Chapter 4: FESTERING TWIN BALANCE SHEET SYNDROME

- Public sector Banks reported in Feb 2016 that nonperforming assets (NPA) had soared, to such an extent that provisioning norms had overwhelmed the operating earnings of the banks resulting in poor balance sheets.
- As a result, net income had plunged deeply into the red.

Reasons for NPA:

- Normally, NPAs soar when there is an economic crisis, triggering widespread bankruptcies, examples being East Asia during 1997-98 and the US and UK in 2008-09.
- The RBI had conducted an **Asset Quality Review (AQR**), following which brought the clear picture of NPAs in the bank. NPAs reached 9 percent of total advances by September -- double their year-ago level.

Other features of NPA:

- Bad loans were concentrated in PSBs only. More than four-fiths of the non-performing assets were in the public sector banks, where the NPA ratio had reached almost 12 percent.
- India was suffering from a "twin balance sheet problem", where both the banking and corporate sectors were under stress.
- At its current level, India's NPA ratio is higher than any other major emerging market (with the exception of Russia), higher even than the peak levels seen in Korea during the East Asian crisis.

REASONS for twin Balance sheet syndrome:

- Corporations over-expand during a boom, leaving them with obligations that they can't repay. So, they default on their debts, leaving bank balance sheets impaired, as well.
- This combination proves devastating for growth
  - The hobbled corporations are reluctant to invest,
  - Those that remain sound can't invest much either, since fragile banks are not really in a position to lend to them.
- However, this was not the India's case. Though India boomed during the mid-2000s along with the global economy, it sailed through the GFC largely unscathed, with only a brief interruption in growth before it resumed at a rapid rate.
- Indian companies and banks had avoided the boom period mistakes made by their counterparts abroad. They were prevented from accumulating too much everage, because prudential restrictions keeping bank credit from expanding excessively during the boom and capital controls prevented an undue recourse to foreign loans.

The question then is what went wrong?

- The origins of the NPA problem lie in decisions taken during the mid-2000s. During that period, all world economies were booming, India's GDP growth had surged to 9-10 percent per annum.
- Everything was going right: corporate profitability was amongst the highest in the world, encouraging firms to hire labor aggressively, which in turn sent wages soaring

- Firms launched new projects worth lakhs of crores, particularly in infrastructure-related areas such as power generation, steel, and telecoms, setting off the biggest investment boom in the country's history.
- Within the span of four short years, the **investment-GDP ratio** had soared by 11 percentage points, reaching over 38 percent by 2007-08.
- This investment was financed by an astonishing credit boom, also the largest in the nation's history, one that was sizeable even compared to other large credit booms internationally.
- In the span of just three years, running from 2004-05 to 2008-09, the amount of non-food bank credit doubled.
- There were also large inflows of funding from overseas, with capital inflows in 2007-08 reaching 9 percent of GDP. All of this added up to an extraordinary increase in the debt of non-financial corporations.
- As double digit growth beckoned, firms abandoned their conservative debt/equity ratios and leveraged themselves to take advantage of the perceived opportunities.
- But just as companies were taking on more risk, things started to go wrong. Costs soared far above budgeted levels, as securing land and environmental clearances proved much more difficult and time consuming than expected.
- At the same time, forecast revenues collapsed after the GFC; projects that had been built around the assumption that growth would continue at double-digit levels were suddenly confronted with growth rates half that level.
- The financing costs increased sharply. Firms that borrowed domestically suffered when the RBI increased interest rates to quell double digit inflation. And fims that had borrowed abroad when the rupee was trading around Rs 40/dollar were hit hard when the rupee depreciated, forcing them to repay their debts at exchange rates closer to Rs 60-70/ dollar.
- Higher costs, lower revenues, greater financing costs — all squeezed corporate cash flow, quickly leading to debt servicing problems.
- By 2013, nearly one-third of corporate debt was owed by companies with an interest coverage ratio less than 1 ("IC1 companies"), many of them in the infrastructure (especially power generation) and metals sectors.
- By 2015, the share of IC1 companies reached nearly 40 percent, as slowing growth in China caused international steel prices to collapse, causing nearly every Indian steel company to record large losses.

