The Implications of Bank Resolution in New Zealand and Australia for Europe

David G. Mayes

University of Auckland

These Working Papers are circulated for comment. They are provisional and should not be quoted without permission.

This research was assisted by a grant from the EU on the topic “The Future of Monetary and Financial Integration in the EU”
Abstract

This paper offers a critical review of the measures that have been put in place for the resolution of the four major banks that are common to Australia and New Zealand and considers their implications for the success of the new measures applied in the EU as part of ‘banking union’. These are of particular interest because the countries have decided to look after resolution independently rather than jointly, which requires ‘ex ante ring-fencing’ and because New Zealand is implementing Open Bank Resolution which is a form of compulsory bail in. There is also a clear reverse lesson. New Zealand has elected not to have either deposit insurance or depositor preference and hence its form of bailing in is likely to increase the chance of bank runs and systemic instability, which has been avoided in the EU.

Although New Zealand is a small country and has a somewhat unusual banking system in that the four largest banks, which hold well over 80% of deposits, are Australian owned and the next largest, Kiwibank, is effectively owned by the government, it has taken some striking steps in bank resolution which make it an interesting example for European countries to consider. The over-riding precepts of the system are that the taxpayer should not have to pay for bank failure however large the bank and that the vital functions of the large banks have to continue uninterrupted despite the failure. Furthermore, since all the banks of systemic importance (SIFIs) are foreign owned, the way in which they are structured must be such that the New Zealand authorities can resolve the parts in their jurisdiction satisfactorily irrespective of what their owners and the Australian authorities decide to do.

---

1 I am grateful to Ioanna Karamichailidou for comments.
For small banks whose individual closure would have no implications for the stability of the financial system the regime is simple. Such banks will simply be closed and the normal rules of insolvency as applied to any other company will be applied. The only difference is that the central bank is able to step in and have the bank placed in statutory management (an equivalent of receivership) so that it can control the insolvency process if necessary. While no banks failed in the global financial crisis (GFC) in New Zealand, this form of statutory management was applied to the largest of the finance companies that failed, South Canterbury Finance, so the possible process is clear. Other than Kiwibank, none of the other retail banks except the four largest, either jointly or separately, has a significant market share.

For the large banks, the regime is a little more complicated. First of all, each bank must be locally incorporated, separately capitalised, and locally managed. In this way, the New Zealand authorities will have the legal authority to resolve it. Secondly, it must be capable of operating on its own within the trading day, independent of its parent or any other significant external supplier. In that way, the New Zealand authorities will have the practical ability to resolve it. Thirdly, the process of resolution that is likely to be applied is that the Reserve Bank as the prudential banking regulator and resolution authority will apply for the bank to be placed in statutory management. The statutory manager will then, on a summary valuation of the bank, apply a conservative write-down to all of the claims, in the order of priority that would apply in an insolvency, and ensure that the bank can continue trading on the next day, without a material break in its operations and without triggering any close out clauses or other actions that would stop it trading normally. The regime has been labelled ‘Open Bank Resolution’ although its previous name ‘Bank Creditor Recapitalisation’ also explains the

---

2 Kiwibank will presumably be recapitalised by its owner and as a narrow bank it should not be exposed to high risks except possibly through its mortgage portfolio.

3 See Hoskin and Woolford (2011) for an exposition.
process. These days this form of resolution has been labelled ‘bailing in’ (as opposed to bailing out with taxpayer funds) although the term did not exist when New Zealand put its plans in place. The statutory manager would not necessarily treat all of the bank’s operations in the same way as some may not be of systemic importance and could form part of a normal insolvency or separate sale, whichever is in the best interests of the creditors.

Clearly there are plenty of practical problems in implementing this form of resolution and these are being addressed. In imposing statutory management the procedure is akin to forming a bridge bank in that the authorities take over the running of the bank until such time as it can be sold to another authorised provider and recapitalised. In the meantime, it will probably operate under government guarantee against subsequent loss. The taxpayer will hence only be exposed in so far as the write-down of creditors was insufficient or continuing operations result in further losses that were not anticipated. The writing down process will start with the shareholders, who are likely to be wiped out entirely unless intervention is remarkably quick, and will then move on to the subordinated debt holders, the unsecured creditors and on upwards through the bondholders, if necessary, to the point that the losses are clearly accounted for. All those written down will receive a residual claim on the net assets of the bank, which will probably be tradeable if it has any value.

Although somewhat unusual, this all seems straightforward, until one considers the depositors. New Zealand has no deposit insurance. Depositors, therefore, are junior creditors whose claims will be written down in proportion along with other creditors in the same class. Hence, all deposits will be divided into a frozen portion and a continuing portion that can be used in normal transactions immediately. This places some heavy IT and ‘pre-positioning’

---

4 Harrison et al. (2007) provides a clear statement of what is required and the main features needed for it to work well.
requirements on the banks, as they will have to be able to identify the balances in all accounts on any given day and perform the separation into the two parts overnight.\footnote{The pre-positioning requirements in New Zealand are set out in a 24 page handbook by the RBNZ \url{http://www.rbnz.govt.nz/regulation_and_supervision/banks/banking_supervision_handbook/5341478.pdf}.}

Clearly these proposed arrangements present a number of major problems and the rest of this paper deals with them. As there have been no bank failures in recent years and no experience of problems in large institutions these arrangements are untried – fortunately.

The paper starts with a brief contrast of current arrangements in New Zealand and Australia with Europe and then considers five issues relevant for Europe in consecutive sections before concluding. These issues are:

- The division of the bank along jurisdictional boundaries for systemic activities;
- Whether one can have a resolution arrangement that will work without explicit cooperation of the different jurisdictions involved;
- Whether writing down the creditors’ claims works better than other forms of bailing in;
- Whether the resolution can take place fast enough that it can actually be done while the bank remains ‘open’;
- Whether OBR can operate without provoking a bank run because of the lack of deposit insurance.

