Note to Parliamentary Estimates Committee on Bank NPAs¹

1) Why did the NPAs occur?

I have not seen a study that has unearthed the precise weight of all the factors responsible, but here is a list of the main ones.

Over-optimism:

A larger number of bad loans were originated in the period 2006-2008 when economic growth was strong, and previous infrastructure projects such as power plants had been completed on time and within budget. It is at such times that banks make mistakes. They extrapolate past growth and performance to the future. So they are willing to accept higher leverage in projects, and less promoter equity. Indeed, sometimes banks signed up to lend based on project reports by the promoter's investment bank, without doing their own due diligence. One promoter told me about how he was pursued then by banks waving checkbooks, asking him to name the amount he wanted. This is the historic phenomenon of irrational exuberance, common across countries at such a phase in the cycle.

Slow Growth

Unfortunately, growth does not always take place as expected. The years of strong global growth before the global financial crisis were followed by a slowdown, which extended even to India, showing how much more integrated we had become with the world. Strong demand projections for various projects were shown to be increasingly unrealistic as domestic demand slowed down.

Government Permissions and Foot-Dragging

A variety of governance problems such as the suspect allocation of coal mines coupled with the fear of investigation slowed down government decision making in Delhi, both in the UPA and the subsequent NDA governments. Project cost overruns escalated for stalled projects and they

¹This note was prepared by Professor Raghuram G. Rajan on September 6th 2018 at the request of the Chairman of the Parliament Estimates Committee, Dr. Murli Manohar Joshi, MP.

became increasingly unable to service debt. The continuing travails of the stranded power plants, even though India is short of power, suggests government decision making has not picked up sufficient pace to date.

Loss of Promoter and Banker Interest

Once projects got delayed enough that the promoter had little equity left in the project, he lost interest. Ideally, projects should be restructured at such times, with banks writing down bank debt that is uncollectable, and promoters bringing in more equity, under the threat that they would otherwise lose their project. Unfortunately, until the Bankruptcy Code was enacted, bankers had little ability to threaten promoters (see later), even incompetent or unscrupulous ones, with loss of their project. Writing down the debt was then simply a gift to promoters, and no banker wanted to take the risk of doing so and inviting the attention of the investigative agencies. Stalled projects continued as "zombie" projects, neither dead nor alive ("zombie" is a technical term used in the banking literature).

It was in everyone's interest to extend the loan by making additional loans to enable the promoter to pay interest and pretend it was performing. The promoter had no need to bring in equity, the banker did not have to restructure and recognize losses or declare the loan NPA and spoil his profitability, the government had no need to infuse capital. In reality though, because the loan was actually non-performing, bank profitability was illusory, and the size of losses on its balance sheet were ballooning because no interest was actually coming in. Unless the project miraculously recovered on its own – and with only a few exceptions, no one was seriously trying to put it back on track – this was deceptive accounting. It postponed the day of reckoning into the future, but there would be such a day.

Malfeasance

How important was malfeasance and corruption in the NPA problem? Undoubtedly, there was some, but it is hard to tell banker exuberance, incompetence, and corruption apart. Clearly, bankers were overconfident and probably did too little due diligence for some of these loans. Many did no independent analysis, and placed excessive reliance on SBI Caps and IDBI to do

the necessary due diligence. Such outsourcing of analysis is a weakness in the system, and multiplies the possibilities for undue influence.

Banker performance after the initial loans were made were also not up to the mark. Unscrupulous promoters who inflated the cost of capital equipment through over-invoicing were rarely checked. Public sector bankers continued financing promoters even while private sector banks were getting out, suggesting their monitoring of promoter and project health was inadequate. Too many bankers put yet more money for additional "balancing" equipment, even though the initial project was heavily underwater, and the promoter's intent suspect. Finally, too many loans were made to well-connected promoters who have a history of defaulting on their loans.