What Explains the Twin Balance Sheet Syndrome with Indian Characteristics?

- India did indeed follow the standard path to the TBS problem: a surge of borrowing, leading to over leverage and debt servicing problems.
- What distinguished India from other countries was the consequence of TBS.
- <u>Even as Indian balance sheets have suffered structural damage on the order of what has occurred in crisis cases, the impact on growth has been quite modest.</u>
- TBS did not lead to economic stagnation, as occurred in the U.S. and Europe after the GFC and Japan after its bubble burst in the 1990s.
- To the contrary, it co-existed with strong levels of aggregate domestic demand, as reflected in high levels of growth despite very weak exports and moderate, at times high, levels of inflation.

But other factors also played a role, including the unusual structure of the economy.

- India has long suffered from exceptionally severe supply constraints, as the lack of infrastructure has hindered expansion of manufacturing and even some service activities, such as trade and transport.

- These constraints were loosened considerably during the boom, as new power plants were
  installed, and new roads, airports, and ports built.
- As a result, there was ample room for the economy to grow after the GFC, even as the infrastructure investments themselves did not prove financially viable.
- So, the legacy of the historic mid-2000s investment boom was a curious combination of both TBS and growth. In comparison, the US boom was based on housing construction, which proved far less useful after the crisis.
- And in any case, the US never suffered from severe supply constraints.

- Perhaps the most important difference between India and other countries, however, was the way in which the financial system responded to the intense stress on corporations.
- In other countries, creditors would have triggered bankruptcies, forcing a sharp adjustment that would have brought down growth in the short run (even as the reconfiguration of the economy improved long run prospects). But in India this did not occur.

  Instead, the strategy was, as the saying goes, to **"give time to time**", meaning to allow time for the corporate wounds to heal. That is, companies sought financial accommodation from their creditors, asking for principal payments to be postponed, on the grounds that if the projects were given sufficient time they would eventually prove viable.
- Initially, this request seemed reasonable. For a start, the "giving time to time" strategy had worked well in the previous business cycle, during the early 2000s.
- At that time, nonperforming loans had also reached high levels, but they then subsided a few years later when demand picked up and commodity prices recovered.
- It seemed sensible to assume the same might happen this time too, because India would eventually need the infrastructure capacity that was being installed.
- Accordingly, banks decided to give stressed enterprises more time by postponing loan repayments, restructuring by 2014-15 no less than 6.4 percent of their loans outstanding
- They also extended fresh funding to the stressed firms to tide them over until demand recovered.
- As a result, total stressed assets have far exceeded the headline figure of NPAs.
- To that amount one needs to add the restructured loans, as well as the loans owed by IC1 companies that have not even been recognized as problem debts – the ones that have been "evergreened", where banks lend firms the money needed to pay their interest obligations.
- Total stressed assets would amount to about 16.6 per cent of banking system loans – and nearly 20 percent of loans at the state banks

Is the Strategy Sustainable?

- In principle, a financing strategy can indeed be sustainable.
  - Accelerating growth would gradually raise the cash flows of stressed companies, eventually allowing them to service their debts.
  - The inherent dynamism of the Indian economy would carry the impaired companies and banks along with them
- The Indian economy could still grow out of its balance sheet problems.

