

Effect of Prudential Accounting Norms on PSBs in India with regards to ‘NPA’: (Developing a model for NPA to predict the factors which effect formation of NPA most)

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ABSTRACT: A common hypothesis is that with the introduction of prudential norms on capital adequacy, income recognition, asset classification and provisioning requirements, the financial position of banks in India has been improved in the last few years. Simultaneously, trading in securities market has improved in terms of turnover and the range of maturities dealt with. In view of these developments and taking into consideration the evolving international practices, the paper explores to study the experience of Prudential Accounting Norms adopted by State Bank of India and Punjab National Bank. The objective of our study is to analyze the banking sector reforms in India with a motto to understand the implications of Prudential Accounting Norms in improving the financial soundness of Public sector banks. This would also enable us to understand their upbringing with international standards.

The Methodology consists of both secondary and primary data. RBI circulars and different articles have been studied and presented in easily understandable way. The sample consisting of 11 banks: State Bank of India, State Bank of Hyderabad, State Bank of Mysore, Andhra Bank, Allahabad Bank, Bank of India, Canara Bank, Central Bank of India, Punjab National Bank, Syndicate Bank, UCO Bank has been taken up for study. A comparison of these banks has been made on parameters of ‘Net profit’ to ‘Total Assets ratio’ of the Sample for the period 1991-2004.

Keywords: Current account, Non Performing Assets (NPA), Cash Reserve Requirement (CRR), Statutory Liquidity Requirement (SLR), Notes of Accounts, Finance charge, Leased Asset.

I. INTRODUCTION

With an intense to use the international best practice and to ensure greater transparency, “90 days” overdue norms are accepted for the identification of NPA from the year ended March 31, 2004. With effect from March 31, 2004, a NPA shall be counted on loan and advances where: Interest and / or installment of principal remain overdue for a period of more than 90 days in respect of a term loan. The account remains out of order for a period of 90 days, in respect of an Overdraft/ Cash Credit (OD/CC). The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted. Any amount to be received remains overdue for a period of more than 90 days in respect of any other accounts.

FACTORS RESPONSIBLE FOR NPA:

- Improper selection of borrower’s activities
- Weak credit appraisal system
- Industrial problem
- Inefficiency in management of borrower
- Slackness in credit management & monitoring
- Lack of proper follow up by bank
- Recession in the market
- Due to natural calamities and other uncertainties.

INCOME RECOGNITION

Income from NPA is not recognized on accrual basis but is booked as income only when it is actually received. Therefore interest on any NPA should not be recognized unless realized. However, interest on

advances against term deposits, NSCs(National Savings Certificate), IVPs (Indira Vikas Patras), KVPs (Kisan Vikas Patra) and Life policies may be taken to income account on the due date, provided adequate margin is available in the accounts.

For example:

i) A borrower has taken loan of Rs.1 lac against term deposit of Rs.1.25 lacs. Balance in the account as on 31st March'06 is Rs.1.10 lacs. Even though account is over drawn, income would be recognized since value of deposit is more than the balance outstanding.

ii) Fees and commissions earned by the banks as a result of re-negotiations or rescheduling of outstanding debts should be recognized on an accrual basis over the period of time covered by the renegotiated or rescheduled extension of credit.

iii) If Government guaranteed advances become NPA, the interest on such advances should not be taken to income account unless the interest has been realized.