Yet, unless we can determine the unaccounted wealth of bankers, I hesitate to say a significant element was corruption. Rather than attempting to hold bankers responsible for specific loans, I think bank boards and investigative agencies must look for a pattern of bad loans that bank CEOs were responsible for – some banks went from healthy to critically undercapitalized under the term of a single CEO. Then they must look for unaccounted assets with that CEO. Only then should there be a presumption that there was corruption.

Fraud

The size of frauds in the public sector banking system have been increasing, though still small relative to the overall volume of NPAs. Frauds are different from normal NPAs in that the loss is because of a patently illegal action, by either the borrower or the banker. Unfortunately, the system has been singularly ineffective in bringing even a single high profile fraudster to book. As a result, fraud is not discouraged.

The investigative agencies blame the banks for labeling frauds much after the fraud has actually taken place, the bankers are slow because they know that once they call a transaction a fraud, they will be subject to harassment by the investigative agencies, without substantial progress in catching the crooks. The RBI set up a fraud monitoring cell when I was Governor to coordinate the early reporting of fraud cases to the investigative agencies. I also sent a list of high profile

cases to the PMO urging that we coordinate action to bring at least one or two to book. I am not aware of progress on this front. This is a matter that should be addressed with urgency.

2) Why did the RBI set up various schemes to restructure debt and how effective were they?

When I took office it was clear that bankers had very little power to recover from large promoters. The Debts Recovery Tribunals (DRTs) were set up under the Recovery of Debts Due to Banks and Financial Institutions (RDDBFI) Act, 1993 to help banks and financial institutions recover their dues speedily without being subject to the lengthy procedures of usual civil courts. The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interests (SARFAESI) Act, 2002 went a step further by enabling banks and some financial institutions to enforce their security interest and recover dues even without approaching the DRTs.

Yet the amount banks recover from defaulted debt was both meager and long delayed. The amount recovered from cases decided in 2013-14 under DRTs was Rs. 30590 crores while the outstanding value of debt sought to be recovered was a huge Rs 2,36,600 crores. Thus recovery was only 13% of the amount at stake. Worse, even though the law indicated that cases before the DRT should be disposed off in 6 months, only about a fourth of the cases pending at the beginning of the year were disposed off during the year – suggesting a four year wait even if the tribunals focused only on old cases. However, in 2013-14, the number of new cases filed during the year were about one and a half times the cases disposed off during the year. Thus backlogs and delays were growing, not coming down. A cautionary point as we welcome the NCLT's efforts is that the DRTs and SARFAESI were initially successful, before they became overburdened as large promoters understood how to game them.

The inefficient loan recovery system gave promoters tremendous power over lenders. Not only could they play one lender off against another by threatening to divert payments to the favored bank, they could also refuse to pay unless the lender brought in more money, especially if the lender feared the loan becoming an NPA. Sometimes promoters offered low one-time settlements (OTS) knowing that the system would allow the banks to collect even secured loans only after years. Effectively, bank loans in such a system become equity, with a tough promoter

enjoying the upside in good times, and forcing banks to absorb losses in bad times, even while he holds on to his equity.

The RBI decided we needed to empower the banks and improve on the ineffective CDR system then in place. Our first task was to make sure that all banks had information on who had lent to a borrower. So we created a large loan database (CRILC) that included all loans over Rs. 5 crore, which we shared with all the banks. The CRILC data included the status of each loan – reflecting whether it was performing, already an NPA or going towards NPA. That database allowed banks to identify early warning signs of distress in a borrower such as habitual late payments to a segment of lenders.

The next step was to coordinate the lenders through a Joint Lenders' Forum (JLF) once such early signals were seen. The JLF was tasked with deciding on an approach for resolution, much as a bankruptcy forum does. Incentives were given to banks for reaching quick decisions. We also tried to make the forum more effective by reducing the need for everyone to agree, even while giving those who were unconvinced by the joint decision the opportunity to exit.

