



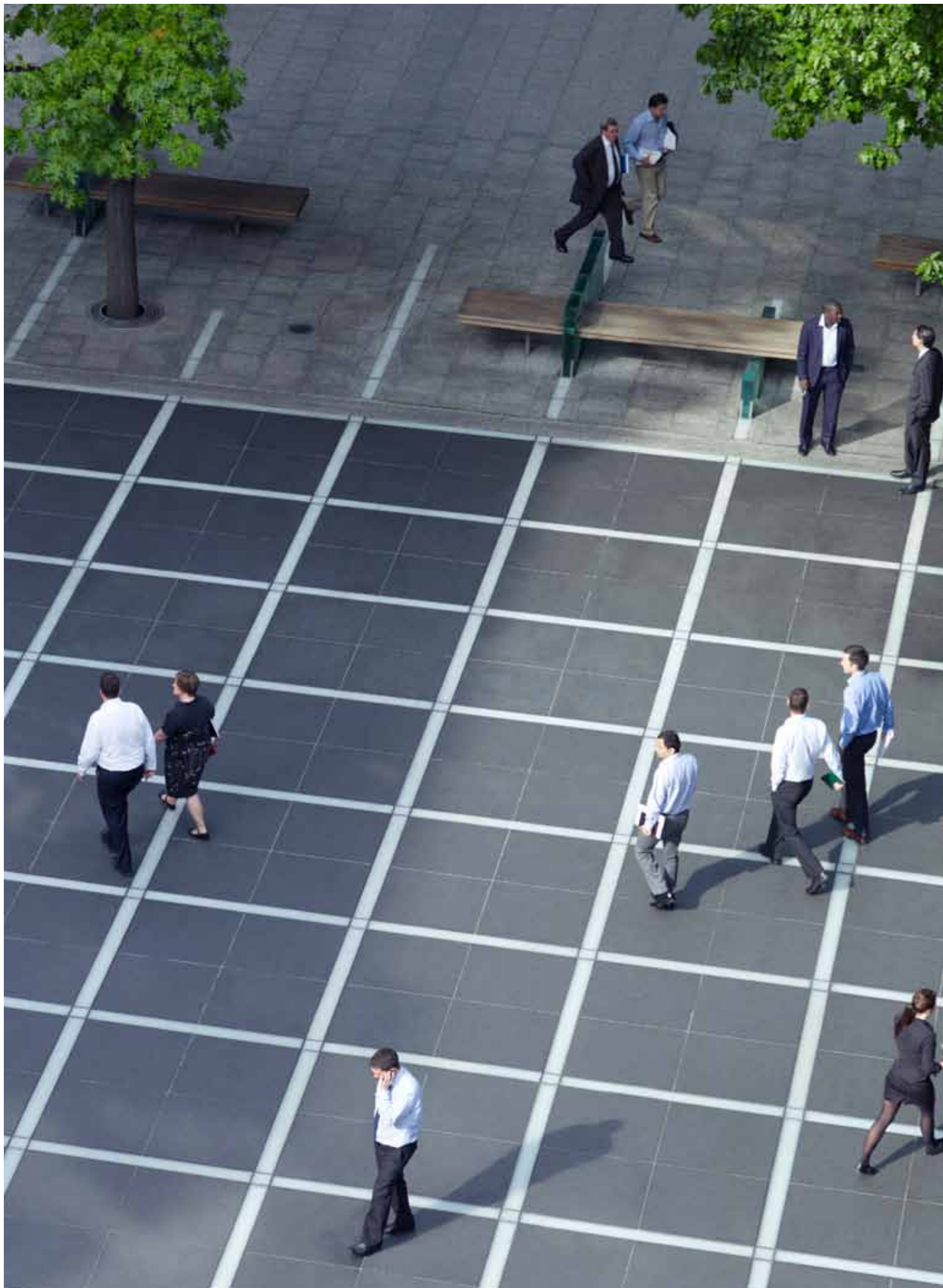
May 2014

Key macro-economic, regulatory and industry issues<sup>p4</sup>/NPA lifecycle in banks and role of early warning systems (EWSs) to mitigate credit risks<sup>p13</sup>/Role of CRA in credit risk assessment and its impact in terms of information value<sup>p16</sup>/Feasibility of an umbrella regulator<sup>p21</sup>/Regulatory role for improving efficacy of CRAs<sup>p23</sup>/ Conclusion<sup>p26</sup>

# ***Growing NPAs in banks***

## ***Efficacy of credit rating agencies***







## Message

I am glad to know that ASSOCHAM is releasing Growing NPAs in banks: Efficacy of credit rating agencies at the National Conference on Growing NPAs in Banks: Efficacy of Ratings and Accountability and Transparency of Credit Rating Agencies. I heartily congratulate the organisers for putting together the conference, the subject of which is very relevant to the Indian financial sector today. I also congratulate them for bringing out the knowledge report and wish them all the success.



**R Gandhi**

Deputy Governor, RBI

## Message

Non-performing assets (NPAs) are a key concern for banks in India. They are the best indicator of the health of the banking industry. Public sector banks have displayed excellent performance and have beaten the performance of private sector banks in financial operations. However, the only problem of these banks is the increasing level of non-performing assets, year by year. On the contrary, the NPAs of private sector banks have shown a decline. A reduction in NPAs shows that banks have strengthened their credit appraisal processes over the years. The increase in NPAs shows the necessity of provisions, which bring down the overall profitability of banks. Therefore to improve the efficiency and profitability of banks, NPAs need to be reduced and controlled.

A high degree of NPAs suggests high probability of a large number of credit defaults that affect the profitability and liquidity of banks. Under the circumstances, the role of credit rating agencies also needs to be relooked at and brainstormed over. We need to devise a way forward to ensure that rating agencies put forth an improved mechanism to keep a check.

The broad issues facing the modern day banking sector have been exhaustively covered in our report prepared in close association with our knowledge partner PricewaterhouseCoopers India Pvt Ltd. The PwC team has done full justice with the topic and I am sure the deliberations in the conference will throw light on the strategies to counter the issues affecting the bottom-line.

I wish the conference success.



**D. S. Rawat**

Secretary General , ASSOCHAM

## Message

To the question, whether economics and finance is science or art, somebody answered, science seeks to understand and art seeks to do. To that extent, banking today is almost a science and consequently, it is absolutely critical that the long-term impact of bank lending is seen as part of a larger ecosystem to understand linkages among stakeholders in this ecosystem.

Working with many of the stakeholders enables us at PwC to attempt to unfold the value chain of credit dispensation. This paper written with help from industry reports, our own knowledge repository and ASSOCHAM is a step in that direction. Our association with ASSOCHAM has been on topical issues and this time we have collaborated with them on NPAs, which I liken to an albatross that can bring down the profitability of banks and impair their future lending capabilities.

We thank ASSOCHAM for giving us this opportunity and look forward to more such collaborative ventures in the larger interest of the banking sector.



**Munesh Khanna**

Executive Director, Financial Advisory Services  
Pricewaterhouse Coopers Pvt Ltd

# Key macro-economic, regulatory and industry issues

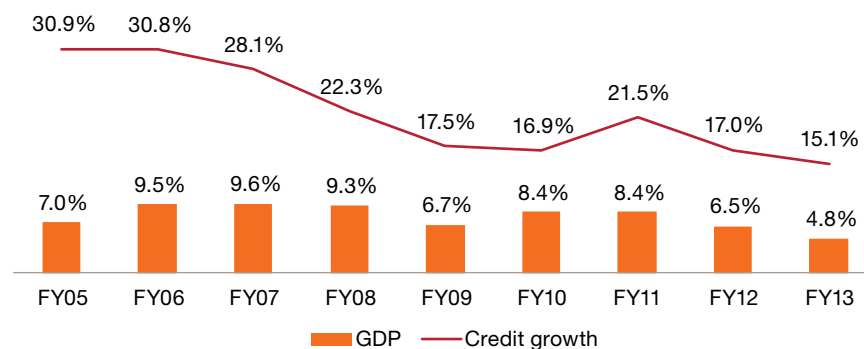
Across the globe, the banking sector acts as the catalyst for the country's economy. Banks play a vital role in providing financial resources especially to capital-intensive sectors such as infrastructure, automobiles, iron and steel, industrials and high-growth sectors such as pharmaceuticals, healthcare and consumer discretionary. In emerging economies, banks are more than mere agents of financial intermediation and carry the additional responsibility of achieving the government's social agenda also. Because of this close relationship between banking and economic development, the growth of the overall economy is intrinsically correlated to the health of the banking industry.

During the high growth phase of the economy from 2002 to 2008, credit growth in the Indian banking sector was in excess of 22%. A slackening in the economic growth rate has resulted in both, a lower credit demand as well as a receding appetite on the part of the banking industry, to extend credit. Stressed assets (SAs) in India have almost doubled from 5.7% in FY08 to 10.2% in FY13, which has impacted the banking industry adversely.

## Increasing stressed assets (SAs)

India is one of the fastest growing economies in the world and is set to remain on that path, backed by the growth in infrastructure, industry, services and agriculture. To support this growth, credit flow to various sectors of the economy has been increasing.