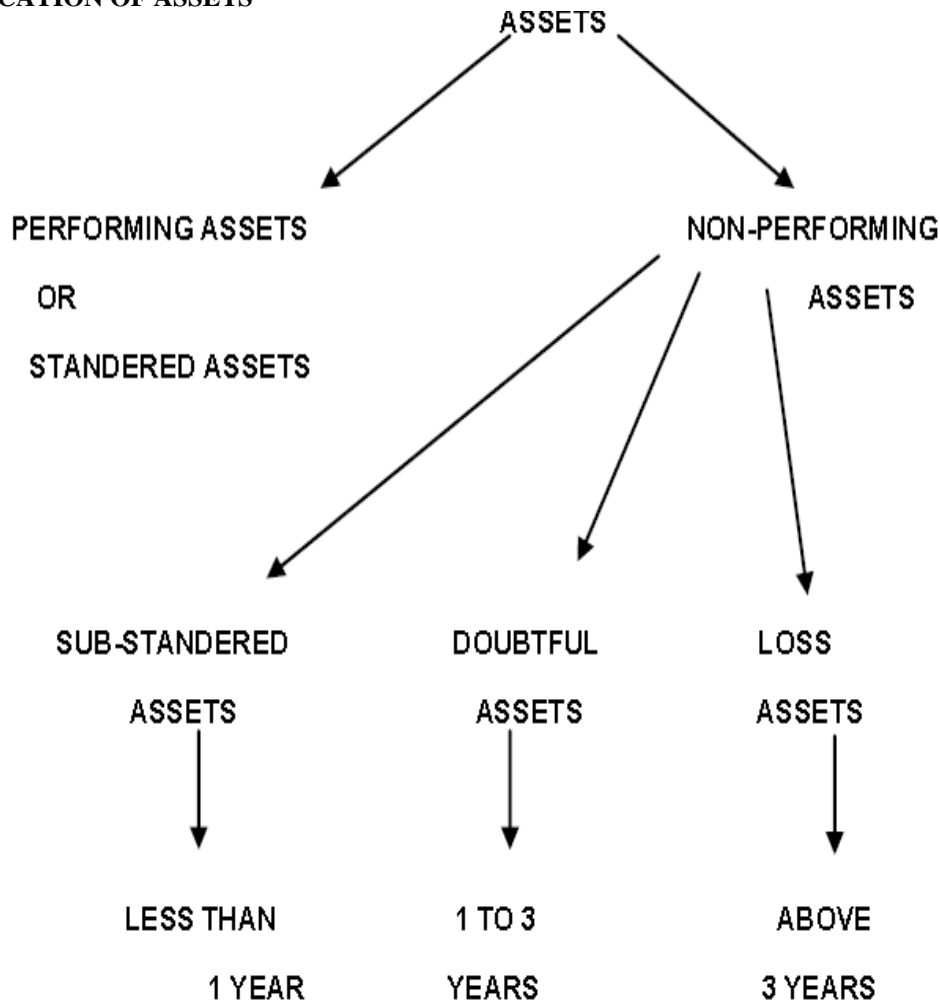
REVERSAL OF INCOME

i) If any advance, including bills purchased and discounted, becomes NPA as at the close of any year, interest accrued and credited to income bills account in the corresponding previous year, should be reversed or provided for if the same is not realized during the year under audit. This will apply to Government guaranteed accounts also.

ii) In respect of NPAs, fees, commission and similar income that have accrued should cease to accrue in the current period and should be reversed or provided for with respect to past periods, if uncollected.

iii) The finance charge component of finance income [as defined in 'AS 19 – Leases' issued by the Council of the Institute of Chartered Accountants of India (ICAI)] on the leased asset which has accrued and was credited to income account before the asset became nonperforming and remain unrealized, should be reversed or provided for in the current accounting period.

CLASSIFICATION OF ASSETS



STANDARD ASSET

0.25% on Standard Assets on Global loan portfolio basis

SUB-STANDARD ASSET

10% of total outstanding

20% of total outstanding if loan is unsecured

Banks are permitted to phase the additional provisioning upon reduction in transition period from 18 to 12 months over a period of four years with minimum 20% each year (new guidelines)

LOSS ASSET:

100% should be provided for

DOUBTFUL ASSETS

Period Provision (Secured +Unsecured)

Up to 1 year 20% + 100%

1to 3 years 30% + 100%

More than 3 years 100% + 100%

(Effective from 31st March 2005)

Outstanding as on 60%, 75%, 100% on secured portion.

31st March 2004 2005 2006 2007

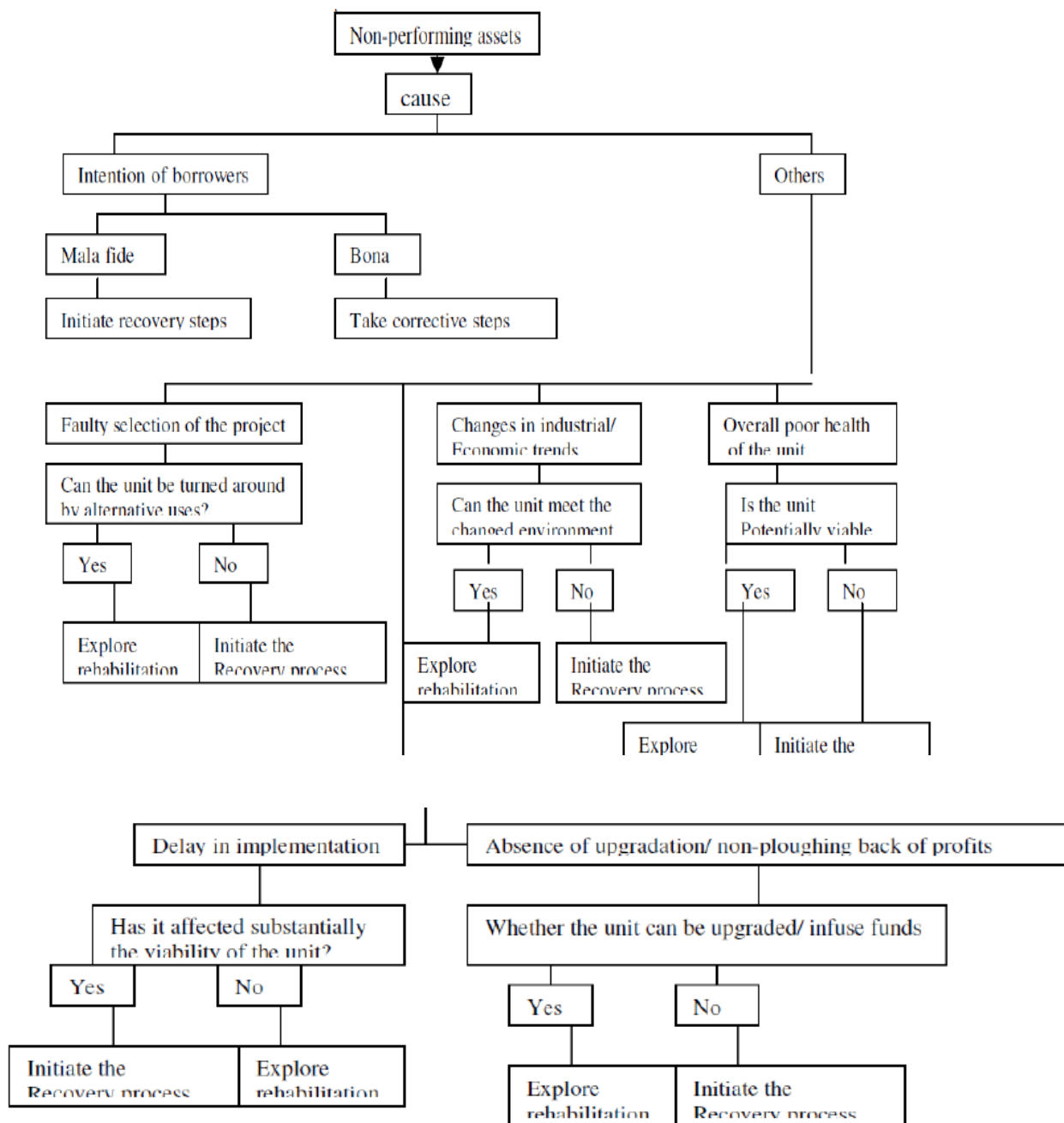
At the ground level, to present a better asset quality rating, banks tend to maintain their NPA portfolio up to substandard and Doubtful stage 1 & 2. The assets beyond that stage, being fully provided, are written off. Most of the banks have thus got rid of the D-3 and loss assets. In such a case, the average provisioning cover will be around 50 per cent only.