  - Under the "containment" scenario, the NPAs would be limited in nominal terms as a share of the economy and a proportion of bank balance sheets, since GDP is growing at a nominal rate of more than 10 percent.
  - In that way, the twin balance sheet problem, while never being explicitly solved, could simply fade away in importance.
- Stressed companies are consequently facing an increasingly difficult situation. Their cash flows are deteriorating even as their interest obligations are mounting – and if they borrow more, this will only cause the gap to widen further.
- In some cases, companies have tried to "square the circle" by selling off some of their assets. But this has sufficed mainly to buy them time, since selling off assets provides immediate revenues but leaves firms with less income to service their debts in the future.
- The aggregate financial position of the stressed companies consequently continues to with losses (roughly, the excess of interest payments, depreciation and taxes over EBIT and asset sales)
- The situation in the power sector illustrates these problems the best.
- At the same time, corporate stress seems to be spreading. For much of the period since the Global Financial Crisis, the problems were concentrated in the large companies which had taken on excessive leverage during the mid-2000s boom, while the more cautious smaller and midsize companies had by and large continued to service their debts.
- However in second half a significant proportion of the increases in NPAs – four-fifths of the slippages during the second quarter – came from mid-size and MSMEs, as smaller companies that had been suffering from poor sales and profitability for a number of years struggled to remain current on their debts.
- Countries with TBS problems tend to have low investment, as stressed companies reduce their new investments to conserve cash flow, while stressed banks are unable to assume new lending and this seems to be happening in India, as well.
- To cushion the impact on the overall economy, **public investment has been stepped up** considerably, but this has still not been sufficient to arrest a fall in overall investment.
- In the short run, the economy can continue to expand briskly on the back of consumption, with firms fulfilling demand by using the capacity that was built up during the boom years.
- TBS is taking a heavy toll on the health of the public sector banks.
  - At least 13 of these banks accounting for approximately 40 per cent of total loans are severely stressed, with over 20 per cent of their outstanding loans classified as restructured or NPAs.
- Banks around the world typically strive for a **return of assets (ROA)** of 1.5 per cent or above. But Indian public sector banks are much below this international norm. In fact, their ROA has turned negative over the past two years.

Response of PSBs:

- They have tried to protect their capital positions by minimizing the new risks they are taking, that is by scaling back their new lending.

- Private sector banks also have limited capacity to replace the slack in lending by PSBs
- Household credit, where default has been minimal and where **private sector banks have a comparative lending advantage,** has been expanding exceptionally rapidly, fuelling the growth of consumption. A
- **Agricultural loans** have also continued at a good pace, as they have been protected by the priority sector lending requirements.
- However, corporates and MSMEs have been hit severely.

- No Monetary transmission of policy cuts
- The widening of spreads, in turn, has encouraged **disintermediation** from the banking system. The increase in margins means that **performing borrowers and depositors are effectively being taxed** in order to subsidize the non-performing borrowers.

> **Disintermediation**, in finance, is the withdrawal of funds from intermediary financial institutions, such as **banks** and savings and loan associations, to invest them directly. Generally, **disintermediation** is the process of removing the middleman or intermediary from future transactions.

ALTERNATE SOURCES OF CREDIT:

- The good borrowers are seeking funding elsewhere:
    - from the commercial paper market for their short term needs and
    - The bond market for longer term financing.
- But if this trend of disintermediation continues, it will leave much of the “tax” burden on the MSMEs, who cannot decamp for the bond markets, since they require the knowledge intensive type of lending that is provided only by banks.
- Even after eight years of buying time, there is still no sign that the affected companies are regaining their health, or even that the bad debt problem is being contained.
- To the contrary, the stress on corporates and banks is continuing to intensify, and this in turn is taking a measurable toll on investment and credit.
- The increase in public investment has been more than offset by the fall in private investment, while until demonetization monetary easing had not been transmitted to bank borrowers because banks had been widening their margins instead.

