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A Study on the Observations and Assessments of the Reserve Bank of India on Non Performing Assets in the Indian Banking Sector

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Abstract

This paper looks into the causes behind the emergence of Non-Performing Assets (NPA) and the reasons why they continued to grow in the Indian banking sector from the perspective of top officials of the Reserve Bank of India(RBI). It makes a detailed analysis of the speeches delivered and academic research conducted by RBI officials on various aspects of NPA growth.

Evidence can be found in RBI publications that credit policy mistakes by bankers caused exceptional growth in corporate debt levels during the high economic growth phase of the early 2000s. Many of these loans were made to projects with weak fundamentals or those that had very low promoter investment. When economic growth slowed down, these businesses became incapable of paying interest on their loans. With the emergence of governance problems, many projects got delayed or stalled. Promoters did not make genuine efforts to revive these projects. Banks continued to restructure these loans but did not designate these as non-performing. When RBI finally downgraded these loans under the "Asset Quality Review" exercise, the quantum of NPAs grew rapidly in the bank books. RBI's NPA resolution schemes have evolved continuously and are now potent enough to even bring about ownership change in loan defaulting companies.

Keywords- Non-Performing Assets (NPA), Reserve Bank of India (RBI), NPA resolution, Global Financial Crisis, Insolvency and Bankruptcy Code (IBC)

Introduction

In the years following the economic downturn of 2008-09 and the Eurozone debt crisis of 2011, the Indian banking sector was ravaged by an exponential growth in Non Performing Assets (NPA). During this time period international financial turbulences had started impacting India's economy and banking sector. The rapid rate of economic growth that had been achieved in the early 2000s began losing momentum. Corporate incomes declined rapidly and they failed to repay bank loans raised in the previous years. Growing liability towards banks in the form of unpaid loans, coupled with shrinking profits greatly weakened the balance sheets of the over leveraged companies. Inability of the borrowing companies in paying loan interest hurt the principal income source for the lending banks – interest on loans and advances. However, although the loan accounts of the defaulting companies did not yield interest income for the banks, these continued to appear as assets in the bank balance sheets. As the number of loan defaulting companies increased; so did the number of "bad loans" in the bank balance sheets. The simultaneous existence of huge unserviceable debts in the corporate balance sheets and loan accounts lacking interest earning ability in the bank balance sheets is commonly called the "twin balance sheet" syndrome of the Indian economy (Shukla and Shaw (2020)).

Successive leadership of Reserve Bank of India (RBI) have attributed utmost importance to the task of stemming the growth of NPAs. Over the years, RBI has been actively monitoring the trends and patterns of NPA proliferation in Indian banks and the functioning and progress achieved by its NPA resolution schemes. In this process, the RBI officials were able to discover and document several important aspects of NPAs in India's Public Sector Banks (PSBs), which cannot be fully understood from the study of academic literature or by analysing the macroeconomic situation alone. Such observations have also aided the evolution of new NPA schemes and to make necessary modifications to existing ones.

This paper analyses RBI's policy and approach towards finding a solution to the rapid NPA proliferation in Indian banks in the wake of the 2008-09 financial crisis. It assesses various forms of RBI literature pertaining

to NPAs in Indian banks as well as the functioning of its NPA resolution schemes. The RBI website contains detailed compilation of observations made by key RBI officials regarding the growth of bad loans in India's banking sector and the functioning of the NPA resolution schemes. Detailed analysis of RBI literature can help to understand various salient aspects of NPAs in the Indian context and identify reasons why NPAs continued to grow even after the implementation of various NPA resolution schemes. Through a thorough study of various RBI publications, this paper attempts to identify those aspects of the emergence or growth of NPAs in Indian banks which cannot be readily discerned from analysis of academic literature.

Literature Review

Non-performing loans (NPL) have a negative relation with GDP growth (Fofack (2005), Louzis et al(2012),Greenidge & Grosvenor(2010), Messai & Jouini (2013)). When a country's real economy improves, NPLs of its commercial banks decrease instantly (Khemraj & Pasha (2009), Swamy(2012)). Economic growth is linked to rise in incomes and reduction of financial distress (Nkusu (2011)). NPLs are lower during periods of high economic growth as borrowers have enough income to repay their debts (Marouf & Guellil(2017), Wood & Skinner(2018), Makri(2014), Bofondi & Ropele(2011)). Contrarily, a recessionary phase adversely impacts the NPL ratio (Abid et al(2014), Louzis et al(2012)).Fall in per capita income increases chances of NPL formation (Fofack(2005)).

