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What is the goal of the OBR

The Reserve Bank is pretty clear regarding [what the OBR](#) is:

Open Bank Resolution is a long-standing Reserve Bank policy aimed at allowing a distressed bank to be kept open for business, while placing the cost of a bank failure primarily on the bank's shareholders and creditors, rather than the taxpayer.

There are two elements to this.

In the case of a bank failure, the OBR allows the bank that is in distress to continue providing the important *payment and transaction services* they are known for, and has the central bank and government determine quickly who pays. In this way, the OBR replaces standard bankruptcy and liquidation processes - fast tracking them to reduce the distortion to the broader economy.

In principal this is an extremely good idea - as it deals with the sudden loss of liquidity faced by households and firms in the event that a large bank fails. Furthermore, by ensuring that firms and households which rely on the bank are not suddenly pushed out of business due to the loss of liquidity, this prevents costly delays and failures in the general economy stemming solely from the slow process of determining liability.

The funds available to creditors will have to be set at an appropriate level - so that the firms and households are able to continue meeting liquidity needs, but are unable to "run" on the failed bank.

The principle here is that the banking sector can keep functioning, and the failure of an individual financial institution need not lead to a breakdown in activity over the broader economy.

Note: The fact that households and firms will be unable to access all their funds is an important point - as if they start to expect the bank will go into statutory management, they may "run" prior to the bank failing. We will get to this more later.

The second element has to do with where the burden of bank failure falls.

When the bank in question is put into statutory management, the burden of the failure will be distributed across shareholders and creditor - precluding a bailout (and taxpayer burden) UNLESS the government decides it wants to bailout out the bank.

These descriptions are enough to make the OBR sound workable and reasonable - but in order to understand why we may want an OBR, and whether it is appropriate and/or enough, we need to step back and think about banking regulation.

OBR and broader financial market issues

Bank runs

At first brush, it is fair to look suspiciously at regulation for any market - which is why we require a clear discussion of why regulation should take place.

Thomas Sargent did a [good job of setting this up](#) back in September 2010 in his piece titled "where to draw the lines: stability vs efficiency".

The failure of a bank, like any other firm, involves losses for the individuals involved. As a starting point for analysis, we'd take as given that the agents involved recognise the risks and as a result there is little impetus for any sort of government involvement.

However, as Diamond-Dybvig (1983) pointed out that when there is a maturity mismatch (short term liabilities, long term assets for banks) banks can improve the allocation of resources over time - but they are vulnerable to "runs" based on the expectations of depositors. As a result, there are "multiple pareto-ranked" equilibrium, and no assurance that the expectations of deposit holders will guide us to the best outcome.

This also threatens broader financial stability when institutions are "large". In this context, the fire sale of assets due to a sudden "run" will push down asset prices - making both this bank, and other banks, appear insolvent. Even when in a "normal" state of the world they would not be.

Note: What is often ignored is this sort of run can hold for small institutions as well - where the failure of one small institution shifts expectations about the solvency of all institutions. This is partially what happened in the US during 1931/32.

In this context, it can be difficult to apply Bagehot's dictum - to lend to "illiquid" institutions with a penalty rate of interest and let "insolvent" institutions fail.

In this environment, explicit deposit insurance does the trick. When depositors know their funds are safe they are not going to run on an institution. As a result, introducing deposit insurance offers an "ex-post" optimal outcome.

Moral hazard

But as the Bank and David have noted, the next big issue that crops up here is one of moral hazard.

This stems from Kareken and Wallace (1978). They started with a situation where depositors want to hold a risk free portfolio, and there is no government bailout, and bankruptcy is costly, and there is competition - in this situation banks held a risk free portfolio and there were no bailouts.

However, during the Great Depression deposit insurance was introduced. As Friedman said, this essentially made the banking system "panic proof".

In the Kareken and Wallace model, when deposit insurance comes in to play, depositors no longer care how risky the bank's portfolio is - while shareholders want the bank to take on risk to maximise the expected return. As a result, the existence of a bailout leads to excessive risk taking by banks. This result is essentially "gambling with public money" by banks, and other regulation is then required to help deal with the issue that is essentially caused by deposit insurance.

In this case, deposit insurance which was introduced with "ex-post concerns" in mind has changed the incentives of depositors and banks, thereby leading to more risk taking, more bank failures, and a transfer of resources from taxpayers to bank shareholders. In this example, making the shareholders take losses does not solve the problem - the issue is

that depositors do not expect to bear risk, and as a result the core of the moral hazard problem comes back to the incentives of creditors.

This is where the OBR may come into play. In conjunction with the Treasury and the Reserve Bank's focus on broad communication - the OBR is meant to convince people to take account of the risk associated with the choice of where they place funds. By stating there is no deposit insurance, making that commitment credible (for example by letting a large part of the NBFIs fail), and announcing that depositors may face haircuts - and so have to bear risk - they help to solve this moral hazard problem

But is this the case - information sensitivity and state changes

However, we have to be quite careful with this view. Deposit insurance in the United States did prevent a bank run in the traditional banking sector, this was still "panic proof".

But the uninsured shadow banking sector did face a bank run. Gary Gorton went over these issues in a series of papers in recent years ([link](#)).

One part of his explanation is relevant for thinking about the broad banking system in New Zealand. Information sensitive vs information insensitive deposits.

The shadow banking system involved banks and other financial institutions lending to each other. These were groups with the resources and time to think heavily about the risks they faced, and how to deal with them. They also knew that the type of lending they were doing was not subject to government guarantees.