We also wanted to stop ever-greening of projects by banks who want to avoid recognizing losses – so we ended *forbearance*, the ability of banks to restructure projects without calling them NPA in April 2015. At the same time, a number of long duration projects such as roads had been structured with overly rapid required repayments, even though cash flows continued to be available decades from now. So we allowed such project payments to be restructured through the 5/25 scheme provided the long dated future cash flows could be reliably established. Of course, there was always the possibility of banks using this scheme to evergreen, so we monitored how it worked in practice, and continued tweaking the scheme where necessary so that it achieved its objectives.

Because promoters were often unable to bring in new funds, and because the judicial system often protected those with equity ownership, together with SEBI we introduced the Strategic Debt Restructuring (SDR) scheme so as to enable banks to displace weak promoters by

converting debt to equity. We did not want banks to own projects indefinitely, so we indicated a time-line by which they had to find a new promoter.

We adjusted the schemes with experience. Each scheme's effectiveness, while seemingly obvious when designing, had to be monitored in light of the distorted incentives in the system. As we learnt, we adapted regulation. Our objective was not to be theoretical but to be pragmatic, even while subjecting the system to increasing discipline and transparency.

All these new tools (including some I do not have the space to describe) effectively created a resolution system that replicated an out-of-court bankruptcy. Banks now had the power to resolve distress, so we could push them to exercise these powers by requiring recognition. The schemes were a step forward, and enabled some resolution and recovery, but far less than we thought was possible. Incentives to conclude deals were unfortunately too weak.

3) Why Recognize Bad Loans?

There are two polar approaches to loan stress. One is to apply band aids to keep the loan current, and hope that time and growth will set the project back on track. Sometimes this works. But most of the time, the low growth that precipitated the stress persists. Lending intended to keep the original loan current (also called "ever-greening") grows. Facing large and potentially unpayable debt, the promoter loses interest, does little to fix existing problems, and the project goes into further losses.

An alternative approach is to try to put the stressed project back on track rather than simply applying band aids. This may require deep surgery. Existing loans may have to be written down somewhat because of the changed circumstances since they were sanctioned. If loans are written down, the promoter brings in more equity, and other stakeholders like the tariff authorities or the local government chip in, the project may have a strong chance of revival, and the promoter will be incentivized to try his utmost to put it back on track.

But to do deep surgery such as restructuring or writing down loans, the bank has to recognize it has a problem – classify the asset as a Non Performing Asset (NPA). Think therefore of the NPA classification as an anesthetic that allows the bank to perform extensive necessary surgery to set the project back on its feet. If the bank wants to pretend that everything is all right with the loan, it can only apply band aids – for any more drastic action would require NPA classification.

Loan classification is merely good accounting – it reflects what the true value of the loan might be. It is accompanied by provisioning, which ensures the bank sets aside a buffer to absorb likely losses. If the losses do not materialize, the bank can write back provisioning to profits. If the losses do materialize, the bank does not have to suddenly declare a big loss, it can set the losses against the prudential provisions it has made. Thus the bank balance sheet then represents a true and fair picture of the bank's health, as a bank balance sheet is meant to. Of course, we can postpone the day of reckoning with regulatory forbearance. But unless conditions in the industry improve suddenly and dramatically, the bank balance sheets present a distorted picture of health, and the eventual hole becomes bigger.

4) Did the RBI create the NPAs?

Bankers, promoters, or their backers in government sometimes turn around and accuse regulators of creating the bad loan problem. The truth is bankers, promoters, and circumstances create the bad loan problem. The regulator cannot substitute for the banker's commercial decisions or micromanage them or even investigate them when they are being made. Instead, in most situations, the regulator can at best warn about poor lending practices when they are being undertaken, and demand banks hold adequate risk buffers. The RBI is primarily a referee, not a player in the process of commercial lending. Its nominees on bank boards have no commercial lending experience and can only try and make sure that processes are followed. They offer an illusion that the regulator is in control, which is why nearly every RBI Governor has asked the government for permission to withdraw them from bank boards.

The important duty of the regulator is to force timely recognition of NPAs and their disclosure when they happen, followed by requiring adequate bank capitalization. This is done through the RBI's regular supervision of banks.