OBR should reduce the cost of bank resolution in two respects: it should reduce the costs to creditors and, in favourable cases, to shareholders, as the deadweight cost of the loss of franchise and the costs of working out the resolution through insolvency are reduced; it should reduce the systemic impact on the rest of the economy by limiting the extent of any direct contagion through failed transactions and indirect contagion through loss of confidence.
in the banking system as a whole and uncertainty about where the losses will fall. However, by concentrating the cost in the present by bailing in, it may have a larger adverse short-run impact on the real economy than would spreading it over time through a tax-financed bail out.\(^6\)

**The Contrast with Europe**

During 2012-4 the EU has put together what it describes as a ‘banking union’, which will be progressively implemented over the ensuing decade.\(^7\) The key difference from Australia and New Zealand in the EU legislation which is incorporated in the Bank Recovery and Resolution Directive (BRRD)\(^8\) and the associated regulation introducing the Single Resolution Mechanism (SRM)\(^9\) is that, for the euro area (and for other countries that choose

---

\(^6\) OBR actually imposes more than a 100% initial impact in the present as the write-down will be conservative and it will not be until later that those written down get a further release of funds as the proceeds of the insolvency or valuation of transferred assets are revealed. Thus, while the impact of OBR on creditors and hence on the real economy will be a clear improvement over a traditional insolvency where payouts depend on the actual and potential sale of assets it is not so clear how it will rank compared with a bail out as the resolution method. The administrative costs of a bail in are likely to exceed those of a bail out, for example.

\(^7\) Banking union has been extensively discussed elsewhere see for example Castaneda et al. (2015) and hence is not described in any detail here.


to join)\textsuperscript{10} the EU plans to resolve problem cross-border banks jointly, rather than splitting them up along jurisdictional lines and resolving the problems separately. Trying to resolve banks jointly, whether done just by the lead authority or by coordinated intervention across all the jurisdictions is an order of magnitude more complex than what is planned under OBR.\textsuperscript{11} Hence, looking at the problems that OBR is likely to encounter gives an indication of

\hspace{1cm}

\textsuperscript{10} All euro area countries have to become members of the SRM, which will be run by a Single Resolution Board (SRB), based in Brussels. However, other EU countries can participate in this if they elect to join the Single Supervisory Mechanism (SSM) led by the ECB. Under the SSM the ECB is responsible for the supervision of banks in the SSM countries, although it will only supervise the most significant 130 banks directly. The remainder and non-banking operations of these institutions will remain the responsibility of the national authorities. Because non-euro area countries who decide to participate are not represented on the Governing Council, which is the ECB’s decision-making body, a Board of Supervisors has been created so that they can be involved but ultimately, if they do not agree with a decision, they can withdraw. This is embodied in two Regulations, one to give the necessary powers to the ECB Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions, OJ 287/63 (29 October 2013), retrieved from http://www.europarl.europa.eu/document/activities/cont/201311/20131104ATT73792/20131104ATT73792EN.pdf, and the other Regulation (EU) No 1022/2013 of the European Parliament and of the Council of 22 October 2013 amending Regulation (EU) No 1093/2010 establishing a European Supervisory Authority (European Banking Authority) as regards the conferral of specific tasks on the European Central Bank pursuant to Council Regulation (EU) No 1024/2013 which amends the Regulation on the European Banking Authority to establish its relationship with the ECB and to amend the voting rules in the Board of Supervisors.

\textsuperscript{11} Resolution of the banking group by the home country authority is labelled the Single Point of Entry (SPOE) approach and would be the equivalent of Australia solving the problems of the four main banks whether or not the problems occurred in Australia, New Zealand or elsewhere. This hence inherently much more
the minimum level of difficulty that will be faced by the EU, providing we set aside the problem of bailing in depositors.

There are three other differences in the structure of the BRRD from OBR worth bearing in mind from the outset. The first is that, under the BRRD, banks will be recapitalised by the process of bailing in and not just returned to above the point of solvency. The scale of the bail in will therefore need to be larger, perhaps considerably so.\textsuperscript{12} Second, the BRRD introduces depositor preference, so that is unlikely that depositors, whether insured or not, will ever be bailed in.\textsuperscript{13} Third, countries are required to set aside a fund, contributed by the banks, equal to at least 1\% of covered deposits of the banking system, which can be used to assist the process of resolution but only after a bail in of at least 8\% of liabilities of the troubled bank. Thus, while the first of these may make the process of resolution more costly in the short run, the second and third should make the process more likely to succeed, although some have criticised the size of the fund as being too small (Gordon and Ringe, 2014).

The tools available to perform resolutions are approximately the same, although Australia has not as yet put in place similar legislation. However, the banks on which they have to operate are not. Banking operations covered by OBR in New Zealand are almost entirely retail, the banks themselves have relatively straightforward structures and other operations outside Australia are not of systemic importance. The large European banks on the other hand are straightforward as the degree of cooperation required by other jurisdictions is limited. The alternative of multiple (but coordinated) points of entry (MPOE) requires a level of cooperation not yet seen in practice.

\textsuperscript{12} Minimum capital requirements for a large SIFI will be at least 10.5\% of risk weighted assets and if a troubled bank is to have credibility it will need to have substantially more than the regulatory minimum. Lenders will fear that there may be further problems that have not yet been revealed.

\textsuperscript{13} In some respects this was a reaction to the outcry when depositors were bailed in during the resolution of banks in Cyprus in 2012 despite the existence of deposit insurance.
complex G-SIFIs and handling problems in them will be an order of magnitude more complex. As yet, the EU has not imposed any requirements for division of banks into retail and other operations in either the manner suggested by the Liikanen report\textsuperscript{14} or the Dodd-Frank Act in the US. Nor has it required any restructuring by jurisdiction, so this is the first of the five facets of OBR which the discussion moves to next.

\textbf{Splitting the Bank}

One of the keys to the New Zealand approach is the ability of the authorities to take control of a free-standing entity and resolve it without recourse to other authorities or the parent. The EU is going in a different direction of trying to get supranational authorities which can supervise the banking group as a whole (the ECB), take decisions and coordinate the different authorities involved in the resolution (the SRB), although of course this does not apply to countries that decide not to participate in the SSM, which includes the UK which has the most important banking system.

