# Viral V Acharya: A bank should be something one can "bank" upon

Speech by Dr Viral V Acharya, Deputy Governor of the Reserve Bank of India, to the Federation of Indian Chambers of Commerce and Industry - FICCI Ladies Organisation, Mumbai Chapter, Mumbai, 28 April 2017.

* * *

*I am grateful to my colleagues and teams at the Reserve Bank of India for many stimulating discussions and insights, to many banking sector stalwarts of today and the past, and to several practitioners and policy-makers in sectors and institutions related to the resolution of bank stressed assets. All errors remain my own.*

I am grateful to the Federation of Indian Chambers of Commerce and Industry – FICCI Ladies Organisation, Mumbai Chapter, for inviting me to speak today. I salute FLO’s mission, and wish the very best to the incoming office bearers on their efforts to empower and educate women, unlocking a potential workforce for the Indian economy that can both balance gender distribution of jobs and identify new sources of enterprise and entrepreneurship. I hope that by explaining today the important role that banks play in an economy, I can make a small contribution, offering if not a flower at least a petal, to help the financial planning undertaken by women workers, educators and entrepreneurs.

I wish to try and simplify the mechanics of how a bank works, why we put our savings into banks, what does a bank do with our savings, when should we question which bank are we banking with, and why when such questions are asked *en masse*, is there a banking crisis and economic growth comes to a screeching halt. I will then draw implications for the current condition of the Indian banking sector and suggest some ways to restore it to healthier levels.

The gist of what I want to say can be summarized in one line message – A Bank Should Be Something One Can “Bank” Upon, inspired by the real meaning behind *banking upon something*, a statement of credibility, of confidence, of trust – something that ideally a bank must earn over time by making prudent choices.

To understand this, we need to first grasp three simple concepts: what are bank deposits, what are bank loans, and that bank deposits can be demanded immediately by depositors but bank borrowers may not repay their loans exactly at that time.

So let us work step by step.

### What are bank deposits?

In its simplest form, my bank deposit is an amount of saving I have deposited into an account at a bank on my street corner. Once I have created the deposit account and put my savings into it, I can withdraw up to that amount at will. A deposit is something that the bank owes me; in other words, it is the bank’s *liability.*

Crucially, the deposit can be redeemed with immediacy. I can show up at the bank ATM or at the bank teller, demanding that my money be paid back to me – Show me the money! Why might I need to do this? A bank deposit is the place where I save for the rainy day – my health expenses, my tuition fees, my day to day expenses. Some of these needs are predictable, some random; each time I withdraw at the ATM or the teller, or write a cheque or do a wire transfer, I am demanding my money from the bank. Each instance I do not demand my money back, I am rolling over the deposit to the next instance.

Bank deposits are thus savings that I have kept with a bank. I trust them to be safe and to be demandable at will. I am happy to earn a low interest rate on them as they provide me valuable liquidity services, allowing me to meet my day to day and the occasional lumpy payment needs.

### What are bank loans?

There are many depositors like me parking their savings in the bank. Viewed this way, the bank is a safety vault or a storage technology. However, most of the time, the deposits are not being withdrawn and are simply being rolled over. Even when withdrawn, the deposits are not being redeemed at the same time. For instance, my health expenses are not coincident with those of my neighbor. In other words, there is much saving in the bank that is lying idle.

Let us now bring into picture others in the economy who are potential borrowers. A bright young woman down the street has been a successful consultant, but wants to have a shot at building a new enterprise. She needs financing beyond her savings to put her bright ideas to test. There is a new construction just completed and several young couples, first-time home buyers, are looking to purchase houses there. They have some capacity to make down-payments for the properties but must avail of extra monies that they can repay over the course of their lives. An old family needs money for medical expenses to treat a long-term illness. They cannot afford to spend out of their savings, but they do own a property against which they would like to borrow.

These potential borrowers can visit the bank branch to meet such financing needs. The bank makes loans to these individuals and families, assessing their ability to repay the loans, signing appropriate agreements to claim repayments in due course, and attaching the property and other assets as collateral that it can have access to in case the repayments fall through for some reason.

Such loans are bank's *assets.* They typically earn a higher rate of interest than bank deposits and make banking activity an attractive proposition.

### Demand deposits are short-term; bank loans are long-term

This way, a bank takes shape. It has liabilities, the right-hand side of its balance-sheet, in the form of deposits that must be repaid when depositors so demand; it has assets, the left-hand side of its balance-sheet, in the form of bank loans that have some fixed points of time at which the bank can command repayments.

By being so organized, the bank is performing the economic function of *maturity transformation*. A deposit, which is potentially demandable at any instance, has effectively been lent out through financial intermediation in the form of a longer-term bank loan that is not making repayments at each instance.

