Comparative Study of NPA and Cancer: A Generic Model

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Abstract: Non-Performing Assets are a burning topic of concern for the public sector banks, as managing and controlling NPA is very important. NPA is like applying ointment to Cancer where surgery is needed. Many banks are facing the problem of NPAs which hampers the business of the banks. Non-performing assets are a drain to the banks. Unless and otherwise proper remedial measures are taken the quantum of non-performing assets cannot be reduced and the bank will incur losses to a great extent. In addition, we attempted to relate the NPA state to the development of cancer in the human body and discovered that there are many parallels between the two. We noticed that NPA spreads in a manner akin to that of cancer. Additionally, it exacerbates other negative side effects including increased unemployment, inflation, and bear markets while reducing bank profits. We might infer from this that if we want to save the banking sector, we must halt the growth of NPA.

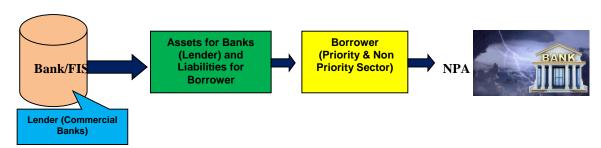
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NPA, Bank, Management of NPAs, Cancer, unemployment, inflation

I. INTRODUCTION:

Financial intermediation by banks is an engine of growth because they cause money to be circulated in the economy by seeking deposits from those who have surplus and lend for investment activity. It has a multiplier effect in the economy. Borrowing leads to creation of demand for productive resources and increases the income of the other. This leads to higher GDP and faster productive growth. Contraction in lending has opposite effect and growth falters. One major reason for muted credit growth is fast accretion of Non Performing Assets (NPAs) on banks' balance sheets. Roughly 72 per cent of market share of outstanding credit of SCBs (Scheduled Commercial Banks) is of PSBs. The twin balance sheet problem is overleveraged and distress companies coupled with rising NPAs of PSBs is holding up investment in the economy. Emerging scenario after Insolvency and Bankruptcy Code has kicked in, will change the borrowing culture and make lending, in future by the banks, much safer. Banks, undoubtedly, will have a sigh of relief. The mindset of the borrowers will be change.

About Non Performing Assets (NPAs)



Definitions of NPA by RBI:

- a) An asset, including a leased asset, becomes non-performing when it ceases to generate income for the bank.
- b) A non-performing asset (NPA) is a loan or an advance where;
- i. Interest and/ or instalment of principal remain overdue for a period of more than 90 days in respect of a term loan,
- ii. The account remains out of order in respect of an Overdraft /Cash Credit (OD/CC),
- iii. The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted,
- iv. The instalment of principal or interest thereon remains overdue for two crop seasons for short duration crops, the instalment of principal or interest thereon remains overdue for one crop season for long duration crops,
- v. The instalment of principal or interest thereon remains overdue for one crop season for long duration crops,

- vi. The amount of liquidity facility remains outstanding for more than 90 days, in respect of a securitisation transaction undertaken in terms of guidelines on securitisation dated February 1, 2006.
- vii. In respect of derivative transactions, the overdue receivables representing positive mark-to-market value of a derivative contract, if these remain unpaid for a period of 90 days from the specified due date for payment.
- c) Banks should, classify an account as NPA only if the interest due and charged during any quarter is not serviced fully within 90 days from the end of the quarter.
- d) **Out of Order statuses:** An account should be treated as **out of order** if the outstanding balance remains continuously in excess of the sanctioned limit/drawing power. In cases where the outstanding balance in the principal operating account is less than the sanctioned limit/drawing power, but there are no credits continuously for 90 days as on the date of Balance Sheet or credits are not enough to cover the interest debited during the same period, these accounts should be treated as **out of order**.
- e) **Overdue:** Any amount due to the bank under any credit facility is "overdue" if it is not paid on the due date fixed by the bank. (rbi.org.in)
- **1.3 Classification of Assets:** Non-performing assets are further classified into three categories based on the span for which the asset has remained non-performing and the recovery of the dues:

i. Substandard Assets

With effect from March 31, 2005, a substandard asset would be the one, which has remained as a non-performing asset for a period of less than or equal to 12 months. Substandard assets have credit weaknesses that jeopardise the liquidation of the debt and there are also possibility of incurring and sustaining some losses if the deficiencies are not corrected.

