



# Information Paper

## **Domestic systemically important banks in Australia**

December 2013

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## Glossary

ADI	Authorised deposit-taking institution
APRA	Australian Prudential Regulation Authority
APS 110	<i>Prudential Standard APS 110 Capital Adequacy</i>
APS 221	<i>Prudential Standard APS 221 Large Exposures</i>
ARS 221.0	<i>Reporting Standard ARS 221.0 Large Exposures</i>
Basel Committee	Basel Committee on Banking Supervision
CD	Certificate of deposit
D-SIB	Domestic systemically important bank
EDF	Expected default frequency
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
G20	Group of Twenty
GDP	Gross Domestic Product
G-SIB	Global systemically important bank
HLA	Higher loss absorbency
IMF	International Monetary Fund
Level 3	Supervision of conglomerate groups
OTC	Over-the-counter
PCR	Prudential Capital Requirement
RCAP	Regulatory Consistency Assessment Program
Repos	Repurchase agreements
SIFI	Systemically important financial institution

## Chapter 1 – Introduction

In November 2011, the Basel Committee on Banking Supervision (Basel Committee) issued its framework for dealing with global systemically important banks (G-SIBs).<sup>1</sup> The G-SIB framework was developed in the aftermath of the global financial crisis, in response to the wide-ranging impact that the failure and impairment of a number of large, global financial institutions had on the global financial system and, in turn, the global economy. As a consequence, public sector intervention to restore financial stability during the crisis was necessary.

Systemically important financial institutions (SIFIs) are institutions of such size, market importance and interconnectedness that their distress or failure would cause significant dislocation in the financial system and adverse economic consequences.<sup>2</sup> The ‘too-big-to-fail’ problem arises when the threatened failure of a SIFI leaves public authorities with no option but to bail it out using public funds to avoid financial instability and economic damage.<sup>3</sup> As the Basel Committee argued, the moral hazard associated with implicit guarantees derived from the perceived expectation of government support can encourage SIFIs to take excessive risks, reduces market discipline and creates competitive distortions, further increasing the probability of distress in the future.<sup>4</sup> As a result, the direct cost of support associated with moral hazard is borne by taxpayers, representing a large and unacceptable implicit public subsidy of private enterprise.<sup>5</sup>

The G-SIB framework responds to the strongly held view of the Group of Twenty (G20) leaders, including Australia, that no financial firm should be ‘too-big-to-fail’ and that taxpayers should not bear the cost of resolution. The policy measures for G-SIBs aim to address the moral hazard that arises from the perception that certain firms are too big or too interconnected to fail. The measures include a requirement that banks identified as G-SIBs have a greater capacity to absorb losses through higher capital requirements. No Australian bank is on the current list of G-SIBs.

The ‘too-big-to-fail’ problem exists not only at the global level but also at the national level. As the Basel Committee noted, there are many banks that are not significant at the global level but could, if they were to come under stress, have an important impact on their domestic financial system and economy. Accordingly, the G20 Leaders considered it appropriate that the Basel Committee and the Financial Stability Board (FSB) review ways to address the potential adverse effects posed by systemically important banks at a domestic level.<sup>6</sup>

In October 2012, the Basel Committee finalised its framework for dealing with domestic systemically important banks (D-SIBs).<sup>7</sup> The D-SIB framework involves a set of principles on the assessment methodology and the higher loss absorbency (HLA) requirement for banks identified as D-SIBs. In line with the G-SIB framework, the D-SIB framework comes into effect from 1 January 2016, and the Basel Committee expects national authorities to introduce any D-SIB requirements into relevant regulation or prudential standards by 1 January 2014.

1 Basel Committee on Banking Supervision, *Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement*, updated in July 2013, at <http://www.bis.org/publ/bcbs255.htm>.

2 Financial Stability Board, *Reducing the moral hazard posed by systemically important financial institutions - FSB Recommendations and Time Lines*, 20 October 2010, page 2.

3 Financial Stability Board, *Progress and Next Steps Towards Ending “Too-Big-To-Fail” (TBTF)*, Report of the Financial Stability Board to the G20, 2 September 2013, page 2.

4 Basel Committee on Banking Supervision, *op.cit.*, page 3.

5 Financial Stability Board, *Progress and Next Steps Towards Ending “Too-Big-To-Fail” (TBTF)*, page 2.

6 See footnote 2.

7 Basel Committee on Banking Supervision, *A framework for dealing with domestic systemically important banks*, October 2012 at <http://www.bis.org/publ/bcbs233.htm>.

To ensure appropriate adherence to the principles of the D-SIB framework, the implementation of this framework within the Basel Committee jurisdictions, including Australia, will be subject to an international peer review programme. The Basel Committee is developing a programme for such a peer review, which will start no later than mid-2015.<sup>8</sup>

This Information Paper outlines the approach that the Australian Prudential Regulation Authority (APRA) intends to take in implementing the D-SIB framework in Australia. Chapter 2 sets out the principles of the Basel Committee's D-SIB framework. Chapter 3 outlines APRA's framework for determining domestic systemic importance and Chapter 4 identifies the banks assessed by APRA to be D-SIBs in Australia. Chapter 5 outlines the methodologies and considerations taken into account by APRA in determining an appropriate HLA requirement for D-SIBs.

The D-SIB framework in Australia focuses only on the larger banks. Other authorised deposit-taking institutions (ADIs), such as smaller banks, credit unions and building societies, though an important part of the competitive landscape, lack the scale and scope of banking activities to be considered within a D-SIB framework.

<sup>8</sup> FSB, *Progress and Next Steps Towards Ending "Too-Big-To-Fail" (TBTF)*, page 16.

## Chapter 2 – Basel Committee framework for D-SIBs

The Basel Committee has developed a principles-based minimum framework for D-SIBs that is compatible with the G-SIB framework. The set of 12 principles is provided in Appendix 1.

Under the D-SIB framework, national authorities are to develop a methodology for assessing the degree to which banks are systemically important in a domestic context. Appropriate national discretion is allowed to accommodate structural characteristics of the domestic financial system, recognising that a local authority is best placed to evaluate the impact of failure on its financial system and economy. An outline of the methodology employed to assess the systemic importance of banks in their domestic economy is to be published and reviewed periodically by national authorities.

### Assessment methodology

The Basel Committee's D-SIB framework is based on the view that systemic importance should be measured in terms of the potential impact of a bank's failure on the economy, rather than the risk that a failure could occur. Hence, to the extent that D-SIB indicators are included in any assessment methodology for determining systemic importance, they should primarily relate to 'impact of failure' measures as opposed to 'risk of failure' measures.

The G-SIB methodology identifies five broad categories of factors that influence global systemic importance: size, cross-jurisdictional activity, interconnectedness, substitutability/financial institution infrastructure (including considerations related to the concentrated nature of the banking sector) and complexity.<sup>9</sup> Among these five categories, cross-jurisdictional activity is not considered to be directly relevant to D-SIBs, since it measures the degree of global (cross-jurisdictional) activity of a bank, which is not the focus of the D-SIB framework.

Consequently, the impact of a D-SIB's failure on the domestic economy should, in principle, be assessed having regard to the four bank-specific factors of size, interconnectedness, substitutability and complexity.