MANAGEMENT OF NPA:

It is very necessary for bank to keep the level of NPA as low as possible. Because NPA is one kind of obstacle in the success of bank so, for that the management of NPA in bank is necessary. And this management can be done by following way:

- Framing reasonably well documented loan policy and rules.
- Sound credit appraisal on well-settled banking norms.
- Emphasizing reduction in Gross NPAs rather than Net NPAs
- Pasting of sale notice/ wall posters on the house pledged as security.
- Recovery effort starts from the month of default itself. Prompt legal action should be taken.
- Position of overdue accounts is reviewed on a weekly basis to arrest slippage of fresh account to NPA.
- Half yearly balance confirmation certificates are obtained from the borrowers regularly.
- A committee is constituted at Head Office, to review irregular accounts.
- Due to lower credit risk and consequent higher profitability, greater encouragement is given to small borrowers.
- Recovery competition system is extended among the staff members. The recovering highest amount is felicitated.
- Adopting the system of market intelligence for deciding the credibility of the borrowers
- Creation of a separate 'Recovery Department' with Special Recovery Officer appointed by the RCS

Chart for Assessing Corrective Steps in different circumstances:



II. RESTRUCTURING / RESCHEDULING OF LOANS

i) The restructuring/rescheduling/renegotiation of the terms of loan agreement could take place:

- Before commencement of commercial production;
- After commencement of commercial production but before the asset has been classified as sub standard,
- After commencement of commercial production and after the asset has been classified as sub standard.

ii) Treatment of Restructured Standard Accounts

- A standard asset (first two categories) whose installments are being restructured need not be classified as sub standard provided the loan/credit facility is fully secured
- A standard asset (first two categories) whose interest is being restructured would not cause it to be downgraded to sub standard category if the future interest due as per the original loan agreement in respect of an account should be discounted to the present value at a rate appropriate to the risk category of the borrower (i.e.,

current PLR+ the appropriate credit risk premium for the borrower category) and compared with the present value of the dues expected to be received under the restructuring package, discounted on the same basis.

c) In case there is a sacrifice involved in the amount of interest in present value terms, as at (b) above, the amount of sacrifice should either be written off or provision made to the extent of the sacrifice involved.

iii) Treatment of restructured sub-standard accounts

a) A sub-standard asset whose installments are being rescheduled can be continued in the substandard category for the specified period, provided the loan/credit facility is fully secured.

b) A sub-standard asset can continue to be classified as such provided interest sacrifice as explained in para (ii) (b) and (c) above is worked out and either provided for or written off.

(iv) Up gradation of restructured accounts:

The sub-standard accounts, which have been subjected to restructuring etc., whether in respect of principal installment or interest amount, by whatever modality, would be eligible to be upgraded to the standard category only after the specified period i.e., a period of one year after the date when first payment of interest or of principal, whichever is earlier, falls due, subject to satisfactory performance during the period.

In case, however, the satisfactory performance during the one year period is not evidenced, the asset classification of the restructured account would be governed as per the applicable prudential norms with reference to the pre-restructuring payment schedule.

At times, as per the terms of restructuring, the amount outstanding is converted into other instruments like equity, debentures or any other instrument. If the amount of interest dues is converted into equity or any other instrument, and income is recognized in consequence, full provision should be made for the amount of income so recognized to offset the effect of such income recognition. However, if the conversion of interest is into equity, which is quoted, interest income can be recognized at market value of equity, as on the date of conversion, not exceeding the amount of interest converted to equity. The income in respect of unrealized interest, which is converted into debentures or any other fixed maturity instrument, should be recognized only on redemption of such instrument.

III. CORPORATE DEBT RESTRUCTURING (CDR)

- i). In particular, the framework will aim at preserving viable corporate that are affected by certain internal and external factors and minimize the losses to the creditors and other stakeholders through an orderly and coordinated restructuring programs.
- ii) a) The CDR mechanism will cover only multiple banking accounts/syndication/ consortium accounts with outstanding exposure of Rs.20 crore and above by banks and institutions.
b) The Category 1 CDR system will be applicable only to accounts classified as 'standard' and 'sub-standard'.
- c) In no case, the requests of any corporate indulging in willful default, fraud or misfeasance, even in a single bank, will be considered for restructuring under CDR system.
- d) The accounts where recovery suits have been filed by the lenders against the company, may be eligible for consideration under the CDR system provided, the initiative to resolve the case under the CDR system is taken by at least 75% of the lenders (by value).

iii) Category 2 CDR System

There have been instances where the projects have been found to be viable by the lenders but the accounts could not be taken up for restructuring under the CDR system as they fell under 'doubtful' category. Hence, a second category of CDR is introduced for cases where the accounts have been classified as 'doubtful' in the books of lenders, and if a minimum of 75% (by value) of the lenders satisfy themselves of the viability of the account and consent for such restructuring.

iv) Accounting treatment for restructured account

Restructuring of corporate debts under CDR system could take place in the following stages:

- a). before commencement of commercial production;
- b). after commencement of commercial production but before the asset has been classified as 'substandard'.
- c). after commencement of commercial production and the asset has been classified as 'sub-standard' or 'doubtful'. The same prudential norms in respect of rescheduled/restructured accounts as given earlier would apply to accounts restructured under CDR system.

