TE TAI ŌHANGA
THE TREASURY

RESERVE BANK
OF NEW ZEALAND
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# Safeguarding the future of our financial system

## Background paper on bank crisis management and resolution

Phase 2 of the Reserve Bank Act Review

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# Contents

# Introduction

This paper supports Phase 2 of the Review of the Reserve Bank of New Zealand Act 1989 (the Reserve Bank Act). It provides background information on the Review's *Consultation Document 2B: The Reserve Bank's role in financial policy: tools, powers, and approach* – specifically Chapter 5 'What features should New Zealand's bank crisis management regime have?'. The paper provides supplementary material on the following selected elements of that chapter:[1]

§ **The Financial Stability Board's *Key Attributes of Effective Resolution Regimes for Financial Institutions*** – a summary of the twelve elements that comprise international best practice guidelines for bank resolution regimes

§ **The triggers for using crisis management powers** – an overview of the current triggers for crisis management intervention under the Reserve Bank Act and the conditions for resolution in the United Kingdom and Hong Kong regimes

§ **Resolution objectives** – additional detail on the resolution objectives in the United Kingdom, the European Union, and Hong Kong, and the rationales for them

§ **Creditor property rights and safeguards** – additional discussion of issues relating to creditor property rights in a bank resolution and the 'no creditor worse off than in liquidation' safeguard

§ **Bail-in** – additional information on bail-in as a resolution tool, including the difference between statutory bail-in and contractual bail-in

§ **Challenges to resolution** – an overview of international developments in addressing common barriers to resolution

§ **The recommendations of the International Monetary Fund's Financial Sector Assessment Program** – a summary of how the Review has addressed the IMF's recommendations for bank crisis management in its New Zealand Financial Sector Assessment Program report of 2016/17.

[1] As supplementary material, this paper does not provide a comprehensive discussion on these topics and should be read in conjunction with Chapter 5 of Consultation Document 2B.

# I. The Financial Stability Board's *Key Attributes of Effective Resolution Regimes for Financial Institutions*

The Financial Stability Board (FSB)[2] *Key Attributes of Effective Resolution Regimes for Financial Institutions* (the '*Key Attributes*') are one of the FSB's Key Standards for Sound Financial Systems, sitting alongside core principles for (amongst other things) banking supervision, depositor insurance systems, and Financial Market Infrastructures (FMIs). Each of the Key Standards forms a baseline for good practice (which countries are encouraged to meet or exceed) and are the benchmark against which the International Monetary Fund (IMF) conducts its Financial Sector Assessment Programmes (FSAPs).

The FSB *Key Attributes* are the product of work undertaken in the aftermath of the global financial crisis (GFC) to address the shortcomings in national frameworks so that failing banks[3] could be resolved in an orderly way and without relying on publicly funded (i.e. taxpayer-funded) bailouts.

As noted in Chapter 5 of Consultation Document 2B, several jurisdictions around the world made major legislative and operational changes to strengthen their resolution regimes during and soon after the global financial crisis (GFC). Since then, many others have followed suit.

> *"Many countries entered [the] crisis without a proper resolution regime, and no country had a regime that could cope with failing SIFIs [systemically important financial institutions]. Where effective resolution tools existed, these did not address the cross border dimension or obstacles stemming from within firms themselves. This meant that proper market discipline was not in place in the years preceding the crisis and made the handling of the crisis more difficult. The G20 called on the FSB to propose actions to address these challenges"* (FSB, 2011, p. 8).

This challenge involved looking at ways to:

§ make resolution effective without putting public funds at risk (that is, finding credible alternatives to bail-outs or blanket government guarantees)

§ provide market participants with predictability on how resolution authorities could approach a resolution without constraining their discretion in how best to undertake one

§ maintain continuity of essential banking functions and protect customers' access to them

§ ensure cross-border cooperation and coordination in resolving cross-border banking groups.

Agreement on guidelines for resolution frameworks was reached in 2011, when the FSB adopted the *Key Attributes*. The G20 endorsed the *Key Attributes* as "a new international standard for resolution

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[2] The FSB evolved from the Financial Stability Forum (FSF) – a 1999 creation of the G7 Finance Ministers and Central Bank Governors as a forum for promoting stability in the international financial system. As a result of the GFC, the G20 called for the FSF to expand its membership and strengthen its effectiveness as a mechanism for national authorities and standard-setting bodies to develop and implement strong regulatory, supervisory, and other policies in the interest of financial stability. In 2009 the FSB was formally established as the successor to the FSF (see http://www.fsb.org/history-of-the-fsb/).

[3] This chapter refers to 'bank' as shorthand for deposit takers, which include non-bank deposit-takers (NBDTs). The Minister of Finance has made an in-principle decision to bring together the regulation of the banking sector and the NBDT sector in a single 'licensed deposit taker' framework. See Chapter 4 of Consultation Document 2A. Under this decision, the crisis management of NBDTs in New Zealand would use the same regime as that for registered banks.

regimes" as part of agreeing on comprehensive measures to ensure that "no firm can be deemed 'too big to fail' and to protect taxpayers from bearing the costs of resolution" (G20, 2011, p. 3). The *Key Attributes* were updated in 2014 to incorporate additional guidance on their implementation and interpretation (FSB, 2014).

The *Key Attributes* have also been recognised as international standards by the IMF and the World Bank (IMF, 2019). They are used across both organisations' work, with the assessment of crisis management frameworks having become a key building block for IMF FSAPs, while both the IMF and World Bank have been involved in the development of the *Key Attributes* assessment methodology from the outset (IMF, 2017b, p. 40).

The *Key Attributes* are designed to be relevant for systemic financial institutions of all types – including both global systemically important banks and domestic systemically important banks – and in all jurisdictions (FSB, 2014, p. 2; Bank for International Settlements, 2017, p. 1).[4]

## The 12 *Key Attributes*

The *Key Attributes* comprise 12 features that the FSB considers essential to an effective resolution regime. Table 1 summarises the 12 *Key Attributes*.

### Table 1: The 12 FSB *Key Attributes*

| Key Attribute (KA) | Detail |
|---|---|
| **KA 1 – Scope** | § Any financial institution that could be systemic if it fails should be subject to a resolution regime in line with the *Key Attributes*<br>§ Banks, FMIs, investment and securities firms, and other financial institutions are all within scope |
| **KA 2 – Resolution authority** | § Each jurisdiction should have an operationally independent but accountable administrative authority designated as a resolution authority<br>§ The resolution authority should have a statutory mandate to pursue financial stability and support the continuity of critical economic functions |
| **KA 3 – Resolution powers** | § There should be a broad range of powers to intervene and resolve a financial institution that is no longer viable<br>§ There should be clear standards or indicators of non-viability to help guide decisions on whether a bank meets the conditions for entry into resolution |

[4] Internationally, non-systemic banks are seen as less demanding of a framework such as the FSB Key Attributes because the widespread availability of deposit insurance makes their orderly wind-down more feasible.

| Key Attribute (KA) | Detail |
|---|---|
| **KA 4 – Set-off, netting, collateralisation, segregation of client assets, temporary stays on early termination rights** | § Protected arrangements (i.e. set-offs, netting sets, secured liabilities) should be effective, enforceable, and certain in resolution<br>§ The exercise of the resolution powers should not by itself trigger a default event<br>§ A time-limited stay on early termination and cross-default rights should apply where they arise only by reason of an institution's entry into resolution |
| **KA 5 - Safeguards** | § Resolution powers should respect the statutory hierarchy of creditor claims, but provide resolution authorities with the flexibility to depart from the principle of treating creditors within the same class of claims equally where necessary to contain the systemic impacts of a bank's failure, or to maximise value for creditors as a whole<br>§ Creditors should have a minimum recovery right in resolution (the principle of 'no creditor worse off' than they would be in liquidation)<br>§ Resolution powers should be exercisable with the necessary speed and flexibility subject to legal remedies and due process, but judicial action should not be able to constrain the implementation of, or result in the reversal of, resolution actions made within legal powers and in good faith<br>§ Jurisdictions should have flexibility to allow temporary exemption from company disclosure requirements where disclosure would affect the successful implementation of a resolution |
| **KA 6 – Funding of banks in resolution** | § Jurisdictions should have resolution policies that mean they are not constrained to relying on public ownership, bailouts, or guarantees of failing banks<br>§ A resolution should be funded primarily by the bank's equity holders and unsecured (and uninsured) creditors<br>§ There should be creditor-financed loss absorption and recapitalisation (i.e. bail-in) that restores a bank's financial resources to a level that regains market and public confidence and allows it to access private sector credit<br>§ There should be privately financed resolution funding sources, such as deposit insurance or resolution funds<br>§ There should be *ex post* recoveries of resolution costs from industry, if necessary<br>§ Public ownership should be used only as a last resort, and only as a temporary support |

| Key Attribute (KA) | Detail |
| --- | --- |
| **KA 7 – Legal framework conditions for cross-border cooperation** | § There should be a statutory mandate to cooperate, and the legal capacity to share information, with foreign agencies<br>§ There should be frameworks to give effect to foreign resolution measures<br>§ There should be no discrimination against creditors on the basis of nationality, location, or jurisdiction |
| **KA 8 – Crisis Management Groups** | § The home and key host jurisdictions of all global systemically important financial institutions (G-SIFIs) at a minimum should establish and maintain Crisis Management Groups, involving central banks, supervisors, and resolution authorities[5] |
| **KA 9 – Institution-specific cross-border cooperation agreements** | § Protocols and mechanisms for cooperation and information-sharing among home and key host authorities in recovery and resolution planning, as well as for crisis situations, should be set out in pre-agreed cooperation agreements |
| **KA 10 – Resolvability assessments** | § Resolvability assessments[6] should be completed at a minimum for all G-SIFIs<br>§ Resolvability assessments should evaluate the feasibility of resolution strategies, and their credibility in light of the likely impacts of a systemically important financial institution's failure on the wider market and economy<br>§ Resolvability assessments should identify barriers to resolvability, and measures to improve resolvability<br>§ Resolution authorities should have powers to require changes to banks' structure or operations to improve resolvability |
| **KA 11 – Recovery and resolution planning** | § Recovery and resolution plans should be prepared at a minimum for all G-SIFIs<br>§ Officials should review home and host authorities' of resolution strategies and operational plans regularly |
| **KA 12 – Access to information and information sharing** | § Robust information management systems should allow banks to produce up-to-date resolution-related information on a timely basis<br>§ There should be no impediments to the sharing of relevant information among all cross-border authorities with a role in resolution (subject to appropriate confidentiality arrangements) |