In contrast to the G-SIB methodology, which uses an indicator-based approach and an equal weighting schema, the D-SIB framework provides that a national authority should outline, at a high level, the broad category of factors used to assess the impact of a bank's failure and therefore determine domestic systemic importance. The D-SIB framework recognises that a national authority should have discretion as to the appropriate relative weights given to each factor, depending on national circumstances.

### Higher loss absorbency

The purpose of an HLA requirement for D-SIBs is to reduce the probability of failure compared to non-systemic institutions, reflecting the greater impact a D-SIB failure is expected to have on the domestic financial system and economy. One of the principles underlying the implementation of the HLA requirement is that it should be commensurate with the degree of systemic importance of the D-SIB, as identified by the assessment methodology. Unlike the G-SIB 'bucket' approach<sup>10</sup>, the HLA requirement for D-SIBs is intended to be subject to policy judgement by national authorities. This policy judgement should be informed and guided by both quantitative methodologies (where available) and country-specific factors.

In line with the G-SIB framework, the HLA requirement for D-SIBs is to be met fully by Common Equity Tier 1, which is the simplest and most effective way for banks to increase their capacity to absorb losses on a going-concern basis. The HLA requirement is to be implemented through an extension of the capital conservation buffer, maintaining the division of the buffer into four equal bands of equal size.

The D-SIB framework also emphasises that other policy tools, such as more intensive supervision, can play an important role in dealing with D-SIBs.

<sup>9</sup> See footnote 1.

<sup>10</sup> The extra capital requirement for each G-SIB bucket ranges from 1 per cent to 3.5 per cent of risk-weighted assets.

# Chapter 3 – APRA’s framework for determining domestic systemic importance

APRA’s assessment methodology for D-SIBs takes as its starting point the Basel Committee’s four objective key indicators of systemic importance: size, interconnectedness, substitutability (including considerations related to the concentrated nature of the banking sector) and complexity.

A number of metrics can be used to quantify these indicators. The G-SIB framework uses 12 quantitative measures, but several of these were not considered relevant for determining systemic importance in a domestic context. Measures considered relevant for a D-SIB framework in Australia are discussed below.

## Overview of the four indicators of systemic importance

### 1. Size

The link between the size of an institution and its systemic impact is generally accepted to be a key factor in assessing systemic importance. A bank’s distress or failure is more likely to damage financial markets or the real economy if its activities comprise a large share of banking activity. The larger the bank, the more difficult it is for its activities to be quickly replaced by other banks and therefore the greater the likelihood that its distress or failure would cause disruption to the financial markets in which it operates. The distress or failure of a large bank is also more likely to damage confidence in the domestic financial system and have an impact on the real economy. Size is therefore a key measure of systemic importance.

There are a number of ways in which size can be measured. For example, the FSB has suggested that the size of the balance sheet and off-balance sheet exposures of an institution, the volume of transactions it engages in and processes, and the volume of assets it warehouses or manages are all indicative of the extent to which its business with other institutions and customers will be disrupted and of the magnitude of losses its counterparties may face.<sup>11</sup>

<sup>11</sup> *Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations*, October 2009, prepared by the International Monetary Fund, the Bank for International Settlements and the Financial Stability Board, <http://www.imf.org/external/np/g20/pdf/100109.pdf>.

The Basel Committee’s D-SIB framework specifies that national regulators should assess banks for their degree of systemic importance at the consolidated group level. This is because the activities of a bank outside the home jurisdiction can, if the bank fails, have potential spill-overs to the domestic (home) economy. However, the Basel Committee also acknowledges that cross-border activity may not be as directly relevant as a measure of size at the domestic level since it measures the degree of global activity of a bank, which is not the focus of the D-SIB framework.<sup>12</sup> The systemic importance of a bank for the domestic economy needs to be assessed on the basis of the bank’s domestic footprint. For this reason, and in line with the approach taken by other authorities, APRA considers total resident assets to be an appropriate measure of a bank’s size for the purposes of the D-SIB framework.

### 2. Interconnectedness

Another measure of domestic systemic importance is the degree to which banks have connections to other financial institutions. Interconnectedness increases the risk that financial distress in one institution spills over to and generates financial distress in other institutions, whether they be clients and/or creditors. The greater the number and size of links, the higher the potential for spill-overs onto clients and/or creditors.

The degree of interconnectedness can be measured by using intra-financial system assets and liabilities, and securities outstanding, as indicators. On the broadest definition, intra-financial assets would include lending to financial institutions, holdings of securities issued by other financial institutions, net mark-to-market reverse repurchase agreements (repos), and securities and over-the-counter (OTC) derivatives traded with other financial institutions. Intra-financial system liabilities would include deposits by financial institutions (including undrawn commitments), securities issued by the bank that are owned by other financial institutions, net mark-to-market repos, and securities and OTC derivatives traded with other financial institutions. Interconnectedness may also be

<sup>12</sup> Refer to paragraph 22 of the Basel Committee’s D-SIB framework.

measured by securities outstanding, which include debt securities, commercial paper, certificates of deposit (CDs) and equity market capitalisation. The intention of the latter indicator is to help capture a bank's vulnerability to funding shocks and the risk of spill-over to the broader financial system.

To capture the interconnectedness of banks in terms of intra-financial assets and liabilities, APRA considers loans and advances to financial corporations and deposits from financial corporations to be relevant measures. To capture the amount of securities outstanding, APRA considers three measures to be relevant: short-term securities outstanding (such as repos, promissory notes/commercial paper, other short-term debt securities and short-term loans); long-term borrowings (such as loans and debt securities with a residual term to maturity of more than one year<sup>13</sup>); and the volume of CDs issued. Interconnectedness can also be assessed in terms of large exposures, as reported to APRA under *Reporting Standard ARS 221.0 Large Exposures* (ARS 221.0).

### 3. Substitutability

Some banks may lack immediate substitutes for the banking activities and services they provide. They are systemically important not so much because other institutions are financially exposed to them but because other financial market participants and customers, notably borrowers, rely on them for the continued provision of key services. The systemic importance of a single bank increases in cases where it is difficult for other participants of the financial system to provide, in a timely manner, the same or similar services in the event of a failure. The greater a bank's role in a particular business line, the larger the disruption is expected to be following its failure. At the same time, the cost to the failed bank's customers in having to seek the same service from another institution is likely to be higher for a bank with relatively greater market share in providing the service.

In the global context, three measures of substitutability that have been used are assets under custody, payments activity and underwritten transactions in debt and equity markets. A bank that acts as custodian for a large volume of assets on behalf of customers, or is involved in a large volume of payments activities, is likely to act on behalf of a large number of other institutions and customers (including retail customers). If it were to fail, these other institutions and customers may be unable to process payments, which would immediately affect their liquidity. Similarly, an obligation to purchase unsold securities indicates the reliance that financial market participants have on a bank for the continued provision of that service.

APRA has had regard to these three substitutability measures. In a domestic context, however, the key factor in assessing substitutability is identifying those key services, disruptions to which would have potential to impact on the real economy because of the time and expense involved in finding replacement providers. In Australia, business models of banks are predominantly centred on lending and deposit-taking, with loan portfolios concentrated mainly in lending to the Australian household sector. For this reason, APRA considers loans and advances to households and total domestic lending to be indicative of a bank's substitutability in the domestic market.

### 4. Complexity

Large and interconnected banks are likely to be of greater systemic concern when they are complex. Complexity is often associated with lack of transparency and difficulties in understanding the exposures of the institution. The more complex the business and operations of the bank, the greater the costs and time needed to resolve the bank in the event of a failure, and the greater the uncertainty associated with the resolution.