The prudential accounting norms and other reforms are expected to have an impact on the operations and profitability of banks.

With reduced statutory requirements banks will have more funds at their disposal for commercial lending. interest rate liberalization is expected to bring flexibility and competition into the banking system. Competition is also infused by opening up banking sector for the private and foreign banks.

IMPACT OF NORMS ON THE PUBLIC SECTOR BANKS

IV. NON-PERFORMING ASSETS

Various measures initiated over the last decade-and-a half have significantly strengthened the commercial banking sector in terms of profitability, asset quality and capital position. The soundness parameters of the banking system, in particular, have shown sustained improvement. The asset quality of the Indian banking system has improved significantly over the past one decade. The NPAs of all SCBs, which stood at 15.7% of gross advances and 7.0% of total assets in 1995-96, declined to 3.3 per cent of gross advances and 1.9 per cent of total assets in 2005-06. While that of Public Sector Banks from 23.2% of gross advances and 11.8% of total assets in 1993 declined to 3.7% of gross advances and 2.1% of total assets in 2006. Similar trend can also be seen in the net NPAs ratios during the same period, reflecting better recoveries by banks and better allocation of funds. There has been a distinct improvement in the recovery climate in recent years facilitated by strong macroeconomic performance and institutional measures initiated by the Reserve Bank/Government. It is also significant to note that the asset quality of public sector banks has been better than private sector banks – both old and new – in terms of net NPL (*i.e.*, net of provisioning).

2. INCOME AND EXPENDITURE

The growth of other income has been greater than interest income for public sector banks. The interest income has been declining on account of slower growth of credit and softening of interest rates. On the other hand, the government securities market remained buoyant as a result of excess liquidity, declining yields and soft interest rates. Active trading in government securities resulted in an increase in trading profits and led to greater increase in other income. The changing composition of income reflects the changing composition of assets of the banking system.

Trends in financial ratios:

The ratios such as Income to Assets ratio and Net profit to Assets ratio are performance indicators of the profitability in Banking Sector. Total Income to Total Assets ratio hovers around 10, Net Profit to Total Assets ratio has increased significantly from 0.17 in 1991 to 1.045 in 2004. The performance of public sector banks in terms of growth rate of profits shows that the policy reforms have been supportive. It also shows that the Banks have capitalized much on the policy reforms as shown by the profitability criteria of the performance.

THE CRITIQUE

Current anomalies in defining an NPA

There is a high degree of arbitrariness involved in defining NPAs so far as the duration of no-payment is concerned. The uniform norm of repayment of dues for 90 days fails to capture diversity in terms of the seasonal and cyclical nature of the economic activities in India. For example, the agricultural cycle from sowing to harvesting and selling at a reasonable price (including some storage time) may extend more than 90 days. It may happen that selling crops immediately after the harvest in order to repay loans within 90 days may fetch a much lower price and the revenue may be lower than the loan amount.

In current banking practice, interest is fixed and applied from the first month and is also required to be served by the borrower in the month end. If the project has a longer gestation lag, the amount will turn to be NPA much before the project becomes operational. The current practice of fixing interest and defining NPA may induce more NPA. NPAs do not include default in interest payment or principal on privately placed debt.

Choice of Gross or net NPAs

For the present study relevant data on NPA are collected from various issues of Report on Trend and Progress in Indian Banking. Aggregate data are available since 1993 and bank-wise data are available since 1995-96.

It reports:

- gross NPAs/ gross advances,
- net NPAs/ net advances,
- gross NPA/total assets and
- Net NPAs/total assets.

Net NPAs are obtained from gross NPA after deduction of the following:

- balances in interest suspense account i.e. interest due but not received;
- claims received from credit guarantors and kept in suspense accounts pending final settlement;
- part payments received and kept in suspensions; and
- Total provisions held.

Gross advances = bills purchased and discounted + cash credits + overdrafts + loans and term loans,
Net advance = netting out bills rediscounted, DICGC claims etc from gross advance.

Banks will try to show a lower net NPA figure irrespective of gross NPA magnitude because net NPA below a stipulated level has been made one of the requirements for granting autonomy to PSBs. Raja Raman et al (2002) argued that gross NPA is a better indicator than net NPA since the former does not incorporate the endogenous provisioning process. This is because banks make provisioning for NPAs according to their capacities. Hence two banks with same gross NPA may be able to show different levels of net NPAs. On the other hand, two banks may show nearly the same net NPA figures when their gross NPA figures are different. Clearly one may not get a true picture of NPA from net NPA figures. They will have to be supplemented by gross NPA figures.

Dilemma of relating NPAs to Advances or Assets

The ratio used by the policy makers to judge the extent of the NPA problem of a bank is net NPA/net advances as it is internationally recognized. Rajaraman et al (2002) has taken NPAs as a percent of gross/net advances rather than as a percent of total assets. They argue that the former is a post-facto measure of failure to judge credit risk, whereas the latter is a measure of threat to solvency posed by that misjudgment. A similar view was also expressed by Mukherjee (2003). She, however, preferred to use the ratio of NPA to advances for Indian banks. It is argued that such a measure will enable the bank to have an idea about what proportion of its lending is paid off.

It is further argued that considering only the NPA to total assets ratio may underestimate the problem of NPA. This is because, in India, NPAs constitute a very small proportion of total assets, as loans and advances are around 40 percent of the total assets. However, in banking circles, it is argued that the international norm relates the NPA ratio to assets and not to advances. If NPAs are expressed as a ratio of assets, it allows the decomposition of the figure into substandard, doubtful and loss assets. This would throw more light on quality of assets.