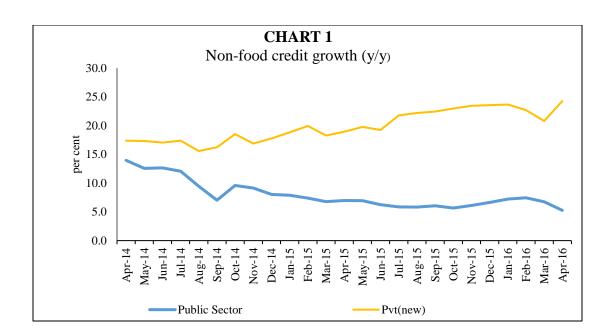
5) Why did RBI initiate the Asset Quality Review?

Once we had created enough ways for banks to recover, we decided to not prolong forbearance beyond when it was scheduled to end. Banks were simply not recognizing bad loans. They were not following uniform procedures – a loan that was non-performing in one bank was shown as performing in others. They were not making adequate provisions for loans that had stayed NPA for a long time. Equally problematic, they were doing little to put projects back on track. They had also slowed credit growth. What any student of banking history will tell you is that the sooner banks are cleaned up, the faster the banks will be able to resume credit. We proceeded to ensure in our bank inspections in 2015 that every bank followed the same norms on every stressed loan. We especially looked for signs of ever-greening. A dedicated team of supervisors ensured that the Asset Quality Review (AQR), completed in October 2015 and subsequently shared with banks, was fair and conducted without favor. The government was kept informed and consulted on every step of the way, after the initial supervision was done.

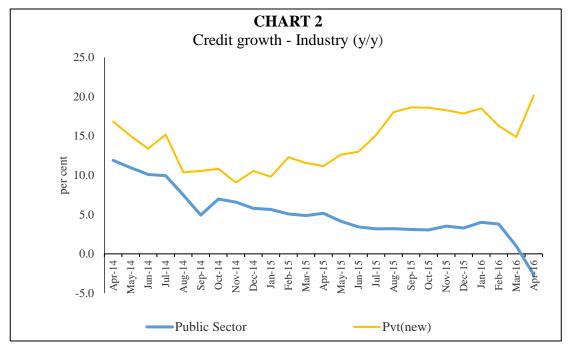
6) Did NPA recognition slow credit growth, and hence economic growth?

The RBI has been accused of slowing the economy by forcing NPA recognition. I actually gave a speech in July 2016 on this issue before I demitted office, knowing it was only a matter of time before vested interests who wanted to torpedo the clean-up started attacking the RBI on the growth issue.

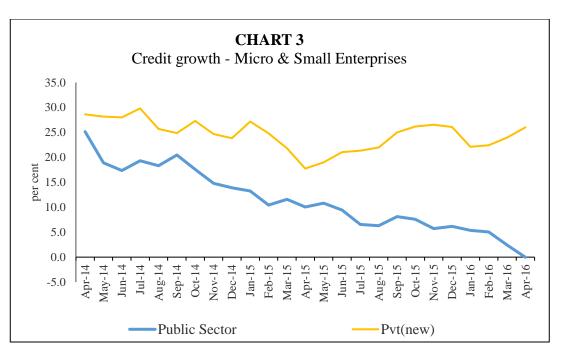
Simply eye-balling the evidence suggests the claim is ludicrous, and made by people who have not done their homework. Let us start by looking at public sector bank credit growth compared with the growth in credit by the new private banks. As the trend in non-food credit growth shows (Chart 1), public sector bank non-food credit growth was falling relative to credit growth from the new private sector banks (Axis, HDFC, ICICI, and IndusInd) since early 2014.