Previously in the GFC, it became clear that the only cross-border arrangement that works well is where the home country authorities take on the job and allow the whole group to continue. Then none of the conflicts of interest about what is best for one country, particularly from the point of view of systemic stability, need to be addressed. In practice of course, this was the bailout route, although, as in the case of Royal Bank of Scotland, for example, this can enable the authorities to have quite a considerable say over how the group is run since they are the large majority owner. European level constraints, such as the Commission’s requirements as the relevant competition authority for Lloyds Group to sell off some of the branches as a condition of their takeover of (technically merger with) HBOS, do

not appear to offer any constraint on the essential feature of the resolution, which is to keep
the bank operating in all countries without a break. It is noticeable that the UK and the US in
the joint statement by the FDIC and the Bank of England have continued with this view, that
the practical route to resolving a SIFI is to for authorities responsible for the parent

How the new EU legislation will pan out depends very much on how the BRRD will be
applied and in particular how the SRB operates. The initial concern is that a banking group
should be properly supervised as a single entity, although this will only apply to groups that
are headquartered in the EU/EEA. It does not necessarily mean that there will be a single
resolution agency and the problem may still be how to coordinate all the individual
jurisdictions even if the SRB is one of those involved.\footnote{Binder (2015) follows through how all of the possible combinations of responsible authorities might work.} If the intention is to organise a bail in
at the group level then this may still be straightforward but as soon as the resolution involves
closing or severely restricting some parts of the group then conflicts of interest among the
countries involved may surface. For example, closing a loss-making operation may be in the
best interests of the creditors as a whole but cause a systemic problem in one country.
Conflicts can also occur in bailout as some countries may regard the source of the difficulties
as being the fault of other regulatory authorities or the result of events that are completely
extraneous to them and hence the concern solely of other regulators/bailout funds. Once the
Single Supervisory Mechanism is in place and the problems from the past have been
satisfactorily dealt with, including adequate recapitalisation, then the chance of such blame
should be much smaller when supervision is a joint activity led by the ECB. However, bailing
in like bailing out imposes losses where it falls and hence simply switching from bailing out to bailing in does not alter the concerns about fairness, as governments will have to handle the economic consequences of the losses even if they do not fall directly on the exchequer.

Conflicts may also be avoided if bail-in arrangements are sufficiently extensive that the entire banking group can continue to operate. In that way, it might be possible to avoid the use of taxpayer funds, especially if deposit insurance and resolution funds are provided by the industry and not by the state as intended in the BRRD. However, such bail-in arrangements will have to be carefully specified in the design of bonds and subordinated debt. In particular, that they could be triggered before the bank reaches insolvency.\textsuperscript{17} The Financial Stability Board (FSB) in its recommendations (FSB, 2014) includes such hybrid capital that can be converted into equity in the event of capital shortage in its definition of TLAC (total loss-absorbing capacity), which is a similar concept to the BRRD’s MREL (minimum required eligible liabilities). Managing a cross-border insolvency would still be very difficult. Almost any halfway house between legal and practical separation and a single jurisdiction for the whole group looks fraught with difficulty.

Separability at face value sounds as if it runs counter to all of the ideas of the European Single Market but in practice the strict separability required between Australia and New Zealand seems to have been of little consequence for the banks. Staff move between the two jurisdictions – the current and previous CEOs of one of the main four banks, Commonwealth, are New Zealanders – much of the managerial practices and products are common. However, the New Zealand banks have by and large maintained their own trading names when they

\textsuperscript{17} The Bank Recovery and Resolution Directive, as its name implies, addresses this concern upfront by seeking to have not just resolution plans for each systemic bank, which would enable orderly resolution should they fail, but also recovery plans that give a plausible path for the bank to restore capital adequacy and a return to profitability without failing should it experience a severe shock.
have been acquired and the fact that the absorbing of the National Bank of New Zealand into the ANZ in early 2013, having been owned by it for a number of years, seems to have lost them some customers, tends to confirm this.\textsuperscript{18} Thus, although the literature suggests than economies of scale are possible until banks are very large there does not appear to be much loss from these sources of separation (Buch and DeLong, 2010). The parent will still access capital markets on behalf of the group, many investment services will be sourced from Australia and hence many of the spillovers will still take place.

For large groups a different dimension of separability needs to be considered, relating to non-bank arms, such as insurance, and retail and investment banking activities but here the New Zealand example has little to offer in the way of lessons. The stability of the main four banks in the GFC relates mainly to their not having participated in risky activities and having little exposure to the US. Many argue this was simply because they had no shortage of profitable opportunities remaining at home and so did not face the same ‘search for yield’ (Brown \textit{et al.}, 2011).

The High Level Group behind the Liikanen Report (2012)\textsuperscript{19} were clearly of opinion that current and indeed proposed requirements for separability in EU banking groups was going to be insufficient. \textit{‘In the Group’s view, producing an effective and credible RRP [Recovery and Resolution Plan] may require the scope of the separable activities to be wider than under the mandatory separation’} (p.103, emphasis in original). Some countries including the UK, France and Germany\textsuperscript{20} have already acted in this regard and imposed their own requirements

\textsuperscript{18} There were substantial customer losses when Danske Bank (Denmark) decided to integrate Sampo Bank (Finland) rapidly into its systems shortly after acquisition in 2007, although the name did not change until 2012.

\textsuperscript{19} See footnote 11.

for separation or at least ex ante ring-fencing of the retail operations from their more risky counterparts but the EU proposed legislation, announced on 24 January 2014,\textsuperscript{21} has not as yet proceeded further and there are some indications that it may not proceed.

**Can One Ignore the Australians?**

OBR is in part predicated on the idea that what the Australians wish to do, while relevant, is not going to constrain New Zealand in its resolution procedures. This seems unlikely. While New Zealand operations may only be around 15% or so of the banking group’s activities they are large enough to have an implication for the whole group, even if only on grounds of reputation risk. If an Australian bank has been prepared to let its New Zealand subsidiary fail, what does that imply for its overall viability? Thus, the Australian authorities are likely to be intervening at the same time. No doubt what they would like to do is resolve the group and send New Zealand the bill for its share, based perhaps on the share of assets, much along the lines suggested for European banks by Goodhart and Schoenmaker (2009).

It is therefore important to understand how Australia will probably go about a resolution. They have made it clear that the four main banks are pillars of the system and will not be allowed to fail. However, they would follow a similar statutory management route to New Zealand but without the writing down of depositors in the same way. Australia operates a deposit guarantee scheme. Since this is unfunded and losses would be met by a government

loan in the short run before levies could be raised to claw back the losses. However, (domestic) depositors are preferred creditors in Australia, so the chances of them making losses eventually are small. Hence, the guarantee scheme is only likely to act as a temporary financier of depositors. Indeed, if there is no run, it is not clear that it will have much of a job to do unless the losses are very large. The option to write-down other debtors does exist. The Australian authorities have not made it clear what they will do except that once in statutory management the bank will need to be recapitalised. This can come from taxpayers, levies on the industry or creditors or of course by capital injections by a purchaser. Since a bank in statutory management can continue to trade with a government guarantee even though its liabilities exceed its assets this can be a viable way forward, assuming that people find the guarantee credible. If a bank has a ‘living will’ the route to recapitalisation will be rather clearer.