<sup>13</sup> This includes bonds, debentures, unsecured notes, fixed interest securities, MTNs, inflation-indexed bonds, FRNs, other floating-rate debt securities, asset-backed bonds, non-participating preference shares, subordinated bonds and notes, secured and unsecured borrowings, financial lease arrangements, term loans, mortgages, commercial loans, equity participation in leveraged leases, redeemable preference share finance, and loans due to related parties that are resident entities.

In the global context, three measures used to assess complexity are the notional amount of OTC derivatives, the amount of trading and available-for-sale securities, and Level 3 assets under fair value accounting.<sup>14</sup> In principle, the greater the number and variety of non-centrally cleared OTC derivatives a bank enters into, the more complex its activities. Holdings of trading and available-for-sale securities could also generate spill-overs through mark-to-market losses and subsequent fire sale of these securities in the case an institution experiences severe stress. This in turn can drive down the prices of these securities and force other financial institutions to write-down their holdings of the same securities. Similarly, banks with a high proportion of Level 3 assets on their balance sheets could face severe problems in market valuation in the case of distress, thus impairing market confidence.

To gauge the level of a bank's complexity, APRA has had regard to the notional amount of OTC derivatives and holdings of trading and available-for-sale securities. The OTC derivatives market in Australia is a relatively small share of the global market, with activity mostly focused on Australian dollar-denominated contracts.<sup>15</sup> The majority of this activity is intermediated by a small group of domestic and offshore dealers. APRA also considers that the level of traded assets subject to a market risk capital charge can be indicative of the complexity of a bank's activities.

<sup>14</sup> Level 3 assets are assets whose fair value cannot be determined using observable measures, such as market prices or models. Level 3 assets are illiquid, and fair values can only be calculated using estimates or risk-adjusted value ranges.

<sup>15</sup> *Report on the Australian OTC Derivatives Market*, Australian Prudential Regulation Authority, Australian Securities and Investments Commission, Reserve Bank of Australia, October 2012 at <http://www.rba.gov.au/payments-system/clearing-settlement/otc-derivatives/201210-otc-der-mkt-rep-au/index.html>.

## Summary: Key indicators for measuring domestic systemic importance

A summary of APRA's assessment framework for identifying D-SIBs is shown in Table 1 below. The indicators are compared to the measures used in the G-SIB framework, which provide a useful reference for developing relevant proxies in the domestic context. They are also compared to the indicators used by the International Monetary Fund (IMF) in a Technical Note prepared in the context of the IMF's Financial Sector Assessment Program (FSAP) review of Australia in 2012.<sup>16</sup>

APRA emphasises that the four indicators should not be considered in isolation. At any one point in time, a bank may display characteristics of each indicator but this does not mean that such a bank should be identified as a D-SIB. The assessment of domestic systemic importance needs to encompass all four of the indicators outlined in Table 1.

Table 1

Indicator	G-SIB framework	IMF	APRA's framework
Size	Total exposures	Total resident assets	Total resident assets
Interconnectedness	Intra-financial system assets Intra-financial system liabilities Securities outstanding	Investment securities Wholesale funding Loan/deposit ratio Intra-group exposures	Intra-financial system assets Intra-financial system liabilities Securities outstanding (Short-term securities, long-term borrowings and CDs) Large exposures
Substitutability	Assets under custody Payments activity Underwritten transactions in debt and equity markets	N/A	Assets under custody Payments activity Underwritten transactions in debt and equity markets Total gross loans and advances Total household lending
Complexity	Notional amount of OTC derivatives Level 3 assets Trading and available-for-sale securities	Trading book Trading book and qualitative information	Notional amount of OTC derivatives Trading and available-for-sale securities Risk-weighted assets for traded market risk

<sup>16</sup> IMF, *Australia: Addressing Systemic Risk Through Higher Loss Absorbency – Technical Note*, November 2012, IMF Country Report No. 12/311.

# Chapter 4 – Identification of D-SIBs in Australia

This chapter provides a summary of the readings from the various indicators APRA has used in its assessment of domestic systemic importance. The information presented is based on data that are publically available. Where APRA has referred to data that are not publically available, brief commentary on the findings is provided.

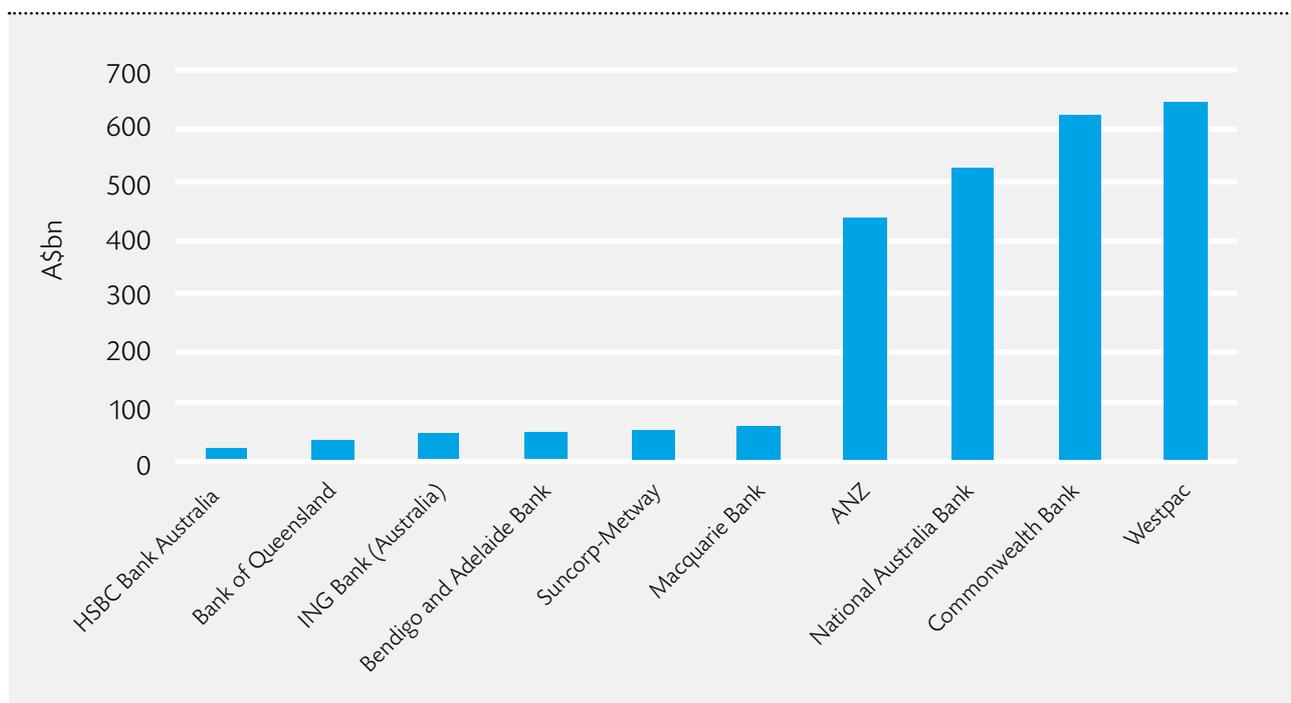
## 1. Size

A ranking of banks by total resident assets shows that there is a significant step down in asset size between the four major banks, and the next group of banks (Figure 1). The assets of the four major banks range from 16 per cent to 23 per cent of total resident assets, as opposed to around two per cent for the next four banks. Relative to the domestic economy, the assets of the four major banks, taken together, are equivalent to approximately one and half times that of Australia’s Gross Domestic Product (GDP).<sup>17</sup>

## 2. Interconnectedness

Measures of the degree of interconnectedness in terms of intra-financial assets and liabilities rank the four major banks clearly ahead of other banks. In Figure 2, the four major banks individually provide approximately 15 to 25 per cent of the total amount of loans and advances to financial corporations, compared to around four per cent for the next four banks. Figure 3 shows that the two largest banks each hold approximately 22 per cent of deposits from financial corporations compared to approximately six per cent held by the fifth largest bank.