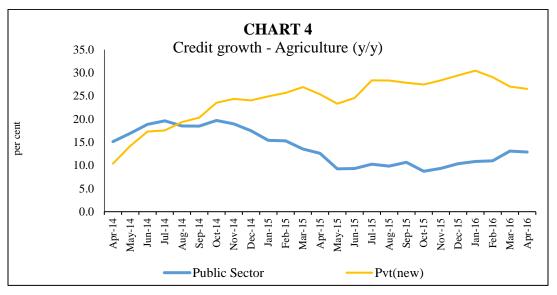
This is reflected not only in credit to industry (Chart 2), but also in credit to micro and small enterprise credit (Chart 3).²



 $^{^{2}}$ In Chart 2, the negative growth in April 2016 may be an aberration because of UDAY bonds being transferred from bank loan books to investments.



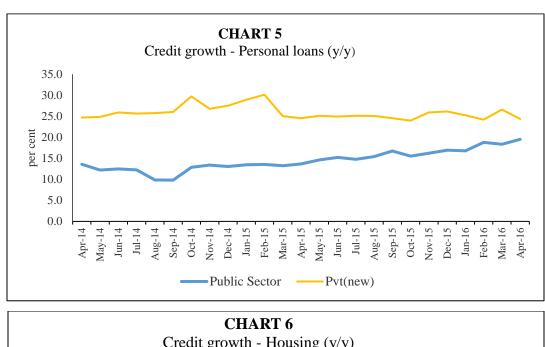
The relative slowdown in credit growth, albeit not so dramatic, is also seen in agriculture (Chart 4), though public sector bank credit growth picked up once again in October 2015.

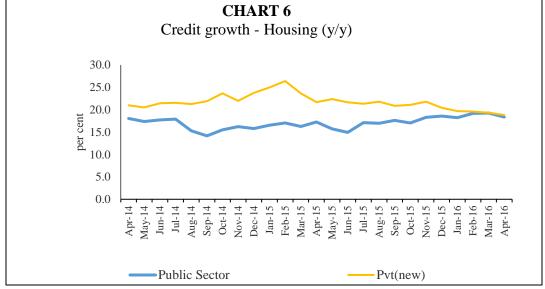


Whenever one sees a slowdown in lending, one could conclude there is no demand for credit – firms are not investing. But what we see here is a slowdown in lending by public sector banks vis a vis private sector banks.

Interestingly, if we look at personal loan growth (Chart 5), and specifically housing loans (Chart 6), public sector bank loan growth approaches private sector bank growth. So the reality is that

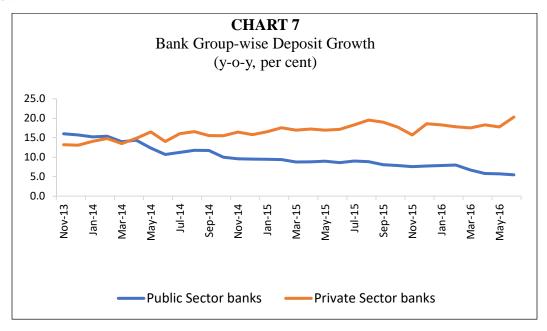
public sector banks slowed lending to the sectors where they were seeing large NPAs but not in sectors where NPAs were low.





The fact that the public sector bank credit slowdown to industry dates from early 2014 suggests that the bank cleanup, which started in earnest in the second half of fiscal year 2015, was not the cause. Indeed, the slowdown is best attributed to over-burdened public sector bank balance sheets and growing risk aversion in public sector bankers. Their aversion to increasing their activity can be seen in the rapid slowdown of their deposit growth also, relative to private sector banks (see

Chart 7). After all, why would public sector banks raise deposits aggressively if they are unwilling to lend?



In sum, the Indian evidence, supported by the experiences from other parts of the world such as Europe and Japan, suggests that what we were seeing was classic behavior by a banking system with balance sheet problems. We were able to identify the effects because parts of our banking system – the private banks — did not suffer as much from such problems. The obvious remedy to anyone with an open mind would be to tackle the source of the problem – to clean the balance sheets of public sector banks, a remedy that has worked well in other countries where it has been implemented. This is not a "foreign" solution, it is an economically sensible solution. It is something that has been repeatedly flagged by the government's own Economic Survey, under the guidance of the respected Dr. Arvind Subramanian. Clean up was part of the solution, not the problem.