[5] Crisis Management Groups are intended to bring together the parties that are material to the resolution of a systemically important cross-border bank with the objective of enhancing preparedness for, and facilitating the management and resolution of, a cross-border financial crisis affecting the bank.

[6] See section VI for further discussion of resolvability assessments.

The *Key Attributes* seek to change the way that distressed banks are dealt with, and reduce the impacts of bank failure on financial system stability. They do this by supporting a shift from *pre-GFC bank administration arrangements* that:

§ focused on wind-downs administered by judicial authorities

§ were not comprehensively planned in advance

§ relied on public funds (through bailouts or guarantees) to maintain critical functions

to modern, *post-crisis resolution arrangements* that are:

§ controlled by resolution authorities

§ coordinated across borders

§ subject to comprehensive *ex ante* planning, prepositioning, and operationalising

§ aimed at maintaining banks' vital economic functions while avoiding the need for public funds through creditor-financed recapitalisations.

The *Key Attributes* also:

§ describe the *objective* of an effective resolution regime as to:

> *"make feasible the resolution of financial institutions without severe systemic disruption and without exposing taxpayers to loss, while protecting vital economic functions through mechanisms which make it possible for shareholders and unsecured and uninsured creditors to absorb losses in a manner that respects the hierarchy of claims in liquidation"* (FSB, 2014, p. 3)

§ describe the *purposes* of an effective resolution regime, which are to:

(i) ensure continuity of systemically important financial services and payment, clearing, and settlement functions

(ii) protect, where applicable, depositors, insurance policy holders, and investors covered by insurance and compensation schemes and ensure the rapid return of segregated client assets

(iii) allocate losses to bank owners and unsecured and uninsured creditors in a way that respects the hierarchy of claims

(iv) not rely on public solvency support and not create an expectation that such support will be available

(v) avoid unnecessary destruction of value, and seek to minimise both the overall cost of resolution in home and host jurisdictions and, consistent with the other objectives, losses for creditors

(vi) provide for speed and transparency and as much predictability as possible through legal and procedural clarity and advanced planning for orderly resolution

(vii) provide a mandate for cooperation, information exchange and coordination domestically and with relevant foreign resolution authorities

(viii) ensure that non-viable banks can exit the market in an orderly way

(ix) be credible, enhance market discipline, and provide incentives for market-based solutions

- set out the *tools* that an effective resolution regime should have for achieving its objectives and purposes, including:
    - (i) stabilisation options (e.g. bridge banks, moratoria, stays on termination rights, bail-in) that enable continuity of systemically important and critical economic functions
    - (ii) resolution options that enable all or part(s) of a bank's business to be closed or wound down in an orderly way that also protects insured depositors (through timely payouts or transfers) and other retail customers (through providing them with prompt access to transaction accounts).

### Implementation of the *Key Attributes* to date

Internationally, almost all home and key host jurisdictions of global systemically important banks (G-SIBs) now have in place comprehensive bank resolution regimes that align with the *Key Attributes* (FSB, 2018a, p. 1). Nine FSB jurisdictions have assessed their regimes as fully compliant with the *Key Attributes* in relation to global and domestic systemically important banks.[7] Others are close to being fully compliant, have reforms under development, or have begun to establish relevant rule-making processes under existing statutory authority (FSB, 2018a, p. 19-20).[8]

[7] France, Germany, Hong Kong, Italy, the Netherlands, Spain, Switzerland, the United Kingdom, and the United States.

[8] For example, Australia, Canada, Japan, Korea, Saudi Arabia, Singapore, South Africa, and Turkey.

# II. Triggers for using crisis management powers

Placing a bank into resolution is a significant intervention that overrides ordinary legal rights and procedures. It therefore demands a high level of clarity around the conditions that need to be met.

The FSB *Key Attributes* state that resolution should be initiated when a bank:

- is, or is likely to be, no longer viable and
- has no reasonable prospect of becoming viable.

Chapter 5 of Consultation Document 2B notes that the Reserve Bank Act provides for three channels of crisis management intervention: Reserve Bank directions, director replacement, and statutory management. The triggers for exercising these powers are set out below.

## Reserve Bank directions

The Reserve Bank can (with the Minister of Finance's consent) give a direction to a (registered) bank or an associated person[9] if the Reserve Bank has reasonable grounds to believe that any one of the following applies:

(a) The bank or the associated person is insolvent or is likely to become insolvent.

(b) The bank or the associated person is about to suspend payment or is unable to meet its obligations as and when they fall due.

(c) The bank or the associated person is conducting its affairs in a way that is prejudicial to the soundness of the financial system.

(d) The bank's or the associated person's circumstances are prejudicial to the soundness of the financial system.

(e) The bank has is not, or has not been, conducting its business in a prudent manner.

(f) Any of the following has failed to comply with any requirement imposed by or under the Reserve Bank Act or regulations made under the Act:

  (i) the bank

  (ii) a director of the bank

  (iii) in the case of an overseas-incorporated bank, its New Zealand chief executive officer.

(g) Any of the following have been convicted of an offence against the Reserve Bank Act:

  (i) the bank

[9] A person is an 'associated person' if:

(a) that person directly or indirectly controls the management of the financial institution or registered bank; or

(b) that person has a direct or indirect qualifying interest in 20 percent or more of the voting or non-voting securities issued by the financial institution or registered bank; or

(c) that financial institution or registered bank directly or indirectly controls the management of that person; or

(d) that financial institution or registered bank has a direct or indirect qualifying interest in 20 percent or more of the voting or non-voting securities issued by that person.

(ii) a director of the bank

(iii) in the case of an overseas incorporated bank, its New Zealand chief executive officer

(h) The bank has failed to comply with a condition of its registration (section 113(1)).

## Removing, replacing, or appointing directors

The Reserve Bank can (with the Minister's consent) remove, replace, or appoint a director of a registered bank or of an associated person of a registered bank if:

(i) any *one* of the above triggers for giving a direction is met, and

(ii) the Reserve Bank has reasonable grounds to believe that it is necessary to remove, replace, or appoint a director of the bank or of an associated person of the bank (section 113B).

## Statutory management

The Governor-General by Order in Council can place a bank or an associated person of a bank into statutory management and appoint a statutory manager. This is done on the advice of the Minister, based on a recommendation from the Reserve Bank.

There are six possible triggers for recommending the appointment of a statutory manager (section 118). The first five are the same first five triggers for giving a direction – that is, the Reserve Bank must have reasonable grounds to believe that any *one* of the following applies:

(a) The bank or the associated person is insolvent or is likely to become insolvent.

(b) The bank or the associated person is about to suspend payment or is unable to meet its obligations as and when they fall due.

(c) The bank or the associated person is conducting its affairs in a way that is prejudicial to the soundness of the financial system.

(d) The bank's or the associated person's circumstances are prejudicial to the soundness of the financial system.

(e) The bank has is not, or has not been, conducting its business in a prudent manner.

The sixth possible trigger is that the bank or the associated person has failed to comply with a direction from the Reserve Bank.

## Reviewing the criteria for entry into resolution

The FSB *Key Attributes* set out a narrower set of conditions for resolution (noted above) than those that enable a bank to be placed into statutory management under the Reserve Bank Act. In particular, the meaning of 'prejudicial to the soundness of the financial system' or not 'in a prudent manner' may need refining.

In the **UK**, two conditions must be met before a bank may be placed into resolution (HM Treasury, 2017, pp. 21-22):

- First, the bank must be determined to be failing or likely to fail. A bank is considered to be failing or likely to fail if:
  - the bank is failing or likely to fail to meet its 'threshold conditions' for carrying on regulated activities. The 'threshold conditions' include having adequate resources to satisfy applicable capital and liquidity requirements, appropriate resources to measure, monitor, and manage risk, and fit and proper management who conduct business prudently
  - the value of its assets are or are likely soon to be less than the value of its liabilities
  - it is unable or likely to become unable to pay its debts as they fall due, or
  - certain extraordinary public financial support is required.
- The second condition is that it must not be reasonably likely that action will be taken – outside resolution – that will enable the bank not to fail, and to satisfy the threshold conditions.

