Regulation Impact Statement

Implementing Basel III liquidity reforms in Australia

(OBPR ID: 2012/14531)

Background

This Regulation Impact Statement (RIS) addresses the Australian Prudential Regulation Authority's (APRA's) proposed changes to prudential and reporting standards applying to authorised deposit-taking institutions (ADIs). These changes would implement part of the liquidity requirements known as Basel III liquidity issued by the Basel Committee on Banking Supervision (Basel Committee) and endorsed prior to release by the Group of 20 (G20). Australia is a member of both the Basel Committee and the G20.

APRA's current liquidity implementation incorporates the Basel III Liquidity Coverage Ratio (LCR), the Basel Committee's *Principles for Sound Liquidity Risk Management and Supervision*, intra-day liquidity reporting, crisis reporting and liquidity disclosure requirements for ADIs. The implementation does not include the Net Stable Funding Ratio (NSFR) which is currently undergoing further consideration by the Basel Committee.

APRA's mandate is to ensure the safety and soundness of prudentially regulated financial institutions so that they can meet their financial promises to depositors, policyholders and fund members within a stable, efficient and competitive financial system. APRA carries out this mandate through a multi-layered prudential framework that encompasses licensing and supervision of institutions. In the case of the banking industry, APRA is empowered under the *Banking Act 1959* (the Banking Act) to issue legally binding prudential standards that set out specific requirements with which ADIs must comply. These standards are supported by prudential practice guides (PPGs), which clarify APRA's expectations with regard to prudential requirements.

APRA is also empowered under the *Financial Sector (Collection of Data) Act 2001* (FSCODA) to make reporting standards requiring regulated entities to submit

specified data through various reporting forms. Data from these forms are used internally to assist APRA's supervisory functions. Under FSCODA, APRA also collects and refers data to other agencies such as the Reserve Bank of Australia (RBA) and the Australian Bureau of Statistics (ABS).

APRA regularly reviews its prudential and reporting requirements, making amendments as a result of a number of factors including:

- international developments;
- changes in financial market conditions or changes in risk management practices;
- the identification of weaknesses in the prudential framework; and/or
- to reduce potential negative impacts of emerging industry issues.

Problem

Background: APRA's existing liquidity framework

APRA has undertaken the supervision of ADI liquidity risk since its establishment; this was previously a responsibility of the RBA. At the RBA and initially at APRA, liquidity supervision was enforced with Prudential Statement D1 Liquidity Management, which included requirements for scenario analysis. In 2000, APRA introduced *Prudential Standard APS 210 Liquidity* (APS 210) as a part of its project to harmonise prudential standards. This included the continuation of the scenario analysis requirements of the five-day name crisis scenario for larger and more complex ADIs and the minimum liquidity holdings (MLH) regime for smaller, retail-based operations.

In 2007, in acknowledgement of the need to enhance APRA's supervision framework for liquidity risk, a project was commenced to revise APS 210 and this led to the release of a discussion paper in September 2009[1]. Concurrently, and with the onset of the financial crisis of 2007-2009, the Basel Committee commenced development of a global liquidity standard for internationally active banks. APRA followed the Basel Committee's December 2010 release of Basel III liquidity[2] with its November 2011 discussion paper[3] and draft prudential standard incorporating the key Basel global standards, the LCR and the NSFR.

The LCR focuses on ensuring that in a time of liquidity stress, an ADI can survive for a period of at least 30 days using its own resources, without any need for extraordinary public sector intervention. Globally, internationally active banks will be required to hold high-quality liquid assets (HQLA) in sufficient quantity to cover

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[1] *APRA proposes enhanced liquidity requirements for ADIs*, September 2009, http://www.apra.gov.au/adi/PrudentialFramework/Pages/enhancing-prudential-framework-for-adi-liquidity-risk-management.aspx

[2] *Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring*, December 2010, http://www.bis.org/publ/bcbs188.htm

[3] *Implementing Basel III Liquidity Reforms in Australia*, November 2011, http://apra.gov.au/adi/Documents/ADI_DP_IBLR_November_2011.pdf

potential cash outflows from their operation over a 30-day period under the assumption of a market wide and idiosyncratic[4] stress event.

The LCR stress scenario is an extreme but plausible stress event. It is materially more testing than the 'name crisis' scenario under the current APS 210. The name crisis requires ADIs to prove that they can continue to operate for at least five business days in adverse operating circumstances specific to the ADI. The events of late 2008 demonstrated that APRA's current liquidity requirement is well short of the rigour needed in a world where international funding markets are now known to be at risk of extended failure.

The LCR recognises the potential for both an idiosyncratic and a market-wide liquidity stress event, and the severity of such an event for ADIs. The 30-day duration of the LCR provides a more manageable horizon as compared to the five-day duration of the name crisis. That is, the 30-day duration provides a more reasonable timeframe for ADI management, APRA and the RBA to resolve a liquidity crisis.

In January 2013, the Basel Committee released a final version of the LCR[5] incorporating a number of amendments on which APRA then consulted in May 2013[6]. In the January 2013 release, the Basel Committee made provision for supervisors to stage the implementation of the LCR, such that it could be introduced as a 60 per cent requirement on 1 January 2015, increasing in annual 10 per cent increments to 100 per cent on 1 January 2019. The January 2013 release also allowed supervisors to consider additional categories of assets for inclusion in the pool of HQLA and made some revisions to the outflow rates on some business lines.

In the May 2013 consultation package, APRA proposed to not exercise the discretion to implement the LCR on a staged basis, instead requiring all LCR ADIs to meet the original 100 per cent requirement on 1 January 2015. APRA is also not exercising its discretion to extend the list of eligible assets for inclusion as HQLA. APRA has adopted the revisions to the outflow rates in the January release.

In its implementation, APRA has also exercised national supervisor discretion in setting the cash outflow rate for high run-off less stable retail deposits, contingent funding obligations and the method of calculating collateral flows related to the valuation of derivatives.