7) Why do NPAs continue mounting even after the AQR is over?

The AQR was meant to stop the ever-greening and concealment of bad loans, and force banks to revive stalled projects. The hope was that once the mass of bad loans were disclosed, the banks, with the aid of the government, would undertake the surgery that was necessary to put the projects back on track. Unfortunately, this process has not played out as well. As NPAs age, they require more provisioning, so projects that have not been revived simply add to the stock of

gross NPAs. A fair amount of the increase in NPAs may be due to ageing rather than as a result of a fresh lot of NPAs.

Why have projects not been revived? Since the post-AQR process took place after I demitted office, I can only comment on this from press reports. Blame probably lies on all sides here.

- a) Risk-averse bankers, seeing the arrests of some of their colleagues, are simply not willing to take the write-downs and push a restructuring to conclusion, without the process being blessed by the courts or eminent individuals. Taking every restructuring to an eminent persons group or court simply delays the process endlessly.
- b) Until the Bankruptcy Code was enacted, promoters never believed they were under serious threat of losing their firms. Even after it was enacted, some still are playing the process, hoping to regain control though a proxy bidder, at a much lower price. So many have not engaged seriously with the banks.
- c) The government has dragged its feet on project revival the continuing problems in the power sector are just one example. The steps on reforming governance of public sector banks, or on protecting bank commercial decisions from second guessing by the investigative agencies, have been limited and ineffective. Sometimes even basic steps such as appointing CEOs on time have been found wanting. Finally, the government has not recapitalized banks with the urgency that the matter needed (though without governance reform, recapitalization is also not like to be as useful).
- d) The Bankruptcy Code is being tested by the large promoters, with continuous and sometimes frivolous appeals. It is very important that the integrity of the process be maintained, and bankruptcy resolution be speedy, without the promoter inserting a bid by an associate at the auction, and acquiring the firm at a bargain-basement price. Given our conditions, the promoter should have every chance of concluding a deal before the firm goes to auction, but not after. Higher courts must resist the temptation to intervene routinely in these cases, and appeals must be limited once points of law are settled.

That said, the judicial process is simply not equipped to handle every NPA through a bankruptcy process. Banks and promoters have to strike deals outside of bankruptcy, or if promoters prove uncooperative, bankers should have the ability to proceed without them.

Bankruptcy Court should be a final threat, and much loan renegotiation should be done under the shadow of the Bankruptcy Court, not in it. This requires fixing the factors mentioned in (a) that make bankers risk averse and in (b) that make promoters uncooperative.

We need concentrated attention by a high level empowered and responsible group set up by government on cleaning up the banks. Otherwise the same non-solutions (bad bank, management teams to take over stressed assets, bank mergers, new infrastructure lending institution) keep coming up and nothing really moves. Public sector banks are losing market share as non-bank finance companies, the private sector banks, and some of the newly licensed banks are expanding.

8) What could the regulator have done better?

It is hard to offer an objective self-assessment. However, the RBI should probably have raised more flags about the quality of lending in the early days of banking exuberance. With the benefit of hindsight, we should probably not have agreed to forbearance, though without the tools to clean up, it is not clear what the banks would have done. Forbearance was a bet that growth would revive, and projects would come back on track. That it did not work out does not mean that it was not the right decision at the time it was initiated. Also, we should have initiated the new tools earlier, and pushed for a more rapid enactment of the Bankruptcy Code. If so, we could have started the AQR process earlier. Finally, the RBI could have been more decisive in enforcing penalties on non-compliant banks. Fortunately, this culture of leniency has been changing in recent years. Hindsight, of course, is 20/20.

9) How should we prevent recurrence?

• Improve governance of public sector banks and distance them from the government.