### GDP vs credit growth



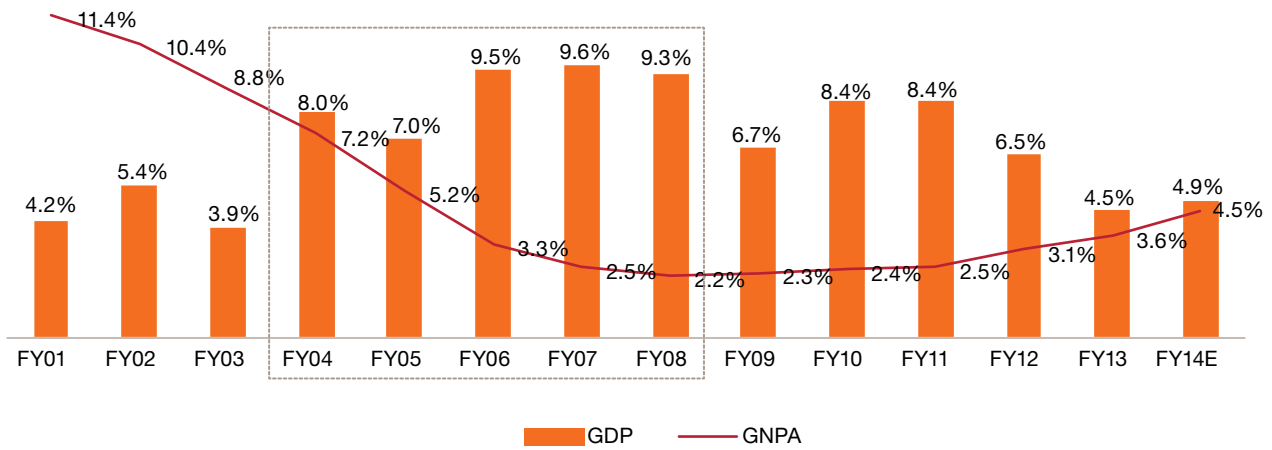
Source: Reserve Bank of India

## Asset quality trends correlate with GDP growth

Strong and sustainable credit growth is almost synonymous with a healthy operating environment and strong economic growth. This trend by and large leads to healthy and profitable asset creation within the economy and the banking sector. However, high growth phases are also when SAs are generated within the banking sector. This is due to excess capacity creation, easy availability of credit, less strict underwriting and easier monitoring during such a phase. This SA accumulation is however masked by strong credit growth. As a result, SAs look very low during this growth phase of the economy.

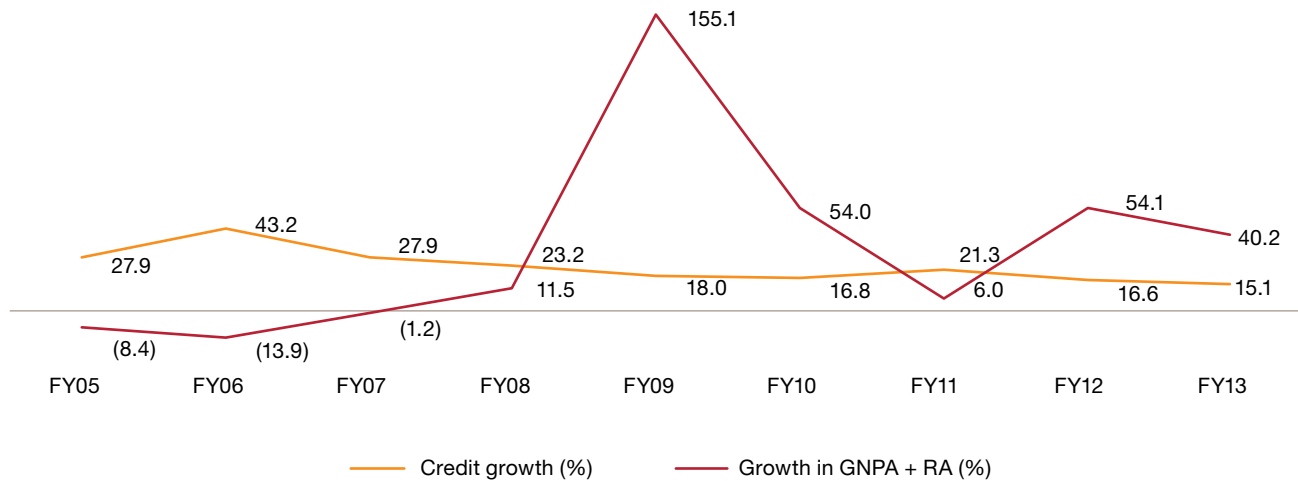


Gross NPA vs GDP in India



Source: Trends in Indian banking sector, Reserve Bank of India

Credit growth vs growth in GNPA + restructured assets (RAs)



Source: Trends in Indian banking sector, Reserve Bank of India

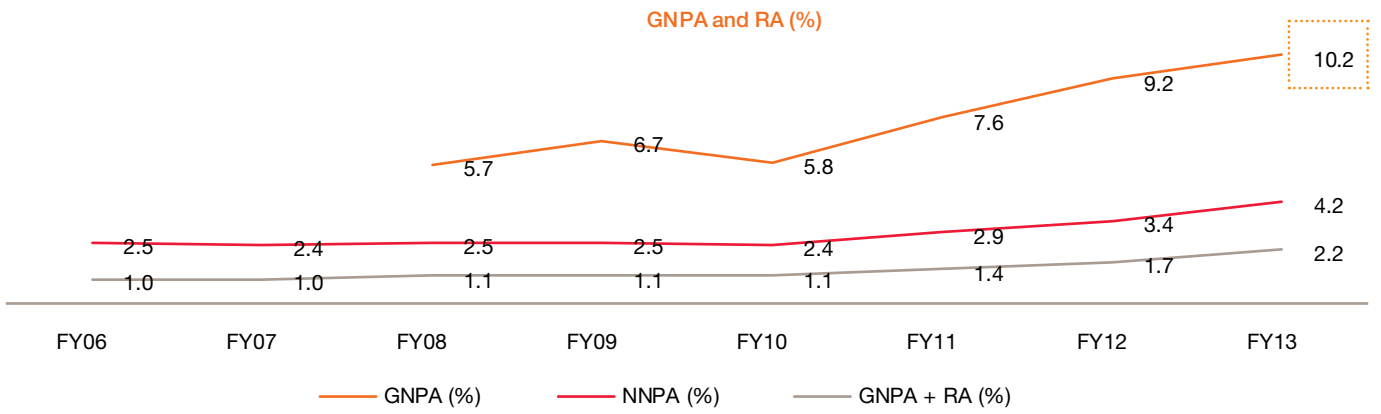
A period of downturn reverses this trend of low SA levels and asset quality concern increases as the growth in SA outpaces credit growth in the banking system. As a result, as the graph depicts, growth in SA increased by 40.2% in 2013 as against a 15.1% credit growth.

**Stressed assets: How big is the problem?**

The problem is not only restricted to rising GNPA ratios. The rise in the percentage of RA and security receipts (SRs) issued by asset reconstruction companies (ARCs) are also a cause for concern. Owing to the lack of detailed

data we have on SRs, we have limited our definition of SA in India to only GNPA and RAs. The true picture of SA can be depicted by combining the GNPA and RA (as a percentage of total advances). This figure, as on March 2013 is as high as 10.2% of the total banking credit.

**GNPA and RA (%)**



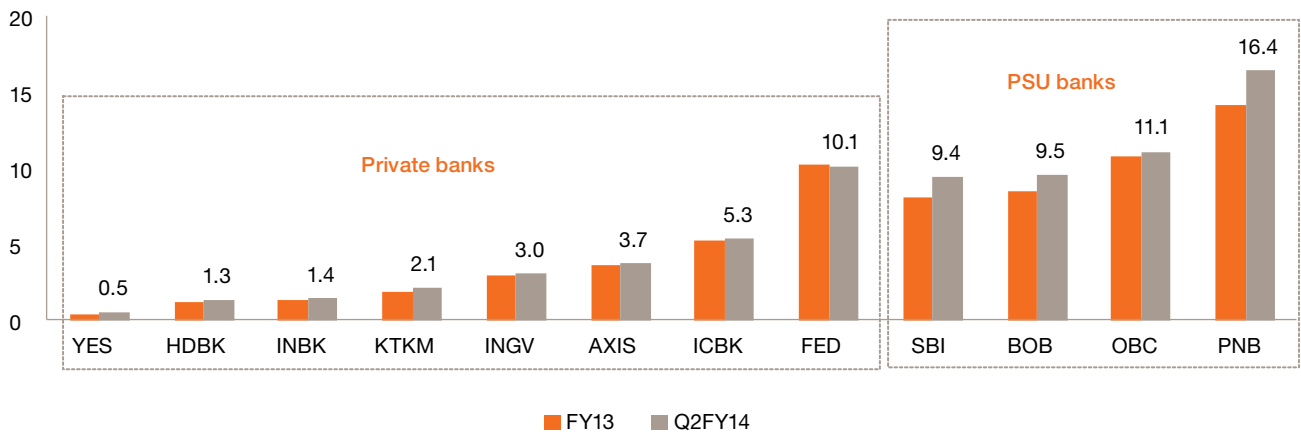
Source: Reserve Bank of India and Goldman Sachs Global Investment Research

The total banking credit outstanding as on 31 March 2013 was 57.90 trillion INR. Of this, the stressed asset (GNPA + RA) size is 5.91 trillion INR (10.2% of total)

**This can be further broken down into GNPA of 2.43 trillion INR (4.2%) and RA of 3.47 trillion INR (6.0%)**

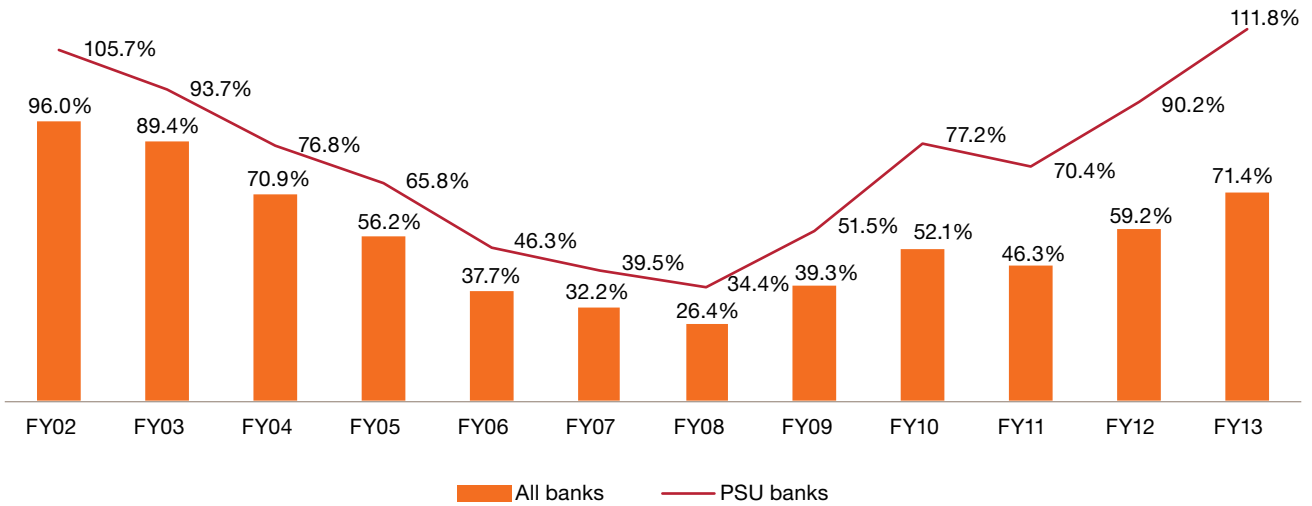
The biggest contributor to the 10.2% pool of GNPA is state-owned banks, where the stressed asset ratios (SA/total advances) in some cases are already high percentages.