However, the short-term lending in these markets was information insensitive during the lead up to the global financial crisis. The cost associated with updating beliefs was viewed to exceed the expected benefit from doing so. Once the crisis did strike, short-term lending became information sensitive - making it more costly and variable.

In this case, ex-ante knowledge that there was no bailout coming had no impact - the fact that there was a step change from "information insensitive" to "information sensitive" short-term lending was all that was needed to cause the bank run. In essence this is the same type of event as the standard Diamond-Dybvig (1983) model.

Given that this occurred between financial institutions - whose entire lives are made up of trying to understand risk and deal with it - I think it stretches credibility to say that individuals within society will look at the OBR, and optimally adjust the way they lend to banks, and thereby change the risk taking behaviour of banks.

Note: Here we can state that deposit insurance doesn't create a moral hazard problem in of itself - it is the fact that agents are information insensitive that leads to the issue! In this context, ex-post bailouts could be optimal UNLESS they are changing household and firms incentive to acquire information. This is the relevant margin for the moral hazard argument. However, in both the information and moral hazard case this does imply that direct regulation in the financial industry may be necessary.

Furthermore, even if we are confident individuals would adjust, and that it is not prohibitively costly for households and firms to account for the risk of financial institutions failure - there are additional issues:

1. "No bailout" credibility for depositors is no likely to get cross-party support. As a result, the probability of a bailout occurring in the event of disaster will be positive, and likely not small. This is an "implicit guarantee.
2. For government, and society as a whole, there may be a belief that a risk-free way of saving for retirement is part of the "social contract" (just like a minimum income). In this environment, and given that can depreciates at 2%pa, a deposit guarantee may be a direct result of a social preference. This is not the RBNZ's responsibility - but is something that Treasury should take into account when considering the de minimis threshold involved.
3. Faced with a "systemic event", bailouts are likely. If bank failures only show up during "systemic events", then essentially there is an implicit guarantee at all times. In a country dominated by four large banks, this is almost definitely the case.

Financial market policy

Capital requirements and short-term liability taxes

As has been discussed above, the space the OBR fits into involves much larger concerns about capital market regulation - and whether the OBR is appropriate depends on the context we have for the rest of these regulations.

RBNZ actions have been consistent in these regards. The RBNZ has been involved with a capital adequacy ratio (ensuring banks have sufficient capital), core funding ratio, and mismatch ratios (both to help ensure sufficient "liquidity") specifically because of presumed concerns about systemic risk and externalities in the financial sector.

However, whether society was to determine that deposit insurance should be done or should not be done, this is one of those ugly circumstances where regulation would be required on top of regulation.

In the aforementioned Sargent piece, he pointed to the Diamond-Dybvig (1983) model and then the Kareken and Wallace (1978) model - stating that they appeared to provide inconsistent policy advice. He then notes the Keister (2010) model - which includes both the good and bad aspects of bank bailouts. This model captures the K&W result as one of time inconsistency with regards to the bailout a government pays (leading to ex-ante bank choices that involve "excessive illiquidity"), however it captures the Diamond-Dybvig (1983) due to the fact that a no bailout policy increases the likelihood the economy ends up in with a bank run and the associated loss of efficiency. In this model, a tax on short-term bank liabilities combined with a bank bailout is the way forward.

Admati and Hellwig in 'The Bankers New Clothes' have publically made the case for significantly increasing capital requirements. Here the view was that both explicit and implicit deposit insurance act as a subsidy on "too big to fail" banks, and convince them to take on too much risk by becoming too leveraged - in that context, forcing the banks to fund more from equity and less from short-term deposits (as it is the short-term deposits that are subsidised) would be the way forward.

John Cochrane has been one of the most vocal supporters of significant increases in capital requirements. In fact, he has even gone so far as to suggest 100% reserve banking in his recent Wall Street Journal article. Although full reserve banking would remove the

risk of failure, the loss of maturity transformation is likely to have some efficiency costs - overall, there is a growing push for stronger regulation of capital/equity requirements for banks.

These debates are all separate from - but related to - the OBR. It is one tool in a suite of potential tools that will be used by the RBNZ, in conjunction with the government, in the face of a financial crisis.

In this way, having the OBR makes sense, it is a net positive. But, we have to remember that financial regulation is a much broader - and more heavily debated - area. And the existence of the OBR does not rule out debates around other elements of the broad financial system.

Suggestions

However, given the way the OBR is set up, there are a couple of areas that I would highlight as important - and where RBNZ and Treasury actions need to be consistent. And these are all around communication:

1. If government is going to tell households and firms to expect losses in the face of a bank failure - give the public some guidance about the types of losses. They are still relying on a "policy choice" here, so some certainty is worthwhile. **Note:** It is true that these things will vary on a case by case basis, and will be very complicated - but this is a reason to make it clearer for households and firms, not to avoid the issue.
2. An explicit analysis of when the government would bail out banks, and how this situation fits in with the way governments overseas would deal with such a crisis (given that a systemic episode where one of the big four goes down is likely to be international in nature) is an essential part of determining what the "implicit bailout" in NZ is. It would be encouraging to have regulation, or an explicit short-term liability tax, to meet this.
3. Remember that what matters is the expectations people will have in a given situation - not the expectations we would like them to have. If systemic events are sufficiently rare that households and firms act in information insensitive way most of the time, government "insurance" can be justified. Governments can be seen as ways that communities/society try to pool risk.