Taking advantage of loopholes in the old banking law, PSBs developed enough laxity to accumulate a large volume of NPA. Sheer size of NPA and its growth rate over the greater part of the 1990s indicate the ill health of the Indian public sector banks. After implementations of the Narasimham Committee Report (1991) banks could no longer show interest on an accrual basis but it had to make provisioning from its income while granting of advances. This led to a situation in which a large number of the PSBs started reporting negative profit in 1992-93. Banks fulfilling certain conditions were allowed to write off these losses against their capital. This called for recapitalization of these banks.

Through this paper we want to help banks to determine how much the npa will change with change in some indicators

OBJECTIVE:

To help develop a relationship model for NPA that helps in reframing the policies to avert the crisis.

V. METHODOLOGY

This paper intends to discover the effect of seasonal and cyclical changes on NPA as such a revisiting of the problem through application of VAR (Value at Risk) model is attempted here. This is a conceptual frame work of research done on the core issue of banking industry in India.

Defining few terms:

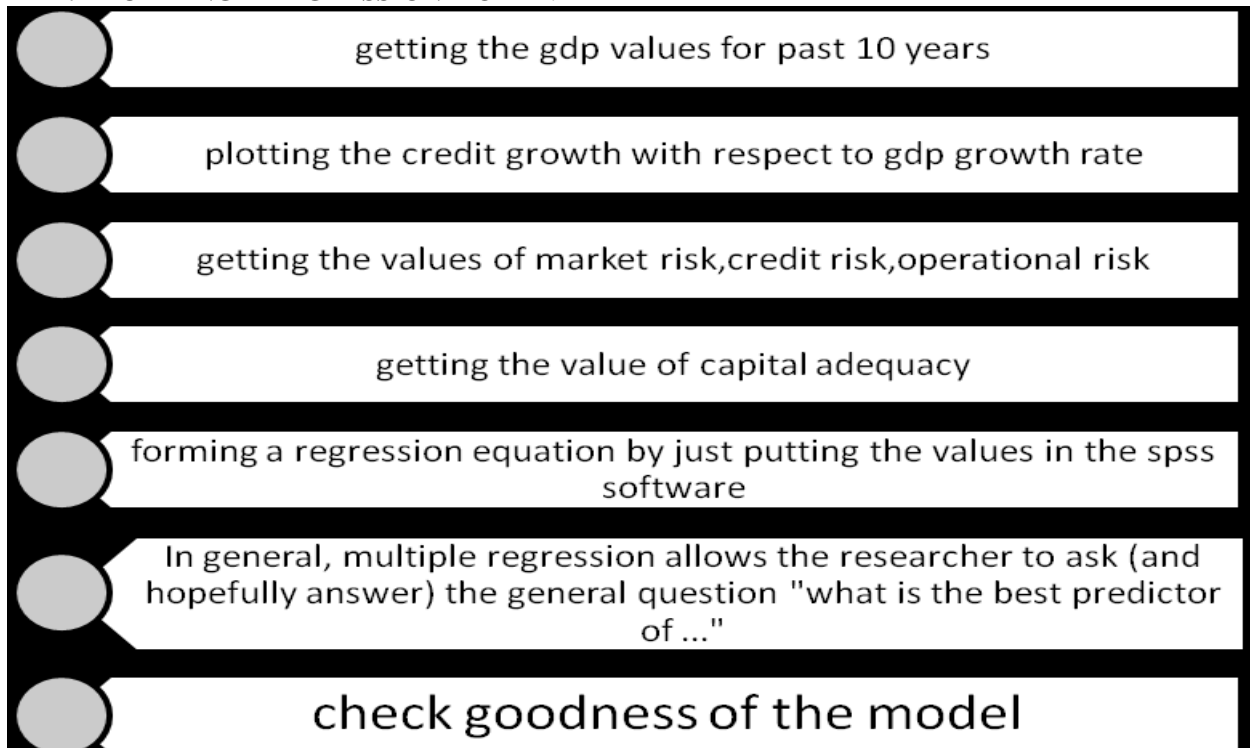
VAR: VAR is the maximum **loss** over a **target horizon** such that there is a low, **pre specified probability** that the actual loss will be larger.

CAPITAL ADEQUACY: Capital adequacy ratio is the ratio which determines the capacity of the bank in terms of meeting the time liabilities and other risks such as credit risk, operational risk, etc. Capital adequacy ratios ("CAR") are a measure of the amount of a bank's core capital expressed as a percentage of its assets weighted credit exposures.