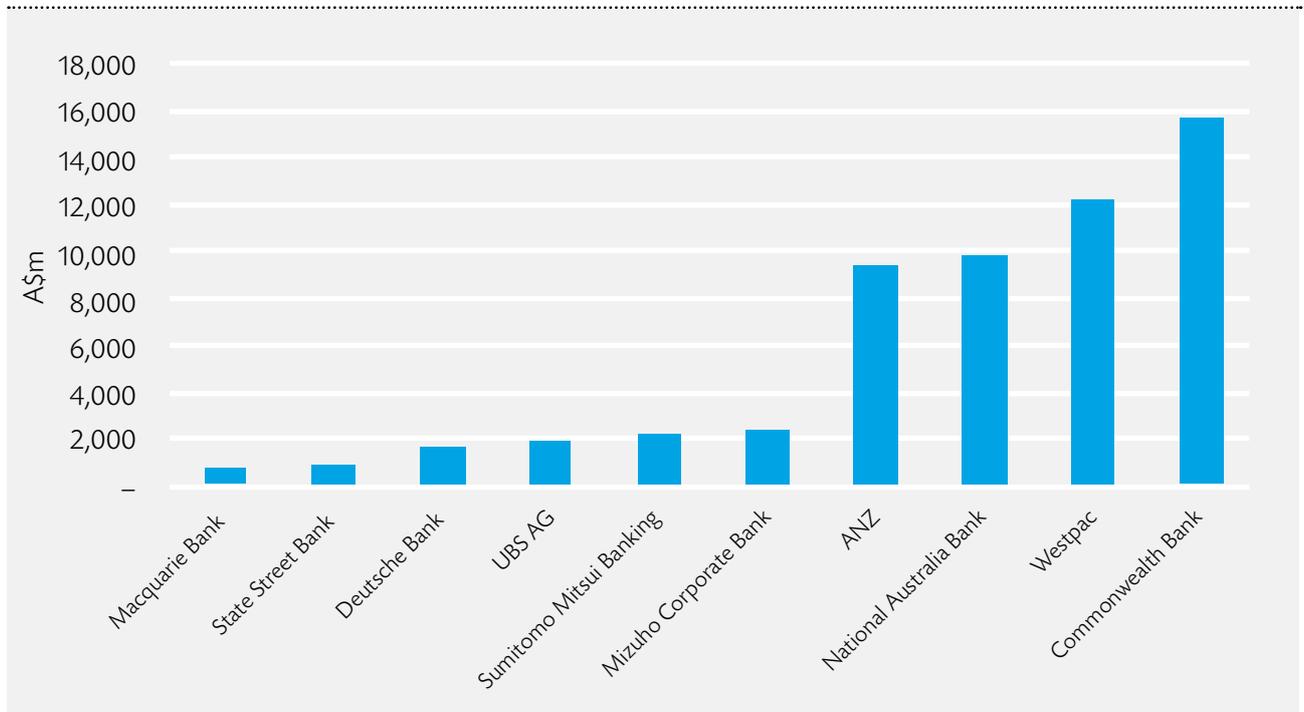
Figure 1: Total resident assets



Source: APRA, *Monthly Banking Statistics*, August 2013

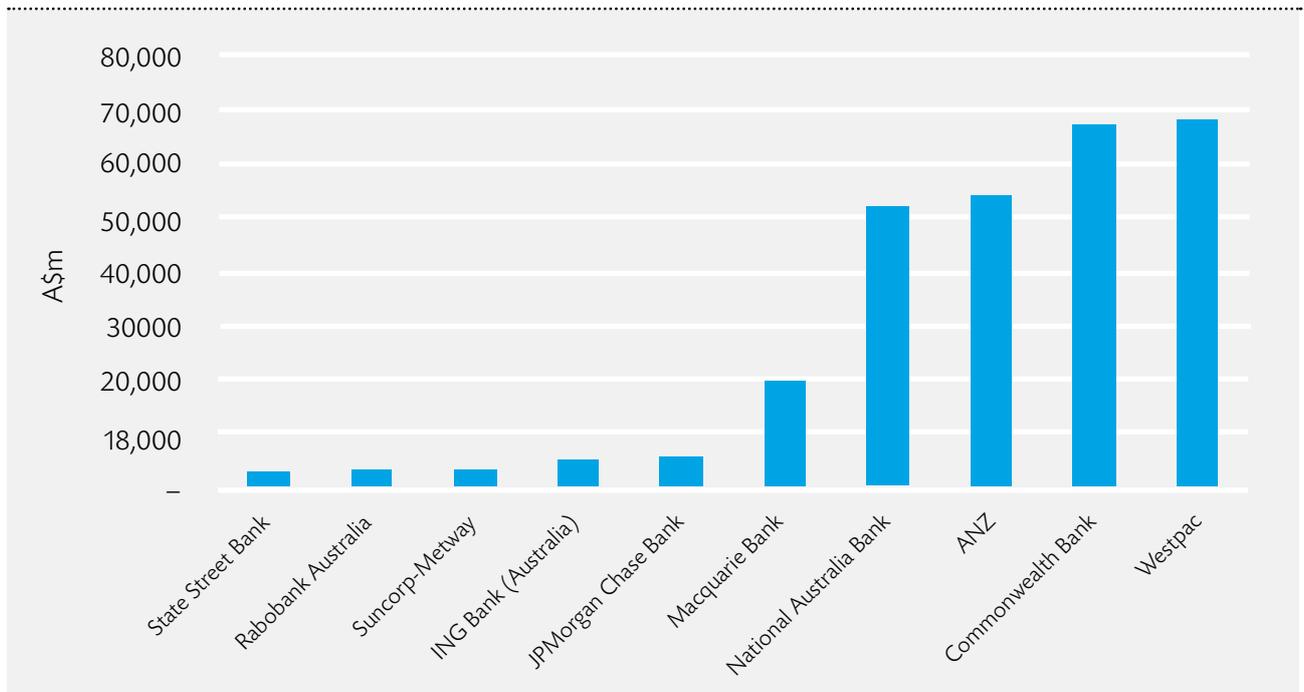
<sup>17</sup> Australia’s GDP in 2012/2013 was approximately A\$1.5 trillion. Refer Australian Bureau of Statistics, *Key economic Indicators, 2012* at <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/1345.0?opendocument?opendocument>