Rapid credit growth owing to its increased demand during times of economic prosperity may subsequently give rise to bad loans (Jayaraman et al(2018)). Jiménez & Saurina(2006) have observed a "positive" but "quite lagged" relationship between rapid loan growth and NPLs in banks. This long time lag between credit growth and emergence of bad loans may create disaster myopia, herd behaviour and agency problem between bank managers and shareholders. It also assures bank managers that lowering of credit standards will not adversely affect asset quality in short run (Jiménez & Saurina(2006)). Thus, when demand for loans is high, bank managers facing stiff competition from other banks relax their credit standards and lend to borrowers of low creditworthiness. If the economy slows down, the financial condition of these borrowers degrades and they fail to service their debts. Such loan losses negatively impacts bank profitability (Makri(2014)). However, Greenidge & Grosvenor (2010) have reported that total credit growth is "significantly" and "negatively" related to the NPL ratio. They argued that periods of loan growth coincide with economic expansion and increasing employment and income. The opposite happens in a recession causing slower loan growths and emergence of NPLs.

Inflation negatively affects borrowers' incomes reducing their ability to service their debts (Jayaraman et al(2018), Greenidge & Grosvenor (2010)). Falling inflation favourably affects the borrowers' financial condition and helps them to repay their loans (Abid et al(2014). Some authors describe the effect of inflation on bank asset quality as 'mixed'. Higher inflation reduces the borrower's real income if wages and salaries remain unchanged. During inflation, lenders may adjust interest rates on variable interest rate loans for maintaining their returns or to pass on increments in policy rates caused by anti inflationary monetary policies. Loan repayment thus becomes more difficult. However inflation may also make it easier to repay loans as it reduces the real value of the debt (Nkusu (2011), Bofondi, & Tiziano (2011), Makri(2014), Kjosevski & Petkovski(2016)).

Research Gap

Existing literature on asset quality and Non Performing Assets (NPA) have mostly explored the subject from an academic standpoint. However, analysis of academic literature on bad loans does not always present a practitioner's point of view. This gap may be bridged by analysing views that bankers have on the growth of bad loans in the banking system. Lectures, reports and white papers included in the official publications of different central banks contain detailed analysis by the country's top bankers on various aspects of NPAs. The current paper attempts to analyse the banker's perspective on non-performing loans in order to complement the current academic literature on non performing assets.

Objectives

The paper has the following objectives:

i. To identify and analyse salient aspects of Non-Performing Assets in the Indian banking sector as highlighted by RBI officials in their assessments and observations
ii. To study the evolution of NPA resolution policies of RBI

Data Collection

The chief source of data for this paper is the wide variety of banking literature published by the RBI in its official website: https://www.rbi.org.in. The following forms of RBI literature have been used as data sources for this paper:

1. RBI occasional papers and working papers
2. Speeches by key RBI officials
3. RBI circulars and guidelines
4. Statistical Tables Relating to Banks in India(STRBI)

The RBI Occasional Papers serves as RBI's official research journal. It publishes analytical and empirical research by RBI officials either independently or in association with external researchers. The high-quality research work published in it is of interest for both policymakers and academics (https://www.rbi.org.in/Scripts/OccasionalPapers.aspx). Since March 2011, the RBI Working Papers series has been presenting in-progress research by RBI staff members. Its purpose is to draw out comments and encourage further debate. Speeches delivered by key RBI officials on various occasions are available in archived format on the RBI website. These speeches contain first hand observations and opinions of RBI officials on a wide variety of banking and economic issues.

For the purpose of the paper, particular occasional and working papers, speeches and circular relating to the issue of NPAs and stressed advance were downloaded for analysis.

From time to time, the RBI issues "master circulars" to disseminate its guidelines, instruction and regulations on various banking and financial matters. These master circulars are available on RBI's website and are updated when necessary.