APRA has also departed from the Basel Committee's rules text to reflect circumstances particular to Australia with regard to the treatment of self-managed superannuation funds.

Following APRA's May 2013 consultations, APS 210 is now being finalised for implementation effective 1 January 2014.

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[4] Meaning that the circumstances leading to the stress event are specific to the institution.

[5] *Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools*, January 2013, http://www.bis.org/publ/bcbs238.htm

[6] *Implementing Basel III liquidity reforms in Australia*, May 2013, http://www.apra.gov.au/adi/PrudentialFramework/Pages/Implementing-Basel-III-liquidity-reforms-in-Australia-May-2013.aspx

In addition to the LCR, the Basel Committee is also implementing the NSFR. The NSFR prescribes a minimum amount of longer-term funding that must be sourced by ADIs as a result of the volume of longer-term assets on their balance sheet. The Basel Committee is continuing to refine the NSFR with the intention of introducing it as a global standard on 1 January 2018.

Basel III liquidity implementation will require enhancements to the operating environment and prudential regime. Under the current regime, the main prudential requirement for LCR ADIs is the five-day name crisis. The name crisis requires ADIs to run a stress scenario that simulates a name specific stress event on their banking operation and estimate potential cash outflows for each of the five business days of the test. This compares to the 30 calendar days of the LCR scenario.

ADIs are required to evidence that they have sufficient forecast cash inflows and holdings of liquid assets to survive the five-day period without reliance on public support.

At a high level, the key differences between the name crisis and the LCR are in the scope and duration. The LCR is a 30-day stress scenario, in recognition of the fact that five days may not be sufficient time for ADI management, APRA and the RBA to appropriately resolve a banking crisis. The LCR also includes components of a system-wide stress scenario, recognising that it is entirely plausible that a banking crisis may affect a number of ADIs at the same time.

More specifically, some of the key differences between the two scenarios include:

- the LCR limits reliance on cash inflows whereas the name crisis does not;
- the LCR does not allow for reliance on facility drawdowns where that facility is provided by another ADI;
- the LCR has a narrower scope for what constitutes eligible HQLA; and
- the LCR has generally higher outflow rates for most items in recognition of the 30-day timeframe of the test.

The outcome of these differences is that under the LCR stress test, ADIs will typically hold more HQLA as compared to what they held under the name crisis. The difference between these two is somewhere in the range of 11 per cent of the typical retail bank balance sheet. This difference will comprise some addition of liquid assets to the balance sheet, and some reclassification of loans as liquid assets. There is no reduction in lending associated with this balance sheet re-arrangement.

The revised prudential standard will also see enhanced qualitative requirements for all ADIs. The crucial difference is in the emphasis that APRA now expects ADIs to place on liquidity risk management and oversight. Traditionally, liquidity risk has been a function undertaken by ADI treasury officials without significant emphasis on the risks inherent in various funding and liquidity practices. Under the new regime, however, there is an expectation that ADIs will give liquidity risk appropriate visibility across the organisation, including at the Board level.

Although the new prudential standard will provide a prudential framework under which APRA will enforce these new requirements, the industry has already moved some way toward these better practices. The shift within industry is a result of multiple factors including regulatory, investor and rating agency pressures as well as a new understanding since 2008 of the need for high-quality liquidity management to ensure the ongoing viability of banking operations.

Quantitatively, the new emphasis on liquidity risk management has resulted in increases in liquidity buffers since 2007 from around 6 per cent of the typical bank balance sheet to approximately 12 per cent. This is in the context of the 17 per cent that it is anticipated that full compliance with the new standard will require. As at April 2013, there were 172 ADIs and authorised banking non-operating holding companies (NOHCs) subject to APRA's liquidity framework. The LCR will apply to approximately 40 of the larger, more complex ADIs. The MLH regime will be maintained with minimal adjustments for smaller ADIs.

The approximately 40 LCR ADIs include the four major Australian banks as well as the regional or mid-tier banks and a number of foreign branch operations. These ADIs represent over 95 per cent of the $3.2 trillion in total ADI assets. The Australian banking system is highly concentrated within the major domestic retail operations, with the four largest banks comprising over 75 per cent of ADI assets.

The global financial crisis

A strong and resilient banking system is a foundation of sustainable economic growth. Banks are at the centre of the credit intermediation process between savers and investors. Moreover, banking institutions provide critical services to consumers, small and medium-sized enterprises, large corporate firms and governments, which rely on banks to conduct their daily business, both at a domestic and international level.

One of the main reasons the global financial crisis became so severe in 2007-2009 was that the banking sectors of many countries had built up excessive on- and off-balance sheet leverage. At the same time, many banking institutions were holding insufficient liquidity buffers. Banking systems therefore were not able to absorb liquidity outflows, arising from loss of confidence in some international institutions, following their trading and credit losses. The crisis was further amplified by a pro-cyclical deleveraging process and by the interconnectedness of systemic institutions. At the height of the crisis, the market lost confidence in the solvency and liquidity of many banks, including banks that were otherwise sound. Weaknesses in a number of banking systems were rapidly transmitted to the rest of the financial system and the real economy, resulting in a contraction of liquidity and credit availability. In many countries, the public sector had to intervene with unprecedented injections of liquidity, capital support and guarantees, exposing taxpayers to large contingent liabilities and losses.

The effect on banks, financial systems and economies at the epicentre of the crisis was immediate. The crisis also spread around the globe. For these countries, the transmission channels were less direct, resulting from a severe contraction in global liquidity, cross-border credit availability and demand for exports.

Australia was not immune from these impacts, although the root causes of the crisis – lax underwriting standards in the United States sub-prime mortgage sector and poor risk management of exposures to complex structured securities collateralised by sub-prime mortgages – had no parallels in Australia.