**Stressed assets as a percentage of total advances**



Source: Company data, Goldman Sachs

Stressed assets as a percentage of equity



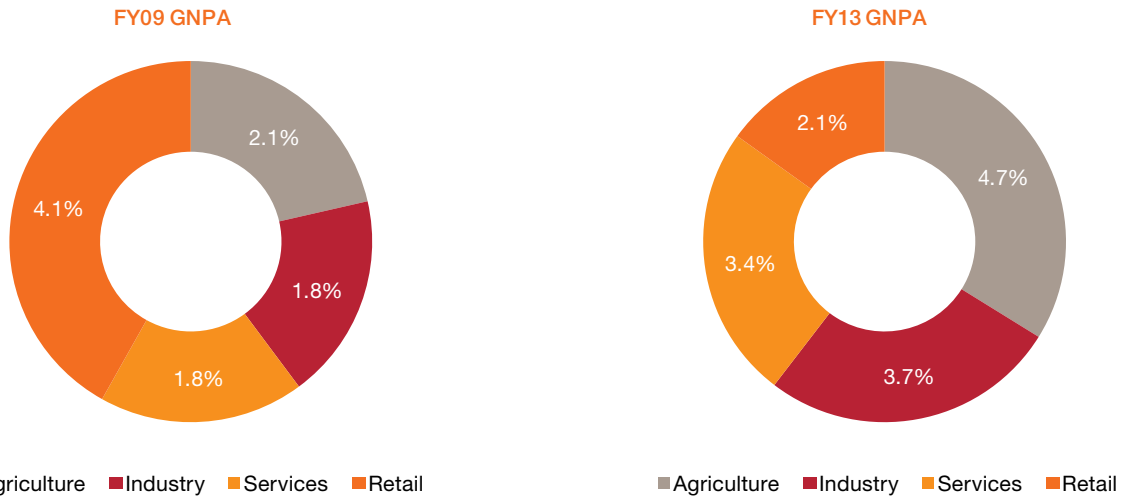
Source: Reserve Bank of India, Jefferies



Stressed assets among PSU banks have reached alarming proportions of approximately 112% of equity, whereas the same figure for private banks is manageable at about 50% of equity.

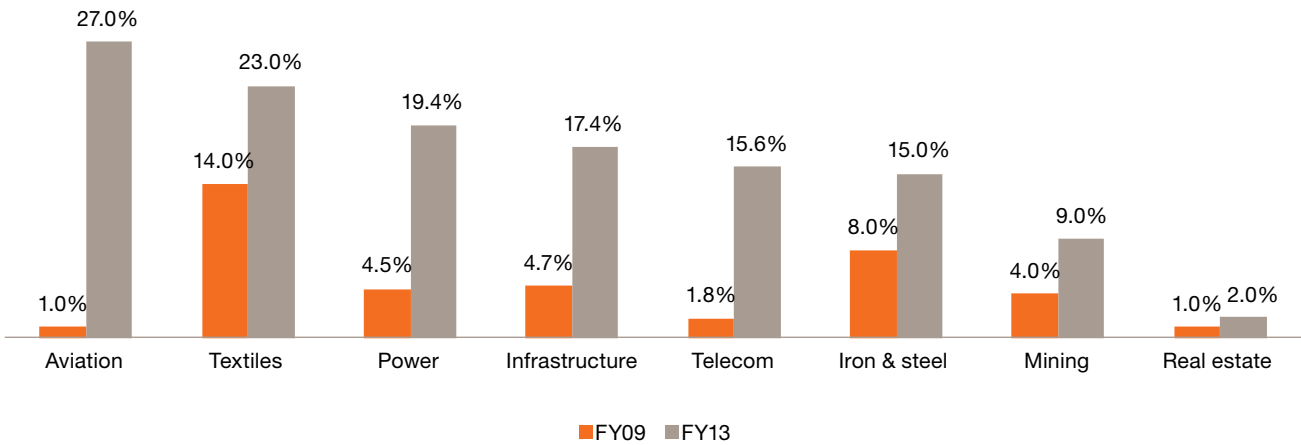
The four broad sectors in the economy where disbursements are taking place are agriculture, industry, services and retail. For most of these sectors (barring retail), stressed asset ratios have increased substantially (and in some cases almost doubled) from FY09 to FY13.

**FY09 vs FY13 sectoral GNPA**



Source: Reserve Bank of India, Jefferies

**Sector-wise stressed assets**



Source: Reserve Bank of India, Jefferies

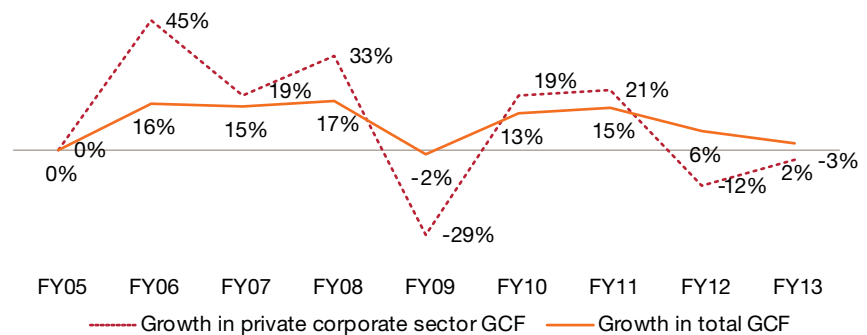
A closer analysis reveals that the majority of stressed assets are in the infrastructure segment, including power and telecom, as well as textile, iron and steel.

**Macro-economic, regulatory and industry issues impacting SAs**

**Macro-economic risks**

Pre-2008, the positive market sentiment and buoyancy in the economy led to huge capacity build-up by Indian corporates, primarily funded by debt.

**Annual growth in GCF in the private sector**

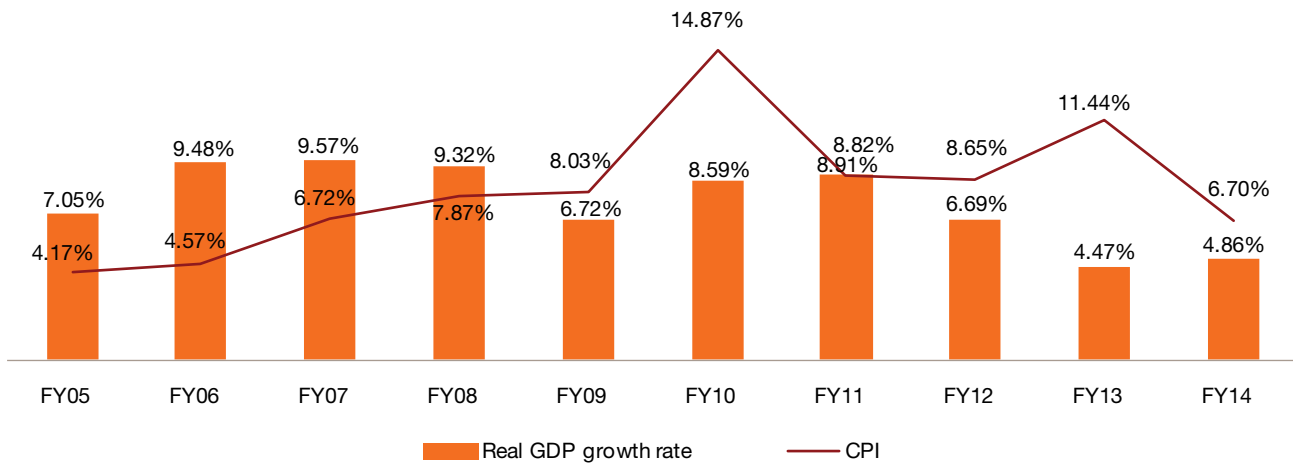


Source: Reserve Bank of India, Jefferies



Post the 2008 global financial meltdown, India and the world witnessed steep declines in growth rates. To counter the aftermath of the financial crisis and declining growth, major central banks globally adopted the easy money policy which also resulted in easy liquidity in emerging markets such as India. This phenomenon pushed up asset prices and led to inflation.

### GDP growth rate vs inflation



Source: Reserve Bank of India, Jefferies

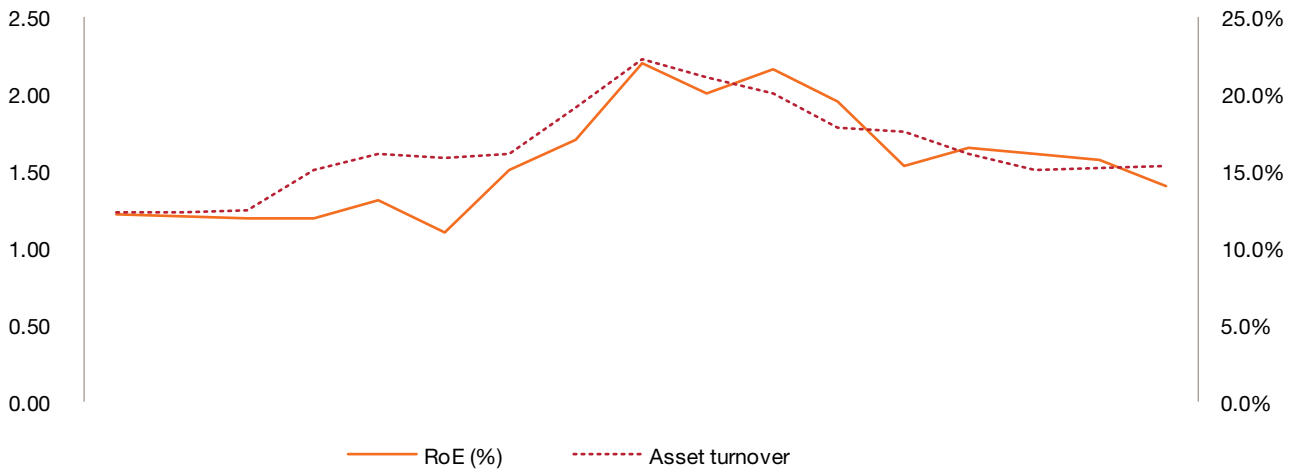
Due to consistently high levels of inflation and slowdown in the broader economy, demand across sectors dropped drastically (barring consumer discretionary and pharmaceuticals), causing widespread decline in capacity utilisations. This subsequently resulted in large stress in the industrial sectors in particular and the economy at large.