Figure 2: Loans and advances to financial corporations



Source: APRA, Monthly Banking Statistics, August 2013

Figure 3: Deposits from financial corporations



Source: APRA, Monthly Banking Statistics, August 2013

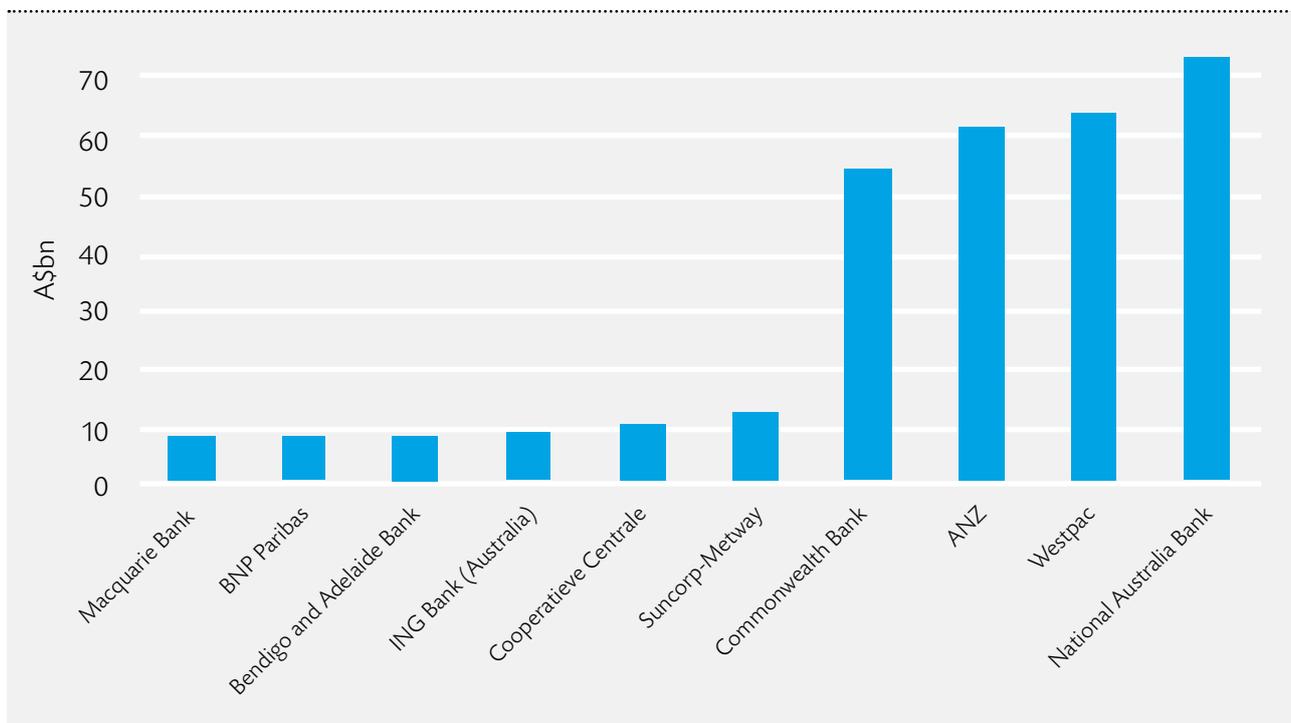
In terms of securities outstanding, Figure 4 shows that the four major banks are significantly more active in the issuance of both short-term and long-term securities. The share of total securities outstanding for the four major banks ranges from around 14 to 19 per cent. In contrast, the fifth most active bank in these markets accounts for around three per cent of total securities issued.

Under ARS 221.0, APRA collects information on ADI exposures to various forms of risk concentration, which may arise from large exposures to individual counterparties. The information shows that it is routinely the case that most other banks and ADIs report large exposures (as defined by *Prudential Standard APS 221 Large Exposures*) to the four major banks. However, it is not routinely the case for the four major banks to report large exposures to other banks and ADIs.

### 3. Substitutability

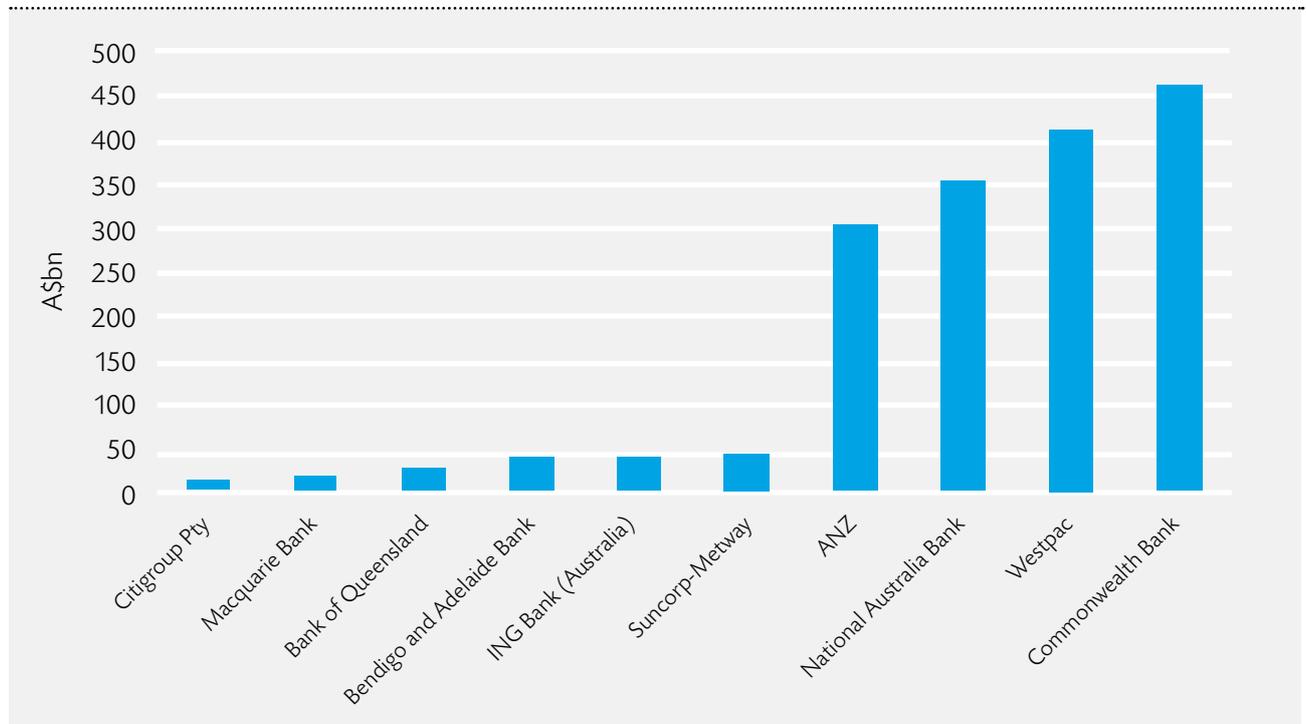
A ranking of banks by their domestic lending activity, which would be hardest to replace in a timely manner, shows that there is a significant step down between the four major banks and the next group of banks. As shown in Figure 5, the four major banks each provide a significant portion of domestic lending activity, the largest providing 25 per cent of total loans and advances; by comparison, the next group of three banks provides around two per cent each. This is similarly the case for household lending, as shown in Figure 6.