For ADIs, crisis pressures arose from the severe contraction in global liquidity. The pressures were initially managed through extraordinary intervention by the RBA. In October 2008, the Commonwealth Government provided a guarantee of deposits and wholesale funding. This guarantee proved pivotal in assuring ADIs' access to funding. ADIs raised over $169 billion in government-guaranteed large deposits and wholesale funding. Eventually, as markets stabilised, the guarantee was removed for new liabilities from March 2010. During the global financial crisis, the Commonwealth Government also introduced the Financial Claims Scheme for the ADI and general insurance industries.

Before the crisis, a number of ADIs had progressively become more dependent on offshore wholesale funding to augment traditional retail deposit bases. Some ADIs made extensive use of securitisation markets to fund their residential mortgage lending. The global loss of confidence in banks and in structured credit arrangements resulted in reduced access to longer-term funding sources, other than for the most highly rated or sovereign-backed banks. During the crisis, securitisation markets virtually ceased to function, and have yet to recover their pre-crisis volumes globally. To maintain some level of securitisation activity, particularly for smaller ADIs and non-ADI mortgage lenders, the Treasurer directed the Australian Office of Financial Management (AOFM) to invest up to $20 billion to support securitisation markets.

It also became apparent in 2008 that a number of securities that ADIs were holding in their liquid asset portfolios were of limited liquidity value. This was particularly the case for asset-backed securities where secondary market investors became risk averse to the potential exposure to the underlying assets in these securities. Some of this aversion related to the highly complex nature of these securities, where it can be extremely difficult for an investor to understand the underlying risk.

Other securities, such as unsecured financial institution debt securities, suffered similar concerns as investors sought to limit their exposure to these types of institutions.

Ultimately, secondary market liquidity for almost all security types beyond government debt was limited globally, resulting in a compromised liquidity situation for banks. In order to overcome these limitations, central banks globally, and to a lesser extent the RBA in Australia, took additional steps to ensure the continued functioning of financial markets and the banking system's ability to obtain cash.

In Australia, the RBA extended the list of securities eligible under market operations[7], as well as extending the term of some repurchase (repo) transactions[8] in order to

[7] Market Operations are transactions that the Reserve Bank undertakes in financial markets to ensure that the operational target for monetary policy – the cash rate – remains close to the target rate set by the Reserve Bank Board.
[8] The sale or purchase of securities with an undertaking to reverse the transaction at an agreed date in the future and at an agreed price.

enhance liquidity in term markets. The RBA also allowed ADIs to pledge related-party assets as collateral for repo transactions under certain circumstances in return for cash. These actions had the effect of ensuring that all ADIs were able to meet their obligations as they fell due.

The key requirement under the current liquidity supervision regime is the five-day name crisis. One of the lessons from the global financial crisis was that five days was not a sufficient period for supervisors, central banks and ADI management to address a severe liquidity stress event. Another lesson is that APRA's and the banking industry's assumption that global funding markets would remain open to sound banks, proved false. Global funding markets can panic in a manner that might impair access to new credit for some time.

The LCR is the global response to the liquidity lessons from the financial crisis and is, in part, an acknowledgement that the quantum of liquid assets held by banks prior to and during the crisis was insufficient.

Basel III liquidity

The Basel III reforms, including the new global liquidity standards, are the response of banking supervisors to deficiencies in the regulatory framework identified during the global financial crisis. These reforms were endorsed prior to release by the G20[9], of which Australia is a member.

Basel III liquidity represents the first time that the Basel Committee has introduced an internationally harmonised standard for the supervision of liquidity risk. This is a significant evolution in the supervision of liquidity risk globally.

In addition to the LCR, in 2008, the Basel Committee released its *Principles for Sound Liquidity Risk Management*[10]. This document sets out global better practice in liquidity risk management for banks. APRA will incorporate the *Sound Principles* into the new APS 210. Most ADIs already meet most of these risk management principles.

Qualitative lessons from the global financial crisis

APRA and industry experience during the crisis demonstrated that the Australian banking sector's liquidity risk management capability needed to improve. Identified issues ranged from lack of board oversight of liquidity risk, through defects in operating management of liquidity risk, to a simple inability to produce useful liquidity forecasts on at least a daily basis. In addition to the need to materially strengthen the Australian banking sector's on-balance sheet liquidity, the financial crisis demonstrated that the sector needs to spend considerably more time and attention on properly managing liquidity risk.

Objectives of APRA's initiative

[9] At the Seoul summit of 12 November 2010: http://www.g20.utoronto.ca/2010/g20seoul.html

[10] Basel Committee *Principles for Sound Liquidity Risk Management and Supervision,* September 2008, www.bis.org/publ/bcbs144.htm

Prior to the financial crisis, APRA had already commenced work on a substantially strengthened liquidity framework. This work was overtaken first by the financial crisis, then by the Basel Committee's work on the LCR. Had the Basel Committee not undertaken this work, then APRA would doubtless have proceeded with its own material strengthening of the current APS 210.

By adopting the Basel III liquidity framework in Australia, APRA's objectives are to give effect to Australia's G20 commitment and, in particular, to:

- address deficiencies in the current liquidity framework, both qualitative and quantitative, which were highlighted by the more extreme phases of the global financial crisis in 2007-2009;

- continue to align APRA's liquidity regime with international best practice, maintaining the high international reputation of the Australian financial system and helping to ensure that funding markets stay open to ADIs; and

- reduce the likelihood of the need for (and degree of) government intervention or support for ADIs in any future financial crisis.

APRA is proposing to fully implement the Basel III liquidity framework in Australia. This will include the implementation of the LCR, coming into force on 1 January 2015, and the NSFR coming into force on 1 January 2018. The LCR and the NSFR will be set as minimum prudential requirements for the larger and more complex ADIs (LCR ADIs). The list of LCR ADIs includes most of the locally incorporated banks as well as a number of foreign bank branches.