The worst hit sectors on the basis of asset turnover are industrials, telecommunication service providers, utilities and pharmaceuticals.

The sectors that retain a positive outlook are consumer discretionary, oil and IT.



Corporate India RoE trending with falling asset turnover ratio

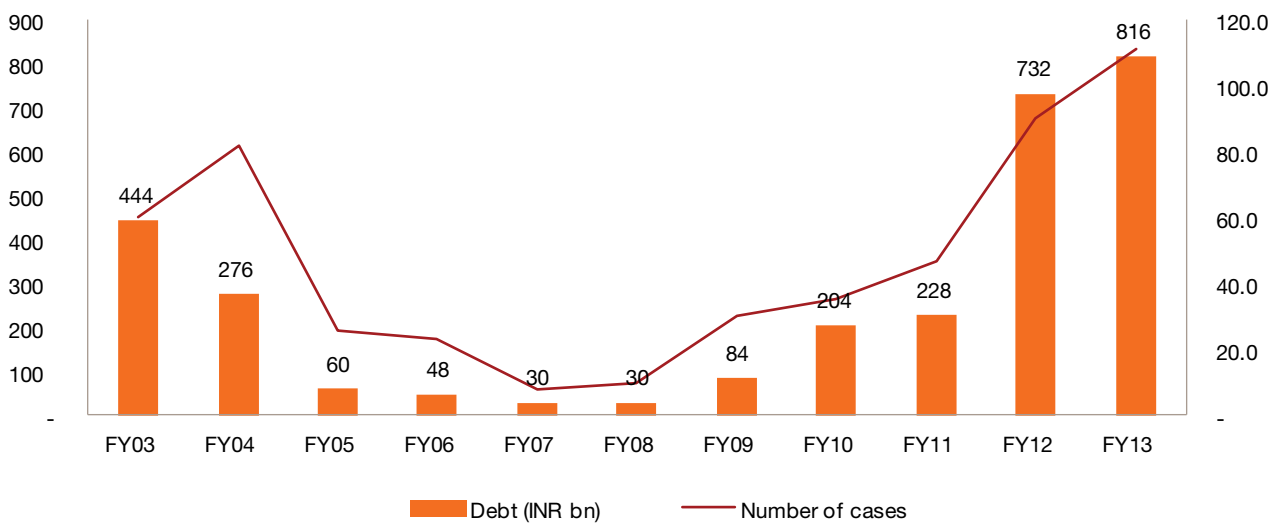


Source: Jefferies

The corporate sector in India has shown a marked decline in asset turnover, depicting falling capacity utilisations. As a result, return on equity has taken a huge hit. The chief concern going forward is that new capacities that were added using leverage remain either underutilised or suffer delayed commercial commissioning. The additional capacity, instead of resulting in increased cash flows, is adding to the debt burden, thus creating additional stress.

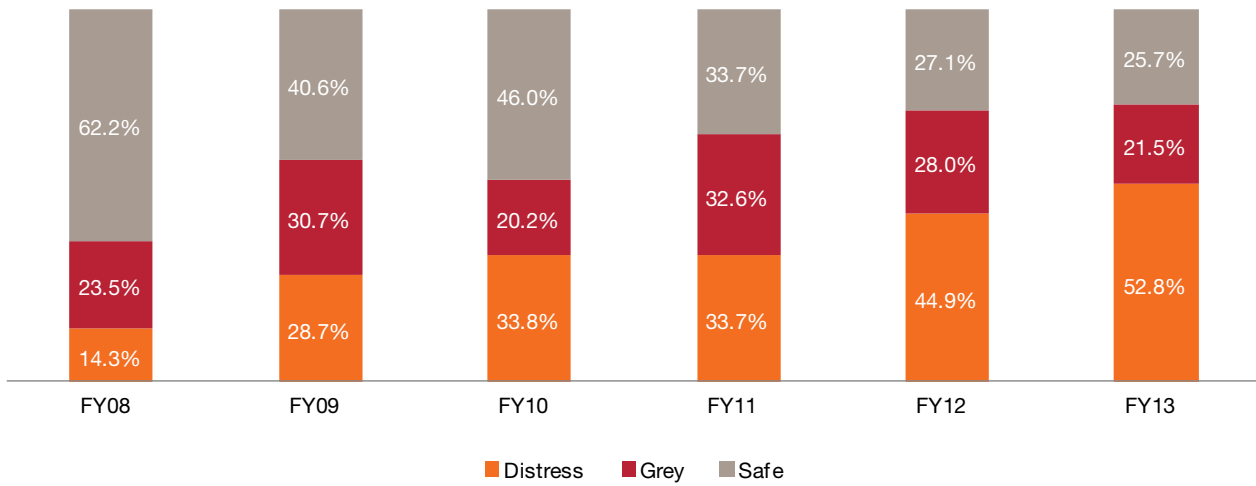


Referrals to CDR have picked up sharply



Source: Corporate Debt Restructuring (CDR) cell

Share of corporate debt failing Z-score levels



Source: Jefferies –Performed on 414 companies out of the BSE 500 Index, making up almost 40% of the total banking system loans

The number of cases referred to the CDR cell is on the rise and potential stressed corporate debt has risen from 14.3% in FY08 to 52.8% in FY13.

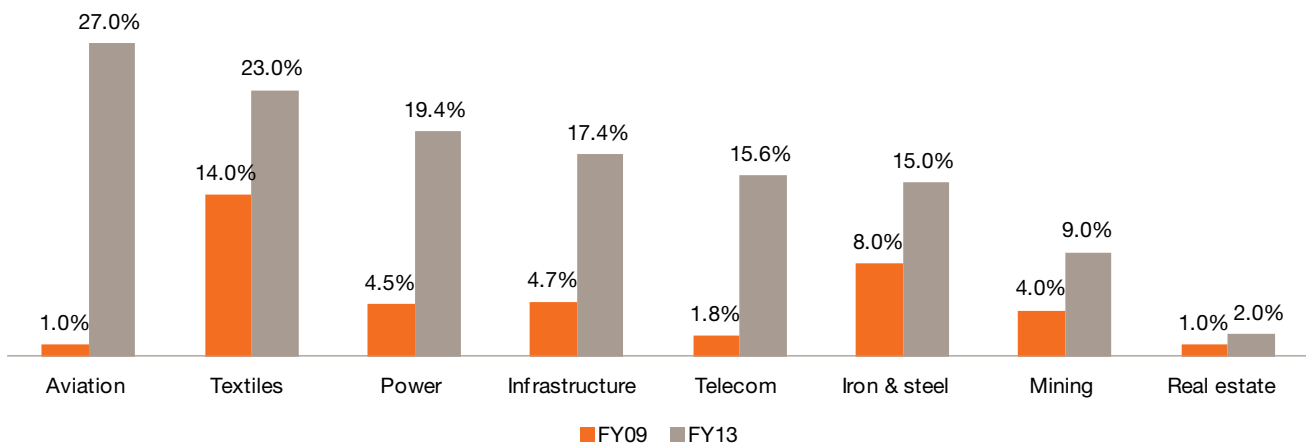
**Regulatory and policy risks**

Industries thrive on certainty in the policy framework. The past few years in India saw a volatile regulatory framework which built stress in certain industries. Some examples of the same are highlighted below:

- Mining ban in certain southern Indian states
- Decision to cancel and re-auction the telecom airwaves
- Uncertainty around the rationing of gas produced in KG D6 basin among various industries in India

Some of the above reasons caused significant financial and operating stress in companies engaged in the mining, telecom and infrastructure sectors which had a cascading effect on overall investments in the Indian economy.

Sector-wise impaired assets



Source: Reserve Bank of India, Jefferies

## ***Industry risks***

In addition to the macro-economic factors, there are industry-specific reasons that cause a rise in SA levels in India. Sectors which are seeing increased stress are aviation, textile and telecom among others.

### ***Aviation: Irrational pricing coupled with taxation issues on fuel pricing***

The high cost of jet fuel in India due to taxes has negatively impacted the competitiveness of the Indian air transport industry for over a decade. Domestic fuel taxes can be as high as 30%, in addition to an 8.2% excise duty. As a result, fuel for Indian airlines is about 45% of total operating costs, compared to the global average of 30%. This results in skewed operating margins and cash flows, thus causing stress in the airline sector.

### ***Telecom: Increasing competition and consequently irrational pricing behaviour among players***

Due to intense competition, companies have been engaging in price wars for the last few years.

The telecom rates in the country are currently the lowest in the world. Comparison between 2007 and 2014 data reveals that margins have reduced drastically. Thus, lowering prices is putting pressure on telecom companies and adding to stress. In addition, aggressive bidding for frequency has also increased the debt burden significantly, with no immediate increase in cash flows.

### ***Textiles: Low scale, power availability issues coupled with shrinking demand worldwide***

In contrast to other textile-producing countries, India's textile sector is characterised by mostly small-scale fragmented enterprises. The unique structure of the industry owes itself to the legacy of tax, labour, and other regulatory policies that have favoured small-scale, labour-intensive enterprises. Power availability and shrinking worldwide demand have also added significant stress to the sector.

### ***Mitigating the risks***

The overall economic scenario and increasing NPAs and SAs pose a deep challenge to the banking sector. A holistic plan is required to mitigate the risks emanating from SAs.