22 The Australian authorities have recently (2 August 2013) announced that they intend to create a resolution fund by imposing a levy on the banks in proportion to their asset base http://ministers.treasury.gov.au/DisplayDocs.aspx?doc=transcripts/2013/022.htm&pageID=004&min=cebb&Year=&DocType=. However, the government then lost the general election and the idea has not been picked up by their successors. In part, this is because they have initiated a general inquiry into the financial system (FSI), which reported in November 2014. It has yet to decide how to respond. See Mayes (2015) and the associated set of articles in JASSA for a critique.


The implications for New Zealand are then interesting. It depends which route to recapitalisation is going to dominate. A cynical view of the position would argue that because of reputation risk and the systemic importance of the financial institutions to Australia that there is little need for the New Zealand authorities to take much action as a problem with one of the big four banks, even if it occurred primarily in New Zealand, would be handled by Australia with little if any implication for either the New Zealand taxpayer or financial stability in New Zealand as the bank would be kept open. Indeed, if the problem occurred primarily in Australia, the New Zealand authorities would have a reasonable case for feeling that they should not have to make any financial contribution to the resolution.

The drawback of any such assessment is that it is a guess and if it were to be incorrect the New Zealand authorities would face a crisis if they were not prepared. Going carefully through all the steps in preparing for OBR, therefore, makes sense even if the underlying guess is that it will never be used. Its mere existence will help in resolution and more importantly its existence will help in reducing any moral hazard that is currently present. If the banks know that the New Zealand authorities have in place a workable resolution scheme that will result in the wiping out of shareholders and the probable loss to the senior managers of their jobs, then they will be that much more reluctant to take on excessive risk.

Given that this is a bilateral relationship rather than one with the multilateral complexity in Europe, one might expect that the two countries would try to produce a highly coordinated system even though they are preparing for a contingency they think highly unlikely. Routes to achieve this exist through the Trans-Tasman Council on Banking Supervision, for
example, through which a Memorandum of Cooperation was signed in 2010. While harmonisation of procedures might seem desirable, even if this cannot be achieved, some clear form of understanding of what the two countries expect of each other would be normal, even though Memoranda of Understanding have been shown to have limited value by the GFC. At a minimum, regular testing of the resolution procedures on a cross-country basis would seem a wise precaution.

The first principle of the Memorandum of Cooperation (p.3) is that ‘Consistent with the legislation in both countries, the participants in responding to bank distress or failure situations, will to the extent reasonably practicable, avoid any actions that are likely to have a detrimental effect on the other country’s financial system.’ But the second acknowledges the advantages of cooperation ‘A coordinated, cooperative approach involving the participants is likely to lead to a more cost effective financial crisis resolution and a more effective means of maintaining financial system stability in both countries than one in which the respective participants pursue separate agendas.’(p.4). While the rest of that principle says they will ‘cooperate, where practicable, in respect of all stages of resolving a crisis situation, including problem identification; information sharing; systemic impact analysis; assessment of response options; implementation of resolution; public communication; and exit strategy’, there is little practical detail except to make it clear that New Zealand will be responsible for

---


what lies within its jurisdiction and Australia will be responsible for the parent and its jurisdiction.

Thus, while the potential for a less costly cooperation exists, it does not seem likely that the two countries would move towards it any time soon.

**Bailing In**

If there are losses, someone has to bear them. Furthermore, it is generally thought that recognising the losses early and assigning them is much more beneficial to the recovery than trying to cover them up and obscure who the holders of the losses are. Japan is the major case in point. However, the conclusions are not that clear as there is considerable debate about whether it is better to try to recapitalise the business as a whole or separate it into a good bank and a bad bank (or in the Icelandic case into a domestic bank and a foreign residual).  

The New Zealand arrangements cut through this. First of all, the statutory manager can, if he thinks that it is in the best interests of the creditors and financial stability, place some of the bank in insolvency and only resolve part by the write-down of claims. Those written down have a claim on the insolvency estate. Furthermore, the process buys time. It returns the bank to operating viability but it does not solve the question of recapitalisation. In Mayes *et al.* (2001) we suggest that a write-down could go all the way to recapitalisation, with those who are written down becoming the new owners of the bank. The drawback of this arrangement is that there is no reason to expect that the new owners will be ‘fit and proper persons’ to run a bank and hence there would have to be a transition before the statutory manager or his equivalent was prepared to step back from running the bank. In the New Zealand arrangements, there is a period after resolution where the statutory manager looks for the new owners.

---

27 See for example the debate between Norway and Sweden and Finland discussed in Moe *et al.* (2004).

28 This appears to be the provision in the BRRD as well.
owners. Presumably, this would be some form of auctioning process such as the FDIC performs when it wishes to find new owners for a failed institution but with it being held in an equivalent to a bridge bank in the meantime.

With CoCos (contingent convertibles) or other contracted bail in arrangements, such as subordinated debt in Denmark, it is clear how much debt is available to be turned into equity. With the New Zealand arrangements there is no legal provision in the debt instruments but their status is overruled by the resolution arrangements. There is also no limit to how much might be written down except for the size of the eligible debt. Thus, covered bonds, repos and all the other collateralised transactions would be excluded. It is not surprising, therefore, that deposits have to form part of this pool or one might run out of suitable cover for a major loss – of the proportion of Landsbanki or Anglo-Irish Bank, for example. Bertram and Tripe (2012) show that in the New Zealand environment all wholesale lending might well be covered, so that once the shareholders and the subordinated debt holders are wiped out, the depositors will bear the rest of the exposure. If smaller depositors were excluded by the de minimis clause then the burden on the remainder could be quite substantial. Certainly

---

29 One can readily envisage foreign bondholders contesting that through the courts.

30 Again similar to that arrangement is set out in the BRRD.

31 It is clear from Figure 2 in Hoskin and Woolford (2011) that the RBNZ has a very different view about the proportion of claims that are likely to be secured or otherwise collateralized as these are shown as a small minority. They envisage ‘wholesale financing’ as being able to contribute substantially to the write-down. Given that the exit of wholesale financing in what Kane (1999) describes as a silent run is usually the direct cause of the bank failure this may be rather optimistic.