Figure 4: Securities outstanding



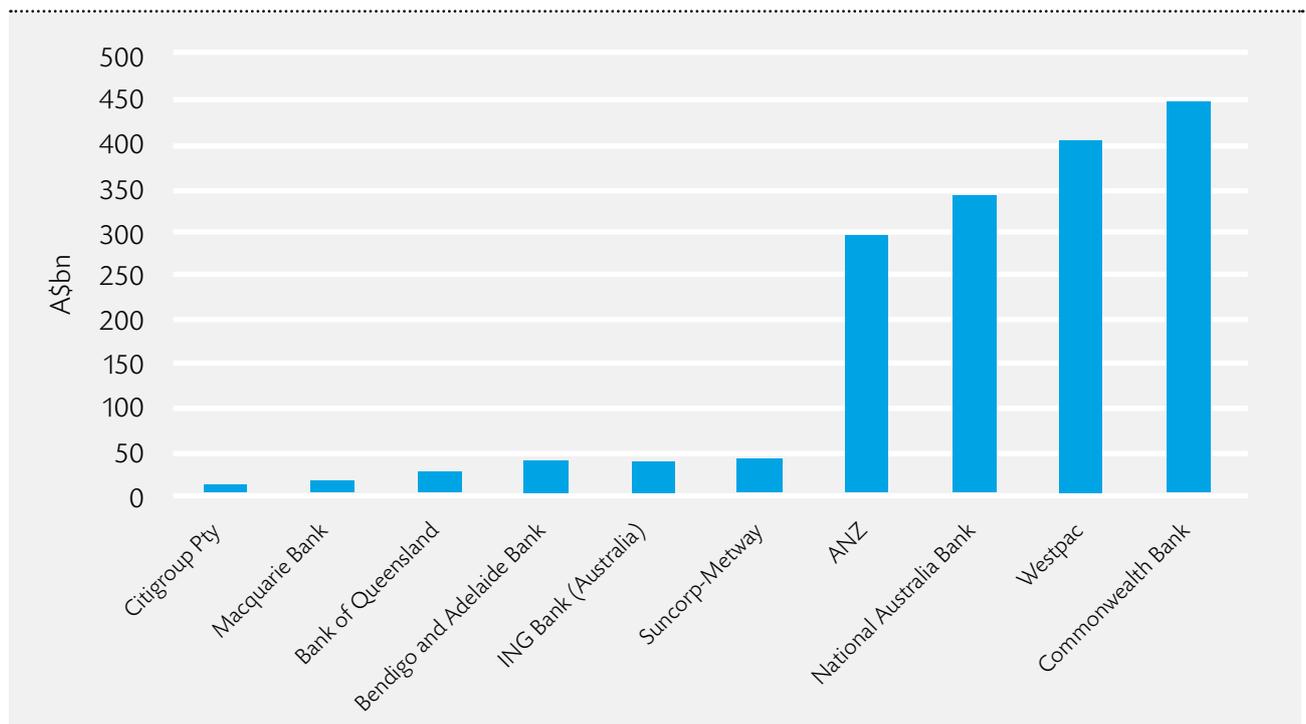
Source: APRA, *Monthly Banking Statistics*, August 2013

Figure 5: Total loans and advances



Source: APRA, Monthly Banking Statistics, August 2013

Figure 6: Loans and advances to households and non-financial corporations



Source: APRA, Monthly Banking Statistics, August 2013

Data on payments activity and assets under custody (as defined by the G-SIB framework<sup>18</sup>) were also reviewed. These data are confidential but were taken into account in APRA's D-SIB assessment.

Various indicators of payments activity showed that the four major banks were dominant in terms of their respective share of both the volume and value of payments activity. The indicators also showed that there was no consistent ranking in the next group of banks. Custody is a specialist business and several major custodians are not systemic banks. Based on the data reviewed, only one of the four major banks had a large volume of assets under custody, compared to other banks.

When assessing substitutability in financial markets, APRA has also had regard to market sources of data on debt and equity capital market underwriting activity. The four major banks were the largest in terms of the aggregated values of underwritten transactions in debt and equity markets in 2012. Debt market underwriting accounts for approximately 65 per cent of the total underwriting pool and the four major banks account for around 70 per cent of this market. A number of investment banks were involved in the equity market underwriting pool.<sup>19</sup>

18 Payments activity is defined in accordance with the Basel Committee's data collection exercise for assessing the systemic importance of banks in a global context. See Basel Committee on Banking Supervision, *Instructions for the end-2012 data collection exercise of the Macroprudential Supervision Group*, 14 April 2012, at <http://www.bis.org/bcbs/gsib/index.htm>.

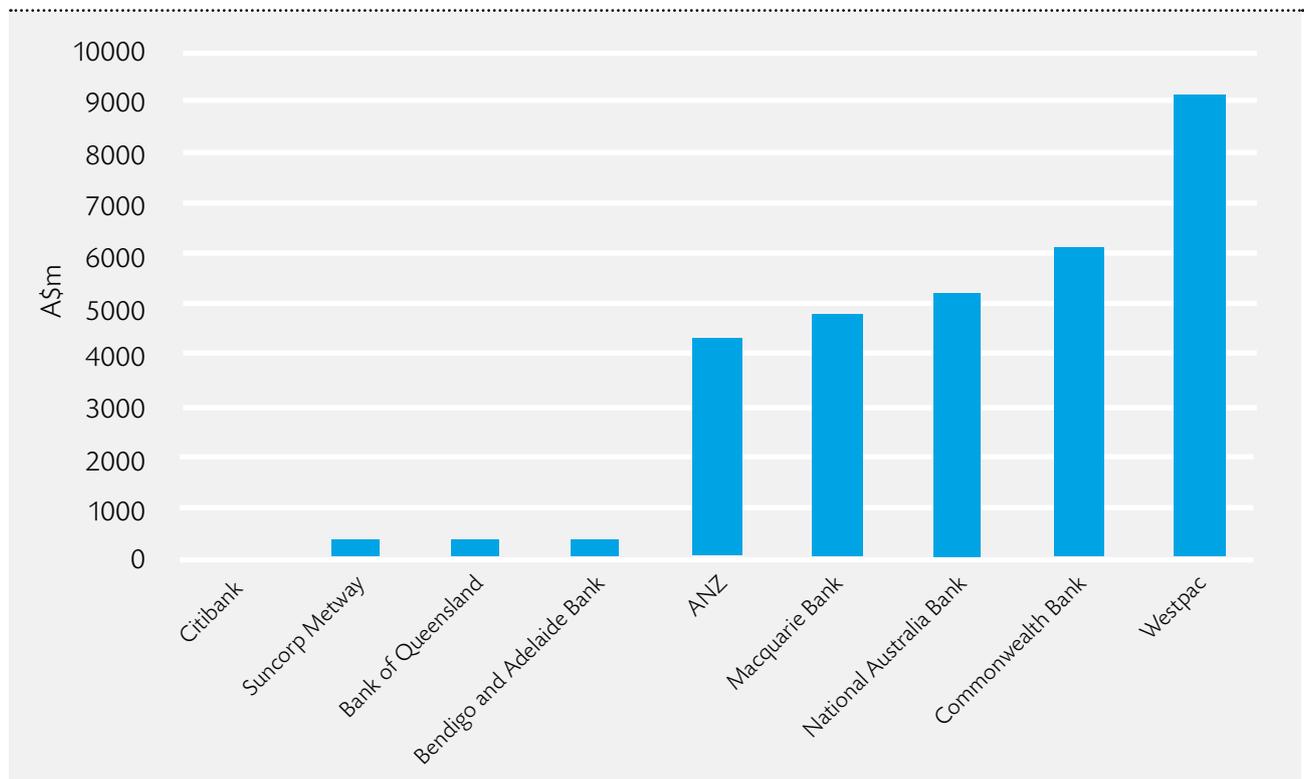
19 For example, Thomson Reuters, *Global Equity Markets Review 2012* and *Global Syndicated Loans Review 2012*.