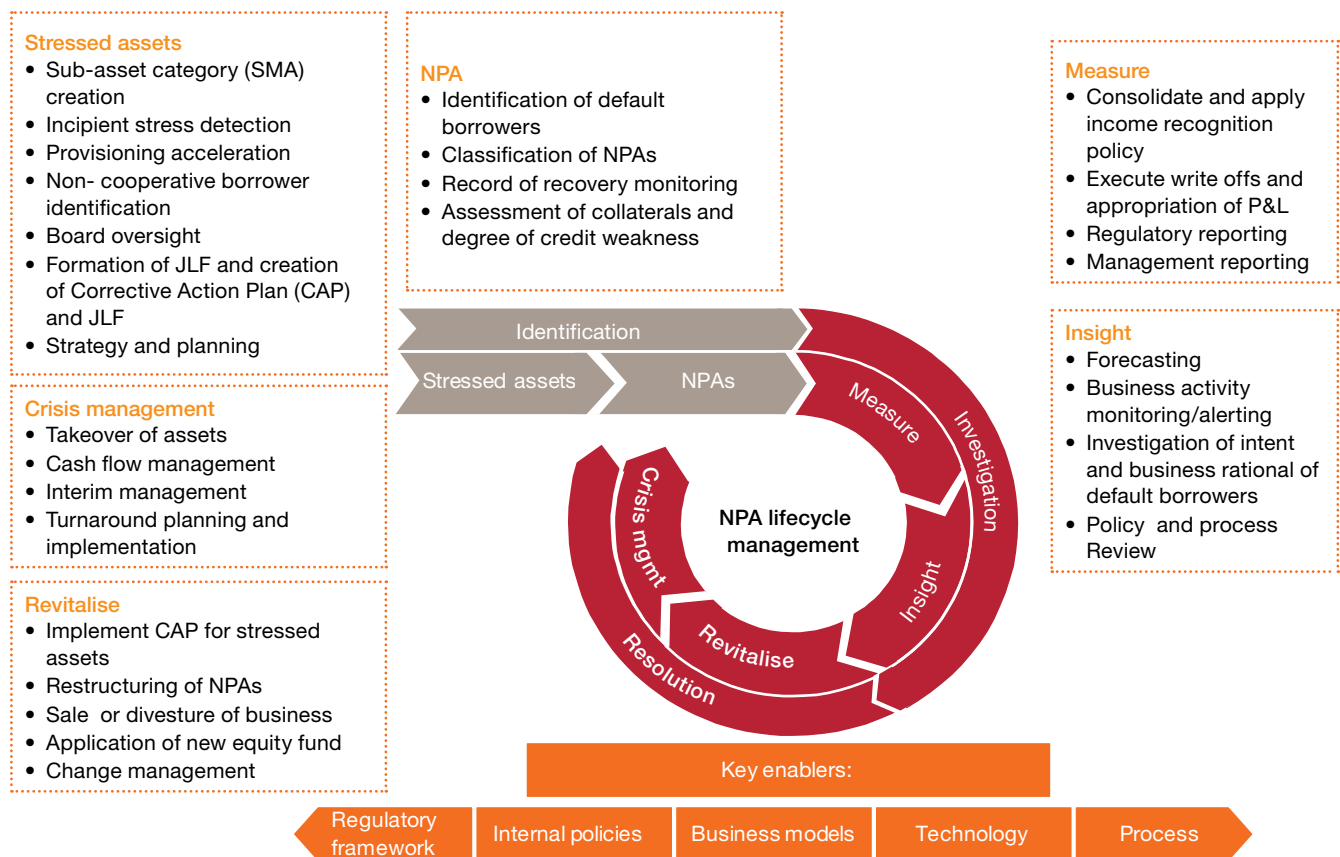




# NPA lifecycle in banks and role of early warning systems (EWSs) to mitigate credit risks

## NPA lifecycle in banks

The NPA lifecycle of banks has three main stages: Identification of stressed assets and NPAs, investigation by measurement and obtaining insight and lastly, resolution through crisis management and revitalisation of stressed assets. The Reserve Bank of



India (RBI) has taken a number of steps which are pushing banks in India to be more proactive in recognition of stress and to take remedial steps so as to preserve the economic value of assets. As a part of such efforts, special mention accounts (SMAs) classification has been recently introduced coupled with defining a timebound procedure towards deciding the course and nature of remedial actions.

The RBI, in addition, is also strengthening the NPA resolution ecosystem in India including increase in foreign participation rules in ARCs in India and bringing a sunset clause to the regulatory forbearance accorded to restructured accounts up to March 2015. There is also an increasing demand from industry to keep MSMEs out of the ambit of SMAs.

## Role of EWS to mitigate credit risks

Over the years, the credit monitoring function has assumed criticality for banks, as it has direct impact on the profitability and liquidity of their credit portfolios. Credit monitoring can be important for the following reasons:

- **Dynamic portfolio mix:** With changing market conditions, a robust credit monitoring system allows the bank to align its exposure in line with its risk strategy.
- **Slippages and NPAs:** Increase in slippages and NPAs indicate low asset quality on the loan book leading to credit and reputational risks for the banks.
- **Better capital management:** Provisions have a draining effect on the profitability of the bank and hence the equity, which has an impact on the capital structure.
- **Efficient cost management:** Recovery of NPAs could lead to incremental operational and legal cost for the bank.

Early warning systems can be an important tool to mitigate credit risks through proactive monitoring. A good early warning system can include key parameters indicative of 'hidden' problems:

### The building blocks of an early warning system

- Analysis of trends in NPAs of the bank including factors leading to NPAs:
  - Internal factors include diversion of funds, time and cost overruns during project implementation, business failure, inefficiency in management, slackness in credit management and monitoring, inappropriate technology and lack of co-ordination between lenders.
  - External factors include recession, price escalation and currency fluctuations, changes in government policies, environment concerns and accident and natural calamities to name a few.
- Analysis of trends in credit portfolio diversification
- Studying the relationship between diversified portfolio and NPAs of the bank
- Profiling and analysis of concentration risk in the bank
- Evaluating the credit risk management practices in banks



### Sample early signs and asset class-based workflows

Non-financial components (account performance related)	Financial components/periodicity
No. of days overdue	Fixed asset trend/half yearly-annually
Overdue frequency	Profitability trend/annually, during reviews
% of overdue amount in business turnover	Monthly turnover trend
Loan & tax payment history	Debtor/creditor/inventory turnover trend
Changes in management	Cash conversion cycle/annually during reviews
Lien release requests	Current ratio and debt-equity ratio/annually during reviews
Asset class	Recommended monitoring action
Standard	Complete any gaps as per loan covenants
Watch list	<ul style="list-style-type: none"> <li>• Site visit with submission of inspection report</li> <li>• Review of financials/other data every six months or more</li> <li>• Follow-up with the customers for corrective measures in conjunction with risk and business team frequently</li> </ul>



The key to success for EWS lies in identifying the triggers and customising them. The idea is to develop proactive monitoring across the asset portfolio lifecycle with continuous monitoring of assets from sanction till loan closure through development of a system by taking data-based cues from the early signs and red flags:

**The benefits of EWS**

- Definite process to govern credit monitoring, ensuring a standardised bank-wide approach to detect and escalate EWSS
- Implementation of a knowledge management system to retain the organisation’s learning of each type of customer
- Relationship manager’s time freed up to make him or her capable to handle more responsibilities at the ground level
- Better compliance to regulatory requirements and audits

**Key elements of EWS**

Financial	Operational	Attitude of borrowers	Others
<ul style="list-style-type: none"> <li>• Irregularity in installment and insufficient payments</li> <li>• Irregularity of operations in the accounts</li> <li>• Bouncing of cheque due to insufficient balance in the accounts</li> <li>• Unpaid overdue bills</li> <li>• Declining current ratio</li> <li>• Diversion of funds</li> </ul>	<ul style="list-style-type: none"> <li>• Information about borrower initiating the process of winding up or not doing the business</li> <li>• Overdue receivables</li> <li>• External non-control-lable factor like natural calamities in the city where borrower conduct his business</li> <li>• Frequent changes in plan and nonpayment of wages</li> </ul>	<ul style="list-style-type: none"> <li>• Use for personal comfort, stocks and shares by borrower</li> <li>• Avoidance of contact with bank</li> <li>• Problem between partners</li> </ul>	<ul style="list-style-type: none"> <li>• Changes in government policies</li> <li>• Death of borrower</li> <li>• Competition in the market</li> </ul>

Mitigation of credit risks

# Role of CRA in credit risk assessment and its impact in terms of information value

## Information value of credit ratings

In the last couple of years, as NPA levels and SAs have grown considerably in the economy, a significant proportion is skewed towards corporates.

Consequently, credit risk assessment, credit administration and monitoring has come increasingly into focus. The suitability of current credit risk assessment has often come into question.

Credit rating agencies across the world are increasingly becoming an important component in the value chain of credit risk assessment. Credit rating is an indicator to measure the creditworthiness of borrowers and acts as an intermediary between the issuer (borrower) and investor (banks) to minimise information asymmetries about the riskiness of investment products on offer.

In general, credit rating provides a third party with independent information on default risk i.e. the likelihood of default of an issuer on a debt instrument, relative to the respective likelihoods of default of other issuers and therefore becomes a useful ready-to-use tool for assessing credit risk.

In the case of sanctioning loans, banks use ratings as a filter and sometimes perform an additional check through an independent due diligence review or credit matrix. So, banks may use the credit rating issued by CRAs to the debtor as important information during the credit appraisal. The RBI's regulatory framework requires banks to have their own credit risk assessment framework for lending and investment decisions and not rely only on ratings assigned by credit rating agencies. The Indian banking system's mandated reliance on external credit ratings is limited to capital adequacy computation for credit risk and general market risk under standardised approach of Basel II.

As banks develop their internal ratings model as mandated by the Advanced Basel framework, they can validate the credit rating for a particular borrower generated from that model with that of the publicly available ratings by CRAs. Banks can also seek information from CRAs if there is wide variation in its credit assessment vis-a-vis the rating agencies. Banks and CRAs should be able to contribute to developing an ecosystem where credit assessments become more effective.