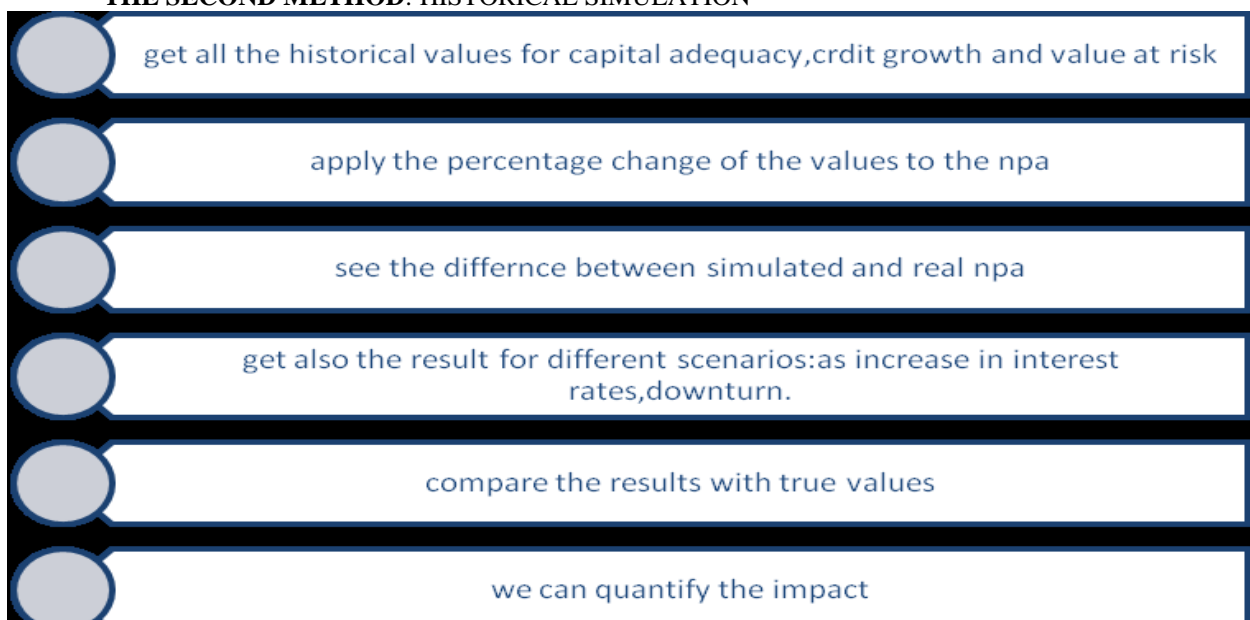
The paper takes into account how my NPA will change in capital adequacy or VAR AND WITH CREDIT GROWTH which further depends on GDP growth. Credit growth can also be segregated in to priority sector and non priority sector. The reason for taking VAR and capital adequacy in to account is that they capture the risks- market risk, credit risk and operational risk in to account and their value changes with all these factors. so we can capture that if my VAR or capital adequacy changes this much what extent my NPA changes. This well help banks to be prepared for any unprecedented NPA which may happen due to market risk-liquidity risk, interest rate risk, credit risk, operational risk. We can even segregate our results according to which risk affect or NPAs.

TWO WAYS

1. FORMING A REGRESSION MODEL:



THE SECOND METHOD: HISTORICAL SIMULATION

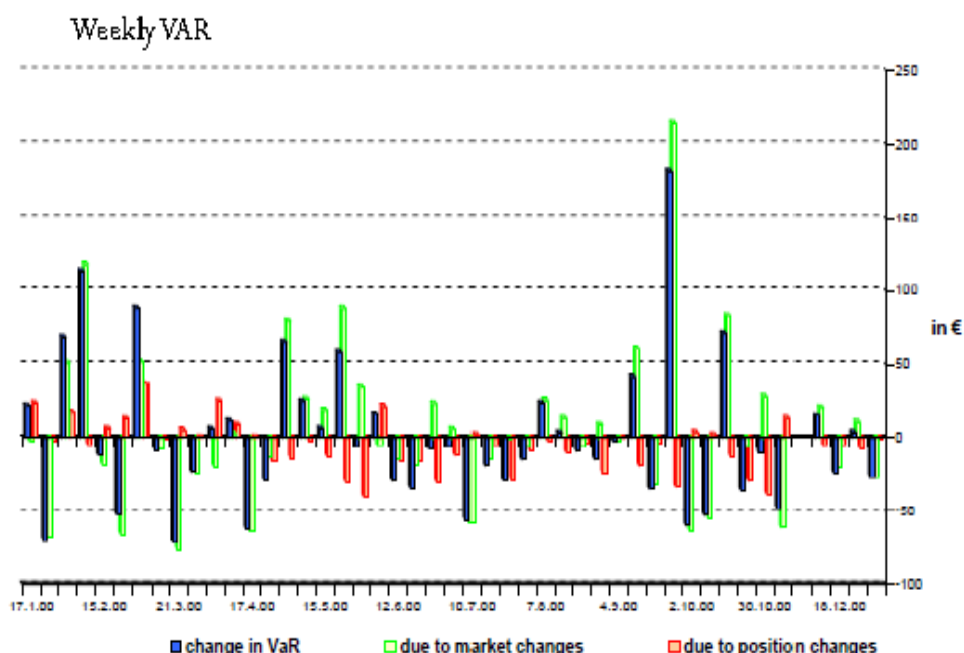


THE PARAMETERS:

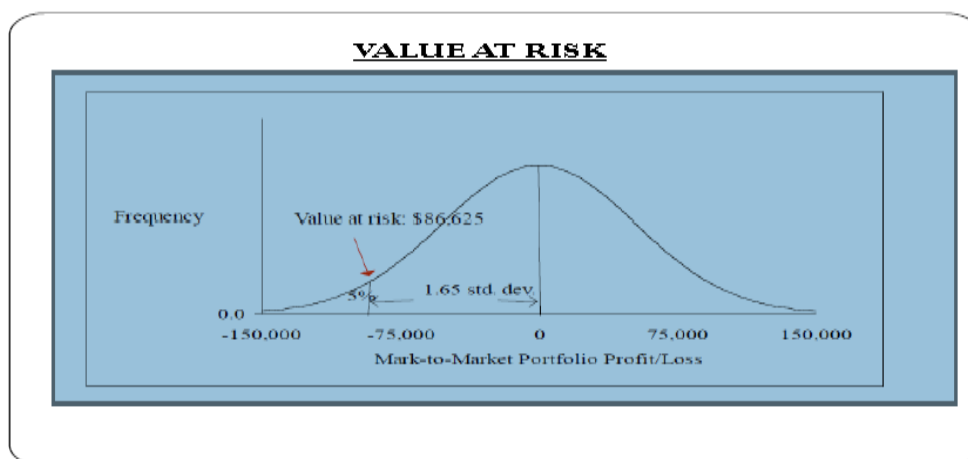
WE CAN COMPUTE THE CAPITAL CHARGE FOR MARKET RISK AND FIND THE VARIATIONS WITH RESPECT TO NPA