Other ADIs, termed MLH ADIs, are supervised under APRA's simplified MLH regime. This regime applies to simpler, retail-based operations, typically credit unions and building societies. This regime requires ADIs to have a minimum holding of liquid assets set at a level of 9 per cent of the ADI's liability base.

APRA will also incorporate the Basel *Sound Principles* into APS 210 which will place enhanced expectations on the liquidity management of all ADIs.

The Committed Liquidity Facility

The assets deemed eligible to be included as HQLA in Australia do not exist in sufficient supply to enable ADIs to comply with the LCR. As a result, APRA and the RBA are introducing the Committed Liquidity Facility (CLF) which will allow LCR ADIs with a material liquidity shortfall to meet the LCR requirement, for a fee. The CLF is an alternative liquidity approach provided for within the Basel rules text[11].

Through the CLF, the RBA will provide a commitment to ADIs to accept eligible assets as collateral under repo agreement. ADIs will be able to draw on the CLF in a time of stress in order to source cash to cover cash outflows.

[11] See paragraphs 55 to 58 of *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools* (January 2013) www.bis.org/publ/bcbs238.pdf

ADIs that require a CLF will be required to hold eligible collateral in sufficient volume to satisfy the minimum LCR requirement. Eligible collateral will include some debt securities that are external to the Australian banking system as well as a significant volume of debt securities issued by other ADIs. Excessive holdings of debt securities issued by other ADIs would introduce a significant contagion risk to the Australian banking sector. In order to limit this risk, the RBA will also accept as collateral self-securitisations[12]. The total stock of self-securitisations that each ADI can hold as collateral for the purposes for LCR compliance will be closely monitored.

APRA will release its final standard APS 210 in December 2013 and it will come into force on 1 January 2014. For all ADIs, this will mean that the qualitative requirements of the standard will become effective on this date, although for MLH ADIs these requirements include only minor amendments to the current standard.

For LCR ADIs, the current name crisis requirement will be maintained until 1 January 2015, when the minimum 100 per cent LCR requirement will come into force. The name crisis requirement will cease at this time. The NSFR is not yet included in APS 210, pending further work by the Basel Committee and APRA.

The implementation of the LCR and, subsequently, the NSFR will also necessitate additional reporting on behalf of ADIs. APRA is introducing reporting forms that will significantly enhance its understanding of the funding and liquidity situation of all ADIs.

APRA will introduce a reporting form for the LCR as well as a maturity gap report and balance sheet projection report. A further report on funding concentrations will also be required. Formal reporting of the NSFR will be deferred until the Basel Committee's proposal for the NSFR are finalised.

Intra-day liquidity reporting will be required of some ADIs for whom intra-day exposures are considered sufficiently material.

Reporting will be required by scenario ADIs on the LCR on at least a quarterly basis. Reporting will be required by all ADIs on the balance sheet maturity, balance sheet projection and supplementary information reports on a quarterly basis as well.

ADIs will also be subject to additional liquidity disclosure requirements and a requirement to provide crisis liquidity reporting to APRA, upon request on a one-day delayed basis. The disclosure requirements and crisis reporting will be implemented in 2014.

APRA will retain the MLH report for quarterly submission by MLH ADIs with only minor amendments.

Options

APRA has identified three options:

[12] A process in which an originator sells a pool of assets to a related special purpose vehicle (SPV), and the SPV in turn issues debt securities, which are held entirely by the originator.

1. maintain APRA's existing prudential framework;
2. implement some of the Basel III liquidity measures; or
3. fully implement the Basel III liquidity framework.

Impact analysis

Assessment of costs and benefits

Qualitative costs and benefits

The reformed APS 210 requires that LCR ADIs engage in considerably more robust governance of their liquidity risks, and that MLH ADIs also materially improve their liquidity risk governance. Since 2007, the banking industry has widely accepted the need for improved liquidity risk governance, and has already invested substantial funds and management attention towards this improvement.

Furthermore, as APRA's consultation on improved liquidity risk management has now entered its seventh year, for some time both the banking industry and APRA have operated on the basis that the reformed APS 210 qualitative requirements should be in place.

As of late 2013, APRA's view is that industry has largely implemented the new APS 210 qualitative requirements, and the resulting costs and benefits have already been achieved. Accordingly, APRA notes in this RIS that the Australian banking system has already achieved necessary and worthwhile improvements in liquidity risk management. APRA does not propose to further quantify the qualitative costs and benefits in this RIS.

The overall magnitude of the impact of the implementation of Basel III liquidity will be the aggregate of the upfront and ongoing compliance costs of implementation as well as the ongoing costs of balance sheet transformation that is undertaken as a result of the implementation. APRA estimates that the compliance costs as well as the costs of holding additional liquid assets is less than 10 basis points per annum on assets, including loans. The components of such an estimate are outlined below.

When considering the costs of implementing the Basel III liquidity framework, it is most important to consider the increased costs of holding and managing liquid assets, and useful to quantify compliance operating costs. As part of the consultation process APRA requested from ADIs cost and benefits analysis but has only received limited analysis of these costs in submissions. No ADI provided information using the Office of Best Practice Regulation's (OBPR's) Business Cost Calculator. In any event, the costs associated with balance sheet transformation will be considerably larger than the operating costs. This is particularly the case given that the ADI industry is already largely compliant with the qualitative elements of the proposed prudential standard.

Leaving aside any APRA prudential requirements, the banking industry and its funding providers understand that sound banks need much stronger liquidity positions than prevailed before the crisis. The industry has already strengthened its liquidity position. Some of this strengthening may have been prefatory to anticipated prudential

reform. APRA's view, however, is that Australian banks, in common with widespread global practice, have already revealed their preference for substantially stronger liquidity.