<u>WHAT NEEDS TO BE DONE?</u>

- The RBI has been encouraging
    - The establishment of private Asset Reconstruction Companies (ARCs), in the hope that they would buy up the bad loans of the commercial banks.
    - In that way, there could be an efficient division of labour, as banks could resume focusing on their traditional deposit-and-loan operations, while the ARCs could deploy the specialist skills needed to restructure corporate debts.
- Limitations: Many ARCs have been created, but they have solved only a small portion of the problem, buying up only about 5 percent of total
    - In June 2015, the **Strategic Debt Restructuring (SDR) scheme** was introduced, under which creditors could take over firms that were unable to pay and sell them to new owners.
    - The following year, the Sustainable Structuring of Stressed Assets (S4A) was announced, under which creditors could provide firms with debt reductions up to 50 percent in order to restore their financial viability.
- Limitations: While two dozen firms have entered into negotiations under SDR, only two cases have actually been concluded as of end-December 2016. And only one small case has been resolved so far under S4A.
- However, the bigger problem is that the key elements needed for resolution are still not firmly in place:
    - **Loss recognition.** The AQR was meant to force banks to recognize the true state of their balance sheets. But banks nonetheless continue to evergreen loans, as the substantial estimates of unrecognized stressed assets make clear.

    - **Coordination.** The RBI has encouraged creditors to come together in **Joint Lenders Forums,** where decisions can be taken by 75 percent of creditors by value and 60 percent by number. But reaching agreement in these Forums has proved difficult, because different banks have different degrees of credit exposure, capital cushions, and incentives. For example, banks with relatively large exposures may be much more reluctant to accept losses. In some cases the firm's losses aren't even known, for they depend on the extent of government compensation for its own implementation shortfalls, such as delays in acquiring land or adjusting electricity tariffs. And deciding compensation is a difficult and time-consuming task; many cases are now with the judiciary.
    - **Proper incentives.** The S4A scheme recognizes that **large debt reductions** will be needed to **restore viability in many cases**. But public sector bankers are reluctant to grant write-downs, because there are no rewards for doing so.
        - Accordingly, bankers have every incentive to simply reschedule loans, in order to defer the problems until a later date. To address this problem, the Bank Board Bureau (BBB) has created an Oversight Committee which can vet and certify write-down proposals. But it remains open whether it can change bankers' incentives.
    - **Capital.** The government has promised under the Indradhanush scheme to infuse Rs 70,000 crores of capital into the public sector banks by 2018-19. But this is far from sufficient, and inherently so, because there is a principal-agent problem, arising from the separation of the institution with financial responsibility (the government) from its decision-making agent (the state banks). If the government promises unduly large funds in advance, the banks may grant excessive debt reductions. But banks do not receive sufficient assurance of funding, they will not be able to grant companies enough debt relief.

    The bulk of the problem, however, is not located in ordinary cases. To the contrary, stressed assets are concentrated in a remarkably few borrowers, with a mere 50 companies accounting for 71 percent of the debt owed by IC1 debtors.

- On average, these 50 companies owe Rs 20,000 crores in debt, with 10 companies owing more than Rs 40,000 crores apiece. And the large, over-indebted borrowers are particularly difficult to resolve, for several deep-seated reasons:
    - **Severe viability issues.** At this point, large write-offs will be required to restore viability to the large IC1 companies. The amounts vary widely from case to case, and requires a thorough analysis of the accounts to ascertain. But a broad idea can be obtained by calculating the debt reduction that would be needed to reduce interest obligations to the current level of cash flows.
    - **Acute coordination failures.** Large debtors have many creditors, who need to agree on a strategy. This is often difficult when major sums are involved.
    - **Serious incentive problems.** Public sector bankers are even more cautious in granting debt reductions in major cases, as this may attract the attention of not only the investigative agencies, but also the wider public. At the same time, state banks are often not in a position to take the alternative route of converting their claims to equity, taking over large firms, and then reselling them, even when this is clearly the value-maximizing solution – and even though it is encouraged under SDR.
    - **Insufficient capital.** Debt write-downs in the case of the large debtors could quickly deplete banks' capital cushions.
- Could the **new Bankruptcy Law** provide a viable alternative way forward?