As the UK regime permits resolution to be triggered when there is evidence a bank is failing or likely to fail, this can happen before it is 'insolvent' – that is, before it can no longer pay its debts as they fall due or the value of its assets falls below the value of its liabilities. The conditions for entry into the regime are designed to strike a balance between, on the one hand, avoiding placing a bank into resolution before all realistic options for a private sector solution have been exhausted and, on the other, reducing the chances of an orderly resolution by waiting until it is technically insolvent (HM Treasury, 2017, p. 21; Bank of England, 2017, p. 14).

In **Hong Kong**, three conditions must be met before a bank can be placed into resolution. The first two conditions are very similar to those in the UK. The third condition is that:

- the non-viability of the bank poses risks to the stability and effective working of Hong Kong's financial system, and
- resolution will avoid or mitigate those risks.[10]

Further work will be undertaken as part of this Review on whether the conditions for entry into resolution in New Zealand should be narrower than they are currently, and whether indicators of conditions such as 'failing' or 'likely to fail' should be set out in legislation or set out in guidelines issued by the resolution authority.

[10] See section 25 of the Financial Institutions (Resolution) Ordinance, 2016.

# III. Resolution objectives

Chapter 5 of Consultation Document 2B notes that the Reserve Bank Act provides a high-level purpose for using resolution powers but not detailed objectives. Ordinarily, failing businesses are resolved through established insolvency laws the objectives of which seek to maximise the value from the insolvent estate for creditors and shareholders. However, a bank's failure can affect the financial system's stability, New Zealand's economic growth, and the livelihoods of those who have deposited their funds with the bank.

These broader concerns suggest the need for clear resolution objectives to ensure good resolution choices are made – choices that consider the multiple dimensions of bank failure and seek to minimise both the disruptive impacts of bank failure and the costs of resolution on the bank's creditors and the wider public. Clear statutory objectives, along with accountability for achieving them, also reflect good regulatory design when conferring significant powers on an unelected body.

Chapter 5 notes four resolution objectives that the FSB *Key Attributes* recommend be included in a resolution authority's statutory objectives:

i. Pursuing financial stability and ensuring continuity of systemically important services

ii. Protecting depositors that are covered by relevant insurance schemes

and where consistent with other statutory objectives:

iii. Avoiding unnecessary destruction of value

iv. Seeking to minimise the overall costs of resolution in home and host jurisdictions and losses to creditors.

Chapter 5 summarises the resolution objectives used in the UK, the EU, and Hong Kong. These jurisdictions' objectives are set out in further detail here.

### United Kingdom

The UK was the first jurisdiction to reform its resolution regime in response to the GFC. The regime initially had five objectives specified in the Banking Act (2009). This list was extended in response to the EU's 2014 Bank Recovery and Resolution Directive (BRRD), which harmonised resolution regimes across EU countries (European Parliament and Council, 2014).

The UK's resolution regime designates the Bank of England (BoE) as the UK's resolution authority. The resolution regime is designed to deal with financial firms in a way that protects financial stability and the public interest.

The BoE must have regard to seven special resolution objectives when preparing for and carrying out a resolution:

§ Ensure the continuity of banking services in the UK and of critical functions

§ Protect and enhance the stability of the UK's financial system, in particular by preventing contagion and maintaining market discipline

§ Protect and enhance public confidence in the stability of the UK's financial system

§ Protect public funds, including by minimising reliance on extraordinary public financial support

- Protect depositors and investors to the extent that they are covered by the UK's deposit protection scheme, the Financial Services Compensation Scheme (FSCS)
- Protect client assets in cases where client money may be affected
- Avoid interfering with property rights

These seven objectives are unranked in statute. Instead, the BoE weighs them on a case-by-case basis according to the specifics of a firm's failure and prevailing market conditions. The resolution objectives and the weightings help the BoE to determine its resolution strategy in each case.

The UK Treasury has also published a *Special Resolution Regime Code of Practice*. Among other things, the *Code of Practice* outlines the factors that UK authorities will consider in achieving their resolution objectives (HM Treasury, 2017).

### European Union

The BRRD, introduced in 2014, specifies five unranked objectives that EU resolution authorities must consider, as appropriate for each case's nature and circumstances:

- Ensure the continuity of critical functions
- Avoid significant adverse effects on the financial system, in particular by preventing contagion, including to market infrastructures, and by maintaining market discipline
- Protect public funds by minimising reliance on extraordinary public financial support
- Protect depositors covered by relevant insurance schemes, and investors covered by relevant compensation schemes
- Protect client funds and client assets

When pursuing the above objectives, the resolution authority must also seek to minimise the costs of resolution and avoid the destruction of value unless they are necessary to achieve the resolution objectives.

### Hong Kong

Hong Kong has recently reformed its resolution regime, drawing on lessons from the UK and EU experience and guided by the FSB *Key Attributes*. The regime's law was passed in 2016 and came into force in 2017.

The FSB has assessed Hong Kong as now having legal powers and safeguards for resolution that are consistent with those required under the FSB *Key Attributes* and as being one of the few FSB jurisdictions with a fully cross-sectoral resolution regime (FSB, 2018b, p. 4).

Under the Financial Institutions Resolution Ordinance (2016), Hong Kong's resolution authorities must aim to:

(a) to promote, and seek to maintain, the stability and effective working of the financial system of Hong Kong, including the continued performance of critical financial functions

(b) to seek to protect deposits or insurance policies of a within scope financial institution to no less an extent than they would be protected under a protective scheme mentioned in Schedule 1 of the Financial Institutions Resolution Ordinance on a winding up of the financial institution

(c) to seek to protect client assets to no less an extent than they would be protected on a winding up of the financial institution

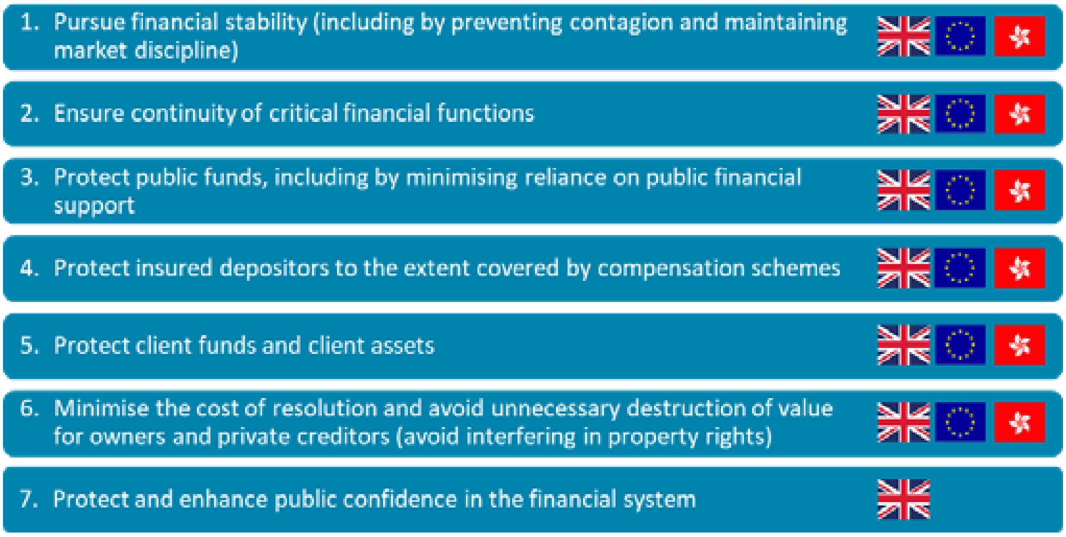
(d) subject to paragraphs (a), (b) and (c), to seek to contain the costs of resolution and, in so doing, protect public money.

Unlike the unranked resolution objectives of the UK and EU, the Hong Kong legislation has a partial hierarchy – the fourth objective is secondary to the other three.

### Rationale for different objectives

Figure 1 below (which reproduces Figure 5D of Consultation Document 2B) groups the UK, EU, and Hong Kong resolution objectives. Their rationales are discussed below.

Figure 1: UK, EU, and Hong Kong resolution objectives




The first two objectives in Figure 1 – **to pursue financial stability and ensure continuity of critical financial functions** – align with the FSB Key Attribute objectives. The risk that a bank failure could disrupt the crucial services that households and businesses rely on every day, affect investor and business confidence, the supply of credit to the economy, and economic growth is one of the main reasons for having a special bank resolution regimes. These objectives feature prominently in all three regimes considered here.

The third objective in Figure 1 – **to protect public funds** – is closely linked to the genesis of post-GFC resolution regime reforms. The GFC revealed that some banks, being large, complex, and highly interconnected, were 'too big to fail', creating moral hazard that allowed bank managers, owners, and investors to take excessive risks. In other words, some banks were so systemically important that, regardless of how reckless their lending behaviour, they would have been bailed out by governments. The preamble to the FSB *Key Attributes* notes that the ultimate objective of an effective resolution regime is to eliminate this too-big-to-fail problem by making it possible to resolve systemically important banks without having to put public funds at risk. All three jurisdictions considered here have this as a statutory objective of their resolution regime.

The fourth objective – **to protect insured depositors** – links to the second purpose of an effective resolution regime in the FSB *Key Attributes*. It underlines the desirability of ensuring that depositors of a failed bank can continue to have ready access to their funds and critical depositor services such as transactional accounts. Protection for insured depositors can be delivered in different ways, such as by:

- facilitating a rapid payout of insured deposits by the insurance scheme
- arranging a transfer of insured deposit accounts to a healthy acquiring bank
- keeping critical banking services such as deposit accounts open and operating through an open bank resolution process.