Statistical Tables Relating to Banks in India (STRBI) is a valuable source of statistical data on the commercial banking sector. It contains balance sheet data and performance indicators on each commercial bank in India (RBI Annual Publications).

Methodology

Various forms of RBI literature and publications pertaining to NPAs were downloaded from the RBI website. Speeches made by present and former governors and deputy governors were studied in detail to understand their conclusions and opinions on NPAs in Indian banks. Special emphasis was put into the speeches made during the time when NPAs had started to become a serious threat to banking stability.

Table1: Speeches analysed for the paper

Speech delivered by	Position held in RBI
Raghuram Rajan	Governor (4 September 2013 – 4 September 2016)
Urjit Patel	Governor (4 September 2016 – 10 December 2018)
Kamalesh Chandra Chakrabarty	Deputy Governor (15 June 2009 – 25 April 2014)
N. S. Vishwanathan	Deputy Governor (4 July 2016 – 31 March 2020)
Rama Subramaniam Gandhi	Deputy Governor (3 April 2014 – 3 April 2017)
Biswamohan Mahapatra	Executive Director

Source: *Author*

Assessment of speeches and working paper articles were instrumental in identifying the reasons that the speakers/authors held responsible for growth of NPAs. Special importance was placed on the following points:

- Identifying credit policy mistakes made by banks during the high GDP growth phase
- Understanding the role of incompetent promoters and continuous restructuring of stressed loans in persistence of the bad loans problem
- Critical analysis made by the speakers of various NPA resolution schemes

For understanding the working and target area of various NPA resolution schemes, the paper has analysed various circulars an guidelines issued by the RBI from time to time.

Driving Factors behind NPA Growth

Majority of the RBI literature analysed here have stated that in the early 2000s, over-optimism and consequent lowering of lending standards by banks had resulted in heavy growth of bank credit. The severe economic recession that followed, lead to the emergence of stress in the loan accounts. However, growth trends of NPAs and its slippages indicate that causes for asset quality deterioration had started arising much before the global economic slowdown started (Chakraborty(2013)). According to Rajan(2016b)the situation in 2007-08 was characterised by strong economic growth, rapid increase of deposits in public sector banks and timely completion of many infrastructure projects. These are precisely the circumstances in which bankers make mistakes in lending decisions. Expecting the strong growth to continue, banks become willing to lend even to projects having bad fundamentals or with very low promoter equity. It was also observed that banks did not do their due diligence and were lending on the basis of project reports made by the borrowers' investment banks. Such "irrational exuberance" is a phenomenon that is commonly observed in many economies during the "boom" phase of the business cycle (Rajan(2016b)).

High levels of growth in bank credit to the industrial sector lead to a steady increase in corporate indebtedness between 2005 and 2011 (Table2). During the high GDP growth period underwriting standards got lowered by what may be called "irrational exuberance". Although debt levels were already high, growth in bank lending continued to be above 20%. Such "over leveraged" businesses are naturally more vulnerable to economic turbulences (Vishwanathan(2016)).

Table2: GDP growth v/s Bank credit growth

	06-07	**07-08**	**08-09**	**09-10**	**10-11**	**11-12**	**12-13**	**13-14**	**14-15**	**15-16**
Annual GDP Growth (%)	9.6	9.3	6.7	8.6	8.9	6.7	5.6	6.6	7.2	7.6(P)
Credit Growth (%) (as on the last Friday of the financial year)	28.1	22.3	17.5	16.9	21.5	17.0	14.1	13.9	9.1	10.9
Credit growth Industrial sector (%)	26.7	25.0	23.0	24.4	23.6	20.3	15.1	13.1	5.6	2.7

Source: *Vishwanathan(2016)*

Based on bank-wise analysis of credit and NPA growths, Chakraborty(2013) has found that banks with highest Compounded Annual Growth Rate (CAGR) of NPAs during 2008-13 were the ones that had higher CAGR of credit during 2004-09. Owing to faulty credit appraisal, banks failed to adequately consider a borrower's existing debt levels before sanctioning or renewing loans. As a result, promoter's equity contribution declined and indebtedness increased in projects financed by bank loans (Chakraborty(2013)).