#### 4. Complexity

To assess the degree of complexity of banks, APRA has reviewed unpublished data on the notional amount of OTC derivatives and holdings of trading and available-for-sale securities. These data show that the four major banks are dominant in these trading activities, with the volume of trading activity undertaken by the fifth largest bank less than half that of the fourth largest bank.

APRA has also used traded market risk data (on a risk-weighted basis) as an indicator of complexity. Figure 7 shows the level of traded market risk assets as disclosed by banks in their Pillar 3 disclosures. The largest bank reported significantly higher levels of risk-weighted assets for traded market risk assets compared to the next four banks.

Figure 7: Risk-weighted assets for traded market risk



Source: Pillar 3 disclosures at September 2013

## Summary of assessment

The various indicators used in APRA's assessment methodology show that the four major banks consistently rank highest across a range of activities in the Australian financial system. Their ranking in the top four varies according to the indicator considered but the differences in the readings are not significant. The indicators also show there is a 'cliff effect' between the four major banks and the next group of banks across almost all indicators. Moreover, there is no consistent ranking of banks in that next group.

On this basis, APRA has determined that the following four banks are D-SIBs in Australia:

- Australia and New Zealand Banking Group Limited;
- Commonwealth Bank of Australia;
- National Australia Bank Limited; and
- Westpac Banking Corporation.

In APRA's judgement, there is no basis to distinguish between the four major banks in terms of their systemic impact. Accordingly, they will be subject to equivalent treatment on matters such as the HLA requirement and other elements of APRA's supervisory approach to D-SIBs.

APRA's assessment concurs with recent analysis by the IMF. In its 2011 Article IV Consultation with Australia, the IMF affirmed that 'the four major banks are systemically important, which imposes a negative externality on the domestic financial system. Significant and protracted difficulties in any one of them would have severe repercussions for the entire financial system and, in turn, the real economy.'<sup>20</sup> In its 2012 Technical Note, *Australia: Addressing Systemic Risk Through Higher Loss Absorbency*, the IMF concluded that 'applying various metrics for these indicators to the case of Australia unambiguously establishes the four largest banks as systemically important'.<sup>21</sup>

APRA emphasises that the designation of a bank as a D-SIB does not make it immune from failure, and shareholders and investors should draw no inferences about public sector support for a D-SIB in the event of distress. Rather, the designation is intended to ensure that banks perceived to be 'too-big-to-fail' are subject to more intense supervisory oversight and have greater capacity to absorb losses, to increase their resilience to failure.

APRA does not see any objective basis for extending the D-SIB framework to a wider group of banks. This would not be in line with, or in the spirit of, the D-SIB reforms, which are intended to *reduce* the moral hazard and potential costs to taxpayers associated with perceptions of government support.

<sup>20</sup> IMF, Australia: *Financial System Stability Assessment*, November 2012, IMF Country Report No. 12/308.

<sup>21</sup> See footnote 16.

## Chapter 5 – Higher loss absorbency capital requirement for D-SIBs

As noted above, the D-SIB framework seeks to reduce the probability of failure of banks deemed to be systemically important by increasing their ability to absorb losses on a going-concern basis. The HLA capital requirement for D-SIBs is intended to reduce their probability of failure compared to non-systemic institutions, as well as to avoid the possibility that any direct costs of support may be borne by taxpayers.

The calibration of the HLA requirement for D-SIBs is intended to be subject to policy judgement by national authorities. This policy judgement should be informed and guided by both quantitative methodologies (where available) and country-specific factors, without prejudice to the use of supervisory judgement.

This chapter outlines APRA's approach to determining an appropriate HLA requirement for D-SIBs. APRA has taken into account quantitative methodologies, its more conservative approach to the definition of capital, its proposed approach to supervising conglomerate groups as well as its supervisory activities.

### HLA requirement

APRA considered a range of quantitative methodologies, which are broadly informed by financial modelling ('model-based' options) and by reference to reasonable benchmarks ('reference-based' options).

In the former case, APRA has had regard to the IMF's expected default frequency (EDF) based model, which uses forward-looking market-based inputs to estimate HLA requirements, and its funding cost advantage method, where the estimate of additional capital is based on offsetting the funding advantage of systemic institutions.<sup>22</sup> APRA also considered model-based methodologies applied by banks approved to use the Basel II 'advanced' methodologies for determining capital levels. These models are predicated on a 99.9 per cent confidence level at which solvency is maintained. APRA assessed the implications of using

higher confidence levels. The reasoning is that systemic institutions must have a higher probability of survival because the impact of failure of such institutions imposes a higher cost on the real economy.<sup>23</sup>

In addition to model-based options, APRA also considered references to key benchmarks. These included:

- historical losses (where estimations of an appropriate additional capital buffer could be based on the loss experience of large systemic banks in the past);
- APRA's stress-testing exercises (calibrating levels at which D-SIBs could be required to withstand a particular stress level of losses);
- the G-SIB framework (where the levels of the HLA required for G-SIBs range from 1.0 per cent to 3.5 per cent); and
- levels of HLA announced by peer jurisdictions.<sup>24</sup>

The methodologies and benchmarks suggest that an appropriate range for the HLA requirement in Australia would be in the order of one to three per cent of risk-weighted assets.

One of the hallmarks of APRA's prudential regime is its conservative approach to the definition and measurement of capital. This approach is widely acknowledged, including by the IMF, FSB and credit rating agencies.<sup>25</sup> For example, APRA requires ADIs to maintain higher quality capital (in terms of regulatory adjustments allowed) and, for advanced banks, requires capital to be held against interest rate risk in the banking book and imposes a floor of 20 per cent for downturn loss-given-default on residential mortgages. In APRA's view, the quality of capital and

<sup>23</sup> The IMF, for instance, argued that the impact of failure of a systemic institution imposes a higher cost on the broader economy than that of a non-systemic institution. To mitigate this externality, modelling should therefore be based on systemic institutions having a much higher probability of survival, higher than the solvency benchmark implied by the Basel capital framework that currently applies to both systemic and non-systemic institutions. See IMF, *Australia: Financial System Stability Assessment*, November 2012.

<sup>24</sup> The following jurisdictions have announced their D-SIB rules and, unless otherwise indicated, the HLA requirement is added to the minimum Common Equity Tier 1 requirement: Denmark (1-3.5%, maximum 4%); Canada (1% added to the capital conservation buffer); China (1% added to the capital conservation buffer); the European Union (2%, plus 1-3%, supplementary to Common Equity Tier 1 capital); Singapore (2%); Sweden (5%); Switzerland (5.5%); the United States (2% supplementary leverage ratio).

<sup>25</sup> Refer FSB, Peer Review of Australia 2011 and IMF, *Australia: Financial System Stability Assessment*, November 2012.

<sup>22</sup> In its Technical Note, the IMF used two approaches to calibrating HLA: a model based on default probabilities (Moody's Expected Default Frequency or EDF); and a similar model based on D-SIB funding cost advantages. See IMF, *Addressing Systemic Risk Through Higher Loss Absorbency - Technical Note*, November 2012.

assets is as important as the 'headline' regulatory capital ratios reported by banks. Banks (and other ADIs) in Australia have traditionally held a higher quality capital base than many of their offshore peers, although reported headline ratios appear lower than those peers.