32 The illustration of the de minimis clause used by the Reserve Bank was only for $500, which would eliminate quite a large number of small or dormant accounts but would not reduce the overall value of claims substantially.
substantial enough that the political fallout from those being written down would be considerable.\textsuperscript{33}

There is, thus, a strong incentive to try to make the bail in arrangements as explicit as possible. Clearly one argument against this might be that this would increase the cost of debt. But with large, strong banks the cost from existing CoCos appears to be quite small. The alternative is to place limits on covered bonds and other secured debt. If depositors are going to be in the frontline in most resolutions, this will heighten the risk of a run should the banking system start looking at all weak.

However, the nature of the effect is debated. Admati and Hellwig (2013) argue for example that if a bank becomes much stronger as a result of increasing its equity, the cost of capital may well fall rather than rise as the default risk falls as does the loss given default. Conlon and Cotter (2015) argue that, in the case of the EU, all of the main bank failures during the GFC could be accommodated without making any major calls on senior debt and several without making any, thus in all cases not requiring a depositor bail in. The Vickers Report\textsuperscript{34} makes a similar claim and suggests that with their recommended 16% capital buffer only in the extreme example of Anglo-Irish Bank would losses not have been covered. This fits with the FSB recommended requirements for TLAC of the order of 18.5-24% of risk-weighted assets.

\textsuperscript{33} Denmark is one of the few countries that have employed a similar technique to OBR. Poulsen and Andreasen (2011) show that in the best known example of its use, for Amagerbanken, unsecured creditors were initially written down by as much 41.2%, although the write-down was later reduced to 33.9% and then lower. Such a write-down on depositors would cause an outcry, as is obvious from the example of the crisis in Cyprus.

The identity of those who have to bail in is important as in periods of difficulty it is important that those who provide capital are not simultaneously weakening the position of other financial institutions. Thus, on the whole the funds should come from outside the banking system unless they come in the form of a merger or acquisition which is acceptable to the authorities. A well-known problem is the merger of a weak bank with a strong bank creating a large weak bank rather than resolving the issue. However, even so losses have consequences for economic activity and bank lending even if they fall entirely on the private sector through bailing in. Some losers can take a reasonable length of time to rebuild their assets but others may be hit hard. Pensioners who are bailed in may see a significant reduction in their income and hence will have to cut their consumption accordingly both reducing GDP and making probable increased demands on the welfare system.

Where ownership structures in Europe are more complex, with cross-holdings, clearly formal ex ante agreed bail in and, indeed, bail out arrangements will become more difficult to apply. Knowing that bail-in clauses are likely to be activated will alter the value of debt shortly before that activation. Whereas depositors can exit, bond holders can only sell to another willing purchaser. In this case, a fall in the market value of the debt will not provide as much of a problem in the way that the decline in share prices does, although it might affect its repo usefulness. It will however spread the problem in that it is going to be difficult if not impossible for other banks to raise such debt even when it needs to be rolled over. An event which is serious enough to trigger a bail in in a major bank is likely to affect the economy as a whole rather than be localised just on that bank.

The New Zealand scheme therefore faces one problem in this regard. If the claims have been written down but the bad loans still left on the balance sheet at their written down values, a potential purchaser/provider of the recapitalisation may still have worries about the likely outcome when the loans are eventually worked out. This would, therefore, make exit from
statutory management difficult. However, the problem is no different from any other resolution, except possibly the size, transferring the impaired loans to an asset management company does get rid of the difficulty. OBR thus does not get round this but then neither does any of the other plausible routes to resolution.

The Liikanen report\textsuperscript{35} also puts an emphasis on bail in facilities ‘The power to write down claims of unsecured creditors or convert debt claims to equity in a bank resolution process is crucial…’ (p.viii). One aspect they draw attention to, given the focus of the report on structure, is where does the bail in occur. Is it to the parent or to the subsidiary? Their concern is that the bail in goes to the retail bank as for them that is the part that needs to continue. In the present context, it is the retail banking operations in each jurisdiction plus any other activities of the group that are of systemic importance in any jurisdiction that matters. The New Zealand scheme gives the appropriate distribution automatically, whereas there are no such guarantees in the EU, which makes the idea of wanting to handle the problem at the EU level all the more understandable.\textsuperscript{36}

The Liikanen report also agrees that bailing in options should be explicit, ‘the Group has come to the conclusion that there is a need to further develop the framework, so as to improve the predictability of the use of the bail-in instrument. Specifically, the Group is of the opinion that the bail-in requirement ought to be applied explicitly to a certain category of debt instruments, the requirement for which should be phased in over an extended period of time. This avoids congestion in the new issues market and allows the primary and the secondary market to grow smoothly.’ (p.103). This last aspect of the impact of introduction has not been considered in the New Zealand scheme. On the other hand, the ideas behind OBR have been

\textsuperscript{35} See footnote 11.

\textsuperscript{36} Unless the parent company’s authorities are prepared to undertake the resolution for the whole banking group.
revealed steadily over a decade and the explicit formulation of the plans does not appear to have had any noticeable effect on markets. It is perhaps not so much the cost of the potential bail in which affects the debt when it is sold as the impact on liquidity when the bail in takes place. Here the nature of the bail in is important. A write-down leaves the bondholder with little value in the written down part. If on the other hand this is a debt for equity swap, the bondholder will have a stake in the future of the bank. In both the Nordic crises and in a number of cases in the GFC, investments by governments in failing banks and other institutions have paid off and resale to the private sector has not merely repaid the money but offered a rate of return higher than the cost of government debt (Mayes, 2014). The existence of these gains has led some people to question whether bailing out should be written off too quickly (Lybeck, 2015). Under OBR the government still has the choice over what to do, even if the presumption is that it would not intervene, but if one of the banks were to become seriously under-capitalised but not technically insolvent there would be quite a temptation to make an equity injection or at least provide some preferred capital with a good rate of return. The BRRD, however, makes this approach more difficult, as does the need to collaborate among governments when banks are not very separable.