When lending during the high GDP growth period, banks did not put in sufficient efforts to gauge the indebtedness levels of a borrower. This greatly reduced the promoter's stake in the project. Thus "corporate insolvency" became more of the lending bank's problem instead of the promoter (Vishwanathan(2016)).

In 2007-08, strong growth made future possibilities look limitless. Banks lent heavily in expectation of this growth surge to continue into the future. However, contrary to such expectations the subsequent years saw the world economy being ravaged by the global financial crisis and the European debt crisis. Its effects were felt even in India. Drastic slowdown in global demand meant that demand projections on various projects turned out to be highly unrealistic (Rajan (2016b)). Research states that in an atmosphere of high credit demand, banks may fail to correctly anticipate hazards for projects finance by it due to disaster myopia (Guttentag & Herring, 1986), herd behaviour (Rajan, 1994), institutional memory hypothesis (Berger & Udell, 2003) etc. Disaster myopia occurs when managers start underestimating the probability of future occurrences of certain adverse financial events that have not occurred for a long time in the past. In their speeches, RBI deputy governors K.C Chakraborty and N.S Vishwanathan have indicated that when lending during the high GDP years, bankers may have underestimated the possibility of erosion of the borrower's repayment capacity in the near future. Banks did not simulate extreme stress scenarios in the stress tests or simulation models they used for risk assessments, or the extent to which a borrower's repayment capacity can withstand these. Various possible adversities to infrastructure projects were not factored in and backup plans were not included in the credit appraisal process (Chakraborty(2013)). Banks had also underestimated the likely impact of international financial troubles, exchange fluctuations etc on Indian markets and businesses (Vishwanathan(2016)). In the wake of the global financial crisis, emergence of governance problems and bureaucratic red-tape made permissions for infrastructure projects difficult to secure. Several projects stalled and suffered cost escalations which eroded their ability to repay bank debts (Rajan (2016b)).

Another reason why the banks failed to foresee the possibility of default by the corporate borrowers is their inability to gather and analyse data on various credit risk elements. As asset size of the banks increased and credit management became more complex, information systems failed to evolve at the same pace. Bankers did not have access to data on early signs of fall in asset quality, slippages and segment wise trends etc. Consequently, they failed to recognize reversals in asset quality trends during the pre-crisis years. This impeded the detection of the problem accounts, thus weakening a bank's credit management (Chakraborty(2013)).

Deficiencies in credit risk assessment could have been "somewhat compensated" by meticulous post-lending monitoring. This includes careful documentation and tracking of collateral and promoter guarantees. Sadly, many projects were weakly monitored even though project costs piled up. Moreover in many cases, public sector banks even kept financing many failing or troubled projects (Rajan (2016b)).

Lack of adequate credit portfolio diversification – both borrower wise and sector wise - also made banks vulnerable to idiosyncratic risk (Vishwanathan(2016)). There has been drastic rise in the indebtedness of large business groups during the high growth years. Credit Suisse had studied ten large corporate groups an found that between 2007 an 2013, their share in banking sector credit had doubled even though their overall debt had increased from Rs one trillion to Rs. six trillion (Chakraborty(2013)). In the later years, it was found that not only these large borrowers had disproportionately high share of bank credit, but also had a very high concentration of NPAs.

Table3: Share of large borrowers in gross advances and gross NPAs

	Gross Advances (%)	Gross NPAs (%)
March-2015	58.10%	72.80%
September-2015	56.80%	83.40%
March-2016	58%	86.40%

Source: *Vishwanathan(2016)*

Considering the higher levels of loan stress, certain industrial sectors could be termed "stressed" sectors. These include: Infrastructure, Iron and Steel, Textiles, Mining (including Coal) and Aviation (Gandhi(2015)). Credit growth in iron and steel, infrastructure, power and telecom sectors witnessed much higher credit growth despite having substantially high ratio of impaired assets. Continuous flow of bank financing to these "stressed" sectors points towards possible loopholes in the credit appraisal process of the banks (Chakraborty(2013)).

In the aftermath of the coal mines de-allocation, fear of investigations had slowed down government decision making. Promoters lost interest in these excessively delayed projects as they had very little equity left in these projects. Bankers did not have the power to compel the promoters to increase their stake in the projects. Instead, banks kept making additional loans to these failing projects instead of recognizing them as non-performing. As no interest income came from these accounts, bank losses kept increasing. The problem continued as promoters made no serious attempts to revive these projects (Rajan(2018)).