 Public sector bank boards are still not adequately professionalized, and the government rather than a more independent body still decides board appointments, with the inevitable politicization. The government could follow the

- PJ Naik Committee report more carefully. Eventually strong boards should be entrusted with all decisions but held responsible for them.
- Pending the change above, there is absolutely no excuse for banks to be left leaderless for long periods of time as has been the case in recent years. The date of retirement of CEOs is well known and government should be prepared well in advance with succession. Indeed, it would be good for the old CEO and the successor to overlap for a few months while they exchange notes. All the more reason to delegate appointments entirely to an entity like the Bank Board Bureau, and not retain it in government.
- Outside talent has been brought in very limited ways into top management in Public Sector Banks. There is already a talent deficit in internal PSB candidates in coming years because of a hiatus in recruitment in the past. This needs to be taken up urgently. Compensation structures in PSBs also need rethinking, especially for high level outside hires. Internal parity will need to be maintained. There will be internal resistance, but lakhs of crores of national assets cannot be held hostage to the career concerns of a few.
- Risk management processes still need substantial improvement in PSBs.
 Compliance is still not adequate, and cyber risk needs greater attention.

Improve the process of project evaluation and monitoring to lower the risk of project NPAs

- (i) Significantly more in-house expertise can be brought to project evaluation, including understanding demand projections for the project's output, likely competition, and the expertise and reliability of the promoter. Bankers will have to develop industry knowledge in key areas since consultants can be biased.
- (ii) Real risks have to be mitigated where possible, and shared where not. Real risk mitigation requires ensuring that key permissions for land acquisition and construction are in place up front, while key inputs and customers are tied up through purchase agreements. Where these risks cannot be mitigated, they should be shared contractually between the promoter and financiers, or a transparent arbitration system agreed upon. So, for instance, if demand falls below

projections, perhaps an agreement among promoters and financier can indicate when new equity will be brought in and by whom.

- (iii) An appropriately flexible capital structure should be in place. The capital structure has to be related to residual risks of the project. The more the risks, the more the equity component should be (genuine promoter equity, not borrowed equity, of course), and the greater the flexibility in the debt structure. Promoters should be incentivized to deliver, with significant rewards for on-time execution and debt repayment. Where possible, corporate debt markets, either through direct issues or securitized project loan portfolios, should be used to absorb some of the initial project risk. More such arm's length debt should typically refinance bank debt when construction is over.
- (iv) Financiers should put in a robust system of project monitoring and appraisal, including where possible, careful real-time monitoring of costs. For example, can project input costs be monitored and compared with comparable inputs elsewhere using IT, so that suspicious transactions suggesting over-invoicing are flagged? Projects that are going off track should be restructured quickly, before they become unviable.
- (v) And finally, the incentive structure for bankers should be worked out so that they evaluate, design, and monitor projects carefully, and get significant rewards if these work out. This means that even while committees may take the final loan decision, some senior banker ought to put her name on the proposal, taking responsibility for recommending the loan. IT systems within banks should be able to pull up overall performance records of loans recommended by individual bankers easily, and this should be an input into their promotion and pay.

• Strengthen the recovery process further.

 Both the out of court restructuring process and the bankruptcy process need to be strengthened and made speedy. The former requires protecting the ability of bankers to make commercial decisions without subjecting them to inquiry. The latter requires steady modifications where necessary to the bankruptcy code so that it is effective, transparent, and not gamed by unscrupulous promoters.

- Government should focus on sources of the next crisis, not just the last one. In particular, government should refrain from setting ambitious credit targets or waiving loans.
 - (i) Credit targets are sometimes achieved by abandoning appropriate due diligence, creating the environment for future NPAs. Both MUDRA loans as well as the Kisan Credit Card, while popular, have to be examined more closely for potential credit risk. The Credit Guarantee Scheme for MSME (CGTMSE) run by SIDBI is a growing contingent liability and needs to be examined with urgency.
 - (ii) Loan waivers, as RBI has repeatedly argued, vitiate the credit culture, and stress the budgets of the waiving state or central government. They are poorly targeted, and eventually reduce the flow of credit. Agriculture needs serious attention, but not through loan waivers. An all-party agreement to this effect would be in the nation's interest, especially given the impending elections.