One thing which the RBNZ has done, which is a helpful pointer to others intending to implement bail in schemes, is to conduct an impact assessment (RBNZ, 2012). Using an undisclosed model, RBNZ (2012) assumes that the cost of a banking crisis is 20% of GDP for the typical case of a bail out although a ‘good’ bail out could reduce this a little.

---

37 The Liikanen Report offers one comment on bailing in which is very attractive, namely that it should apply to some of the remuneration of the senior executives, ‘Bail-in instruments should also be used in remuneration schemes for top management so as best to align decision-making with longer-term performance in banks. The Group suggests that this issue should be studied further.’ (p.104). The narrow New Zealand approach does not address this attempt to try align management incentives more with systemic prudence.
Recapitalisation through the market works best at 12.5% and falling into statutory management and hence a disorderly failure is worst at 25% of GDP. While one might dispute all of these magnitudes but not their ranking, the RBNZ’s view is that a good use of OBR would also deliver a cost of 20% of GDP and if it does not go well it could be similar to the worst case 25% cost.

Thus, there is no claim that using OBR (bailing in) per se reduces the cost of failure. What they do claim is that because bailing in offers a plausible route forward that puts the loss on the shareholders, management and creditors, there will be much more effort by those groups to ensure that market-based recapitalisations take place. Hence, the probability of low cost resolutions goes up and the expected costs of resolutions under an OBR regime as opposed to actually having to implement OBR for a specific failure are considerably reduced.

Taking this change in probabilities into account RBNZ (2012) then estimates that the overall reduction in cost is likely to be of the order of 16.5%. Table 1 reproduces the calculations. No doubt the individual numbers are very soft but they have several noteworthy features. First of all, the banks will have to pay more for their funding and this cost will accrue irrespective of a failure. The costs of implementing and maintaining the capacity within banks for undergoing OBR is trivial by comparison. The largest gain comes from OBR being cheaper to apply than a bail out and of course from the lower economic cost as a result of the greater likelihood of more efficient methods being used. It is worth noting that they do not forecast the chance of requiring a bail out to be zero and hence there may still be ongoing costs from increased government debt.

38 One of the complaints from the banking industry about bailing in will no doubt be that it imposes costs irrespective of actual failures and hence, now that banks also have to acquire considerable capital to make themselves less likely to fail, they are being hit twice and unnecessarily so.
Table 1  
Estimated Impact of Implementing OBR ($mn)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Status Quo</th>
<th>OBR available</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic cost</td>
<td>5492</td>
<td>4764</td>
<td>728</td>
</tr>
<tr>
<td>Bailout cost</td>
<td>1703</td>
<td>693</td>
<td>1010</td>
</tr>
<tr>
<td>Government debt service cost</td>
<td>413</td>
<td>172</td>
<td>241</td>
</tr>
<tr>
<td>Bank funding cost</td>
<td>282</td>
<td>936</td>
<td>-613</td>
</tr>
<tr>
<td>Maintenance cost</td>
<td>0</td>
<td>10</td>
<td>-10</td>
</tr>
<tr>
<td>Build cost</td>
<td>0</td>
<td>20</td>
<td>-20</td>
</tr>
<tr>
<td><strong>Overall NPV</strong></td>
<td></td>
<td></td>
<td><strong>1294.5</strong></td>
</tr>
</tbody>
</table>

Source: RBNZ (2012)

It is not clear that the putative cost of the BRRD or the hoped for reductions in impact are assessed as still being so substantial. The European Commission’s (2012) impact study considers all aspects of the regulatory changes, including the tighten regulation, the need for new capital and the improvement in deposit insurance and the resolution funds as well as bailing in. Nevertheless, the largest part of the net benefit comes from bailing in, some 0.34-0.62% of GDP per year out of a total of 0.76-1.04%. It is not clear how the flow on costs from those who lose in the bail in to the rest of the economy are estimated.

If a SIFI fails it is likely to be as part of a more general crisis and the impact on the economy is likely to be substantial. What bailing in does is shift the incidence across the economy considerably. It is not immediately apparent that such a shift is necessarily beneficial for the economy as a whole nor indeed for ordinary people, who are thought to be the victims as taxpayers when a bail out is used. A bail in concentrates the cost as well on a relatively narrow group of creditors, primarily depositors in the New Zealand case (after the shareholders and subordinated debtors).39 With deposit insurance that cost is not only

---

39 Note that in this case the immediate shareholder is the Australian parent bank. In so far as its share price is hit as well, only a small proportion of the shareholders will be New Zealanders and while the bulk may be Australian this part of the bail in will also spread the cost round other parts of the world.
substantially met in advance through the deposit insurance fund, which is then slowly replenished after the event, but it is spread across all depositors and not just those in the failing bank. It is not intuitively obvious whether the impact on people as depositors or as taxpayers is more or less equitable. The richer in society may have more difficulty avoiding tax than they do in finding non-bank-deposit vehicles for their savings. However, uninsured depositors are hit much harder under a bail in as they incur all the loss upfront and indeed, with a conservative valuation, face more than 100% of it in the short run until the true value is established. As taxpayers they have the cost spread over a generation. The same problem applies to other bailed in creditors. If these happen to be pension funds then they are likely to have an extended period over which to repair the damage, either through increased premiums or through lower benefit rates. Similarly, hedge funds may be good loss absorbers but a proper analysis of the impact of these measures needs to consider on whom the direct cost falls and what consequences this will have on their subsequent behaviour. Imposing losses directly on ordinary depositors will reduce consumption. While pension funds or taxpayers/the government may have to increase their savings rates over the longer term to compensate for the loss, the initial impact may be much smaller. Simple net present values will not cover this, as trying to limit the downturn in the economy and get back into rapid recovery as soon as possible are key policy imperatives.

Swift Action

One of the greatest problems in any resolution framework is that it needs to cut in early. The role of all the parties involved: central bank, resolution agency, ministry of finance and supervisor needs to be clear and regularly tested. Here the position of the New Zealand authorities, while not unusual, does have some clear advantages in that a statutory manager can be appointed before a bank reaches the point of insolvency. The terms under which it can intervene are not precise but severe undercapitalisation or inappropriate responses in the face
of coming failure could trigger it. However, there are checks in the system of appointment. The Reserve Bank makes the recommendation to the Minister of Finance who then requests the Governor-General to implement it. Similarly, while there are abilities to claim compensation should the actions of a statutory manager lead to losses, the decisions of the manager in imposing the resolution cannot be reversed, therefore giving certainty to those involved.

