business/mutual-funds/mf-wrap-why-mutual-funds-pared-stake-in-nbfcs-hfcs-in-september-3042691.html)/

Commercial paper (CP) or unsecured promissory notes with a fixed maturity of not more than 270 days are a major funding instrument used by NBFCs. Figure 10 shows the amount of commercial paper issued over the last 7 years. In this short period, issuance has almost tripled.

**Figure 10** – Growth of commercial paper (CP), 2011-2018




***Source:*** *DBIE-RBI, https://dbie.rbi.org.in/DBIE/dbie.rbi?site=publications*

This spurt in the issuance of commercial paper is one of the reasons for financial fragility of the system; after all, physical assets of businesses whose valuations are prone to market and macroeconomic fluctuations back CPs.

## 4.3.Growing concerns over shadow banks in India

Before we raise concerns over shadow banking in India, we must acknowledge its benefits:

- Provide alternatives for investors to bank deposits.
- Channel resources towards specific needs more efficiently due to increased specialization.

- Constitute alternative funding for the real economy, which is particularly useful when traditional banking or market channels become temporarily impaired.
- Constitute a possible source of risk diversification away from the banking system.

The primary activity of this system is the buying and selling of securities—securities which are, in general, collateralized by loans (or by other securities which are themselves collateralized by loans). Shadow banking therefore, in large part, involves the trading of already existing credit claims. When securities are bought and sold, the commodity which changes hands embodies credit, not goods. What is sold is a promise, by a third party, of future payment in money. When credit claims fall due, settlement requires receipt of assets higher up the pyramid in the hierarchy of money (Mehrling, 2012) than the credit claim itself. A holder of asset-backed commercial paper would usually require settlement in demand deposits. NBFC usually settle these claims with the issue of new CP. However, if banks and other financial institutions are unwilling to buy this new debt, settlement of older claims becomes difficult, inevitably causing a financial crisis in the system.

These risks in shadow banking played out in 2018 with a string of defaults by one of India's largest NBFCs, IL&FS – a company in the top 100 of the Fortune 500 companies – exposing signs of financial fragility in the system. As in Figure 5, IL&FS pyramid had three layers; the holding company, its SPVs and below them, the project companies. Money borrowed by the holding company and the SPVs from banks and other financial institutions were passed down at high rates of interest to project companies, while, at the same time, the holding company collected high fees upfront from its own subsidiaries. IL&FS also worked as a massive Ponzi scheme, with the holding company acquiring funding for its loss-making project companies, utilizing its reputation in the market that was often confused as a government entity.

With IL&FS defaulting CPs, commercial deposits (CDs) and inter-corporate deposits, it soon became apparent that the company was bankrupt with an outstanding debt of Rs.9.1 trillion (US$130 billion). The contagion effect on other companies was massive; the equity markets reverberated with selling of stocks of several financial institutions linked with IL&FS. When major institutional shareholders refused to rescue the company with infusions of capital, the government was forced to take over administration of the company out of the fear that the collapse of IL&FS would spread through the financial system (Ghosh, 2019). This intervention did prevent a crisis from erupting but it revealed the high risks which shadow banking brought to the Indian financial system. While technically the reason for default on loans was the asset-liability mismatch from long term projects being funded with short term loans, it revealed that shadow banking was turning "dark" with elements of fraud, poor corporate governance and weak risk management systems.

### 4.4. Policy responses and interventions in the Indian shadow banking sector

While the regulation of NBFCs comes under the ambit of the RBI, the Securities & Exchange Board of India (SEBI) lays down norms for Mutual Funds. The IL&FS debacle has triggered the regulators to increase surveillance of these institutions to safeguard savers. At the same time, they have realized the importance of shadow banks in financing of much needed investments in the economy and have therefore taken adequate steps to allow growth in and deepening of shadow banking in India.

The RBI focus in its recent announcements has been to ensure higher attention on liquidity management by shadow banks, diversification of sources of funds and harmonization of governance and supervision standards of commercial banks and shadow banks (ET Bureau, 2019). Furthermore, in a latest decision, the RBI has increased the ceiling for a bank's exposure to a single NBFC to 20% of its tier I capital from 15% earlier (Ghosh and Prasad, 2019). According to one of India's leading bankers, the deft handling of the situation through asset sales and government control over IL&FS ensured that it did not turn into a Lehman moment for India.

The SEBI has also issued new rules for the mutual fund industry including mandatory holding of liquid assets (cash and government securities), reduced sectoral exposure and greater diversification in lending, valuation of debt at mark-to-market, investment only in listed commercial papers and non-convertible debentures as well as limits on investments in debt instruments with promoters' guarantee or equity shares as collateral (Yadav, 2019).

However, although the crisis is now considered over, other NBFCs continue to face liquidity problems and difficulty to raise adequate funds. Nonetheless, important lessons have been learnt from the crisis and a consensus has emerged on the need for strict regulation and oversight of NBFCs and lending institutions while, at the same time, an acknowledgement of the shadow banking system.

## SUMMARY AND CONCLUSION

Our analysis reveals the nature of shadow banking in an abstract sense as an institution interlinking three important agents; savers, investors and commercial banks. Banks serve two key functions in this process: credit creation at the commencement of the production cycle and liquidity provision in the process of credit transformation from short-term lenders (savers) to long-term borrowers (investors). Through a process of credit transformation, shadow banks channel funds from savers to investors by selling the former promises to pay by the latter. During times of a booming economy, shadow banks are easily able to access funds from the market and banks to keep up their short-term commitments to savers. Projects also yield returns in the longer-term to settle dues to savers. However, when the macroeconomic environment turns difficult and/or projects turn out dubious, the charade of credit transformation must end at some point of time. Given the inter-linkages between shadow banks and other financial institutions including banks, the systemic risk exposes the fragility in the financial system with crisis as the inevitable outcome.

This paper revealed this underlying narrative of shadow banking by first looking at different definitions of shadow banking and then presenting mechanisms or modus operandi of this financial institution. We then studied the nature, growth and emerging concerns over shadow banks in India. Since the era of financial liberalization in India in the 1990s, shadow banks have grown rapidly and becoming more interlocked with the rest of the financial sector, exposing the sector to systematic risk. This ended up in a crisis with the collapse of IL&FS, a large and significant shadow bank. Since the crisis, the RBI has increased regulatory standards for NBFCs while SEBI has laid out new norms for mutual funds exposed to shadow banks. While regulation of NBFCs in increasing, the financial system is becoming more and more fragile from within – in particular, corporate governance issues – and also from the outside – in terms of the challenging macroeconomic environment. However, shadow banks are now understood as an indispensable financial institution albeit with systemic risks.

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