Current RBI regulations stipulate that if a bank has decided to use the ratings of chosen credit rating agencies for a given type of claim (loans), it can use only the ratings of the same credit rating agencies (for subsequent reviews), despite the fact that some of these claims may be rated by other chosen credit rating agencies whose ratings the bank has decided not to use. In respect of exposures and obligors having multiple ratings from chosen credit rating agencies, for risk weight calculation, banks will use higher risk weight if there are two ratings accorded by chosen credit rating agencies that map into different risk weights. Similarly, if there are three or more ratings accorded by chosen credit rating agencies with different risk weights, the ratings corresponding to the two lowest risk weights should be referred to and the higher of those two risk weights should be applied.

RBI guidelines also stipulate that as a general rule, banks need to use only solicited ratings from chosen credit rating agencies and cannot consider any ratings given on an unsolicited basis by CRAs for risk weight calculation as per the standardised approach.

While external credit rating for corporate loans is not compulsory under Basel II, banks have to assign 100% for unrated corporate claims (both long- and short-term) which was relaxed from 150 to 100% during the

2008 financial crisis. The regulation has brought many smaller firms within the fold of credit rating. In this paper, we have only considered exposures of banks for corporate loans greater than 5 crore INR as any loan upto 5 crore INR is considered as retail exposure.

Borrowers can benefit from the rating exercise as this can help them tone up their management systems and business models. Banks also provide loans as social obligation to institutions with a weak balance sheet like such as state electricity boards, etc. The credit risk on the balance sheet of the lending banks and institutions could be far higher than what is declared, considering the weak financials of those companies. CRAs could play a vital role in assessing these risks.





Banks can also use credit rating for loans to conserve capital as illustrated below.

Rating	Basel I		Basel II (standardised approach for credit risk)		
	Risk weight	Capital* required (mn)	Risk weight	Capital required (mn)	Capital saved (mn)
AAA	100%	90	20%	18	72
AA	100%	90	30%	27	63
A	100%	90	50%	45	45
BBB	100%	90	100%	90	0
BB and below	100%	90	150%	135	(45)
Unrated	100%	90	100%	90	0

\*Capital required is computed as loan amount x risk weight x 9%

Source: CRISIL and RBI

The informational value of credit rating is being debated globally. The important question is whether the rating agencies are being able to predict the default risk better than the markets. It has been argued that markets are in a better position to process information than conduct the credit rating exercise which is dependent on historical data and is essentially backward-looking. It does not take into account the dynamic market environment that includes market risk factors. This can have a significant impact in times of recession or downturn as has been observed in the Indian economy. The financial crisis has demonstrated that in spite of credit rating agencies having access

to confidential information, they have not been able to assess the borrower or financial instruments effectively from a credit risk perspective.

However, credit rating information can be important due to the following reasons:

- It can be particularly suitable for corporates or financial instruments which do not trade in the markets, thus providing a significant information challenge for banks too.
- Good credit rating may reduce information asymmetry and thus enhance more liquidity in the market by increased trading as investors become more confident.

- Corporates may approach credit rating agencies to get their bank loans rated as this will help them explore alternate source of funds and also provide an information base for banks and other investors about default risk. Corporates can then optimally price their bonds and equity issues.
- Also, as mentioned earlier, computation of regulatory capital based on Basel II and III regulations by the RBI will require external rating of the borrower (till the time internal rating models are accepted by the regulator).



Financial markets may process information rather than CRAs in the following manner:

Financial markets	CRAs
Markets may process information faster, leading to over-reaction, inherent volatility and mispricing	CRAs are required to be responsible, fair in their assessments and knee-jerk reactions based on market rumours could result in repeated re-ratings, hence rumours need verification
Markets factor in market risk, price corrections and market microstructure issues	CRAs are required to be responsible, fair in their assessments and knee-jerk reactions based on market rumours could result in repeated re-ratings, hence rumours need verification
Markets have more traders and noise. Markets are also known to overreact, especially to short-term noise	CRAs factor in only significant credit risks
Everyone brings news into the market, hence surveillance is more comprehensive	Long-term bond investors generally buy and hold longer. Need not react immediately if long-term prospects are not endangered
Details of transactions factored instantly	CRA surveillance teams are smaller, with limited information resources and cannot act on unconfirmed news. Extensive re-rating also damages credibility of both, the issuer and CRA
	CRAs acquire knowledge of bulk deals, block deals simultaneously or after the market trades are completed

Credit rating is to be treated only as an ‘opinion’ not the gospel truth and the information generated by their ratings needs to be used in conjunction of the credit risk framework of banks to decide on suitability of loan exposure. While any laxity shown by CRAs in assessing the borrowers, does not impact the final rating of a good issuer, it does enable weaker borrowers to get away despite financial, business, management and quality weaknesses. In this regard, the scrutiny standards need to be raised. As a result, the CRAs will be able to contribute more information to minimise asymmetry in information.

Apart from these, a combination of assessing the market risk along with the credit default risk arising from core business activities can make the rating exercise forward looking, thus avoiding potential downgrades and reduce the pro-cyclicality of ratings.

A forward looking market based credit rating mechanism as part of a move towards risk based pricing can also help the system to take proactive corrective steps to reduce the burden of stressed assets and potentially reduce NPAs systemically and avoid panic and knee-jerk reactions. Early warning systems along with dynamic rating mechanism measuring all the risks of the market can help the banks and other lending institutions to effectively predict the credit risk associated with the borrower and take necessary actions to mitigate such risks.



## Business models of credit rating agencies and their impact

It is imperative that the business model of the CRAs need to ensure that credit ratings are of high quality, accurately measure creditworthiness and should be the product of a strong and independent process. A possible inaccuracy in ratings can pose a threat to financial stability by underestimating the riskiness of investments of regulated entities. In case of a bank loan rating of a borrower, the problem of underestimation of risk can lead to inaccurate capital calculation due to inflated ratings and could pose a significant threat to the financial stability of individual financial institutions as well as the whole financial system. Conversely, ratings that overestimated risk will impose excessive capital requirement on banks, increasing costs to the economy as a whole and reducing shareholder returns.

**Functions of CRAs and associated business models:** Post the sub-prime crisis in 2008, the CRAs have come under fire for their inability to detect the flaws in the system and also conflict of interest in their business models.

In India, most of the credit rating agencies have rating and non-rating businesses. CRAs in India rate a large number of financial products including the following:

1. Bonds and debentures
2. Commercial paper
3. Structured finance products
4. Bank loans
5. Fixed deposits and bank certificate of deposits
6. Mutual fund debt schemes
7. Initial public offers (IPOs)

CRAs also undertake customised credit research of a number of borrowers in a credit portfolio, for the use of the lender. Their to understand the business and operations coupled with the expertise of building frameworks for relative evaluation puts them in good stead.

Apart from their core business of ratings, the CRAs have diversified in the areas listed below:

**Research:** Some Indian CRAs have set up research arms to complement their rating activities and carry out research on the economy, industries and specific companies, and make the same available to external subscribers for a fee.

**Consulting and advisory:** The CRAs, by virtue of assessing credit risk has expertise in risk consulting which they carry out separately. They offer various kinds of advisory services, usually through dedicated advisory arms.

**Knowledge process outsourcing:** Some Indian CRAs have KPO arms that leverage their analytical skills and other process capabilities to serve clients outside India. Most of the CRAs in India are subsidiaries of the International CRAs.

**Funds research:** Some CRAs have diversified from mutual fund ratings into mutual fund research.

The advisory and consulting practices provide an inherent area of conflict of interest. However, CRAs have often argued that advisory or consulting services are offered by different legal entities with whom physical, organisational and functional separation is maintained.

### Associated business models

**Issuer Pays Model:** Globally the CRAs follow 'Issuer Pays' Model, where the entity that issues the security also pays the rating agency for the rating. Similarly for bank loans where the corporate gets itself rated but pays rating fees to the CRAs. The current issuer pays model suffers from a fundamental conflict of interest as CRAs are paid by issuers for rating them and this may encourage ratings shopping and the inflation in ratings.

CRAs follow a reputational model and so they have a responsibility of maintaining high quality ratings. However rating shopping may lead to unhealthy competition and there is a danger of inflating ratings.

A few benefits of the Issuer Pays Model are listed below:

- **Free availability of ratings:** Investors can compare the credit quality of a wide array of instruments, choose the ones that best fit their risk preferences, and continuously monitor the credit quality of their investments.
- **Access for rating agencies to high-quality information**
- **Keeping the cost to the system low**
- The principal risk to manage the risk of conflict through:
- Multilevel rating processes
- Strict separation of the analytical and marketing functions
- Delinking compensation from level of rating

The other models include:

**Issuer Pays Model:** The investor pays for the rating and this may have the benefit of freedom from issuer, however the risks include higher cost for the investor, not publicly available. Also this model does not eliminate the conflict of interest; it only shifts the source of conflict from issuer to investors. Under the investor-pays model, CRAs could give lower ratings than indicated by the actual credit quality of the rated debt, so that investors will get a higher yield than warranted.

**Government or Regulator Pays Model:** In this model the government funds the rating costs. There is no structural incentive for bias in either direction except for PSEs. However, potential risks include moral hazard as this may appear to be an approval of the government policies and also use of public money where the issuer may be able to afford.

**Exchange Pays Model:** The exchanges pay for the ratings and recover the cost through an additional trading fee. This model is one of the best as it eliminates bias but it can be only for traded entities.



Post financial crisis, research has highlighted the weaknesses of the current model. On balance, when the economy is on the upturn, rating agencies may rate bad projects as good risks. If the overall market for rating does not grow, market shares of CRAs decline and hence there is tradeoff between reputation and revenue to retain market share and that may lead to inflating ratings. Also, most CRAs have diversified to consulting and other businesses, where the challenge is to also maintain Chinese walls amongst different services.

While the Issuer Pays Model remains the globally acceptable one, regulators may provide a framework so as to reduce the conflict of interest through disclosures, operational audits and enforcing governance in CRAs in spirit.