What the New Zealand system does not include is any set of mandatory ‘prompt corrective action’ (PCA) along the lines laid down for the FDIC. Indeed RBNZ (2012) casts some doubt over the plausibility of such early interventions regimes (including implicitly the Recovery part of the BRRD). One of the main problems revealed (again) in the GFC is the extent to which authorities have put off reacting – even where there was a mandatory requirement in the US (Garcia, 2012, Bair, 2012). However, the position is similar in most European countries, so one can be reasonably confident that intervention is unlikely to take place before the point that the bank is insolvent. However, the important question in the present context is the amount of time the authorities will have had to try to put an orderly resolution together.

While the requirements in New Zealand for being able to separate the claims of the creditors into frozen and continuing parts overnight can be put in place overnight and can be tested on a regular basis, if there has been no serious preparation, the summary assessment of the financial position of the bank will be very difficult to do. Even if claims are being marked to market one can be reasonably confident that the bank’s own assessment of the value of its assets is likely to be optimistic. One need only observe the enormous inaccuracy of the initial assessment of the value of the assets of Anglo-Irish Bank in 2008 to realise how severe the problem might be (Honohan, 2010). If the supervisor/resolution agency is not doing preparatory work inside the bank for several weeks before the resolution, there is a strong
opportunity for difficulty and possible exposure to taxpayer losses if the write-down of the creditors’ claims turns out to be insufficient.

It is not clear whether other jurisdictions are putting in place adequate prepositioning to be able to handle the resolution of their largest banks, although the US has got as far as drawing up the specification of what would need to be in place for this to work. Leaving this undone must mean that only a bailout is likely to work in practice unless a consolidation is possible as with the purchase of Wachovia by Wells Fargo in 2008. In this case, Wells Fargo was prepared to take the risk that it was paying too much. It could then spend nearly three years absorbing the new organisation, with the last branches of Wachovia becoming Wells Fargo in October 2011. The alternative available at the time was an assisted purchase by Citi. Again, this would have allowed Wachovia to be absorbed steadily but the authorities would not have been able to exit their own expenditure rapidly. Of course, in the traditional resolution of small banks in a closed bank resolution, it is still the case that the deposit insurer will not get closure until all of the assets have been sold and issues relating to all of the contested claims worked out through agreement or through the courts.

If everything is ready and the systems are tried and tested, then it seems likely that the necessary computer based separation of creditors’ claims into frozen and accessible components could be achieved overnight, as well as allowing all transactions in progress to be completed on time so there is no disruption to the normal business or possibility to claim that a default event had occurred. Division into insured and uninsured deposits has been practised elsewhere, particularly in the US, within the necessary timeframe. While the US has handled bigger banks they have had a larger staff to do this. The size of the team the RBNZ could put together from its own staff in a crisis would be quite small and they would have no experience of handling such an event. They could perhaps organise a pool of contingent trained staff on whom they could call in a crisis. While some of these could be retirees, others
might well have other employment. Clearly, the idea of getting any help from Australia is unlikely as they will be flat out handling the problem in the parent bank simultaneously. Getting help from anywhere else would take longer to organise.

Ironically, the greatest contributor to the early action comes neither from OBR nor the BRRD but from securities that are bailinable in the recovery phase of a banking problem when capital adequacy falls below a particular predetermined value. Such contingent convertibles (CoCos) which convert automatically from debt to equity upon reaching a trigger value normally triggered by an independently measured and clearly available variable such as the capital ratio and not by the authorities’ decision. While these may be subject to some gaming (Goodhart, 2010) and may tend to bring forward the time of intervention in the crisis because similar instruments in other banks may start to fall rapidly in value, they are by the same token likely to reduce the overall cost, as all stakeholders have to respond earlier.

**An Error Over Deposit Insurance**

There is a serious flaw in the New Zealand arrangements for Open Bank Resolution. New Zealand does not have deposit insurance and hence, as junior creditors, depositors will incur losses in the resolution. It is yet to be decided how many depositors may be excluded from this threat through the imposition of a de minimis clause that exempts small deposits from any write-down.\(^{40}\) Where any de minimis line is to be drawn is not to be disclosed in advance. Even if is drawn as high as $20,000 there will still be a large number of depositors affected.\(^{41}\)

---

\(^{40}\) Such a de minimis clause makes sense anyway as it would avoid a lot of administrative expense for small sums of money.

\(^{41}\) Not surprisingly outside commentators have touted higher values such as $50,000 [http://www.stuff.co.nz/business/money/5253036/Freezing-deposits-plan-slammed](http://www.stuff.co.nz/business/money/5253036/Freezing-deposits-plan-slammed).
The appropriate strategy for depositors, if there was any sniff of doubt about the viability of a bank, would be to remove their deposits or at least reduce them to below any expected de minimis level. Thus, whereas elsewhere deposits are a stabilising force for troubled banks, this would not be the case in New Zealand. Funding problems for troubled banks occur first in wholesale markets, as informed counterparties first of all demand a premium and then refuse to lend at all as difficulties mount. This inability to borrow in wholesale markets then causes banks to approach the central bank as Lender of Last Resort. If they are thought solvent the central bank will step into the place of the market or if they are thought likely to be insolvent, the process of resolution will start. To organise resolution well, the authorities require quite a long lead time, perhaps as much as 2-3 months if US and UK experience is anything to go by. Depositors help provide that time period because, since their credit to the bank is not under threat, they continue to maintain their loans and the bank can meet its cashflow obligations. If the depositors follow on the wholesale funders quite quickly this grace period will not be possible and the resolution will be messier and more inequitable as some will have been able to withdraw their deposits and others not.

Since OBR relates to the large banks, unless there is very clear evidence that problems are related to a specific bank, the chances are that there will be a general loss of confidence and larger depositors will start removing the money from all banks as a precaution. Thus, a manageable problem is turned into a full blown financial crisis. Almost certainly the government would need to renege on its commitment not to use taxpayer funding.

Thus, not only is OBR likely to be destabilising but it is simply unlikely ever to be exercised, as the authorities are likely to have to offer a blanket guarantee to depositors to prevent a general crisis. Simply having deposit insurance with a fairly high coverage ratio would address this problem, although in the event of a large bank failing the resources required may
exceed those held by the deposit insurer. In that case, temporary government funding would be required if the fund is not to default.