Authors have also criticised the practice of regulatory forbearance and the Corporate Debt Restructuring (CDR) for growth in NPAs. The CDR scheme was introduced in 2001 as an institutional mechanism for restructuring large loan accounts of viable corporate borrowers facing adverse financial circumstances (RBI 2001). The need for such a mechanism stemmed from the fact that bankers faced difficulties in coordinating their negotiation and monitoring efforts in restructuring loans which involved multiple lenders (Chakrabarty (2012)). Initially CDR covered only standard and substandard loan accounts with outstanding exposure of Rs20 crores or above (RBI 2001). Later, the scheme was extended to cover loan accounts of "doubtful" category too (RBI 2003). Also the threshold amount was reduced to loans of Rs.10 crores (RBI 2005). The CDR scheme has often been criticized as it allowed restructured loan accounts to retain their previous asset quality post restructuring, if it met certain conditions. This practice (called regulatory forbearance) was in divergence with Basel II norms that regarded restructuring as an instance of default whatever the status of the account. Bankers were generally reluctant to recognize stressed loans as non-performing. Hence, in many cases CDR restructuring was undertaken just to avoid having to downgrade stressed loan accounts as non-performing instead of resolving their stress. Postponing NPA recognition made bank balance sheets to look stronger than they actually were. Also borrowers could escape being labelled as defaulters (Vishwanathan(2018)). Due to asset regulatory forbearance, continued use of the CDR scheme led to sharp rise in the proportion of restructured loans included within "standard" assets. Between 2009 and 2012, restructured standard

advances had grown to more than double that of Gross NPAs (Table4). The true extent of bad loans in the banking system therefore, remained hidden and the bank balance sheets did not show a true and fair view of the bank's health.

Table4: Growth of restructured advances

Item	March 2009	March 2010	March 2011	March 2012
Gross advances	27,93,572	32,71,896	40,12,079	46,55,271
Standard advances	27,25,350	31,90,080	39,17,991	45,29,236
of which restructured	60,379	97,834	1,06,859	2,18,068
Restructured standard advances as % of gross advances	2.16	2.99	2.66	4.68
Gross NPAs	68,222	81,816	94,088	1,37,102
Gross NPAs as a % of gross advances	2.44	2.50	2.35	2.94
Source: *Mahapatra(2012)*				

Remedial Measures Undertaken By the RBI

In the words of former RBI governor Raghuram Rajan, that the NPA situation needed "deep surgery" instead of just applying "band aids". This means taking a comprehensive long term approach in place of adopting short term measures (Rajan(2016)). Over the years, the RBI has undertaken a plethora of measures to enable banks make better credit policy decisions and provide greater strength to the bankers in effectively dealing with promoters who are reluctant to make genuine efforts for reviving their stalled projects.