ii. Doubtful Assets

With effect from March 31, 2005, an asset is classified as doubtful if it has remained as a sub-standard asset for a period of 12 months. A loan classified under the doubtful category has all the weakness characteristics as defined for the sub-standard assets; also it has added characteristics that the weakness makes full liquidation or collection, on the basis of the currently known conditions, facts, and values that are highly doubtful and questionable.

iii. Loss Assets

A loss asset is one where loss has been identified by the bank's internal auditors and RBI"s external auditors, but the amount has not been written off fully. These kinds of assets are also considered as uncollectible, and of little value that its continuance or maintenance as a bankable asset is not warranted or acceptable though there may be some salvage or recovery value.

FACTORS FOR RISE IN NPAs

The banking sector has been facing the serious problems of the rising NPAs. But the problem of NPAs is more in public sector banks when compared to private sector banks and foreign banks. The NPAs in PSB are growing due to external as well as internal factors.

- a) Exuberance in increasing balance sheet size by lending to borrowers unworthy of such loans on account of their past credit history.
- b) Funds were borrowed for creating excess capacities in anticipation of demand without factoring in the global capacities / demand supply position.
- c) Project completion was delayed for various reasons.
- d) Recovery of receivable was poor.
- e) The concerned corporate was not able to raise capital through the issue of equity or other debt instruments from capital markets and used borrowed money as equity leading to double leveraging. Banks did not look at the colour of equity.
- f) Business failure because of over optimistic projections.
- g) Diversion of funds meant for expansion modernization. Borrowed funds were not used for the purpose for which they were lent.
- h) Wilful defaults, siphoning of funds, fraud misappropriation etc.
- i) Lack of skill on the part of the banks to monitor end use of funds and diversion by the borrower through web of shell companies etc.
- j) Deficiency in credit appraisal and improper due diligence.

IMPACT OF NPA

1) **Profitability:** NPA means booking of money in terms of bad asset, which occurred due to wrong choice of client because of the money getting blocked the prodigality of bank decreases not only by the amount of NPA but NPA lead to opportunity cost also as that much of profit invested in some return earning project/asset. So NPA doesn't affect current profit but also future stream of profit, which may lead to loss of some long-term beneficial

opportunity. Another impact of reduction in profitability is low ROI (Return on Investment), which adversely affect current earnings of bank.

- 2) **Liquidity:** Money is getting blocked, decreased profit lead to lack of enough cash at hand which lead to borrowing money for shortest period of time which lead to additional cost to the company. Difficulty in operating the functions of bank is another cause of NPA due to lack of money, routine payments and dues.
- 3) Involvement of Management: Time and efforts of management is another indirect cost which bank has to, bear due to NPA. Time and efforts of management in handling and managing NPA would have diverted to some fruitful activities, which would have given good returns. Now day s banks have special employees to deal and handle NPAs, which is additional cost to the bank.
- **4) Credit Loss:** Bank is facing problem of NPA then it adversely affect the value of bank in terms of market credit. It will lose its goodwill and brand image and credit which have negative impact to the people who are putting their money in the banks.

NPA in Public & Private Sector Banks' in India

One of the major challenges for the Indian banking system is to address the NPA issue which has also affected the profitability of banks besides coming in the way of future bank lending as banks have been cautious while lending especially for long term purposes. Various measures have been attempted to address this issue with the IBC being the latest one where some of the larger NPAs have been identified for speedy resolution. The outcome would be known in course of time.

Gross Non-Performing Assets (ie. Bad Loans) of banks in India as on September 30, 2017 are Rs 8.40 lakh core showing a growth of 1.31 percent from Rs. 8.29 lakh core as on June 30, 2017, Meteoric rise of NPAs from Sept 15 had its genesis in rapid credit growth of banks during the preceding years say from 2008 onwards. During the period of 2008 to 2014 gross advances of public sector banks grew from 18 lakh crores to Rs. 54 lakh crores and by September 17 this figure was Rs. 55.01 lakh crores vis-a-vis Q1 June 17 whereas those of 17 private sector banks increased by nearly 10.5 percent to Rs. 1.06 lakh crores. Gross NPA in 31.03.2018 are 10,35,528/Core. which is very much significant.