### Regulatory concerns

SEBI in 'Report of the Committee on Comprehensive Regulation for Credit Rating Agencies' (2009) indicated the following as potentially the major regulatory concerns of the Indian regulators.

1. Regulatory arbitrage resulting from activities of the CRAs being governed or used by various regulators.
2. Inadequacy of existing methodologies adopted by CRAs for structured products given their complexity, multiple tranches and their susceptibility to rapid, multiple-notch downgrades which are pro-cyclical.
3. A basic conflict of interest which is partly inherent, since the sponsor or issuer of new instruments pays the CRA for being rated.
4. A general lack of accountability as CRAs do not have a legal duty of accuracy and are often protected from liability in case of inaccurate ratings.

5. CRAs sometimes provide ancillary services in addition to credit ratings. The issuer may use the incentive of providing the CRA with more ancillary business in order to obtain higher ratings. There is a clear conflict of interest in offering advisory services or consulting services to entities rated by the CRA.
6. Oligopolistic nature of the rating industry because of natural barriers or propriety barriers of entry leading to lack of competition.

These regulatory concerns need to be holistically taken care of through an overarching regulatory framework and evaluating the feasibility of an umbrella regulator. SEBI has taken initiatives to address some of the concerns with regards to conflict of interest of the CRAs post their findings.





# Feasibility of an umbrella regulator

## Multiplicity of regulators

India is a classic case where CRAs operate in domains regulated by different entities. SEBI recognises CRAs, who rate instruments that are purchased in the capital markets (regulated by SEBI), and a diverse community of investors including banks (regulated by RBI), insurance companies (regulated by IRDA), pension funds (regulated by PFRDA). All CRAs in India are registered with SEBI as most of their revenues currently emanate from capital markets. However, with Basel II prudential guidelines, rating of bank loans has also significantly picked up. In fact, RBI carried out evaluation of Indian CRAs before granting them 'External Credit Assessment Institution' status for rating of bank loans under Basel II. Other regulators like IRDA and PFRDA have also incorporated ratings into the investment guidelines for the entities they regulate.

The list of various products, and the relevant regulators, are as follows:

## Feasibility of an umbrella regulator model

The multiplicity of regulators has necessitated the need for inter-regulatory co-ordination. It has become necessary for policy makers to look at the fact that there are apprehensions about regulatory arbitrage taking advantage of lack of co-ordination among various regulators. Policy makers need to identify areas where they could facilitate an optimal environment for removal of asymmetric information. It relates to the design, structure and extent of the regulatory structure pertaining to the operations of CRAs, and an enquiry as to whether the prevailing policy regulatory regime has helped or harmed their functioning.

### Products or instruments requiring mandatory rating before issuance

Type of instrument	Regulator
1 Bank loans	RBI
2 Commercial paper	RBI
3 Fixed deposits by NBFCs and HFCs	RBI
4 Securitised instruments (Pass through certificates)	RBI
5 Security receipts	RBI
6 Public, rights, listed issue of bonds	SEBI
7 IPO grading	SEBI
8 Capital protection oriented funds	SEBI
9 Collective investment schemes of plantation companies	SEBI
10 LPG and SKO rating	Ministry of Petroleum and Natural Gas
11 Maritime grading	Directorate General of Shipping

### Regulatory prescription of use of ratings for investment purposes

Type of instrument	Regulator
1 Investments by insurance companies	IRDA
2 Provident fund investments	Government of India
3 Banks' investments in unrated non-SLR portfolio	RBI

While SEBI currently regulates credit rating, such ratings are much more used by other regulators where rating advisory is often a part of the regulations. SEBI's jurisdiction over the CRAs only covers securities as defined under the Securities Contract (Regulation) Act, 1956 and does not cover the activities governed by other regulators. Existing SEBI regulations may not be adequate to cover the issues and concerns put forth by other regulators.

The SEBI report further suggests the need for a lead regulator. In the wake of increasing NPAs in the system, it needs an overhaul. The feasibility of forming an umbrella regulator with representations from respective regulators, SEBI, RBI, IRDA, PFRDA and others can

be looked into. While independent regulators can frame their guidelines applicable to sectors they regulate, a holistic regulatory framework needs to be developed considering inputs from all participants. Currently, a standing committee for CRAs has been constituted which comprises of representations from regulatory bodies of the securities market (SEBI), banking sector (RBI), insurance sector (IRDA) and pension funds (PFRDA). The committee has met at several occasions to deliberate on various regulatory issues.

*The Financial Sector Legislative Reforms Commission was formed to look into the regulatory gaps, inconsistencies, overlaps and regulatory arbitrage that exist in the current system. The commission has suggested a draft code which establishes a single framework for regulatory governance across all agencies. In the case of CRAs too, this can be implemented in a way that any new regulation pertaining to CRAs can be formulated by taking into account the concerns of the other regulators.*

*SEBI had proposed that the CRAs registered with it will be required to acquire further accreditation with other regulators (RBI, IRDA, PFRDA, etc) if felt necessary by them, for rating products that come in the regulatory domain of the other regulators. It has also proposed that inspections of CRAs should be carried out by only one team, which should have representations from all concerned regulators to oversee the area of activities governed by them.*

*While SEBI in its report has identified itself as the lead regulator, however the policy makers need to consult among stakeholders if that is the best alternative. From policy formulation perspective, the feasibility of an umbrella regulator is definitely a suitable alternative, the challenge is however implementation of the initiative on ground and ensuring that CRAs are suitably governed to allay the fears of the investors and users of their ratings, not the least commercial banks.*



# Regulatory role for improving efficacy of CRAs

Globally, the need for strong regulations governing CRAs has come into focus post the 2008 sub-prime crisis. Subsequently, significant regulatory changes have been observed in the developed economies (OECD).

In USA, the Credit Rating Agency Reform Act and Dodd-Frank Wall Street Reform and Consumer Protection Act have enhanced the Security Exchange Commission's (SEC) power to regulate Nationally Recognised Statistical Rating Organisations' (NRSROs) by adopting several rules. The areas covered under the rules include record-keeping, conflict of interest with respect to sales and marketing practices, disclosures of data and assumptions underlying credit ratings, statistics, annual reports on internal controls and consistent application of ratings symbols. However, the law prohibits the SEC from regulating an NRSRO's rating methodologies. Banks having inter-state licences are generally required to make assessments of a security's creditworthiness to determine its 'investment grade.' and remove references to external credit ratings. The Federal Deposit Insurance Corporation (FDIC) ensures depository institutions using IRB (Internal Ratings Based) supplement the use of CRAs with internal due diligence processes and additional analyses to demonstrate that CRAs

are used only in an auxiliary role in the calculation of final rating values. For the 'Standardised Approach', banks use alternatives to CRA as well as alternative standards for assessing whether securities are of investment grade or not.

In Australia, major banks use (IRB) approaches to assess credit risk and are required to form their own views on creditworthiness of the borrowers even though external ratings may constitute an input in that view as opposed to relying solely on CRA ratings. The banks are also subjected to continuous monitoring and review mechanism by the Australian Prudential Regulation Authority (APRA). While other authorised deposit taking institutions (ADIs) use a more simplistic approach, they are also required to supplement CRA ratings when determining the credit risk exposures.

The EU has also formulated regulations on CRAs (CRA Regulation III) to reduce reliance on external ratings. The Capital Requirements Directive (CRR) require credit institutions to have strong credit evaluation framework and credit decision processes in place irrespective of whether they grant loans or incur securitisation exposures. However, for calculation of regulatory bank capital requirements, rating agency assessments may be, in certain cases

applied as a basis for differentiating capital requirements according to risks, and not for determining the minimum required quantum of capital itself. The CRD framework as a whole provides banks with an incentive to use internal rather than external credit ratings even for calculating regulatory capital requirements.

In India, the question of improving the efficacy of CRAs needs to be looked from a holistic perspective where all participants in the ecosystem; the regulators, CRAs, corporates and investors (banks) needs to work jointly towards a better system of credit risk assessment and monitoring. From a regulatory perspective it is important that apart from putting up a strong regulatory framework, they also upgrade their skills for greater due diligence to evaluate effectively the ratings that are given by CRAs. The banks need to move towards risk based pricing whereby they can use rating as more than just a mandatory exercise by identifying greater incentives for them to adopt ratings. It has been observed that globally, self-regulation for CRAs has not worked effectively due to revenue and profitability pressures and loss of market share. Also, the fact that there remains conflict of interest from the Issuer Pay Model and the entire gamut of non-rating services provided by the CRAs need to be evaluated.

Pursuant to their findings in 2009, the SEBI has taken multiple steps in the last few years to strengthen the regulatory framework for CRAs:

- CRAs has to document the rating process in detail enlisting the various underlying factors affecting the rating, summary of discussions with all stakeholders, decisions of the rating committee including any dissent note, and rationale for any material difference with the quantitative model used (if any). The records needs to be kept for five years after maturity of the instrument.
- CRAs to release default studies at regular intervals which are central to evaluating their performance and whether its ratings can predict default over a period of time.
- Standardised the default rate calculations with definitions and calculation formula
- Remedial measures for reducing conflict of interest of CRAs through restricting analysts to do marketing and business development including negotiations of fees with the issues and also restricting their family members to hold any ownership of shares of the issuer.
- SEBI has also mandated that every CRA to formulate the policies and internal code for dealing with the conflict of interest.
- Disclose other relationship with income from their rating clients.
- For unsolicited ratings, CRAs have to monitor and disclose the ratings as is done in the case of solicited ratings. And the ratings symbols for the former should be accompanied by the word 'unsolicited'.
- The regulator has also mandated that CRAs conduct an internal audit twice a year covering operations and procedures including investor grievance redressal mechanism and compliance with the SEBI Act.





SEBI is also revisiting the ‘conflict of interest’ by CRAs and working on remedial measures required to tackle the issue of any possible maneuvering by CRAs favouring their major clients through assigning inflated ratings to them and bad ratings for clients who have fallen out of favour. The global regulatory body IOSCO is also working on a CRA code which is aimed to put in place a strong regulatory framework including robust, practical measures. Pursuant to IOSCO guidelines SEBI may also take action in this regard.