- In some ways, going down the path of bankruptcy would make sense for cases where the write down needs are particularly large, which makes them ill-suited for S4A and SDR in the first place.
- The problem is that the new bankruptcy system is not yet fully in place, and even when it is, the new procedures will need to be tested first on smaller cases.

PARA

- One possible strategy would be to create a 'Public Sector Asset Rehabilitation Agency' (PARA), charged with working out the largest and most complex cases.
- It could solve the coordination problem, since debts would be centralized in one agency; it could be set up with proper incentives by giving it an explicit mandate to maximize recoveries within a defined time period; and it would separate the loan resolution process from concerns about bank capital.
- For all these reasons, asset rehabilitation agencies have been adopted by many of the countries facing TBS problems, notably the East Asian crisis cases.

Box 1. Why is a Public Sector Asset Rehabilitation Agency (PARA) Needed?

The argument for PARA is developed at length in the third section. But it is worth outlining in advance the seven steps that lead to this conclusion.

1. **It's not just about banks, it's a lot about companies.** So far, public discussion of the bad loan problem has focused on bank capital, as if the main obstacle to resolving TBS was finding the funds needed by the public sector banks. But securing funding is actually the easiest part, as the cost is small relative to the resources the government commands. Far more problematic is finding a way to resolve the bad debts in the first place.
2. **It is an economic problem, not a morality play.** Without doubt, there are cases where debt repayment problems have been caused by diversion of funds. But the vast bulk of the problem has been caused by unexpected changes in the economic environment: timetables, exchange rates, and growth rate assumptions going wrong.
3. **The stressed debt is heavily concentrated in large companies.** Concentration creates an opportunity, because TBS could be overcome by solving a relatively small number of cases. But it presents an even bigger challenge, because large cases are inherently difficult to resolve.
4. **Many of these companies are unviable at current levels of debt requiring debt write-downs in many cases.** Cash flows in the large stressed companies have been deteriorating over the past few years, to the point where debt reductions of more than 50 percent will often be needed to restore viability. The only alternative would be to convert debt to equity, take over the companies, and then sell them at a loss.
5. **Banks are finding it difficult to resolve these cases, despite a proliferation of schemes to help them.** Among other issues, they face severe coordination problems, since large debtors have many creditors, with different interests. If PSU banks grant large debt reductions, this could attract the attention of the investigative agencies. But taking over large companies will be politically difficult, as well.
6. **Delay is costly.** Since banks can't resolve the big cases, they have simply refinanced the debtors, effectively "kicking the problems down the road". But this is costly for the government, because it means the bad debts keep rising, increasing the ultimate recapitalization bill for the government and the associated political difficulties. Delay is also costly for the economy, because impaired banks are scaling back their credit, while stressed companies are cutting their investments.
7. **Progress may require a PARA.** Private Asset Reconstruction Companies (ARCs) haven't proved any more successful than banks in resolving bad debts. But international experience shows that a professionally run central agency with government backing – while not without its own difficulties -- can overcome the difficulties that have impeded progress.

How would a PARA actually work?

- There are many possible variants, but the broad outlines are clear. It would purchase specified loans (for example, those belonging to large, over-indebted infrastructure and steel firms) from banks and then work them out, **either by converting debt to equity and selling the stakes in auctions** or by granting debt reduction, depending on professional assessments of the value-maximizing strategy.

- Once the loans are off the books of the public sector banks, the government would recapitalize them, thereby restoring them to financial health and allowing them to shift their resources – financial and human – back toward the critical task of making new loans. Similarly, once the financial viability of the over-indebted enterprises is restored, they will be able to focus on their operations, rather than their finances. And they will finally be able to consider new investments.
- Loans have already been made, losses have already occurred, and because public sector banks are the major creditors, the bulk of the burden will necessarily fall on the government.
- To minimize the existing liability of the government by resolving the bad loan problem as quickly and effectively as possible creation of the PARA would aim to do the same.