Risk Category	Capital charge
I. Interest Rate (a+b)	
a. General market risk	
i) Net position (parallel shift) ii) Horizontal disallowance (curvature) iii) Vertical disallowance (basis) iv) Options	
b. Specific risk	
II. Equity (a+b)	
a. General market risk	
b. Specific risk	

THIS FIGURE SHOWS HOW MOST OF THE MARKET RISK IS CAPTURED BY VAR



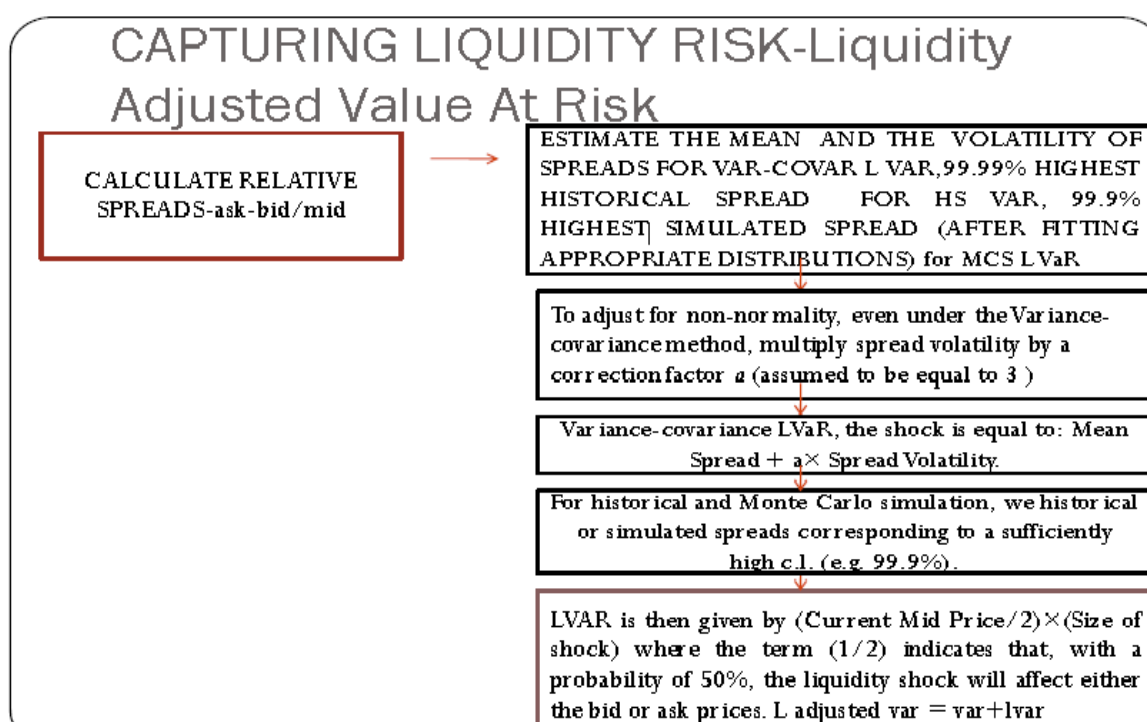
the change in VaR is to a larger extent driven by the change in market risk factors in comparison to the change in positions