Though the share of large borrowers defined as those having limit of Rs. 5 crores and above, in the advances of scheduled commercial banks in 56 percent but their share of NPAs is 86.5 percent. Maximum slippage to NPA has happened in the accounts (numbers a well as amount) having outstanding between Rs. 20 crores to Rs. 50 crores followed by those in the range of Rs. 50 crores to Rs. 100 crores. Top 100 large exposures (outstanding advance) account for nearly 15.2 percent of gross advances but their share in top 100 Non-performing accounts is 25.6 percent of GNPAs of SCBs.

The Stressed Advance Ratio of industries constitutes roughly 23 percent as on March 17 of SCBs whereas this ration for agriculture, services and retail was 6.3 percent, 7 percent and 2.1 percent respectively. Of this PSBs as a group had Stressed Advance Ration of Advance to industry as 28.8 percent when Private Banks and Foreign Banks had 9.3 percent and 7.1 percent respectively. Across the broad spectrum of industries, those which are under stress include primarily basic metals and their products, cement and their products, textiles, infrastructure etc.

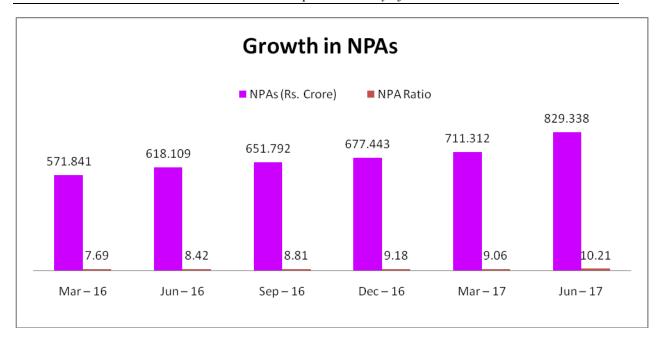
Meanwhile, the performance of banks with respect to NPAs has not been too positive of late. While it was largely expected that the NPA ratios would have settled by March 2017 as there were indications of stabilization relative to December 2017, the picture emerging for Q1-FY18 is that the NPAs have deteriorated further for the system as whole.

In Q1 FY18, non-performing assets (NPAs) of a sample of 38 banks increased by a sharp 34.2% on a yo-y basis. Also the NPA ratio increased to 10.21% in June 2017 from 8.42% in June 2016, which is the highest in the last six quarters.

On a q-o-q basis, the increase in NPAs have been the highest in Q1 FY18 witnessing an increase of about 16.6% to reach Rs 829,338 crore as of June 2017.

NPAs POSITION

MONTH	NPAs (Rs. Crore)	NPA Ratio
Mar – 16	571.841	7.69
Jun – 16	618.109	8.42
Sep – 16	651.792	8.81
Dec - 16	677.443	9.18
Mar – 17	711.312	9.06
Jun – 17	829.338	10.21



Bank wise NPAs as of June 2017 (Rs. Crore)

Bank	NAPs	Bank	NAPs
State Bank of India	188,068	Indian Bank	9,653
Punjab National Bank	57,721	HDFC Bank Ltd.	7,243
Bank of India	51,019	Vijaya Bank	6,812
IDBI Bank	50,173	Punjab & Sind Bank	6,693
Bank of Baroda	46,173	The Jummu & Kashmir Bank	5,641
ICICI Bank Ltd.	43,148	Kotak Mahindra Bank	3,727
Canara Bank	37,658	IDFC Bank	2,004
Union Bank of India	37,286	The Federal Bank	1,868
Indian Overseas Bank	35,453	Karur Vysya Bank	1,807
Central Bank of India	31,398	The South Indian Bank	1,696
UCO Bank	25,054	The Karnataka Bank	1,691
Oriental Bank of Commerce	24,409	Yes Bank	1,364
Axis Bank Ltd.	22,031	Induslnd Bank	1,272
Corporation Bank	21,713	The Lakshmi Vilas Bank	878
Allahabad Bank	21,032	City Union Bank	735
Syndicate Bank	20,184	RBL Bank	458
Andhra Bank	19,428	Dhanlaxmi Bank	354
Bank of Maharashtra	18,049	DCB Bank	285
Dena Bank	12,994	Total	829,338
United Bank of India	12,165		