And yet… the beauty of the arrangement is that most of the time, this works out. The day my health expenses arise and I take out money from the bank, my neighbor and others have likely received monthly paycheques, a part of which remain deposited in the bank, or that same day some loan repayments have been made, extending the savings pool of the bank and allowing it to meet my deposit withdrawals.

In background, financing has been made available to new entrepreneurs, first-time home buyers and aging parents. Their undertakings are creating a whole second-round of economic activity, in the form of job creation at new enterprises, construction and cement industry, and medical services and hospitals. Those involved in these activities have their own saving and borrowing needs, and will in turn deal with their banks.

**Banking, in this manner is the life-blood of an economy**, channels savings in the form of demand deposits into borrowings in the form of bank loans or bank credit, fuels and lubricates growth, and improves everyone's welfare.

All of our lives would be easy, including of central bankers, if banking worked as serenely as I have described so far. But, of course, that would be too good to be true. There are risks, there are tools to deal with these risks, and yet occasionally, there are banking crises. So let me turn to these next.

### What are the risks from maturity transformation and how can a bank manage them?

What if by coincidence, the bank receives a series of withdrawal requests at once. There could be an epidemic in the area of its operations; may be the bank serves a community that is buying a lot of gold for Akshaya Tritiya; or there is a wealth shock to the farming community it serves due to poor monsoon and new deposits do not come in at the expected rate.

In such a scenario, when many depositors need to withdraw their monies at once, the bank faces *risk* from maturity transformation. Given the coincident money demand, it is no longer sufficient to simply manage deposit withdrawals with new deposits and repayments on existing loans. What options does the bank have to manage these risks to ensure that it will show the money to its depositors when they need it and thus retain their trust?

To this end, let me briefly introduce three concepts: **bank liquidity, bank capital, and inter-bank markets**.

### Bank Liquidity

One simple idea is that a bank need not deploy all of its deposits for extending bank loans. It can save some purely as a reserve or a buffer to meet the unexpected coincidence in deposit withdrawals. The benefit of such bank *liquidity* is that it is an impeccable defense as long as withdrawals are smaller than the size of the reserve. The cost is that by not being able to extend bank loans on part of its deposits, economic activity is compromised.

### Bank Capital

Another idea is that a bank need not fund its extension of bank loans only with deposits in its liability structure. It can also raise some other forms of non-demandable liabilities. For example, the banker can put his own capital, beyond the savings needs, into the bank. A large bank can also raise public equity by being listed on a stock exchange. This way, the impact of the bank's unexpected deposit withdrawals can be made smaller relative to the overall size of the bank and the loan repayments it receives.

Such bank *capital* would be supported through profits that a bank makes, by charging loan rates that exceed deposit rates and net of the costs of its operations. Bank capital would then be the first line of defense in case bank faces unexpected withdrawals: bankers can take less bonus out of the bank; dividends being paid out to bank equity could be temporarily suspended; and in fact, bankers and equity owners can inject new finance to meet the temporary needs anticipating that future profits will nevertheless render such capital injection profitable for them.

### Inter-bank Markets

An even more involved idea is for the bank to try and raise liquidity on the fly, from other banks (more generally, other financial intermediaries). Not all banks may be in regions hit by the epidemic or natural disaster. As long as these banks trust that the bank in need of liquidity only has a temporary need but has a high quality of long-term assets otherwise, they can lend their liquidity surplus to the bank in need. This would be an **inter-bank deposit**. At other times, the surplus bank may be unprepared to deposit its money but instead may simply buy some of the needy bank's assets, creating an **inter-bank market for asset sales**. In *extremis*, the surplus bank can simply assume all liabilities of the needy bank, and in return, take over the entire bank itself, creating a market for **inter-bank mergers**.

It should be clear then that a bank has many tools to manage the risk of maturity transformation, the risk that deposits are demanded with immediacy while its assets are yet to make full repayments. The worse the quality of its assets, the less a bank can rely on cash flows from assets to meet unexpected withdrawals, and the more it must pre-arrange in the form of liquidity and capital. The tools – liquidity, capital and inter-bank markets – are not mutually exclusive though they clearly affect each other, and are more attractive at some times than others.

### With such tools to manage its risks, can we not always bank upon our bank?

One possibility is that the bank has raised little equity capital and also held little liquidity of its own. Once depositors know this, they realize that the only way they can be redeemed against their withdrawals is if the bank can use inter-bank markets to raise liquidity. As I explained, this would be possible only if the bank's assets are deemed good enough to repay the inter-bank transaction in future. But then the following question arises: what if the asset quality of the bank is suspect as it has betted the bank's money on the upside leaving depositors at risk of losing their savings if the bets don't pay off? And, even if the asset quality is not entirely suspect, what if the inter-bank markets dry up themselves, which could happen if there is in fact no healthy bank, or only a few healthy banks around as most banks betted the economy's savings imprudently?