The New Zealand authorities seem to have a well entrenched objection to deposit insurance, which will have been reinforced by the rather disastrous introduction of temporary deposit guarantees in 2008 (the Crown Retail Deposit Guarantee Scheme).42 The government ended up paying out not just the depositors but all creditors of South Canterbury Finance owing to a series of design failures in the scheme. Nevertheless, in the face of a run on the main banks, especially where most are thought to be solvent, the authorities would have no alternative but to introduce a new guarantee scheme. No doubt the previous drawbacks will be avoided but we could expect in practice that individual deposits end up being insured up to some quite high value, say $250,000, where the scheme ended up, or $1,000,000 where it started. In this case, there would be a serious problem with the exposure of the taxpayer when the first bank needs to be resolved.

The government will then face the normal dilemma. If the bank is bailed out there will be no call on the guarantee fund. If the bank is not bailed out and OBR is applied then the Crown will become liable for the whole write-down of insured depositors’ funds. Neither sounds attractive. The simplest solution is presumably to introduce the same guarantee scheme as Australia or even just introduce depositor preference. Providing there are enough available funds, the other creditors will have to meet the banks losses under OBR ahead of the depositors. The high size of such a non-depositor write-down may threaten the viability of the scheme. The Australian arrangements will also be unrealistic in that regard if there are insufficient non-depositor creditor funds after taking account of all the carveouts from repos, collateralised bonds and other protected financial market contracts. The position in Europe

---

42 The Auditor-General’s (2011) highly critical review of the handling of the scheme covers the main concerns.
depends upon not just whether there is depositor preference but on how deposit insurance is financed.\textsuperscript{43} If it is prefunded by the industry the taxpayer will not be called on unless that funding is insufficient and the fund has to borrow – temporarily – from the government. If it is ex-post funded by the industry then the temporary government funding is certain. If it is funded by the government then obviously the taxpayer pays. The addition of Resolution Funds as planned in the EU/EEA, will increase the chance of being able to organise the resolution, as it will not be necessary to raise that funding either from the deposit insurer or from the other creditors.

**Concluding remark**

While New Zealand’s new Open Bank Resolution proposals are untried they sound a plausible way of organising the resolution of systemically important subsidiaries of foreign owned banks – provided that the increased threat to financial stability posed by the lack of deposit insurance is addressed. The arrangement not only offers a practical solution that can be implemented swiftly without the need for taxpayer funding but it appears to be one that does not place large continuing costs on the banking system. Four ingredients are necessary for the scheme to work:

- A clear legal and practical ability for the authorities to take over the subsidiary and get it operating again within the same value day;
- Adequate prior preparation to ensure all the necessary IT and other procedures required are in place and regularly tested;
- The ability to write down creditors’ claims and thereby organise a bail in to keep the vital functions of the bank operating without material interruption;

\textsuperscript{43} The BRRD applies depositor preference and super preference for deposit insurance/guarantee schemes in that they rank ahead of the depositors themselves.
The legal rules necessary to ensure that contracts are not closed by the operation of
the resolution – since some contracts will be written down to zero and others
substantially this may pose a problem with other jurisdictions.

Rather than ensuring a clear separation so that all authorities can look after their own
systemic requirements, the EU has decided to pursue the idea of ‘banking union’, which
would enable a new European level supervisor, the ECB, to coordinate supervision so it can
be undertaken for the entire banking group in a single operation. However, this only applies
to the euro area and such other countries as decide to join.\textsuperscript{44} Resolution is being concentrated
through the Single Resolution Board. However, there are no plans for a fully fledged
European level resolution agency which manages the deposit insurance and resolution funds,
so the EU system is not following the example of the US.\textsuperscript{45} How the new agencies and
responsibilities will operate in practice remains to be seen and the detail will determine
feasibility. With not all countries participating, the UK in particular, only some cross-border
SIFIs will be fully covered. New Zealand’s straightforward approach may be difficult to
apply in this framework.

A plausible scheme that enables systemically important banks to be resolved without a
material break in their vital operations and without the use of taxpayer funds is an important
contribution to financial stability. Not simply because of what it will achieve in a crisis but
because it encourages prudence and makes the chance of its being called upon smaller.
Traditional open bank resolution methods applied in the GFC involved injections of taxpayer
capital, no losses to creditors and many of those responsible for the running of the companies

\textsuperscript{44} At the time of writing, only Bulgaria and Romania have announced that they will seek to join the SSM, so that
21 countries would be covered, leaving just seven with their own arrangements. However, the seven includes the
UK, with many of the most important banks and also Sweden which is home to four SIFIs.

\textsuperscript{45} As outlined by Mayes (2006) and Schoenmaker and Gros (2012).
kept their jobs. With a much more limited chance of a bailout those running banks and lending to them, particularly shareholders who are first in line for the losses, will be keen to see banks manage their risk better and not encounter the fragility of recent years. Better supervision and the increase in capital and liquidity buffers will also contribute to a lower chance of ever needing the resolution arrangements. That does not mean that they should not rapidly now be put in place while the political will lasts. As Tucker (2012) puts it, they provide the two ‘bookends’ to a successful treatment – reducing the probability of occurrence at the one end and having a viable means of handle any problems that do nevertheless occur at the other.

Perhaps the most important lesson New Zealand can offer is over how to handle the long interim period before the ideal of banking union across the whole of the EU comes into being. The UK has stressed the importance of the authorities in the parent country being able to handle the entire problem with a single point of entry to the insolvency proceedings (FDIC-Bank of England, 2012; Tucker 2012) and this would work for most EU SIFIs. The problem area is where the banks are large compared to their parent countries. There, multiple points of entry to the resolution process are inevitable with each jurisdiction having to handle its own subsidiaries and manage the costs. Following the New Zealand route of each being able to handle the problems for their own stability until the full system comes on line would make the transition much more robust and from the estimates of the costs in RBNZ (2012) it would not add much to the total for a potentially important benefit, as it seems so difficult to exit firmly from the problems of the GFC.46

46 Lybeck (2015) also draws this conclusion but his line of argument is that bailing in is unlikely to provide the full means of intervention and bailing out will still be needed and indeed may even be the most desirable and least costly route for limited failures. Hence, operating with subsidiaries that can be fully controlled in the New Zealand manner would be a wise precaution in the absence of a full ‘banking union’.
References