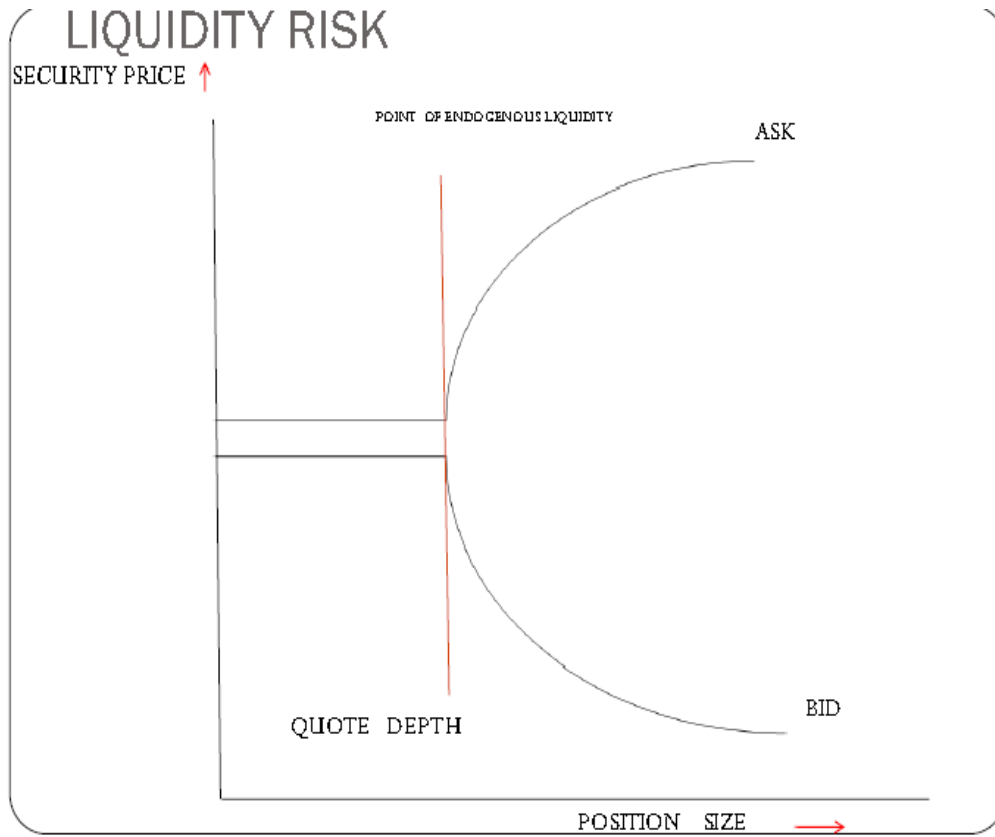


TO CAPTURE THE LIQUIDITY RISK WE EVALUATE LIQUIDITY ADJUSTED VAR AND THEN WE FIND WHAT EFFECT WE WILL HAVE ON THE NPA

Exogenous liquidity risk: which is outside the control of the market maker or trader? The market for liquid securities, such as G7 currencies, is typically characterized by heavy trading volumes, stable and small bid-ask spreads, stable and high levels of quote depth. Quote depth is defined as the volume of shares available at the market maker’s quoted price (bid or ask). Liquidity costs may be negligible for such positions when marking to market provides a proper liquidation value. In contrast, markets in emerging currencies or thinly traded junk bonds are illiquid and are characterized by high volatilities of spread, quote depth and trading volume.

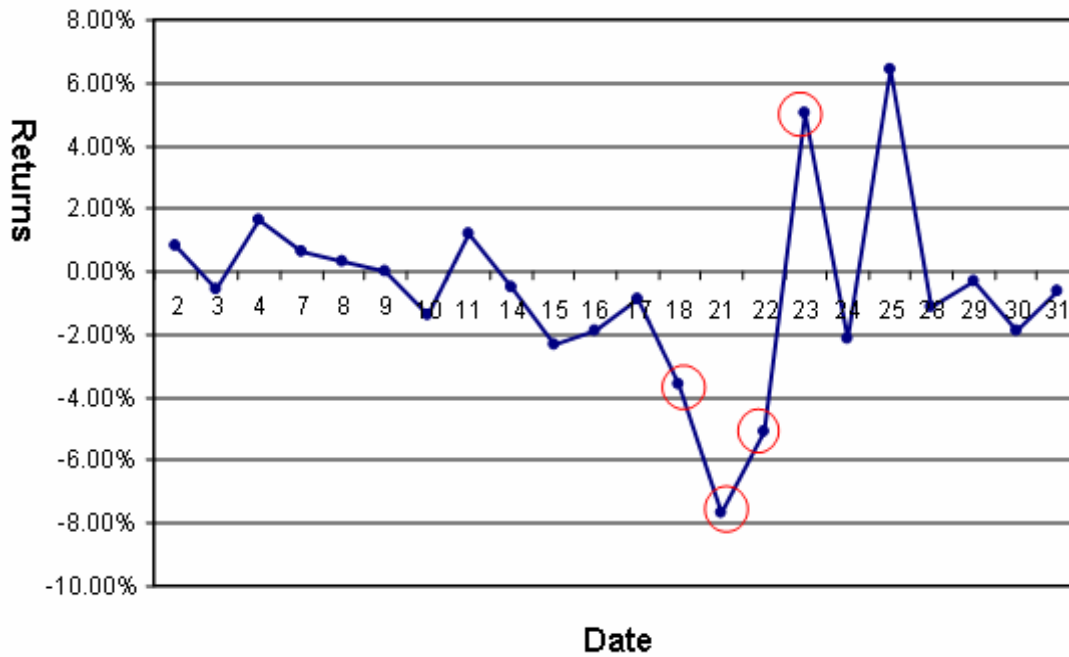
Endogenous liquidity risk: which refers to liquidity fluctuations driven by individual actions, such as an attempt to unwind a very large position? It is mainly driven by the size of the position: the larger the size, the greater the endogenous illiquidity. A good way to understand the implications of the position size is to consider the relationship between the liquidation price and the total position size held.





THE NEXT PARAMETER IS STRESS VAR WHICH CAPTURES ALL THE STRESS SCENARIOS AND SO WE SAY HOW MUCH VAR CHANGES WITH THE STRESS SCENARIO AND THUS ITS EFFECT ON FORMATION OF NPA

BSE SENSEX FLUCTUATIONS IN 2008



VAR CAPTURES ALL SUCH VOLATILITIES AND THUS WE FIND WITH HOW MUCH CHANGE IN VAR MY NPA CHANGES

	Baseline	5% shock	10% shock	15% shock
Long	31.9121	32.3561	32.3561	32.3561
Short	32.25555	32.25049	32.25049	32.25049

99% VaR (in Rs.) for Simple Historical Simulation –STRESS VAR

VI. CONCLUSION

The above conceptual framework designed and developed for the purpose of managing the growing level of Non-performing Assets by most of the commercial banks in India is certainly an attempt to locate the loopholes in the existing systems across the country. Also there is an ample scope for studying the subject from various mathematical and non-mathematical frameworks as being attempted in outside India and the institutions working in the Banking arena have the onus of responsibility in this direction. The growing potential of Indian Banking industry which is growing by leaps and bounds in terms of serving the cross sections in society has to be strengthened by devising a fool-proof mechanism of managing Non-performing Assets which became a area of concern for the entrepreneurial community if not for the State. The proposed VAR model of assessing the worth of NPAs has no doubt demands more research and in-depth criticism from various stakeholders. The RBI's envisioned role in this context also needs to be debated across various forums by taking into account the efforts made by some of the foreign enterprises and if possible by enlisting the support of various academic bodies and scholars community. As such, we would like to present the above work as a conceptual framework aimed at alleviating the potential grievances of most of the commercial banks in India and this further needs to be taken up for full length study in the coming days.

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