Source of funding for PARA

- Part would need to come from government issues of securities. This would increase the debt stock, but could actually strengthen the government's financial position if establishing PARA hastens the resolution of the stressed asset problem, since doing so would reduce the amount that would ultimately be needed to compensate banks for the losses on the bad loans.
- A second source of funding could be the capital markets, if the PARA were to be structured in a way that would encourage the private sector to take up an equity share. In addition, capital markets could help replenish the capital of the public sector banks, if the government were willing to sell down its holdings.
- A third source of capital could be the RBI. The mechanism for doing this is straightforward (Box 2). The RBI would (in effect) transfer some of the government securities it is currently holding to public sector banks and PARA.
- As a result, the RBI's capital would decrease, while that of the banks and PARA would increase. There would be no implications for monetary policy, since no new money would be created.
- Of course, establishing a PARA is not a panacea. In fact, experience with government-run asset rehabilitation agencies has not been uniformly positive. Three major issues have bedevilled other agencies, and would need to be resolved to ensure a PARA would actually work as intended.

How PARA should be:

- **First,** It has to be ensured that the PARA is thoroughly professional, with plans that maximize – and are seen to maximize – recovery value.
- **Second,** the PARA needs to follow commercial rather than political principles.
    - To achieve this, it would need to be an independent agency, staffed by banking professionals. It would also need a clear mandate of maximizing recoveries within a specified, reasonably short time period.
    - The best, perhaps the only way to achieve this is to set up a structure like the one done for the GST Network, which is broadly within the aegis of the public sector but with government owning 49 per cent.
- The third issue is pricing. If loans are transferred at inflated prices, banks would be transferring losses to the Rehabilitation Agency.
- As a result, private sector banks could not be allowed to participate – and then co-ordination issues would remain – while private capital would not want to invest in the Agency, since PARA would make losses.

- To get around this problem, market prices could be used, but establishing the market price of distressed loans is difficult and would prove time consuming.

IV. Conclusion

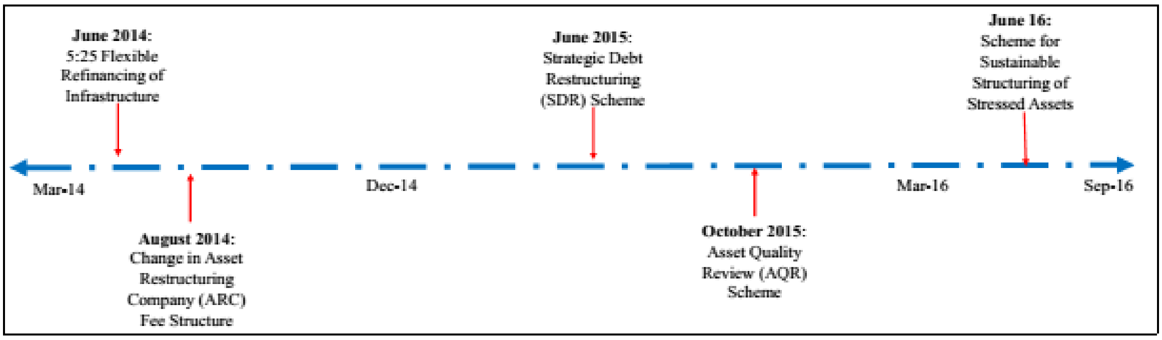
4 R's: *Reform, Recognition, Recapitalization,* and *Resolution.* One year on, how much progress has been made?