While SEBI has taken multiple steps to improve the efficacy of CRAs, the regulators may also consider other effective steps as listed below:

- 1. Holistic regulatory framework and improving regulatory due diligence:** A holistic regulatory framework encompassing participation from all stakeholders in the credit rating ecosystem needs to be created. Apart from looking at the feasibility of creating an umbrella regulator, the agencies need to improve and update their skills to assess as against accepting them easily.
- 2. Feasibility of a centralised platform for ratings:** Regulators may look at creating a centralised platform for ratings. Issuers can approach the centralised agency to get their financial instruments or their company rated. The work can be allocated to the registered CRAs based on their experience in that type of rating, industry experience, etc. CRAs may be encouraged to develop industry expertise, so that the agencies can understand industry specific dynamics better. The above mechanism may prevent rating shopping by the issuers and can also lead to healthy competition between CRAs.
- 3. Comparability of ratings and display on website:** In India, since financial education is at a nascent stage, it will be a good idea to display ratings on a common website for comparison.
- 4. Compulsory separation of advisory services into separate companies:** Currently, as per regulations, a CRA cannot offer fee-based services to the rated entities, beyond credit ratings and research. The regulations also mandate that a credit rating agency shall maintain an arm’s length relationship between its credit rating activity or any other activity. However, CRAs have floated subsidiary companies for undertaking other activities such as consulting, software development, knowledge process outsourcing, research, etc. CRISIL and ICRA, the leading players have separated the advisory business into separate companies, managed by separate teams with separate organisation structures. However, with the proposed umbrella regulator, the conflict of interest of the CRAs with their subsidiaries can be looked into from a regulatory arbitrage point of view. Also, the CRAs must disclose all details of conflict of interest which impact their job of ratings.
- 5. Governance of CRAs:** The governance of CRAs is an important aspect and regulators should ensure that corporate governance is enforced in spirit. CRAs depend on audited financial statements provided by the companies, but also do a limited cross-verification. While inherently the auditor is responsible for financial statements, the CRAs need to dig deeper to unveil any issues. While SEBI has mandated the CRAs to develop their own internal code of conduct for governing its operations, however, regulators need to ensure that this extends to the maintenance of professional excellence and standards, integrity, confidentiality, objectivity, avoidance of conflict of interests, disclosure of shareholdings and any interest in the issuer or borrower.
- 6. Remedial measures for the conflict of interest inherent in the ‘Issuer Pays Model’:** It has been argued that there is an inherent conflict of interest in the ‘Issuer Pay’ model. However, globally the same model is currently followed, though greater transparency is needed. CRAs need to disclose any existing conflict of interest and process audit should be mandated so that strict guidelines are followed with Chinese walls being effected between the sales and ratings divisions.

# Conclusion

In the last couple of years, as Indian economy witnessed downturn trends, the banks have been straddled with high NPAs and restructured assets. Macro-economic dynamics may be a major contributor, however we also believe that inadequate credit assessments and monitoring during the upturn in the economy has also contributed to the same. All participants in the ecosystem, the banks, regulators, borrowers and CRAs need to take responsibility.

Our view is while we cannot undo the mistakes or errors that have been committed in terms of credit assessment and monitoring, effective steps need to be taken and a holistic approach is the best way forward. All stakeholders in the ecosystem need to proactively contribute towards a better credit assessment and monitoring framework with the regulator enabling such initiatives.

Some of our major recommendations include the following:

- Effective use of early warning systems as the monitoring mechanism by the banks to proactively detect and resolve issues related to the credit risk of the borrower. For the resolution of NPAs, an end to end NPA lifecycle management can also help.
- To create a holistic regulatory framework for credit ratings along with an umbrella regulator.
- To minimise the opportunity of regulatory arbitrage

- Efficacy of CRAs being monitored by the regulator through adoption of remedial measures for resolving conflict of interest of CRAs
- Encouraging CRAs to develop industry specific expertise
- Banks moving towards true risk based pricing thus encouraging borrowers to get themselves rated (solicited ratings). Currently banks also monitor market risks, however it is imperative that banks use this information also in conjunction with credit assessment to have a true evaluation of the borrower.
- Banks should also be encouraged to develop their internal rating models and validate these ratings by comparing them with publicly available ratings and also seek more information from the rating agencies, if necessary to be doubly sure of their credit assessment process.
- Feasibility of creation of a centralised platform for credit ratings, where issuers can approach to get themselves rated and allocation of the work can be done to CRAs based on industry expertise and their previous experience amongst others. This will also reduce the conflict of interest and can prevent rating shopping by borrowers
- CRAs also need to effectively use market information in their credit ratings methodology and put in place a strong corporate governance so that conflict of interest can be effectively resolved.

The Financial Stability Board (FSB) which includes members from G20, had set up the Implementation Group on Credit Rating Agencies (CRAs) to assess the position of compliance of regulatory framework in the country vis-à-vis the FSB principles for reducing reliance on CRA ratings. The FSB in its progress report to the St Petersburg G20 Summit titled Credit Rating Agencies: Reducing reliance and strengthening oversight, states that “The Principles recognise that CRAs play an important role and their ratings can appropriately be used as an input to firms’ own judgment as part of internal credit assessment processes. But any use of CRA ratings by a firm should not be mechanistic and does not lessen its own responsibility to ensure that its credit exposures are based on sound assessments”.

The FSB, in its recently published peer review report on national authorities’ implementation of the FSB Principles for Reducing Reliance on CRA Ratings finds that Indian regulatory regime has put in place systems and procedures to develop internal credit risk assessment and due diligence by the market participants. We also strongly believe with the participation and contribution of all stakeholders, a holistic credit assessment and monitoring is the way forward to rein in the high level of NPAs and restructured assets.

## Glossary

Term	Meaning
%	Percentage
~	Estimate
'000	Thousands
ARC	Asset reconstruction companies
AXIS	Axis Bank
Bn	Billion
BOB	Bank of Baroda
c.	Approximate
CAGR	Compounded annual growth rate
CDR	Corporate debt restructuring
CPI	Consumer Price Index
EBITDA	Earnings before interest, depreciation, taxes and amortisation
EWS	Early warning signal
FED	Federal Bank
FY	Financial year
FYXXE	Financial year expectation
FYXXP	Financial year projection
GCF	Gross capital formation
GDP	Gross domestic product
GNPA	Gross non-performing asset
HDBK	HDFC Bank
ICBK	ICICI Bank
INBK	Indian Bank
INGV	ING Vysya
INR	Indian national rupee
JLF	Joint lenders' forum
KTKM	Kotak Mahindra Bank
LPG	Liquefied petroleum gas
Mn	Million
NA	Not available
NNPA	Net non-performing asset
No.	Number
NPA	Non-performing asset
Term	Meaning
OBC	Oriental Bank of Commerce
p.a.	Per annum
PAT	Profit after tax
PNB	Punjab National Bank
PSU	Public sector unit
RA	Restructured asset
RBI	Reserve Bank of India
RoE	Return on equity
SA	Stressed assets
SBI	State Bank of India
SKO	Superior kerosene oil
SR	Security receipts
SMA	Special mention accounts
Tn	Trillion
USD	United States dollar
YES	Yes Bank
YoY	Year-on-year

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# Notes





## About ASSOCHAM

### *The knowledge architect of corporate India*

#### Evolution of value creator

ASSOCHAM initiated its endeavour of value creation for Indian industry in 1920. Having in its fold more than 400 chambers and trade associations, and serving more than 4,00,000 members from all over India, it has witnessed upswings as well as upheavals of the Indian economy, and has contributed significantly by playing a catalytic role in shaping the trade, commerce and industrial environment of the country.

Today, ASSOCHAM has emerged as the fountainhead of knowledge for Indian industry, which is all set to redefine the dynamics of growth and development in the technology driven cyber age of the 'knowledge based economy'.

ASSOCHAM is seen as a forceful, proactive, forward-looking institution equipping itself to meet the aspirations of corporate India in the new world of business. It is working towards creating a conducive environment of Indian business to compete globally.

ASSOCHAM derives its strength from its promoter chambers and other industry and regional chambers and associations spread across the country

#### Vision

Empower Indian enterprise by inculcating knowledge that will be the catalyst of growth in the barrier-less technology driven global market and help it upscale, align and emerge as a formidable player in respective business segments.

#### Mission

As a representative organ of corporate India, ASSOCHAM articulates the genuine, legitimate needs and interests of its members. Its mission is to impact the policy and legislative environment so as to foster a balanced economic, industrial and social development. We believe education, IT, BT, health, corporate social responsibility and environment to be the critical success factors.

#### Members, our strength

ASSOCHAM represents the interests of more than 4,00,000 direct and indirect members across the country. Through its heterogeneous membership, ASSOCHAM combines the entrepreneurial spirit and business acumen of owners with management skills and expertise of professionals to set itself apart as a chamber with a difference.

Currently, ASSOCHAM has more than 100 national councils covering the entire gamut of economic activities in India. It has been especially acknowledged as a significant voice of Indian industry in the field of corporate social responsibility, environment and safety, HR and labour affairs, corporate governance, IT, biotechnology, telecom, banking and finance, company law, corporate finance, economic and international affairs, mergers and acquisitions, tourism, civil aviation, infrastructure, energy and power, education, legal reforms, real estate and rural development, competency building and skill development, to name a few.

#### Insight into 'new business models'

ASSOCHAM has been a significant contributory factor in the emergence of new-age Indian corporates, characterised by a new mindset and global ambition for dominating international business. The chamber has addressed itself to key areas such as India as an investment destination, achieving international competitiveness, promoting international trade, corporate strategies for enhancing stakeholder value, government policies in sustaining India's development, infrastructure development for enhancing India's competitiveness, building Indian MNCs, role of the financial sector as the catalyst for India's transformation.

ASSOCHAM derives its strengths from the Bombay Chamber of Commerce and Industry, Mumbai; the Cochin Chambers of Commerce and Industry, Cochin; the Indian Merchant's Chamber, Mumbai; the Madras Chamber of Commerce and Industry, Chennai; the PHD Chamber of Commerce and Industry, New Delhi and has over 4,00,000 direct and indirect members.

Together, we can make a significant difference to the burden our nation carries and bring in a bright, new tomorrow for our nation.

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