The benefits associated with the extra liquidity costs are firstly, a banking system that has sounder liquidity arrangements at the individual, as well as the systemic level; and, secondly, a banking system that retains better access to global funding markets.

The opportunity cost of holding extra HQLA is the difference between the interest earned on those assets, and the interest paid on funds raised to finance the extra HQLA. As will be discussed below, the CLF arrangements substantially reduce this cost, compared to an Australian regime without the CLF.

A high-level assessment of the costs of LCR compliance as it relates to additional holdings of HQLA is provided in attachment A to this document.

A further opportunity cost to banking operations will be incurred through terming out of balance sheet liabilities that banks have been undertaking and will continue to undertake as a result of this implementation. In December 2010, APRA announced[13] that with the implementation of the CLF, larger ADIs would be required to demonstrate that they have taken all reasonable steps towards meeting their LCR requirements through their own balance sheet management, before relying on the RBA facility. LCR requirements can be met through balance sheet management when ADIs source more stable and longer-term funding such as retail deposits and term debt issuance. Longer-term funding typically comes at a greater cost as the market for the issuance of longer-term paper is not as deep and liquid as that of shorter-term paper, meaning the liquidity premium on debt issues goes up as the term of the funding is increased. As a result, the cost of funding the banking operation increases.

The compliance costs relating to the implementation of the new APS 210, in terms of new systems etc., will also be much less than the balance sheet opportunity costs. APRA has some limited information on these costs, but without use of the OBPR's Business Cost Calculator. Based on these submissions, the cost of ADI implementations that incorporate Basel III liquidity compliance (amongst other project objectives) will be a one-off, and around $30 million for each of the major banks or around 2.5 per cent of the typical annual information technology spend of a major bank.

Again, this cost needs to be considered in the context the expectations of investors and ratings agencies. In the event that APRA did not implement Basel III liquidity, ratings agencies and investors would likely expect LCR ADIs to meet the Basel III liquidity requirements regardless. As a result, the marginal regulatory cost of Basel III liquidity implementation is likely to be lower than that stated here. These estimates are also likely to be overstated to the extent that systems changes are implemented as part of business-as-usual systems upgrades and maintenance such that implementation costs are reduced. To reflect this, a 20 per cent discount has been applied to the estimate derived above.

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[13] Letter to ADIs: *Australian implementation of global liquidity standards*, December 2010, http://www.apra.gov.au/MediaReleases/Pages/10_27.aspx

The on-going compliance costs of Basel III liquidity, will predominantly be based on additional reporting requirements to APRA under the 'Direct 2 APRA' (D2A) reporting infrastructure as well as the ongoing maintenance of information technology (IT) systems. It is APRA's expectation that the cost of D2A compliance would be lower than the aggregate of costs that would be incurred if APRA did not implement. This is because ADIs would still need to separately report liquidity positions to the market and ensure that such reporting was appropriately audited. The costs of doing so outside of the pre-existing APRA reporting infrastructure would probably be higher. Ongoing maintenance of IT infrastructure will cost around $5 million per annum for each major bank.

Many of the ongoing compliance costs will be negligible with respect to an ADI's existing infrastructure. ADIs already report extensively to APRA via the D2A portal and the liquidity reporting will be considered marginal to that. It will, however, be the case that additional staff will be required across the industry to ensure that submissions to APRA truly reflect the risk.

Further, the Australian banking system is highly regarded internationally, in part because of APRA's comprehensive and timely adoption of other elements of the Basel framework. The four major Australian banks are among the most highly rated in the world, and currently enjoy international funding market access disproportionate to their share of global banking assets. This reputation would be at risk if Australia did not adopt international best practice prudential rules. If the ADIs were not Basel III liquidity compliant while their international peers were, it would not be unreasonable to suggest that they would be subject to a rating downgrade of one to two notches. A likely consequence of this downgrade would be funding cost increases in the tens of basis points across the asset base as investors demand greater return for what would be perceived to be a higher risk investment. Such an outcome may occur regardless of whether an issuing ADI is in financial difficulty or whether there is an economic crisis. Furthermore, the large Australian banks currently enjoy substantial access to international funding markets, based in large part upon their high credit ratings, in a world where few banks carry ratings in the AA range. Australia's large banks might lose this funding advantage if they are downgraded, constraining their ability to fund growth on their balance sheets.

With regards to benefits of implementing Basel III liquidity, a full implementation of the liquidity regime will strengthen Australian ADIs' resilience to any future banking sector liquidity crisis in Australia.

Option 1 – maintain APRA's existing prudential framework

The effect of maintaining the existing prudential framework would be twofold; firstly the resilience of ADIs to overcome liquidity stresses without public sector support would be severely limited as compared to a full Basel III implementation. The international community has concluded that prudential liquidity buffers prior to the financial crisis were insufficient in size and the crisis has shown the level of public sector support that can be required as a result.

Even if APRA does not change its prudential framework, global markets will expect ADIs to meet the new global Basel III liquidity standard or will increase funding costs to reflect that Australian ADIs would be considered riskier than banks in countries

that do implement the standard. Therefore, it is likely that ADIs would be pressured by market forces to demonstrate compliance with some aspects of the Basel III liquidity framework. However, discussions with ADIs indicate that they would be unlikely to implement all of the qualitative aspects in full and cannot meet the quantitative requirements without recourse to the proposed CLF (the RBA will not make the CLF available unless supported by APRA prudential standards).

Depending on the extent of market pressure to increase liquidity holdings in the absence of APRA prudential standards and the CLF, the cost of holding the limited liquid assets that are available would likely increase and could easily exceed any compliance costs associated with APRA's implementation of the Basel III liquidity framework.

Even if there were a way for ADIs to obtain sufficient liquid assets to meet the Basel III liquidity framework without recourse to the RBA, in the event that the Australian banking system came under significant stress at some point in the future, the Australian government would come under pressure to again guarantee wholesale liabilities and the RBA would probably need to provide significant liquidity support in order to counter poor liquidity risk resilience of ADIs. This is because global financial markets would not be as confident that ADIs are compliant with Basel III liquidity standards based on a self-certification model as they would be if compliance is supervised by APRA.