- Reforms:
  - Once the Twin Balance Sheet problem is resolved, there could be significant moral hazard problems. Newly cleaned up balance sheets may simply encourage bank managers to lend freely, ignoring the lessons of the past.
  - Structural reform aimed at preventing this can take many forms but serious consideration must also be given to the issue of government majority ownership in the public sector banks.
- Recognition:
  - After years of following a financing strategy, hoping that providing "time to time" would allow the stressed loans to come right, banks have realised that the financial position of the debtors has deteriorated to such an extent that many will not be able to recover.
  - Accordingly, following the RBI's Asset Quality Review, banks have recognised a growing number of loans as non-performing.
- Recapitalization:
  - With higher NPAs has come higher provisioning, which has eaten into banks' capital base. -- much of which will need to be funded by the government, at least for the public sector banks.
  - But recapitalisation, for all its importance and attention received in the public discourse, is not the need of the hour. Not the main need, at any rate.
- Resolution.
  - For even if the public sector banks are recapitalised, they are unlikely to increase their lending until they truly know the losses they will suffer on their bad loans. Nor will the large stressed borrowers be able to increase their investment until their financial positions have been rectified. Until this happens, economic growth will remain under theat.

- Why East Asia was able to clean up its problem debts so quickly was that it had more efficient mechanisms. India has been pursuing a decentralised approach, under which individual banks have been taking restructuring decisions, subject to considerable constraint and distorted incentives.
- Accordingly, they have repeatedly made the choice to delay resolutions. In contrast East Asia adopted a centralised strategy, which allowed debt problems to be worked out quickly using the **vehicle of public asset rehabilitation companies**. Perhaps it is time for India to consider the same approach.

Over the past three years the RBI has implemented a number of schemes to facilitate resolution of the stressed asset problem. The figure below depicts these schemes. In what follows a brief overview of these schemes is provided.

Figure. Chronology of RBI policy actions



The 5/25 Refinancing of Infrastructure Scheme:

- Under this scheme lenders were allowed to extend amortization periods to 25 years with interest rates adjusted every 5 years, so as to match the funding period with the long gestation and productive life of these projects. The scheme thus aimed to improve the credit profile and liquidity position of borrowers, while allowing banks to treat these loans as standard in their balance sheets, reducing provisioning costs.
- However, with amortization spread out over a longer period, this arrangement also meant that the companies faced a higher interest burden, which they found difficult to repay, forcing banks to extend additional loans *('evergreening')*. This in turn has aggravated the initial problem.

Private Asset Reconstruction Companies (ARCs):

- ARCs were introduced to India under the SARFAESI Act (2002), with the notion that as specialists in the task of resolving problem loans, they could relieve banks of this burden.
- However, ARCs have found it difficult to resolve the assets they have purchased, so they are only willing to purchase loans at low prices.
- As a result, banks have been unwilling to sell them loans on a large scale. Then, in 2014 the fee structure of the ARCs was modified, requiring ARCs to pay a greater proportion of the purchase price up-front in cash. Since then, sales have slowed to a trickle: only about 5 percent of total NPAs at book value were sold over 2014-15 and 2015-16.

Strategic Debt Restructuring (SDR):

- The RBI came up with the SDR scheme in June 2015 to provide an opportunity to banks to convert debt of companies (whose stressed assets were restructured but which could not finally fulfill the conditions attached to such restructuring) to 51 percent equity and sell them to the highest bidders, subject to authorization by existing shareholders.
- An 18-month period was envisaged for these transactions, during which the loans could be classified as performing. But as of end-December 2016, only two sales had materialized, in part because many firms remained financially unviable, since only a small portion of their debt had been converted to equity.

Asset Quality Review (AQR): Resolution of the problem of bad assets requires sound recognition of such assets. Therefore, the RBI emphasized AQR, to verify that banks were assessing loans in line with RBI loan classification rules. Any deviations from such rules were to be rectified by March 2016.

Sustainable Structuring of Stressed Assets (S4A): Under this arrangement, introduced in June 2016, an independent agency hired by the banks will decide on how much of the stressed debt of a company is 'sustainable'. The rest ('unsustainable') will be converted into equity and preference shares. Unlike the SDR arrangement, this involves no change in the ownership of the company.