For allowing banks to have easy access information on large credits, RBI created the CRILC (Central Repository of Information on Large Credits) database as part of the "Framework for Revitalising Distressed Assets in the Economy" (RBI 2014, January30). All scheduled commercial banks reported their fund and non fund exposures greater than Rs.5 crores; as well as the SMA (Special Mention Account) status of borrowers to CRILC (RBI). Information collected under CRILC is shared between all reporting banks. Hence, it is an important tool for identifying stress in the loan accounts at an early stage; bring about prompt action for its resolution and to ensure fair recovery from the account. As soon as an account is reported to CRILC as SMA2, lenders should form a Joint Lenders Forum (JLF) and formulate a joint Corrective Action Plan (CAP) for its resolution. Although the framework retained the asset classifications benefits in case of timely implementation of restructuring, provisions for penalty were also added in the form of accelerated provisioning requirements if the lenders failed to report the SMA status of the borrowers or if they attempted ever-greening of their loan accounts (RBI 2014, January30). The general principle of restructuring by the JLF is to make the shareholders of the borrowing entity bear the first loss of restructuring instead of the lenders. Guidelines on JLF and CAP stipulated various options for ensuring greater commitment of shareholders in the restructuring process. The JLF could even consider changing the ownership of the borrowing entity if operational or managerial inefficiencies prevented the borrower from recovering from stress. The restructuring package had to stipulate a time frame by which the restructured loan accounts needed to achieve certain viability milestones (such as improvements in specific financial ratios) (RBI 2014, February26). For loan accounts that failed to attain these planned viability milestones, banks were given the option to undertake "Strategic Debt Restructuring" (SDR). SDR allowed banks to convert principal or outstanding interest in a loan account to equity shares and thereafter acquire majority shareholding in the borrowing company; provided, the terms of restructuring contained a clause to enable such a conversion. Later, banks were to divest their holdings in favour of a new promoter thus bringing about a change of ownership of the borrowing entity. Thereafter, the loan account is upgraded to "standard" category (RBI 2015). Banks were to invoke SDR only when the borrowing company has weak management and changing it altogether is most likely to improve the possibility of recovery from the loan account (RBI 2016). The Scheme for Sustainable Structuring of Stressed Assets (S4A) sought to restructure projects belonging to competent promoters, which may have got over-indebted in times of economic crisis (Rajan (2016b)). Loan accounts that met the prescribed eligibility criteria were tested for debt sustainability by the JLF using an independent Techno Economic Viability (TEV). The scheme would apply only if 50% of the debt was found to be sustainable. The part of the debt deemed unsustainable, were to be converted to equity shares or debentures (RBI 2016b).

To uncover and acknowledge hidden NPAs in the bank books, two major steps were taken: (i) ending of regulatory forbearances and (ii) undertaking of the ARQ. The practice of regulatory forbearance on downgrading restructured standard accounts was ended in April 2015 on the recommendations of the "Working Group to review the Prudential Guidelines on Advance Restructuring" (Mahapatra(2012)). In 2015, RBI started the Asset Quality Review (AQR) exercise in order to clean up and present fully provisioned bank balance sheets by March 2017 (FSR, June 2016). The AQR forced banks to downgrade many restructured accounts as NPAs which lead to a huge increase in NPA levels.
The Insolvency and Bankruptcy Code (IBC) was enacted in 2016 to provide a strong legal framework that can be applied to troubled or defaulting companies. IBC mandates a time period of 180days (which can be extended to a further 90 days) for the creditors to decide on a resolution plan, failing which the adjudicating authority will liquidate the defaulting company. The threat of liquidation means that the creditors as a whole may have to face much higher losses. This ensures that they will quickly arrive at a decision by effectively coordinating during the insolvency resolution process. If a loan defaulting company is referred to IBC, the promoters stand to lose control of the firm to potential bidders. This is a strong incentive for them to avoid loan defaults or to make excessive borrowings (Patel (2017)).

Conclusion:

This paper highlights how bankers can fall prey to "disaster myopia" and "irrational exuberance" and commit fundamental mistakes in making lending decisions during a period of strong economic growth. RBI officials had identified several major lending policy mistakes made by banks during the high growth phase. These include (i) lending to a customer without first referring to his existing debt levels (ii) not doing sufficient due-diligence and lending based on project reports prepared by others, (iii) lending to projects with very low promoter equity (iv) lack of post lending monitoring and (v) continued lending to ailing projects.
De-allocation of coal mines and slowdown in government decision making had caused several projects to get delayed or stalled. Fall in international demand and economic slowdown meant that companies with high debt levels were unable to pay any interest to the banks. Promoters were reluctant in reviving projects with high levels of debts and low promoter equity. Although these projects were unable to service their debts, banks kept restructuring them and refrained from designating these loan accounts as non-performing. The bank books looked healthy on the surface, but actually hid large volumes of "bad loans".
Sensing several limitations in its NPA resolution techniques, the RBI radically modified them. Newer techniques were evolved which made it possible to bring about change in the ownership of the defaulting companies. Enactment of the Insolvency and Bankruptcy Code (IBC) in 2016 was a milestone in India's strife to rid its banks from the menace of Non-performing assets.
Thanks to the Central Repository of Information on Large Credits (CRILC), banks now have comprehensive information on debt levels of various borrowers and in the banking sector as a whole. It is hoped that CRILC and various other measures taken by the RBI will help the banks avoid making such lending mistakes that had led to the evolution of NPAs.

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