Secondly, maintaining the existing prudential framework while the rest of the world implements Basel III liquidity will result in ADIs operating materially short of global best practice. The Basel Committee has confirmed that the majority of internationally active banks taking part in the current Quantitative Impact Study are already compliant with a 100 per cent LCR[14]. If ADIs were to hold liquid assets at the current prudential minimum, once the LCR is fully implemented in other jurisdictions, they would suffer significant and accurate negative perception issues. This would probably result in Australian banks facing higher funding costs in wholesale markets in normal times and they would likely have trouble refinancing or sourcing wholesale funding in stressed market conditions.

There is also the consideration that the current arrangements were tested and found wanting in late 2008 and early 2009, when substantial ad hoc public sector support was required to ensure that the Australian banking system remained liquid. Had the Basel Committee not proposed a stronger international liquidity standard, APRA would in any event have sought to materially strengthen the Australian ADI liquidity framework.

Option 2 – partially implement Basel III liquidity

APRA could consider a partial implementation of Basel III liquidity that could take the form, for example, of implementing a simplified LCR or one that gives more consideration to the amount of available HQLA in the Australian jurisdiction by having a lower compliance threshold for HQLA eligibility. APRA is of the view that

[14] Results of the Basel III monitoring exercise as of 31 December 2012, released September 2013, http://www.bis.org/publ/bcbs262.htm

partially implementing the LCR would not present advantages to ADIs or the community in general. Partial compliance might slightly decrease the direct regulatory costs for Australian ADIs, but APRA estimates that the countervailing costs of Australia being perceived as not fully compliant with the Basel liquidity framework, would be much higher. Under a partial implementation with a lower compliance threshold, the effective survival horizon of ADIs would be reduced, such that ADI management, APRA and the RBA would have less time to address the crisis before an ADI was at threat of not being able to meet its obligations. A simplified implementation would leave ADIs open to the possibility that the standard was not appropriately calibrated to their business model and as a result, may require the holding of a liquidity buffer of inappropriate size for the liquidity risk in ADI operations.

Failure to implement the new standard in full under the circumstance that most other advanced economies have fully implemented Basel III liquidity, would expose ADIs to funding and liquidity risks at a level greater than their international peers.

As a result, ADIs may be exposed to the potential for a ratings downgrade and higher funding costs for their wholesale debt issues. These funding cost increases would be material, noting that the spread between AA rated and single A rated debt securities in Australia historically sits at around 50 basis points.

Option 3 – fully implement Basel III liquidity

A full implementation of Basel III liquidity is consistent with the capabilities and needs of the Australian banking system. APRA considers that ADIs are well placed to meet the minimum requirements of the Basel III liquidity standard. LCR ADIs are currently holding HQLA and CLF-eligible debt securities to a level that results in a system wide LCR of 68 per cent. With incremental additional purchases and the inclusion of self-securitisations, an LCR of 100 per cent by 1 January 2015 is an attainable and appropriate objective.

As noted above, the majority of the internationally active banks that participate in the Basel Committee's Quantitative Impact Study have LCRs of over 100 per cent, meaning that a full implementation will ensure the Australian banking system is consistent with its international peers.

APRA is also cognisant of concerns raised by the IMF in its 2007 and 2012 Financial System Stability Assessments of Australia. The IMF acknowledged the strong position of the Australian banking system while noting that Australian ADIs have a large reliance on offshore funding leaving them exposed to common shocks and disruptions to funding markets.

With this in mind, a full implementation of the Basel III liquidity framework will send a strong message about the soundness of the Australian banking system.

A full implementation will result in no additional compliance costs when compared to an implementation at a lower LCR threshold. It would, however, result in additional compliance costs as compared to a simplified implementation. As has been discussed, a number of ADIs are undertaking significant projects to get systems to a state of

readiness and the estimates of the costs of these projects are in the tens of millions of dollars for each of the larger ADIs.

These costs need to be weighed against the significant benefits of the implementation of the Basel III liquidity framework. Key objectives of the implementation are to enhance the liquidity management practices of banks as well as to minimise reliance of banks on the public sector in a crisis. The implementation of both of these objectives will result in a significantly safer banking system, reducing the propensity for banking sector crisis and also reducing the cost to the public sector in the event of a crisis.

A full implementation of the Basel III liquidity framework will have a profit impact for ADIs. Holdings of liquid assets have lower rates of return than other banking assets such as mortgages. Liquid assets should also be prudently funded and this results in a carrying cost on the liquid assets portfolio, as the cost of funding the portfolio is higher than the return generated by holding those assets.

It is likely that the total cost of holding liquid assets will be passed on to customers through the re-pricing of loan and deposit products. APRA anticipates that the overall impact will be in the range of around eight basis points on ADI asset products, while the incremental impact beyond what ADIs have already achieved would be around three basis points. An illustration of how this estimate is made can be found in attachment A.

ADIs can pass on the impact of this cost increase through the re-pricing of those products over which they have pricing discretion. As all LCR ADIs are some extent equivalently exposed to the increased cost, the distribution of the increase would be expected to be relatively uniform across ADI customers. Additionally, as the increased costs are estimated with respect to liquid asset buffers prior to the financial crisis, the re-pricing of asset products will have to some extent already happened and will continue to happen over a number of years.

It should also be noted that while APRA will make some minor amendments to the MLH regime, the material impacts of the Basel III liquidity reforms will occur for the larger and more complex ADIs. APRA has proposed no changes to the method of setting the size of the liquid asset buffer that an MLH ADI holds. For LCR ADIs, the liquid assets buffer will have increased in size materially (by about 9 per cent of total liabilities) by the point of full implementation.