Ensuring that depositors in a failed bank are adequately protected helps to avoid a loss of confidence in financial services and mitigates the risk of contagion.

The fifth objective – **to protect client assets** – links to FSB Key Attribute 4. It is similar to the deposit protection objective above but applies to a different group of stakeholders. Here, client assets are securities or other property that are held by a financial institution (usually for investment purposes) on behalf of its clients. Client assets are particularly important to the business models of custodian banks, which are specialist financial institutions that mainly earn revenue by safeguarding financial assets rather than undertaking traditional commercial or consumer lending. Custodian banks are a significant feature of large financial centres, such as those in the UK, the EU, and Hong Kong, and this objective features in all those regimes. However, custodian banks are not a significant part of New Zealand's financial system, so there is a question whether this objective should be included as a future-proofing measure.

The sixth objective – **to minimise the cost of resolution** – links to the fifth purpose of an effective resolution regime in the FSB *Key Attributes*. This objective requires the resolution authority to compare the cost of a proposed resolution strategy to the cost of a standard insolvency procedure. In some cases, the best outcome of a resolution for society as a whole may mean imposing losses on some creditors, or classes of creditors, than would be the case if the bank had immediately been placed into liquidation. To safeguard creditors against this kind of discretionary loss, resolution regimes commonly have a built-in 'no creditor worse off' (NCWO) safeguard (explained in more detail in section IV of this paper).

The UK, EU, and Hong Kong regimes all have some form of statutory objective that captures this idea, but in different forms and at different levels in legislation. The UK objective is expressed as "avoiding interfering with property rights". In contrast, the Hong Kong and EU objective is framed around "minimising the cost of resolution".

The seventh objective – **to protect and enhance public confidence** – is closely tied to the objectives of promoting financial stability and ensuring the continuity of critical financial functions. Public confidence is a precondition of financial stability and can be undermined by a loss of critical financial functions. This objective is explicit only in the UK regime; in the EU and Hong Kong it is implicitly covered by other objectives.

# IV. Creditor property rights and safeguards

This section provides more detail on creditor property rights and safeguards in the context of bank resolution. FSB Key Attribute 5 above suggests some principles for how the regime should deal with these issues.

## The importance of property rights in a market economy

Market economies like New Zealand's are based on strong and clear property rights; if participants do not know who owns what, or what might happen to their property, it is difficult to invest, transact, or otherwise deal with that property with any confidence. Where risks cannot be measured or managed, the incentives to invest and build up assets are weakened, and everyone's ability to participate confidently in the economy is compromised. Well-defined property rights help to make the economy efficient and resilient, and violating those rights could have profound and lasting impacts on social and physical capital. Property rights are so pervasive that they are often taken for granted.

In most market economies, property rights are constituted by contract, the common law, or by statute. These property rights are, however, affected by insolvency laws, the operation and application of which are generally known, understood, and anticipated by the commercial community.

In New Zealand, it is a fundamental legal principle that people are entitled to the peaceful enjoyment of their property. Outside of insolvency law, these rights ought to be limited or abrogated only with good justification, following a rigorously fair process and (in general) then only after the payment of fair compensation. There must be a cogent policy justification for not paying compensation – for example, where the proceeds of crime or illegal goods have been confiscated (Legislation Design and Advisory Committee, 2018, p. 24). New Zealand's legislation guidelines require new legislation to respect these property rights principles.

More specifically, 'creditor property rights' can be regarded in the following way. In relation to a debt and a creditor prior to liquidation, creditors' property rights are the right to be repaid on time without any deduction and without being subordinated to another competing claim of equal rank. In relation to a debt and a creditor *during* a liquidation, they are the right to share in the proceeds of the liquidation according to the applicable insolvency laws.

## The impact of special bank resolution on property rights

When a business fails in New Zealand, ordinarily it is shut down, its assets are realised, and investors' and creditors' rights to a share of those assets (their 'claims') are paid out according to the creditor hierarchy and on a pro rata basis among the creditors of the same class.

New Zealand law gives certain creditors a preference in the hierarchy above all others, such as the liquidator, employees who are owed salaries and wages, and Inland Revenue.[11] General creditors (e.g. senior bond holders, depositors, and unsecured derivative counterparties) follow, leaving lower-

[11] Schedule 7 of the Companies Act 1993.

ranking creditors and investors (e.g. holders of junior, or subordinated, debt instruments and shareholders) to be the first to absorb losses and the last to be paid out.[12]

Creditors within the same rank are treated equally; for example, if depositors are fully repaid, then all general creditors – and preferred creditors above them – should also be fully repaid. If one subordinated debt instrument returns only 50 cents on the dollar, all other subordinated debt instruments should return 50 cents, too.

New Zealand's hierarchy of creditor claims is set through contractual arrangements and legislation. The equal treatment of creditors in each rung of the hierarchy is a fundamental principle in insolvency that allows investments to be priced and managed in the usual course of business. For example, creditors at the bottom of the hierarchy, who know that their investments are riskier than others, will normally demand higher returns than higher ranking general creditors.

During the GFC, ordinary insolvency processes like these proved not to be fit-for-purpose for dealing with large and complex institutions like banks that provided critical services to the economy. As shutting banks down risked fuelling disorder and destruction in financial markets and economies, many governments around the world were forced to commit hundreds of billions of dollars of public money to prop them up. To avoid this happening again, 'special resolution' processes were developed to keep critical parts of failing banks open without using public money – they would instead seek to tap the creditors' liabilities to absorb losses and restore viability.

This idea of imposing losses on a failed bank's creditors in resolution is no different from ordinary insolvency. However, in contrast to the established rules governing the treatment of property rights in insolvency – the maximisation of returns through asset realisations and the distribution of the proceeds of those realisations among creditors, on a pro rata basis and in accordance with the creditor hierarchy – most special bank resolution tools interfere with property rights.[13] They give resolution authorities strong and flexible powers to override or limit property rights, which can have the effect of concentrating losses on particular creditors, all to support financial stability and the public interest. Special resolution that seeks to maintain financial stability or optimise *aggregate* wealth can leave individual creditors worse off than they might have been, had they been participating in an ordinary company liquidation.

There is an unavoidable tension in bank resolution between providing creditors and markets with certainty and giving authorities the flexibility to resolve failing banks effectively. This tension must be managed carefully, because uncertainty could drive underinvestment in the economy and damage the public interest that resolution seeks to support. How that tension should be balanced, and what, if anything, authorities should do for creditors whose property rights have been displaced or otherwise affected in the public interest is a key policy challenge for designing a credible resolution regime.

[12] Secured creditors are also in a preferred position but for different reasons. The law recognises that a creditor can take property rights in particular assets of an entity under what is called a security instrument. The secured asset is in effect removed for the estate of the borrowing entity and may be sold following default or the advent of liquidation for the sole benefit of that secured creditor (assuming that there is no other competing secured creditor that has a better claim to that asset). If the debt owed to the secured creditor cannot be wholly satisfied be the sale proceeds of the secured asset, then an unsecured claim in the liquidation for the balance can be made.

[13] Creditor satisfaction is the principle duty of a liquidator (section 253 of the Companies Act 1993).

## The status quo: uncertain treatment of property rights

The protection of property rights is uncertain in New Zealand's current bank resolution framework, and there is no mechanism to compensate creditors whose property rights might be affected or displaced by resolution actions.

The Reserve Bank Act's statutory mechanisms for dealing with failing banks – such as statutory management – prioritise the need to maintain public confidence and avoid significant damage to the financial system over preserving the creditor hierarchy or maintaining creditors' position in a recognised rank, although those are listed as considerations.[14] For example, debts incurred in statutory management rank ahead of pre-existing debts in any subsequent winding up, and the statutory manager has discretion to pay creditors in any priority.[15]

Parliament's Finance and Expenditure Committee, when reporting back on its consideration of the Reserve Bank of New Zealand Amendment Bill in December 1986, indicated unease among its members with the proposal to override creditor rights under statutory management. That unease was only appeased with a compromise that "the trustee under the deed that had existed and protected depositors would also be taken on board the advisory council of that statutory manager, and would have input into the control that would then be managed by the statutory manager" (New Zealand Parliamentary Debates, 1986, pp. 6068-6069). However, a narrowed version of the Committee's creditor safeguard concept as it came to be reflected in the final 1986 Act was lost altogether in the 1989 Act where no guidance was provided around membership of a statutory manager's advisory committee.[16]

As a result, New Zealand's current crisis management tools in the Reserve Bank Act provide the statutory manager with discretion to interfere with property rights. For example, the Reserve Bank's Open Bank Resolution (OBR) tool uses that discretion to allow certain creditors' claims to be 'unfrozen' (in whole or part) from an automatic moratorium and later transferred – along with the failed bank's remaining high-quality assets – to a new business that may be owned and operated by the statutory manager, at least in the interim while the bank's final resolution or sale is being determined. Creditors whom the statutory manager decides to leave behind must claim for repayment from the failed bank's remaining 'bad', low-value assets. These creditors could be left worse off than if the bank had been allowed to go into normal insolvency. If worse off, they will have effectively subsidised 'unfrozen' creditors, depending on the way the statutory manager chooses to transfer assets and unfreeze claims in any given situation.