- State Bank of India accounted for the largest share of about 22.7% in the total NPAs during the quarter. The NPAs stood at Rs 188,068 crore as of June 2017
- ❖ Top 5 banks together − SBI, PNB, BOI, IDBI, BOB account for a share of 47.4% totalling to Rs 393,154 crore
- ❖ 11 of the top 12 banks in terms of NPAs are public sector banks (PSBs) with the exception being ICICI Bank.
- ❖ ICICI Bank accounts for about 5.2% share in the total NPAs during the quarter.
- ❖ Top 12 banks together account for 75.7% share
- ❖ Public sector banks appear to be definitely more stressed than private banks
- ❖ ICICI Bank and Axis Bank are the only private sector banks in the top 15 with a combined share of 7.9% in the total NPAs

Bank-wise NPA ratio as of June 2017 (%)

Bank	NPA ratio	Bank	NPA ratio
IDBI Bank Ltd.	24.11	ICICI Bank Ltd.	7.99
Indian Overseas Bank	23.60	Vijaya Bank	7.30
UCO Bank	19.87	Indian Bank	7.21
Bank Of Maharashtra	18.59	Dhanlaxmi Bank Ltd.	5.62
Central Bank Of India	18.23	Axis Bank Ltd.	5.03
Dena Bank	17.37	The Karnataka Bank	4.34
United Bank of India	17.17	Karur Vysya Bank	4.27
Corporation Bank	15.49	IDFC Bank	4.13
Oriental Bank Of Commerce	14.83	The Lakshmi Vilas Bank	3.78
Allahabad Bank	13.85	The South Indian Bank	3.61
Punjab National Bank	13.66	City Union Bank	3.05
Andhra Bank	13.33	Kotak Mahindra Bank	2.58
Bank Of India	13.05	The Federal Bank	2.42
Union Bank Of India	12.63	DCB Bank	1.74
Bank Of Baroda	11.40	RBL Bank	1.46
Punjab & Sind Bank	11.33	HDFC Bank.	1.24
The Jammu & Kashmir Bank Ltd.	10.79	IndusInd Bank	1.09
Canara Bank	10.56	Yes Bank Ltd.	0.97
State Bank Of India	9.97		
Syndicate Bank	9.96		

- The top 20 banks with highest NPA ratios are public sector banks (PSBs)
- ♦ The top 2 banks, namely IDBI Bank (24.11%) and Indian Overseas Bank (23.6%) have NPA ratios of over 20%
- ❖ Indian Bank is the PSB with lowest ratio of 7.21%.
- ❖ Top 8 banks have an NPA ratio of over 15% as of June 2017.
- ❖ YES Bank is the only bank with a ratio of just less than 1.

Management Resolution of NPAs:

A reduction in the total gross and net NPAs in the Indian financial system indicates a significant improvement in management of NPAs. This is also on account of various resolution mechanisms introduced in the recent past which include the SRFAESI Act 2002, one time settlement schemes, setting up of the CDR mechanism, strengthening of DRTs. Under this Act, 64, 519 properties were seized or taken possession of by the banks in the year 2015-16; as of June 17, the figure is 33928. This ought to have been much more.

Government amended the law to make it mandatory for the district collector / district magistrate to hand over the physical possession to the bank when application is made under the act by the authorized officer. There are other impediments which borrowers create to thwart the efforts of Bankers. Borrowers have been gaming the system for far too long.

A Laudable effort made by the government in implementing Insolvency and Bankruptcy Code on December 1, 2016 is a game changer, twice the government has brought an ordinance to plug the loophole and make a stringent law for recovery. Insolvency and Bankruptcy Code now is a potent weapon like a Brahmastra to be use to destroy the demon of NPAs. Its efficacy will depend on the will power and honest intent of the user to find a just and equitable solution. It is utmost necessary to discern and destroy the ill motive and bad intent of anyone to defeat the real purpose of the law. Resolution under IBC has to be based on intelligence through discrimination.

Unfavourable effects of NPA on the economy and its link to the spread as that of cancer

Every banking crisis that has occurred in recent years throughout the globe has taught us that we must identify and address problem loans as soon as possible. To be patient is to be like an ostrich, expecting the issue will go away. It is naiveté rather than honesty. The occurrences of increasing NPAs in banks and other financial institutions are quite concerning. Going after the source of the NPA cancer and eliminating it is the best way to stop the trend. The common misconception is that banks are constantly correct and that clients are detrimental because they lack monetary control, but this ignores the reality that banks as well as FIs practically neglect or disregard the more crucial task of credit sanctioning as well as tracking due to ignorance, a lack of understanding

and expertise, or complete callousness on the part of all employees. The bank's complacency when authorizing a term loan and working capital is seen [1, 2].