In summary, the costs of full Basel III liquidity implementation are material. But the costs of less than full implementation are considerably more material. The Australian banking system relies upon ready and substantial access to global funding markets. Failure to implement the agreed global liquidity standards would make this funding access more expensive and less certain than is currently the case.

Specific considerations under a full implementation

The Basel Committee has provided discretion for supervisors to implement the LCR on a staged basis, commencing at 60 per cent on 1 January 2015 and increasing in 10 per cent increments until it is 100 per cent on 1 January 2019. APRA has elected not to exercise its discretion to do a staged implementation, instead requiring that all

LCR ADIs be 100 per cent compliant on 1 January 2015. The staged implementation has been proposed by the Basel Committee in light of the considerable stress facing banking systems in some regions. Moreover, the majority of large internationally active ADIs are already compliant with the LCR. As noted above, APRA is also cognisant of concerns raised by the IMF that the continued reliance of ADIs on offshore funding leaves them exposed to disruptions to funding markets.

There is also the consideration that larger ADIs will achieve much of their LCR compliance through the Committed Liquidity Facility granted by the RBA. A phased implementation would simply phase the growth of this facility, but as a practical matter banks and the international markets would assume that this facility would materialise in need during the transition period. In such circumstances, the better balanced outcome is to provide the Committed Liquidity Facility in full from the commencement of the new liquidity regime.

The Basel Committee has published guidelines on the key characteristics that must be present for a debt security to be considered as HQLA. APRA has assessed those debt securities that are eligible for consideration in Australian financial markets against the Basel criteria that assets trade in deep and liquid markets and have a proven resilience in a time of stress. It has concluded that the only assets in the Australian jurisdiction that comply with this requirement are:

- balances held with the RBA, notes and coin;
- Commonwealth government securities (CGS); and
- Semi-government securities (semis)[15].

The Basel criteria also make provision for the consideration of additional assets that may be included as HQLA. In particular, supervisors can consider the inclusion of non-financial equities at a material haircut to their market value, and subject to a cap on the total amount that could be included.

APRA does not consider that the inclusion of non-financial equities as a liquid asset would contribute to the resilience of the Australian banking system. Equities are not repo-eligible with the RBA; hence, a large-scale forced sale of equity portfolios by one or more ADIs could significantly exacerbate a stress event.

Consideration on the eligibility of various assets for inclusion in the portfolio of HQLA is ongoing. APRA will reassess the securities regularly and considers that, at some point in the future, the class of HQLA may be expanded as a result of expanding financial markets in Australia.

Consultation

APRA commenced preliminary consultations on liquidity reform in 2007. The initial

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[15] February 2011, *APRA clarifies implementation of global liquidity standards in Australia*, http://www.apra.gov.au/MediaReleases/Pages/11_03.aspx

consultations were suspended for over two years, during the global financial crisis. This work helped inform later consultation, once the Basel Committee's global reform process commenced.

During its review of the liquidity framework, the Basel Committee invited public comment and sought quantitative data on its proposals. Of a series of consultative documents issued publicly, the December 2009 *International framework for liquidity risk measurement, standards and monitoring - consultative document*[16] set out in detail the proposed liquidity reforms. Over 200 submissions received through this process (including from ADIs in Australia and Australian industry groups) were published in April 2010[17].

APRA has also undertaken extensive consultation on the proposed implementation of the liquidity reforms in Australia, beginning with a September 2009 consultation on ADI liquidity risk.

APRA's formal public consultation packages consisted of the following:

- September 2009: *APRA's prudential approach to ADI liquidity risk* (discussion paper);
- November 2011: *Implementing Basel III Liquidity Reforms in Australia* (discussion paper and draft prudential standard);
- November 2012: *Liquidity reporting requirements for authorised deposit-taking institutions* (discussion paper and draft reporting standards);
- May 2013: *Implementing Basel III Liquidity Reforms in Australia – May 2013* (consultation package including response to submissions, draft prudential standard and prudential practice guide); and
- December 2013 (planned): *Implementing Basel III Liquidity Reforms in Australia – November 2013* (second response to submissions paper, prudential standard, practice guide and reporting standards).

In addition, since the end of 2010, APRA has been collecting data on bank LCR and NSFR positions as a part of the Basel Committee's Quantitative Impact Study. Initially APRA collected semi-annual data from six larger ADIs and since March 2012, has been collecting data on a quarterly basis from all LCR ADIs. These collections give APRA confidence in the balance sheet estimates included in this RIS.

APRA engaged directly with relevant industry associations as part of the consultation process, made presentations at industry conferences and held industry seminars on Basel III in conjunction with the Financial Services Institute of Australasia.

Industry broadly recognises the need for Australia to implement globally accepted

[16] Basel Committee, *International framework for liquidity risk measurement, standards and monitoring - consultative document*, December 2009, http://www.bis.org/publ/bcbs165.htm

[17] Basel Committee, *Comments received on the consultative documents*, http://www.bis.org/publ/bcbs165/cacomments.htm

prudential frameworks and supports APRA’s implementation of the Basel III liquidity framework. Mostly, industry submissions sought clarification on a number of technical aspects.

One of the significant matters raised in submissions was APRA’s interpretation that the supply of HQLA in Australia is limited to Commonwealth government securities and semi-government securities. It was suggested that APRA should expand the list of eligible securities to include other sorts of assets. APRA has reiterated that the alternative assets that were proposed do not meet the Basel criteria, particularly regarding the need for deep and liquid markets.

Some market participants suggested that there would be a benefit in including additional assets classes as this in itself could enhance the level of participation in markets for those assets. In addition, others raised the concern that the need for turnover as an indication of liquidity could be counter-productive as some assets are considered to be of such a high quality that they rarely trade in secondary markets.