The current situation makes it difficult to determine exactly how a failed bank's remaining value would be allocated among its creditors (including depositors) and shareholders. This uncertainty can have practical adverse implications. For example, Australian parent banks have been an important source of funding for New Zealand's four largest banks. However, since 2016 Australian parent banks

[14] Section 121 of the Reserve Bank Act creates an obligation on the statutory manager to only "have regard" to preserving the position and maintaining the ranking of creditors, rather than a requirement to act always in accordance with the hierarchy.

[15] The statutory manager does not have *carte blanche* discretion, though. The statutory manager must have regard to public confidence, financial system function, the speed of resolution, advice from the Reserve Bank, and the position and ranking of creditors, and act under the implicit oversight of the Reserve Bank and Minister, who at all times remains accountable to Parliament.

[16] Nor did the 1986 safeguard get carried over into the Corporations (Investigation and Management) Act 1989, which provided for statutory management of institutions previously covered under the 1986 Act but no longer covered under the Reserve Bank 1989 Act.

have been required by Australian authorities to reduce by 2021 their non-equity exposures to New Zealand banks. In addition, the only type of *contingent* funding support for New Zealand subsidiaries from the parent currently permitted by Australian authorities are loans collateralised by covered bonds – that is, bonds that are among the least vulnerable to loss absorption.[17]

Further, creditors left worse off could potentially seek redress through the 'voidable transactions' provision of the Companies Act 1993, whereby a subsequently appointed liquidator could attempt to unwind certain transactions made under statutory management, creating potential significant fiscal risk for the government through Crown indemnities.[18]

Departing from ordinary insolvency processes is not unusual internationally. Special open bank resolution processes *exist* to depart from ordinary closed-bank insolvency processes. However, New Zealand *is* unusual in not compensating creditors who are left worse off than they would have been in a normal insolvency.

## Best-practice solution: 'no creditor worse off' (NCWO) compensation

International best practice as reflected in the FSB *Key Attributes* includes having built-in creditor 'safeguards', including:

- clear 'public interest' thresholds to restrict the way resolution tools can be used[19]
- providing creditors with a right to compensation if they do not receive at least what they would have received in liquidation under the applicable insolvency regime.[20]

### The rationale for the 'no creditor worse off' principle

NCWO compensation is the difference between the value that creditors received in a special bank resolution and the estimate of what they would have received had the failed bank been put through a normal liquidation. But is there any justification for providing compensation at all?

There is a credible argument that, given the existence of a special bank resolution regime in New Zealand and the lack of creditor safeguards, bank creditors knowingly assume the risk of an alternative resolution that departs from normal insolvency procedures, and therefore shouldn't expect compensation when those risks crystallise.

[17] A covered bond is a bond where the holder's right to payment is legally secured by specific bank assets.

[18] Section 292 of the Companies Act 1993 provides that a transaction is voidable by a liquidator if the transaction:
- was made at a time when the company was unable to pay its due debts
- was made in the two years before the commencement of the liquidation or the two years before the making of an application for the court to put the company into liquidation, and
- enables another person to receive more towards satisfaction of a debt owed by the company than the person would receive, or would be likely to receive, in the company's liquidation.

[19] FSB Key Attribute 5.1 states that it is permissible for resolution regimes to depart from the creditor hierarchy if necessary to contain the potential systemic impact of a bank's failure or to maximise the value for the benefit of all creditors as a whole – but authorities should be transparent about the reasons for doing so.

[20] FSB Key attribute 5.2.

However, several arguments can be made in favour of providing NCWO compensation:

i. The application of the NCWO principle encourages the resolution authority to apply resolution tools in a way that is at least as effective as the use of available tools in a normal insolvency process (such as liquidation). NCWO forces the resolution authority to be conscious of additional costs of resolution decisions, and to discuss those costs with the government.

ii. If the principle were not applied, the resolution authority would not (or not to the same extent) be subject to the legal checks and balances that ought to be required to justify government intervention.

iii. It is not necessarily fair that a bank's shareholders or creditors should bear the risk of being wiped out to a greater extent than they would under normal insolvency rules, simply because an alternative resolution regime has to be applied to safeguard the common good of preserving the general financial infrastructure.

iv. If shareholders and creditors were at risk of being wiped out to this greater extent and the risk were not capped in any way, they could not adequately assess that risk – which might undermine the institution's ability to attract equity and debt capital in the financial markets.

v. In reality, no other mechanism achieves fairness in the same recognisable, objective way. The principles underlying insolvency procedures (admittedly with many differences across various national regimes) have been developed over many decades and have been tried and tested (de Serière and Houwen, 2016).

Creditor safeguards like NCWO are separate from (but can interact with) depositor protections. Both try to give bank stakeholders better clarity on how they will be treated in a bank failure. Many countries have NCWO regimes but have also altered their creditor hierarchies to clearly rank depositors ahead of unsecured creditors like bondholders. As most jurisdictions have deposit insurance to protect most retail depositors' interests, NCWO safeguards in practice typically apply to more sophisticated creditors such as bondholders.

The NCWO safeguard can assure these creditors that their fundamental rights will be respected, and allow resolution authorities to act swiftly and decisively knowing that actions that upset creditors' rankings can be offset with compensation. NCWO can:

- help both creditors and resolution authorities to make sensible decisions before, during, and after resolution
- help investors to price and manage risks
- support the efficient allocation of resources
- in the aftermath of a resolution, help to maintain confidence in New Zealand's financial markets.

NCWO compensation is also a check and discipline on resolution authorities, requiring them to test the value of their planned resolution actions against the liquidation alternative.

NCWO compensation is not without challenges. Careful before-and-after valuations are required so that compensation – if any – can be determined in a way that stands up to challenge and scrutiny. However, arguably a resolution authority should be undertaking such analysis anyway to ensure that the chosen resolution strategy is effective in minimising the costs of resolution and avoids unnecessary destruction of value.

While not necessarily equating to NCWO compensation, in Australia the government is liable under the Australian Constitution and the Financial Sector (Transfer and Restructure) Act 1999 to pay compensation to a person where the operation of APRA's transfer of business powers under the Act have resulted in the acquisition of that person's property other than on 'just terms.'

NCWO compensation also requires a resolution funding source (see the discussion in Chapter 5 of Consultation Document 2B). On the other hand, World Bank case studies of EU resolutions after the GFC 'appear to confirm the assumption that losses are substantively lower under special resolution regimes than under a hypothetical liquidation' (World Bank, 2016, p. 2), suggesting that actually paying out NCWO compensation may often not turn out to be necessary.

## Summary and next steps

Investors' treatment under New Zealand's current crisis management framework creates uncertainty that could cause underinvestment in New Zealand banks. Other jurisdictions have sought to reduce investor uncertainty in resolution, while still allowing for flexible resolution actions, by installing safeguards that leave no creditor worse off in resolution than they would have been in an ordinary liquidation. This is the approach recommended by the FSB. Investor uncertainty will remain as long as resolution authorities can interfere with property rights and alter the hierarchy of investor claims in resolution, without compensation.

If New Zealand were to design an NCWO safeguard, it would need to ensure that it:

- is practical
- provides reasonable certainty of outcomes in advance, without unduly constraining the resolution authority's flexibility to act
- avoids creating operational challenges that are overly onerous, making officials incapable of undertaking a resolution of anything but a very small and simple bank
- considers creditors' ability to challenge NCWO outcomes.[21]

[21] NCWO is intended to mitigate the risk of legal challenge from creditors who have been made worse-off. However, there is a possibility that the NCWO valuation itself can be challenged in court (e.g. the disputed valuation of Banco Popular Espanol in 2017). Other jurisdictions give creditors constrained recourse to appeal the level of compensation to a tribunal and/or through court proceedings.

# V. Bail-in as a resolution tool

A variety of resolution tools should be available to a resolution authority so that, in the event of a bank failure, the resolution approach that is chosen best suits the particular circumstances of the failing bank and prevailing market conditions. Resolution toolkits in other jurisdictions commonly include:

- **modified insolvency/liquidation**, where the wind-down seeks to protect insured depositors in the first instance
- effecting **private sector acquisitions**, where parts of the bank can be sold to one or more purchasers without requiring the consent of the failed bank's shareholders
- **transferring business to a temporary structure** (such as a 'bridge bank'), to preserve essential banking functions or to maintain parts of the business pending acquisition by a private sector entity. A transfer could be achieved through an assets and liabilities transfer, or a share/ownership transfer
- **separating clean from impaired assets** through a partial transfer of assets and liabilities, including transferring impaired assets to a special asset management vehicle
- **bail-in** – the writing down and/or conversion to equity of debt instruments.

Each of these tools might be used in isolation or in conjunction. For example, a bail-in to recapitalise a failed bank might be used in conjunction with (and to incentivise) a private sector purchase transaction.

Bail-in is a tool that is increasingly being adopted internationally in response to lessons from the GFC and as one of the recommended tools in the FSB *Key Attributes*. The FSB's 2018 report on implementation of resolution reforms noted that 10 FSB member jurisdictions[22] had implemented bail-in powers and a further six[23] had relevant reforms under development (FSB, 2018a, p. 19-20).