As part of its Regulatory Consistency Assessment Program (RCAP), the Basel Committee is reviewing the application of the Basel capital framework in Australia. In the process, areas where APRA's prudential regime differs materially from relevant Basel 'rules texts' will be identified. Informed by this review, APRA will work with industry during 2014 on a reporting template to facilitate comparisons between the capital ratios of Australian and overseas banks.

APRA is currently finalising its framework for the supervision of conglomerate groups (Level 3). This acknowledges that Level 3 groups containing a D-SIB will not be able to reduce their Level 3 Prudential Capital Requirement (PCR) through operational separation or separability of their non-APRA-regulated group members. In APRA's view, investors and financial markets will expect a bank that dominates its group to cover losses sustained by group members, even if the affected members are operationally separated or separable from the ADI. If this expectation is not met, investors and markets could form the view that the bank is unable, rather than unwilling, to cover these losses. This loss in market confidence could adversely affect the bank's liquidity position and, ultimately, its viability. Accordingly, APRA considers that D-SIBs should not be able to gain a capital benefit from diversification of their group activities, given the significant market concerns that would arise if a D-SIB was perceived as not standing behind any material group member.

Taking these various considerations into account, particularly its more conservative approach to capital, APRA believes that a HLA requirement at the lower end of the range used elsewhere is appropriate in Australia. Accordingly, APRA has determined that the HLA requirement for the four D-SIBs will be **one per cent**, and must be met in full by Common Equity Tier 1 capital.

In making this judgement, APRA notes that proactive supervision is likely to be more effective in dealing with the risks posed by D-SIBs than an increase in capital requirements. The Basel Committee has emphasised, and APRA agrees, that other policy tools such as more intensive supervision can play an important role in dealing with D-SIBs. APRA's risk-based approach already subjects institutions that pose greater systemic risks to more intensive supervision and other prudential requirements<sup>26</sup>, and APRA considers this heightened supervisory attention on D-SIBs to be a key aspect in supporting the one per cent HLA requirement. The importance of APRA's graduated supervisory response system has been acknowledged by the FSB in its Peer Review of Australia (2011).<sup>27</sup>

### Implementation of the D-SIB framework

The HLA requirement will be implemented in Australia through an extension of the capital conservation buffer, maintaining the division of the buffer into four bands of equal size. This is fully in line with the Basel Committee's D-SIB framework. *Prudential Standard APS 110 Capital Adequacy (APS 110)*, paragraph 25, states that the capital conservation buffer is 2.5 per cent of an ADI's total risk-weighted assets, unless determined otherwise by APRA in writing. Accordingly, APRA will extend the capital conservation buffer for each D-SIB by the one per cent HLA requirement.

The Basel Committee has suggested that national authorities may consider whether it is appropriate to phase-in the HLA requirement, in line with the arrangements for the G-SIB framework. This involves a three-year phase-in arrangement between 1 January 2016 and 1 January 2019.

26 In October 2002, APRA introduced new risk assessment and supervisory response tools known as the Probability and Impact Rating System (PAIRS) and the Supervisory Oversight and Response System (SOARS). More information about PAIRS and SOARS can be found at <http://www.apra.gov.au/AboutAPRA/Pages/Supervision.aspx>

27 FSB, Peer Review of Australia, Review Report, 21 September 2011

The D-SIBs in Australia currently hold significant management capital buffers above the minimum requirements set by APRA; they also have strong capital generation capacity through earnings retention. The D-SIBs already hold sufficient Common Equity Tier 1 capital to meet the capital conservation buffer in full from 1 January 2016 and are expected to have sufficient Common Equity Tier 1 capital to meet the one per cent D-SIB extension to that buffer from that date. APRA therefore does not believe that phase-in arrangements for the HLA requirement, beyond the two-year lead time, are necessary.

At 1 January 2016, the management capital buffers of the D-SIBs may be lower than current levels given the additional HLA requirement. APRA considers it reasonable if D-SIBs choose to operate with a relatively lower management capital buffer from 1 January 2016 given the nature and size of the extended capital conservation buffer.

# Appendix 1 – The Basel Committee’s D-SIB principles

The 12 principles can be broadly categorised into two groups: the first group (Principles 1 to 7) focuses mainly on the assessment methodology for D-SIBs while the second group (Principles 8 to 12) focuses on HLA for D-SIBs.

## Assessment methodology

**Principle 1:** National authorities should establish a methodology for assessing the degree to which banks are systemically important in a domestic context.

**Principle 2:** The assessment methodology for a D-SIB should reflect the potential impact of, or externality imposed by, a bank’s failure.

**Principle 3:** The reference system for assessing the impact of failure of a D-SIB should be the domestic economy.

**Principle 4:** Home authorities should assess banks for their degree of systemic importance at the consolidated group level, while host authorities should assess subsidiaries in their jurisdictions, consolidated to include any of their own downstream subsidiaries, for their degree of systemic importance.

**Principle 5:** The impact of a D-SIB’s failure on the domestic economy should, in principle, be assessed having regard to bank-specific factors:

- (a) size;
- (b) interconnectedness;
- (c) substitutability/financial institution infrastructure (including considerations related to the concentrated nature of the banking sector); and
- (d) complexity (including the additional complexities from cross-border activity).

In addition, national authorities can consider other measures/data that would inform these bank-specific indicators within each of the above factors, such as size of the domestic economy.

**Principle 6:** National authorities should undertake regular assessments of the systemic importance of the banks in their jurisdictions to ensure that their assessment reflects the current state of the relevant financial systems and that the interval between D-SIB assessments not be significantly longer than the G-SIB assessment frequency.

**Principle 7:** National authorities should publicly disclose information that provides an outline of the methodology employed to assess the systemic importance of banks in their domestic economy.

## Higher loss absorbency

**Principle 8:** National authorities should document the methodologies and considerations used to calibrate the level of HLA that the framework would require for D-SIBs in their jurisdiction. The level of HLA calibrated for D-SIBs should be informed by quantitative methodologies (where available) and country-specific factors without prejudice to the use of supervisory judgement.

**Principle 9:** The HLA requirement imposed on a bank should be commensurate with the degree of systemic importance, as identified under Principle 5.

**Principle 10:** National authorities should ensure that the application of the G-SIB and D-SIB frameworks is compatible within their jurisdictions. Home authorities should impose HLA requirements that they calibrate at the parent and/or consolidated level, and host authorities should impose HLA requirements that they calibrate at the sub-consolidated/subsidiary level. The home authority should test that the parent bank is adequately capitalised on a stand-alone basis, including cases in which a D-SIB HLA requirement is applied at the subsidiary level. Home authorities should impose the higher of either the D-SIB or G-SIB HLA requirements in the case where the banking group has been identified as a D-SIB in the home jurisdiction as well as a G-SIB.

**Principle 11:** In cases where the subsidiary of a bank is considered to be a D-SIB by a host authority, home and host authorities should make arrangements to coordinate and cooperate on the appropriate HLA requirement, within the constraints imposed by relevant laws in the host jurisdiction.

**Principle 12:** The HLA requirement should be met fully by Common Equity Tier 1. In addition, national authorities should put in place any additional requirements and other policy measures they consider to be appropriate to address the risks posed by a D-SIB.



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