It is commonly recognized that NPA spreads similarly to how cancer does. When cells in the body begin to divide and expand uncontrolled, frequently spreading into neighbouring tissue, it is referred to as having cancer. Cancer kills by encroaching on vital organs, nerves, or blood arteries, interfering with their normal operation, and ultimately causing death. The patients' immunity is destroyed. Most human cells are capable of initiating it [3].

New cells typically develop by expansion and division. When a cell is too old or damaged, it dies, and is replaced by freshly created cells. The process of cellular death and regeneration is hampered by cancer. As a consequence, old cells survive when the human body should be destroying them, and new cells have abnormalities that worsen with time. When there is no need for them, new cells can also develop. These extra cells have the potential to multiply erratically (decrease planned cell death/apoptosis), leading to tumorigenic growths. The parts that follow will examine the spread of cancer in more detail as it relates to early-stage cancer [4].

Stage 0

This indicates that tumours or malignancies are present "in situ," or in the area where they first appeared. In other words, they haven't spread.

The tumour or malignant cells may frequently be surgically removed at this stage, making it typically very curable.

Stage 1

Stage 1 malignancies or tumors are tiny and not firmly ingrained in the surrounding tissues. They are sometimes referred to as early stage cancers. Additionally, they have not moved to the lymphatic system or other regions of the body.

Stages 2 and 3

Cancers and tumors in stages 2 and 3 are often bigger and have a significant amount of tissue invasion. They could have also spread to the lymphatic system or to other areas of the body.

Stage 4

Cancer at stage 4 is sometimes referred to as metastatic or progressed. Cancers or tumours have already metastasized to other regions of the body at this point.

NPA has similar effects to cancer in that it has a negative influence on the financial industries. It negatively affects banks in the following ways: It lowers bank earnings.

- The banks become reluctant to provide loans and accept zero percent risk. As a result, new credit is not produced.
- ♣ Funds cost higher because of NPA.
- ♣ Banks start focusing on credit risk management rather than increasing bank profitability.
- 4 As NPAs increase, the bank's reputation suffers, which undermines public confidence in banks. In the event that depositors remove their money, banks may become insolvent.
- ♣ Due to a lack of liquidity, banks are unable to make loans for other economically productive industries.
- 4 A slowdown in investment might lead to unemployment, inflation, a bear market, and other negative effects.
- ♣ In order to maintain their profit margins, banks will be forced to boost interest rates, which will worsen the economy.

Below we have tried to correlate adverse function of NPA with how cancer destroys a physiological system.

Table 1: Correlation of adverse function of NPA with cancer spreading

NPA	CANCER
Reductions of profits of bank and bank's capital	Destroys the immunity of the patients and fighting
sufficiency.	capability against cancer.
Banks thus become averse to giving loans.	Failure of immune system fails to fight against new
	cancer cell generation.
Credit risk management increases with reduction of	Cancer cell growth become surplus as of no control
profit.	of programmed cell death in our system (Stage 3)
Funds cost more due to NPA.	Advance stage of cancer requires high expense
	treatment and targeted therapies (Stage 3/4).
Damage the bank's reputation, causing the public to	Further, failures of therapy produce immense
lose faith in banks.	physiological stress to the patients and increase the
	financial burden of the family.
Decrease of productive activities in the economy due	Increase the socio-economical saddle on the family.
to a shortage of liquidity.	

We may infer from the aforementioned information that NPA is a major factor in the decline of banking industry earnings since it bears the most significant and detrimental regression coefficient. It indicates that deteriorating credit quality hinders banks' operations and ultimately causes an ICU situation. If no early diagnosis or treatment is done the NPA may progress to advanced stages as that of cancer and ultimately may shrink the entire economic growth of the country gradually.