The concept of bail-in, however, existed long before the GFC. In New Zealand, the concept was explored as an option by the Reserve Bank as early as 2001 under the term 'bank creditor recapitalisation' (and was the forerunner to today's 'OBR' option):

> *"In the bank creditor recapitalisation case, creditors may recover some or all of their haircut from the subsequent sale of the bank. To the extent bank creditors have become the shareholders of the recapitalised bank, they might have all the rights of ordinary shareholders and indeed might sell their shares at a profit… A credible regime to recapitalise the bank using depositors' and other creditors' money possibly offers a policy option that might be preferable to nationalisation"* (Reserve Bank of New Zealand, 2001).

[22] Canada, France, Germany, Hong Kong, Italy, Netherlands, Spain, Switzerland, UK, and the US.

[23] Brazil, Korea, Saudi Arabia, Singapore, South Africa, and Turkey.

## What is bail-in?

The main aim of bail-in is to stabilise a failing bank so that its essential services can continue, without the need for bail-out by public funds. Stabilising a distressed bank, absent government support (such as guarantees), requires two things: for losses to be absorbed and for the bank to be recapitalised. Bail-in enables a failing bank to be recapitalised through the write-down of liabilities and/or their conversion to equity so that the bank can continue as a going concern. Stabilising a failing bank in this way avoids disruption to the financial system that would likely be caused by stopping or interrupting the bank's critical services, gives markets confidence to engage with the newly recapitalised bank, and gives the authorities time to reorganise the bank or wind down parts of its business in an orderly manner – an 'open bank resolution'. In the process, shareholders should be severely diluted or wiped out, and management may be replaced.

Bail-in can be triggered in one of two ways: through statutory bail-in powers or through contractual provisions.

### Statutory bail-in

Statutory bail-in means authorities have the statutory power to bail in eligible liabilities. New Zealand authorities do not currently have this power. Other jurisdictions generally do not apply it to deposits protected by a deposit insurance scheme, short-term inter-bank lending or claims of clearing houses and payment and settlement systems, client assets, operating liabilities, or liabilities such as salaries, pensions, or taxes (European Commission, 2014, p. 8). Certain liabilities could be excluded on a case-by-case basis, if necessary to ensure the continuity of critical services or to prevent widespread and disruptive contagion to other parts of the financial system, if they cannot be bailed in in a reasonable timeframe, or if bailing them in would destroy more value than it retains.

Creditors and investors who have been bailed in would either see their debt claim written down (to absorb losses) or converted to an equity interest (to recapitalise the failed bank).

As a general principle, the process of write-downs and/or conversion should respect the allocation of losses and ranking in an ordinary insolvency. Equity (from existing shareholders) should absorb losses in full before any debt claim is subject to write-down or conversion.

NCWO compensation may be necessary if a bail-in leaves some creditors or investors worse off than they would have been had the failed bank been immediately placed into liquidation.

### Contractual bail-in

A distinction can be made between debt instruments that may be written down or converted by authorities using statutory powers in resolution, and ‘contingent convertible’ instruments (often known as ‘CoCos’) that convert automatically when a certain condition is met – for example, if the bank’s capital falls below a certain contractually specified threshold. The latter is known as ‘contractual bail-in’, because the in-scope creditors and investors have contractually agreed to be bailed in when specified threshold conditions have been met.

Loss absorption and conversion through contractual provisions may reduce the requirement for NCWO compensation. In the EU, at least, ‘conversion of the CoCos does not require the application of the NCWO principle, because these instruments contain a contractual clause according to which the creditors have accepted that their debt will convert into equity when certain conditions occur. In this case, the conversion is an effect of the clause and not of the statutory action of public authorities' (European Banking Authority, 2016).

In its recent crisis management reforms, Australia has emphasised contractual bail-in rather than pursuing statutory bail-in. Contingent convertible bonds are relatively new and their convertibility relatively untested. Their inherently complex structure has raised concerns around potential legal impediments to triggering their conversion provisions (Australian Treasury, 2014, pp. 4-5). As part of its 2018 crisis management legislation, Australia has therefore sought to provide increased certainty in relation to the conversion and write-off of capital instruments, including amendments to provide that conversion or write-off can happen despite any impediment that may exist in other laws, company constitutions, other contracts, or financial market listing rules.[24]

The FSB and the IMF recommend that statutory bail-in be included in resolution toolkits, rather than relying on contractual loss absorption and conversion alone. The IMF notes that, without the statutory power to bail in, the requirements for increasing loss-absorbing capacity are likely to be higher, with potentially relevant cost implications (IMF, 2019, p. 24).

For the bail-in tool – whether statutory or contractual – to be a credible resolution tool, it is necessary to ensure that there are sufficient 'in-scope' liabilities at the point when a resolution authority determines that a bank meets the conditions for resolution and that writing down or converting the debt of the bank would be in line with the objectives of resolution. International bodies such as the FSB have prepared guidance on loss-absorbing and recapitalisation capacity for systemically important banks (FSB, 2015b). In the EU, banks are required to meet a 'minimum requirement for own funds and eligible liabilities' (MREL) so as to be able to absorb losses and restore their capital position, allowing banks to continuously perform their critical economic functions during and after a crisis.[25]

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[24] See Financial Sector Legislation Amendment (Crisis Resolution Powers and Other Measures) Act 2018.

[25] See https://srb.europa.eu/en/content/mrel

# VI. Challenges to resolution – international experiences

Internationally, a large body of material has been, and continues to be, produced on bank resolution. The FSB in particular has produced extensive guidance material for authorities on various aspects of resolution planning and execution.[26]

This section of the paper canvasses some of the challenges to resolution.

## Resolvability assessments

Resolution powers alone may not be enough to ensure the effective resolution of a failed bank. A resolution authority needs to be confident, in advance of a bank failure, that the likely resolution strategy is:

- feasible – the resolution authority must have the powers and the practical capacity to apply them
- credible – the preferred strategy does not lead to unacceptably adverse broader consequences for the financial system and the real economy.

An assessment of a resolution strategy's feasibility and credibility is known as a 'resolvability assessment'. It involves identifying any impediments to resolution and determining the actions necessary to achieve greater resolvability (FSB, 2014, p. 37).

The FSB *Key Attributes* recommend resolvability assessments for all G-SIBs, at a minimum. In practice, many jurisdictions identify preferred resolution strategies, develop resolution plans, undertake resolvability assessments, and identify and reduce barriers to resolution for all entities covered by their resolution regime.

In EU jurisdictions that have implemented the BRRD, resolution authorities are legally required to address any barriers that resolvability assessments identify in preferred resolution approaches. Although this would ordinarily be done in co-operation with the banks concerned, in many jurisdictions the resolution authority has the legal power to require action, where necessary, to remove barriers to resolution. These powers include 'early intervention' measures to commission external 'skilled persons' to review a bank's systems and resources, or to remove directors. Powers like these align with the FSB *Key Attributes*.

## Common barriers to resolution

A set of common barriers to resolution has been identified during the resolvability assessment process for G-SIBs. These barriers are broadly grouped as:

- **financial barriers** – these include the availability, location, and quality of the financial resources necessary to stabilise a bank in resolution (the 'loss-absorbing and recapitalisation capacity') and

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[26] See https://www.fsb.org/work-of-the-fsb/policy-development/effective-resolution-regimes-and-policies/understanding-the-key-attributes/

the availability of and access to other sources of financing and liquidity, for example from the markets, the central bank, or the government

- **legal barriers** – these include the cross-border effectiveness of home resolution actions, the recognition and enforceability of foreign resolution actions, the risk of a disorderly close-out of financial contracts, and the risk of triggering cross-default clauses on entry into resolution

- **operational barriers** – these create a risk that a bank in resolution will not be able to continue operating as expected, or that its customers will not be able to access the essential economic and financial functions that the bank ordinarily provides to them.

  Impediments to operational continuity could include a lack of assured access to critical service providers and the functions that support them – such as staff, IT, risk management, accounting, and payment systems, and other FMIs. Resolution authorities around the world increasingly acknowledge that continuity of access to banking services, even for customers of non-systemically important banks, is necessary for preserving confidence in the financial system. This makes it critically important to address operational barriers to resolution

- **structural barriers** – these are impediments to restructuring a failed bank to address the causes of its failure. They include operating or legal structures that might prevent business lines being separated and sold to a private sector acquirer, or prevent parts or all of the bank's business being transferred to a temporary bridge bank

- **informational barriers** – these are impediments to resolution authorities' ability to identify and diagnose issues at the failing bank, to assess the nature and extent of those issues accurately, or to address the issues within resolution timeframes. This could happen if banks do not have robust information management systems in place, or if officials do not have enough information (collected in the normal course of business) about a bank's business model, operating and funding structures, customers and counterparties, and interlinkages with the broader financial system

- **cross-border authority issues** – these are barriers to effective co-operation and coordination with foreign resolution authorities.

Progress towards addressing these barriers to resolution is variable, with international guidelines and standards agreed for only some. Progress so far is outlined below.

## Financial barriers

### Resolution funding

The FSB *Key Attributes* state that resolutions should be funded (e.g. for loss absorption and recapitalisation) primarily by a bank's shareholders and creditors, rather than exposing taxpayers to loss.

Banks need the financial resources to allow this to happen. For example, bail-in is only feasible if there are enough liabilities to absorb losses fully and recapitalise the bank. If too many liabilities are excluded from the resolution process, public funds might be required to meet the balance. In New Zealand, only covered bonds are excluded from bearing losses in resolution. Other jurisdictions also exclude insured deposit liabilities, operating liabilities, and short-term debt liabilities.