### Systemic shock, bank runs, financial disintermediation

In essence, if an economic tsunami – like a massive house price crash or global economic collapse or underperformance in many industrial sectors – comes and hits the banking system, and it had chosen to remain heavily exposed to it by being on the shores, so that a large portion of its assets is deemed to be risky at once, then an unexpectedly large deposit withdrawal could be rather hard to meet for *any* bank. Worse, when this happens, if some depositors start being repaid by the bank, other depositors fear that bank liquidity is getting depleted and their savings might be at risk given the underlying assets are either not safe or not liquid enough in inter-bank markets. Now, these depositors may start demanding their deposits too. And a bank "run" starts. Fearing the asset-quality signal revealed by such a run at one bank, depositors could start running on other banks too, especially ones with similar assets and a full-fledged banking panic takes hold.

When this happens, the entire banking system is at the risk of being disintermediated; payments and settlements of financial transactions can come to a standstill; banks have no capacity on balance-sheet to make new loans to new entrepreneurs, first-time home buyers and old families; the economic activity can come to a grinding halt. There are banks around, but no banking, the life-blood of the economy, to channel savings to productive uses and for job creation.[1]

### The present Indian context

Let me now turn to what all this means for the present Indian context. To put things in perspective, let me mention that the recently released Global Financial Stability Report by the International Monetary Fund (IMF) brings out the following salient facts:

1. Indian industrial sector is now among the most heavily indebted in the world in terms of the ability of its cash flows to meet its bank loan repayments[2] ;

   and,

2. Indian banking sector comes out as worse-off compared to other emerging economies in terms of how little bank capital it has set aside to provision for losses on its assets, i.e., on its non-performing loans, made primarily to the industrial sector.[3]

What does it mean to have little bank capital as provision for losses? I like the following analogy. A bank not keeping adequate capital buffer to absorb losses on its loans that are more or less known to be arriving soon is akin to not preparing to rescue with emergency a person who has slipped off the terrace of a skyscraper, and instead in the midst of his almost surely fatal descent, hoping that the laws of gravity would somehow freeze and work differently this time. While such under-provisioning problem extends to some of the private banks too, the scale of the problem is three to four times magnified in case of public sector banks.

By and large, this scenario meets the adverse conditions of the narrative I provided about banking and banking panics. But in our context, several questions immediately come to mind: Why should I worry about whether I can bank upon my bank when my deposit is insured by the government? More so, if my deposits are with a state-owned bank? Why should I bother about my bank's asset quality?

## The double-edged sword of deposit insurance and state ownership of banks

Answering these questions is crucial to understanding how our banking sector problems are likely to play out. A moment of reflection reveals that as long as I trust the deposit insurance and the guarantee of the state behind the public sector banks, I have no good reason to run and pull my deposit out of an insured deposit or a state-owned bank. The catch is this. When banks are in poor health, it does affect the potential borrowers. Once a bank's asset quality is adequately impaired, the bank does not grow its lending book much with fresh loans. Bank management of a thinly capitalized bank is interested in primarily making two kinds of loans. First, ever-greening of existing bad debt – throwing more money after the bad, so as to help the borrower repay past loan, not acknowledge its true quality, and simply kick the can down the road. Second, risky loans that give banks high returns so that it can make a last-ditch effort to rebuild capital quickly – doubling up bets in a casino when first round of gambling has all gone sour. Faced with such borrowing prospects, healthy borrowers who have access to alternate forms of finance may be able to switch out of bank borrowing. Financial intermediation, however, is likely to grow at an anemic pace, and many deserving borrowers such as the ones I have alluded to, likely to remain starved of credit.

Ironically, the presence of large safety net of deposit insurance and state ownership, which ensure that there are likely to be no bank runs, end up eroding any disciplining force that gets the bank health restored to a state where the economy can bank upon its banks to perform the economic function of fueling and lubricating growth. Deposit insurance and state ownership help the sick patient survive but on their own do not guarantee good health; they may prevent financial instability but do not restore credit growth to levels that a vibrant economy needs.