COMPROMISE SETTLEMENT SCHEMES

1) One Time Settlement Schemes: NPAs in all sectors, which have become doubtful or loss as on 31st March 2000. The scheme also covers NPAs classified as sub-standard as on 31st March 2000, which have subsequently become doubtful or loss. All cases on which the banks have initiated action under the SRFAESI Act and also cases pending before Courts/DRTs/BIFR, subject to consent decree being obtained from the Courts/DRTs/BIFR are covered. However cases of wilful default, fraud and malfeasance are not covered. As per the OTS scheme, for NPAs up to Rs. 10crores, the minimum amount that should be recovered should be 100% of the outstanding balance in the account.

State Bank of India (SBI) is on a massive mission to persuade farmers to opt for a one-time settlement (OTS) scheme for non-performing agricultural loans and other unsecured loans up to Rs 20 lakh.

This is the biggest exercise ever undertaken by an Indian bank and comes at a sensitive time when loan waivers are impairing the credit repayment habits of farmers across the country.

SBI hopes to collect Rs 1,500 crore through this programme by October 31, 2017. The NPAs that will be eligible for settlement under this scheme will be Rs 19,000 crore. Of this, Rs 6,000 crore is from Agri loans alone.

The success of the OTS scheme is significant as all banks are currently battling against populist loan waiver measures launched in certain states. Agriculture forms about 15% of our GDP and about 60% of the workforce is in this sector it is critical that banks support the sector. Called the 'Rinn Samadhan Programme', the campaign run through SBI's 15,000 rural and semi-urban branches across the country.

Any farmer with a loan up to Rs 20 lakh can come and settle 50% of his dues, with the remaining being written off. After 30 days, the farmer is eligible for a fresh loan. The average size of an agriculture loan is Rs 1.25 lakh.

2) Negotiated Settlement Schemes: The RBI/Government has been encouraging banks to design and implement policies for negotiated settlements, particularly for old and unresolved NPAs. The broad framework for such settlements was put in place in July 2017.

Merger of PSBs by reducing their number to 12 from 27 was one of the biggest achievements. The merger was found to have resulted in a near 10% reduction in NPAs of weak merging banks and almost all the decline is due to a decrease in strategic defaults. ETBFSI improvement in loan performance and post merger reduction in loan defaults have significant macroeconomic consequence.

II. CONCLUSION

The Indian banking sector is facing a serious problem of NPA. The extent of NPA is comparatively higher in public sector banks. To improve the efficiency and profitability, the NPA has to be scheduled. Various steps have been taken by government to reduce the NPA. It is highly impossible to have zero percentage NPA. But at least Indian banks can try competing with foreign banks to maintain international standard. The Non-Performing Assets continue to remain challenge but hopeful that NPAs will improve and at the same time we need growth capital. It is time to wake up. Government must reorient the lending policies to the majority in this country and take stringent action on wilful defaulters.

NPAs are like applying ointment to Cancer where surgery is needed. It is urgent to implement the proposal of RBI that the banks would be allowed to lend up to 25% of their Core Capital, down from the present ceiling of 55% to a single borrower and limit total fund-based exposure of the Banking System to a Corporate to Rs. 15,000 thousand Core in 2018. Corporate NPAs are because of the fear of collapse of the bank itself if big corporate sector is declared as NPAs.

The RBI move has come at the right hour because the assets quality pressures are near their peak and it will improve the ability of Banks to transit to the new regime. The gross NPAs of the commercials Banks have declined marginally from 10 % to 9.8% which is very much significant.

Banks may further survey for alternate NPA resolution by the way of equity participation or close surveillance of Clients before stage 3 or 4 situation arises. Development of monitoring software for NPA surveillance and early action on the lenders point will also minimise the NPA growth. Sector study for the credit of Agri, Industry, Service, Trading, Home and Vehicle will further help banking sector to go for micro analysis and to formulate NPA phase out. Government must reorient the lending policies to the majority in this country and take stringent action for a wilful defaulter.

We attempted to tie NPA to cancer in this review. We discovered that NPA spreads in a manner akin to that of cancer. In that it has a detrimental impact on the financial industry, NPA has repercussions that are comparable to those of cancer. Banks are harmed in the following ways by it: It decreases bank profits and worsens other side effects including rising unemployment, inflation, and bear markets.

Thus, we can draw the conclusion that slowing the increase of NPA is necessary to save the banking industry. It threat the growing economy and adverse impact on the economy and stock markets.

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