To ensure that they have sufficient financial resources to implement a resolution, all G-SIBs (at a minimum)[27] are required to meet Total Loss Absorbing and Recapitalisation Capacity (TLAC) requirements for the quantity, quality, location, composition, and subordination of resources earmarked for bail-in (FSB, 2015b).[28] Cross-border banking groups need to allocate internal resources across the groups to allow losses to flow up to the bank in resolution, and for capital to flow down to any operating entities and material subsidiaries. In this way, the bank in resolution acts as a source of loss absorption and recapitalisation for material subsidiaries, avoiding their needing to enter resolution.

Both debt and equity can contribute to a bank's loss-absorbing capacity, as long as they meet certain requirements. In theory, any liability not explicitly excluded from bail-in can absorb losses and/or convert to equity in resolution. However, TLAC-eligible resources must be *easily* convertible, as well as ranked lower in the creditor hierarchy than any liability explicitly excluded from bail-in (e.g. insured deposits).

Common equity clearly satisfies this requirement as the first in line to bear losses. For debt to be counted towards TLAC, it must be subordinated. Subordination can be:

§ structural – that is, junior debt, senior unsecured debt issued from a holding company,[29] or a new class of debt such as that which has been developed in Europe to meet BRRD resolution requirements ('senior non-preferred' debt)

§ contractual – through bail-in clauses written into the terms and conditions of senior unsecured debt, or

§ statutory – such as a German law implemented in 2015 which, in cases of insolvency, subordinates the senior unsecured securities of all German banks with full banking licenses to the bank's other senior unsecured liabilities.

Debt with a maturity of less than one year, while potentially bail-in-able, should not contribute to TLAC under the FSB's TLAC principles. This recognises the risk that a creditor run in the lead-up to resolution, and the inability to roll over short-term borrowing, could hinder the execution of the preferred resolution strategy. The 'runway' period into resolution is likely to be short (the United States models a 30-day period), so the maturity restriction on eligible debt helps to ensure that the debt on issue will remain available to bail in at the point of resolution.

Loss-absorbing capacity requirements differ across resolution strategies. As a rough guide:

§ a **bail-in** might require banks to have loss-absorbing capacity in normal times significantly higher than their minimum regulatory capital requirements. The BoE has developed a rough rule of thumb, requiring loss-absorbing capacity in normal times to be twice the regulatory capital

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[27] Some jurisdictions have extended minimum loss-absorbing capacity requirements to *all* banks covered by their resolution regimes. For example, from January 2016 minimum requirements for own funds and eligible liabilities (known as 'MREL') had to be set for all banks covered under the European BRRD (with a four-year transition period).

[28] In November 2015 the FSB issued the final TLAC standard for G-SIBs, requiring a minimum of 16 percent of risk-weighted assets by 2019 and 18 percent by 2022 (or 6 percent and then 6.75 percent as a leverage ratio).

[29] For example, in a holding company/operating company structure, debt issued from the holding company is structurally subordinated to similarly-ranked operating company debt, which in principal should allow the banking group to be recapitalised via bail-in at the holding company, without any impact on operating liabilities.

requirement. This approach was based on the assumption that any regulatory capital pre-resolution would be fully wiped out in absorbing losses, and that the bank would have to be recapitalised post-resolution to a level that satisfied minimum regulatory capital requirements. The Australian Prudential Regulation Authority (APRA) took a similar approach in its recent consultation on increasing the recapitalisation capacity of Australian banks (APRA, 2018)

§ a **transfer of business** requires a bank to have enough financial resources to absorb losses and generate enough capital to make the acquisition by another entity commercially attractive (and at least be non-capital dilutive)

§ a **closed bank resolution** (i.e. an insolvency/liquidation process) involves winding up the bank in resolution so the bank does not require any capital to continue as a going concern. For this kind of resolution, a bank would not need to have loss-absorbing capacity in excess of its regulatory capital requirements.

Under the BRRD, loss-absorbing requirements are set in coordination with supervisors' capital adequacy assessment processes, given the potential impacts of the requirements on a bank's business plans and issuance programmes. A breach of loss-absorbency requirements triggers an assessment of whether the bank is failing or likely to fail. An inability to access financial markets for a sustained period due to a bank-specific issue will most probably trigger an assessment against the general conditions for resolution.

### Resolution liquidity

In 2014 the FSB identified that the provision of temporary funding in resolution was an issue that needed to be addressed to complete the FSB's SIFI reform agenda. According to the FSB, the risk of insufficient liquidity to maintain critical operations is a material impediment to resolving systemically important banks (FSB, 2016, pp. 5-6).

Recapitalisation of a failed bank in resolution is not, by itself, enough to ensure the continuity of its critical functions if it cannot maintain access to liquidity to refinance its liabilities as they fall due. Even with a successful recapitalisation, poor market confidence may cause private participants to refrain from providing new liquidity, and existing creditors may be motivated not to renew existing funding. The bank would then require a public sector liquidity backstop to allow it to pay its debts as they fall due and continue operating during post-resolution restructuring.

In an international work programme in 2015-16, the FSB developed a set of guiding principles on temporary resolution funding (FSB, 2016). These principles identify ways to encourage access to private sector liquidity, the roles and types of temporary public backstop mechanisms, and elements of these mechanisms that support the minimisation of moral hazard.

Chapters 4 and 5 of Consultation Document 2B note that banks likely to be insolvent should not be able to access central bank lender of last resort (LoLR) facilities, but that banks in resolution with uncertain solvency prospects may need emergency liquidity assistance (ELA). For example, a failed bank may need ELA to continue undertaking critical functions while a bridge bank is created.

A central bank should not normally lend to an institution where solvency might be in doubt. However, the FSB concluded that, if market access to funding is not available or sufficient, credible public sector backstop mechanisms (which may include a central bank facility) should be in place to enable a bank's temporary funding needs to be met to the extent necessary to maintain critical functions while it is in resolution. The IMF, too, notes that central banks should be able to provide ELA to a bank in resolution as long as certain safeguards are met (IMF, 2018, p. 8).

FSB-recommended conditions for access to ELA in resolution include:

- a determination of viability based on a well-developed and implementable resolution plan for recapitalising, stabilising, and restructuring the failed bank
- funding being made available only to the extent that:
  - market access to funding is temporarily unavailable or not sufficient to achieve an orderly resolution
  - such funding is necessary to foster financial stability and enable successful implementation of the preferred resolution strategy
- the inclusion of strict conditions to minimise moral hazard risk (e.g. intensified supervision and exit incentives)
- a provision to recover any losses incurred, either from shareholders and unsecured creditors (subject to the NCWO safeguard) or from the financial system more widely, if necessary.[30]

ELA in resolution may also need to be backed by a government indemnity or a guarantee if there is uncertainty over the failed bank's ability to repay it. In New Zealand, the Reserve Bank Act already provides the Reserve Bank with a standing government indemnity. The Crown balance sheet would therefore automatically be exposed if ELA were extended without prudent collateralisation or certainty about the bank's ability to repay.

One option for dealing with this exposure would be to require the Minister of Finance's approval for the Reserve Bank to provide *any* ELA in a resolution situation, or of any liquidity support that does not meet the normal criteria for the central bank's standing LoLR facility. ELA should also be clearly distinguished from LoLR to avoid stigmatising LoLR by associating it with a risk the recipient is insolvent – see Chapter 4 of Consultation Document 2B and Tucker (2014a).

There could also be a case for the Minister to issue standing approvals to lend in cases where the need for ELA is urgent. This would be similar to the standing foreign exchange intervention approval issued by the Minister to the Reserve Bank (see Chapter 4 of Consultation Document 2B).

Pre-established resolution funds can also help to provide liquidity during resolution. In Europe, for example, the Single Resolution Fund (SRF) can provide resources to ensure the ongoing operation of a bank in resolution, such as extending loans, purchasing assets, and providing guarantees. The SRF is funded by industry contributions, with a target ex-ante lending capacity of 1 percent of covered deposits (€55 billion by 2022). The SRF's contribution is capped at 5 percent of a bank's total liabilities at the time of resolution.

In the UK, the deposit guarantee scheme – the industry-funded Financial Services Compensation Scheme (FSCS) – is also the resolution fund. Alternatively, given the FSCS's currently limited capacity, the BoE as lender of last resort may extend temporary liquidity, indemnified by the Treasury. Such lending can only be extended on the basis that bail-in had restored the institution to long-term

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[30] Recovery of temporary public funding could also be facilitated by giving such lending priority in the insolvency of the bank.

viability, and would be highly collateralised (preferably by a fixed charge, although potentially via a floating charge against the balance sheet).

## Legal barriers

### Cross-border effectiveness of resolution actions

Some resolution actions depend on a foreign authority recognising the resolution authority's actions. In particular, haircutting or bailing in foreign-held debt instruments requires the relevant power to be recognised by authorities (including courts) in the jurisdiction in which the debt instruments are held or on contractual recognition by the debt holder.

The EU's BRRD requires financial institutions established in EU member states to include contractual terms in any agreements governed by the laws of non-EU countries that create certain payment and other liabilities, specifying that those liabilities may be subject to bail-in under the BRRD.