And, indeed, recent global experience has shown that governments need to be watchful as to how large the safety net adds up to relative to its own capacity to provide for it. Countries such as Ireland and Spain engaged as a response to their banking sector woes in 2008 with massive guaranteeing of bank deposits and other liabilities. This, however, ended up being a Pyrrhic victory as they emerged with troubled balance-sheets themselves, raising their debt to Gross Domestic Product (GDP) ratios from healthy to questionable levels, and triggering sovereign debt crises. [SLIDESHOW]

## Bank resolution options

It is with the objective of avoiding such a contingency under any circumstance that I wish to propose that we deal with the ailing public sector banks in creative ways instead of just propping them up with state aid.[4]

Let me elaborate. We keep hearing clarion calls for more and more government funding for recapitalization of our public sector banks. Clearly, more recapitalization with government funds is essential. However, as a majority shareholder of public sector banks, the government runs the risk of ending up paying for it all. The expectation of government dole outs might have been set by the past practice of throwing more money after the bad. Take for instance our bank recapitalization plan of 2008–09 after the global financial crisis: banks that experienced the worst outcomes received the most capital in a relative sense. Most of these banks need capital again.

We must not allocate capital so poorly, recreate “Heads I Win, Tails the Taxpayer Loses” incentives, and sow the seeds of another lending excess. There are better ways to do it. Let me offer five options:

1. **Private capital raising:** The healthier public sector banks could have raised private capital by issuing deep discount rights in 2013, and some can still do so now. They must be required to do this to share the government’s burden of recapitalizing banks. It might be a good way to restore some discipline and get the bank shareholders, boards and management to more seriously care about the quality of lending decisions.

2. **Asset sales:** Some banks will have assets or loan portfolios that are in good enough shape to be sold in the market. Modern banks no longer just make bank loans but also hold non-core assets such as insurance subsidiaries, market-making divisions, foreign branches, etc. Such non-core assets can be readily sold. Other assets could be collected across banks and organized into different risk profiles, so as to build transparency and trust with healthier banks and other intermediaries with an interest in purchasing them. Such asset sales can generate some of the needed recapitalization.

3. **Mergers:** As many have pointed out, it is not clear we need so many public sector banks. The system will be better off if they are consolidated into fewer but healthier banks. After all, we do have cooperative banks and micro-finance institutions to provide community-level banking. So some banks can be merged, as a *quid pro quo* for timely government capital injection into the combined entity. It would offer the opportunity to rejig management responsibility away from those who have under-performed or dragged their feet the most. Synergies in lending activity and branch locations could be identified to economize on intermediation costs, allowing sales of real estate where branches are redundant. Voluntary retirement schemes (VRS) can be offered to manage headcount and usher in a younger, digitally-savvy talent pool into these banks. Historically, bank stress of the order we face has almost always involved significant bank restructuring.

4. **Tough prompt corrective action:** Undercapitalized banks could be shown some tough love and be subjected to corrective action, such as the revised Prompt Corrective Action (PCA) guidelines recently released by the Reserve Bank of India. Such action should entail no further growth in deposit base and lending for the worst-capitalized banks. This will ensure a gradual “run-off” of such banks, and encourage deposit migration away from the weakest public sector banks to healthier public sector banks and private sector banks. It is not rocket science to figure out where the growth potential in our banking sector lies and deposit growth should be allowed to reflect that.

5. **Divestments:** Undertaking these measures would improve overall banking sector health, creating an opportune time for the government to divest some of its ownership of the restructured banks, as it has over time in many other sectors of the economy. Perhaps re-privatizing some of the nationalised banks is an idea whose time has come? All this would reduce the overall amount the government needs to inject as bank capital and help preserve its hard-earned fiscal discipline, which along with stable inflation outlook and the diverse nature of our growth engine, appears to have made India the darling of foreign investors at the present moment. We should grapple this macroeconomic stability to our shores with hoops of steel.

## Let me conclude

I wish to encourage you to reflect on all this, read about the current state of Indian banking sector in newspapers and economic writing, try to make sense of it from first principles, and ask the question if we have a banking sector that our economy can bank upon.

At any rate, I hope that I have provided enough food for thought for the weekend so when you do a financial transaction next week – with a bank, a mutual fund, a stock broker, or an insurance company – you will be tempted to follow the river along which the money flows in that transaction from its source to its destination, invariably finding a few banks along the way!

And if you find the rafting exciting enough, do apply to the Reserve Bank of India where we are looking to rebalance our gender distribution of personnel that has gone a bit askew. We are ready to have in our workforce dedicated women such as all of you. Thank you.

---

1 Interestingly, the word "bankruptcy" – a term used to describe the situation when a borrower defaults on repayments to be made – derives from the Italian term "*banca rotta*", or a "broken bank", describing the depositors of a bank breaking the bench or the counter of the teller in the Republic of Genoa when the banker was unable to meet their demands on deposit withdrawals.

2 Figure 1.15, Global Financial Stability Report, April 2017

3 Table 1.2, Global Financial Stability Report, April 2017

4 The part of the speech that follows builds and expands upon the section on Bank Resolution in my speech "Some Ways to Decisively Resolve Bank Stressed Assets", February 21, 2017, delivered at the Indian Banks' Association Banking Technology Conference, Hotel Trident, Nariman Point, Mumbai.