### Disorderly close-out of financial contracts

Entering resolution is commonly listed as a trigger for the early termination or close-out of financial contracts. However, early termination of financial contracts can undermine an orderly resolution. The International Swaps and Derivatives Association 2015 Universal Protocol (accompanied by other supporting country-specific protocols such as the 2016 BRRD Bail-in protocol and the 2018 US Resolution Stay protocol) imposes temporary stays on early close-outs of certain financial contracts (specifically, 'over the counter' derivative contracts and securities financing transactions). Broad adherence to the protocol is necessary for it to be effective: although nearly 400 global organisations on the sell- and buy-sides have signed up to the universal stay protocol,[31] in 2015 the FSB continued to cite cross-border effectiveness as one of the remaining obstacles to resolution (FSB, 2015a). In 2018 noted that ensuring that temporary stays on early termination rights in financial contracts have effect across borders continues to be a priority for making G-SIBs resolvable (FSB, 2018a).

## Operational barriers

### Continuity of access to FMIs and other critical service providers

Operational barriers are the subject of a number of workstreams underway among international bodies such as the FSB. They include work to:

- establish resolution-proof contracts for services that support critical functions – such as IT, treasury, trading and transaction processing, risk management, audit, human resources, and legal services – that do not identify resolution as grounds for termination
- embed continuity principles into FMI scheme rules.

The FSB recommends that, unless otherwise agreed with the resolution authority, a bank's contingency plan should seek to ensure that access to critical FMI services is continued in resolution. Such continuity cannot, however, be guaranteed and there remains a risk that a bank's access will be terminated or suspended.

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[31] See https://www.isda.org/protocol/isda-2015-universal-resolution-stay-protocol/adhering-parties

The bank's contingency plan should:

- include a high-level impact analysis of the consequences of any termination or suspension of the bank's access to critical FMI services on its ability to perform its critical functions
- identify potential actions for mitigating these impacts, including their feasibility and time to implement (FSB, 2017).

Under the BRRD a resolution authority has the power to prevent a member being expelled from an FMI merely because it has entered resolution, and to require an FMI to allow the resolution entity continued access to the scheme even where it does not meet normal member requirements – for as long as 24 months.[32]

## Structural barriers

### Separability of business lines

Banks' interconnectedness and complexity are key risks to continuity in resolving shared services that support critical functions, as well as to post-resolution business restructuring to address the causes of failure.

Reliance on separability depends in part on the resolution strategy to be adopted in a given case. For example, splitting a bank into its critical and non-critical parts, with the former transferred to a bank purchaser and the rump going into receivership, requires the critical and non-critical activities to be identified ex ante and that they can be disentangled in the heat of a crisis (Tucker, 2014b, p. 2).

In the UK, structural reform rules came into effect on 1 January 2019 requiring ring-fenced bodies (RFBs) to operate a sibling structure of subgroups under a parent holding company.[33] Under this arrangement:

- a ring-fenced subgroup is responsible for undertaking the bank's core services (deposit-taking activities, transactional account services, and overdraft facilities)
- the RFB is prohibited from undertaking 'excluded activities', such as dealing in investments as principal, trading in commodities, or incurring exposures to certain other financial institutions. These activities must be carried out by an entirely separate subgroup entity[34]
- the RFB may only receive shared services from an entity in its own subgroup, or from a dedicated intragroup service entity whose services will not be affected in the event of resolution.[35]

This arrangement provides operational continuity in resolution and, by delineating operational subsidiaries, assists post-resolution restructuring.

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[32] Under the Reserve Bank's OBR, continued access to the payments system has been worked out with Payments NZ and industry, including the treatment of inflight transactions (i.e. during the period of time when the access channels to a failed back are closed and the statutory manager steps in). Continued access requires a guarantee from the government or the Reserve Bank. The development of a wider FMI regulatory regime in New Zealand is currently in progress.

[33] See https://www.bankofengland.co.uk/prudential-regulation/key-initiatives/structural-reform for further information.

[34] The UK Treasury reserves the right to specify other 'excluded activities' that it considers would pose a risk to the provision of core services.

[35] This is similar to what the Reserve Banks seeks to achieve under its outsourcing policy.

## Information

### Ability to perform a resolution valuation

Work on resolution valuation is fairly underdeveloped, but it is critical to actions such as bail-in. The European Banking Authority is expected to publish later this year technical guidance that addresses the lack of flexibility in banks' management information systems to enable rapid and accurate valuations.

### Single customer views

For non-systemically important institutions, ensuring a rapid payout of insured deposits under modified insolvency/liquidation proceedings depends on the accurate and timely production of a Single Customer View (SCV) file.[36]

The UK's FSCS carries out both business-as-usual and targeted tests (for banks that supervisors identify as close to failure) to ensure that banks have systems produce files with enough accuracy, timeliness, and independence to implement a bank insolvency resolution. Where testing does not produce acceptable results, banks must take remedial action, proposed by the FSCS and monitored by supervisors. If a bank depends on a third party to produce an SCV file, it must demonstrate that contracts governing IT service provision are resolution-proof.

## Cross-border authority issues

### Co-operation with foreign resolution authorities

Supervisory and resolution colleges and Crisis Management Groups for G-SIBS are addressing international authority issues. Cross-border cooperation is being bolstered with the signing of institution-specific cooperation agreements between G-SIBs' home and host regulators, and (non-legally binding) playbooks that set out the responsibilities of each resolution authority in the event of a cross-border bank failure.

[36] An SCV file is a consolidated view of all deposit accounts in one bank eligible for deposit insurance coverage for a single depositor. Ready availability of SCV files enables faster determination of eligible amounts for reimbursement, and thus facilitates rapid insurance payouts.

# VII. IMF FSAP recommendations

As part of the 2016/17 FSAP, the IMF produced a 'Technical Note' on New Zealand contingency planning and crisis management framework (IMF, 2017a). The Technical Note included several recommendations for making New Zealand's bank crisis management framework more effective and more in line with international best practice (i.e. the FSB *Key Attributes*).

Table 2 sets out the IMF's recommendations for bank crisis management and how this Review has addressed them.

## Table 2: IMF FSAP recommendations on bank crisis management

| FSAP recommendation | Review response |
|---|---|
| 1. Strengthen domestic crisis management arrangements:<br>§ Reach *ex-ante* agreement on roles, responsibilities and decision-making processes | Chapter 5 of Consultation Document 2B proposes clarification of role of the Reserve Bank as resolution authority and of the Minister of Finance |
| § Preposition logistics and communications plans<br>§ Complete initial work on plans to mobilise resources in a crisis<br>§ Complete procedural guidance for appointment of a statutory manager, implementation of OBR and other resolution tool-kit options<br>§ Test domestic preparations in simulation exercises | Operational matters for the resolution authority and other agencies (e.g. the Treasury) |
| 2. Reconsider the merits of deposit insurance | Addressed in the first round of consultation. An in-principle decision has been made to introduce deposit insurance |
| 3. Revise the Reserve Bank Act in line with the Insurance (Prudential Supervision) Act 2010 (IPSA) and the Non-bank Deposit Takers Act (the NBDT Act) to remove the role of the Minister in issuing directions | Included in Chapter 5 of Consultation Document 2B |
| 4. Revise the Reserve Bank Act to provide greater clarity and certainty in resolution: | |
| § Insert objectives in resolution, including protection of depositors and the public interest | Included in Chapter 5 of Consultation Document 2B |
| § Require accountability reporting against the resolution objectives in both the Reserve Bank Act and IPSA, and NBDT Act when revised as recommended above | Still to be addressed in this Review |

| FSAP recommendation | Review response |
|---|---|
| § Clarify that the Reserve Bank is the sole resolution authority | Included in Chapter 5 of Consultation Document 2B |
| § Insert an express requirement for Ministerial consent for resolutions with fiscal or systemic implications only | Included in Chapter 5 of Consultation Document 2B |
| § Clarify the Treasury's role as a provider of advice to the Minister on Reserve Bank recommendations regarding resolution | No action required. This is the Treasury's role as the Minister's policy department |
| § Provide express bail-in powers to the statutory manager (respecting the hierarchy of claims and subject to NCWO) | Included in Chapter 5 of Consultation Document 2B |
| 5. *Ex-ante* agreement on reporting requirements and decision-making procedures for OBR and other resolution options with fiscal or systemic implications | Still to be addressed in this Review |
| 6. Provide a legal foundation to exempt from continuous disclosure requirements information on resolution if such disclosure would be harmful to effective resolution | Included in Chapter 5 of Consultation Document 2B |
| 7. Legislation should require the Reserve Bank as resolution authority to pursue resolution options not requiring public funds and maximising the recoveries from failed institutions | Proposed process would make use of public funds a last resort |
| 8. The Reserve Bank should be empowered to apply for the appointment of a liquidator | Included in Chapter 5 of Consultation Document 2B |
| 9. Legislation should require the Reserve Bank to specify the systemic risk considerations that warrant the provision of a guarantee to support OBR or possibly some other resolution, or in extraordinary circumstances commitment of public funds to recapitalise a failing institution. The Reserve Bank should be required to provide an assessment of other possible resolution options, and a recommendation to the Minister specifying why use of public funds or a non-least-cost resolution is required for financial stability purposes | Still to be considered in this Review |
| 10. Commitment of public funds or a guarantee requires additional reporting, decision-making and accountability provisions for the duration of the Crown exposure | Still to be addressed in this Review |
| 11. Greater certainty for *de minimis* would be provided by establishing in law a limited depositor preference with *pari passu* for other deposits | Superseded by in-principle decision to introduce deposit insurance |

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