APRA accepts that expanding the range of acceptable liquid assets might increase demand for the additional assets when market conditions are normal, because ADIs would be purchasing the assets as part of their liquidity portfolios. However, it is likely that this demand would not be sustained if ADIs need to sell their liquid asset portfolios during a stress event.

In making its determination, APRA considered the appropriateness of the Basel Committee’s criteria and determined that they were appropriate for the local market. APRA gave due consideration to data on the size, depth and turnover of all relevant financial instruments. It is apparent that all other markets for financial instruments are materially smaller, have significantly fewer participants and have materially lower turnover than the markets for CGS and semis. APRA notes that the collateral arrangements under the RBA’s CLF create considerable liquidity value for non-HQLA. It remains to be seen if any of these asset classes can develop to surpass the HQLA requirements in the future.

Other issues raised in submissions were:

- key definitions of retail deposit categories and other outflow categories in the LCR which were perceived as too stringent; and

  APRA’s timetable for implementation. APRA’s reasons for adhering to the original Basel implementation timetable are explained above.

Conclusion and recommended option

The global financial crisis evidenced weaknesses in the regulatory framework applied to banks globally. These included weaknesses with regard to the size and quality of liquidity buffers. Basel III liquidity is the global regulatory community’s response.

The Australian banking system came through the crisis with no ADI experiencing failure through either illiquidity or lack of capital. This is in stark contrast to the experience in many other jurisdictions where numerous banks suffered significant problems, often requiring public sector support at considerable cost to the taxpayer.

Nonetheless the Australian government did guarantee wholesale ADI liabilities to the tune of $169 billion as well as introducing the Financial Claims Scheme for the ADI and general insurance industries and committed to purchase up to $20 billion of residential mortgage-backed securities through the activities of the Australian Office of Financial Management.

Although the fallout from the financial crisis was limited in Australia, there is a need to prepare for the possibility of greater stress to Australian banking institutions in the future. Basel III liquidity will be implemented globally, and Australian banks operate in global markets. It is both appropriate and necessary for APRA to hold Australian banks to at least the same standard as their international counterparts.

The costs of implementing Basel III liquidity are material and will largely be incurred by the larger and more complex ADIs. These costs will most likely be passed on to ADI customers, through the re-pricing of the products that ADIs offer. APRA expects that this repricing will be incremental and will occur over a number of years, and on a relatively uniform basis across different products.

APRA considers a full implementation of the Basel III liquidity framework as being the most appropriate course of action for the safety and security of the Australian banking system.

Implementation and Review

The Basel III liquidity reforms will be implemented from 1 January 2014 through a prudential standard, reporting requirements and a prudential practice guide applying to ADIs in Australia. Further consultation will be undertaken by APRA on the NSFR when the details of this global standard are finalised by the Basel Committee.

APRA's prudential requirements will be reviewed as necessary to ensure they continue to reflect good practice and remain relevant and effective.

Compliance with Best Practice Regulation Handbook

As the proposals for Basel III liquidity reforms fell within the transition period during the implementation of the revised Best Practice Regulation Handbook requirements (commencing on 8 July 2013), APRA has opted to complete a single-stage RIS for this proposal.

Attachment A: Pricing effects of Basel III liquidity implementation

Based on June 2013 data, ADIs would need to hold around $435 billion in HQLA, and approximately $300 billion of this as CLF eligible assets.

Pre-crisis, Australian banks held liquid assets in volume equivalent to six per cent of the balance sheet. It is estimated that at the implementation of Basel III liquidity they will hold 17 per cent of the balance sheet as liquid assets, including holdings of third-party debt securities and self-securitised paper. ADIs will have the capacity to rebalance their portfolios such that the resulting opportunity cost of implementation will be lower than that estimated here.

For this exercise, APRA considers that without the implementation of Basel III liquidity, investor pressure would have required ADIs to hold an additional six per cent of their balance sheet as liquid assets. Beyond this, the remaining five per cent of additional holdings is attributed to Basel III liquidity implementation.

The additional 11 per cent liquid asset holding will be met using some balance of HQLA and CLF-eligible assets. The cost of holding HQLA is conservatively estimated at 100 basis points (the spread between the return on holding the debt security and the cost of funding its purchase, termed its cost of carry) while the cost of holding CLF eligible assets will be around 15 basis points. The difference in return on the HQLA and CLF security portfolios predominantly reflects the difference in credit risk within these two portfolios. On a risk-adjusted basis, the differences in returns will be far narrower.

As a result, the carrying cost on holding liquid assets will shift from around a pre-crisis six basis points to a post-crisis 41 basis points across the liquids book. If this were cost recovered by repricing the rest of the asset book, the price of non-liquid assets would need to increase by around eight basis points. As assumed in this scenario, in the absence in Basel III liquidity, ADIs would have already had to increase liquid asset holdings due to investor pressure, such that the incremental cost of the Basel III liquidity implementation is considered to be around three basis points.

	Pre-crisis		Without Basel III liquidity		With Basel III liquidity	
	2007 ($bn)	Cost (bp)	2013 ($bn)	Cost (bp)	2013 ($bn)	Cost (bp)
HQLA1	6	100	95	100	135	100
CLF assets	92	0	210	15	300	15
Cost of carry in $bn		0.06		1.26		1.80
Weighted average cost over HQLA in bp		6.1		41.4		41.4
Cost over non-liquid assets in bp		0.4		5.6		8.6
Incremental difference in bp				5.3		2.9

Attachment B: Average annual industry compliance costs

Using the OBPR's Business Cost Calculator, APRA has estimated that this regulation results in average annual compliance costs for the ADI industry of around $50.51 million. This is outlined in the Regulatory Burden Cost Offset table provided below.

Table 1: Regulatory Burden Cost Offsets

Average Annual Compliance Costs (from Business as usual)				
Sector/Cost Categories	**Business**	**Community organisations**	**Individuals**	**Total by cost category**
Administrative Costs	$0	$0	$0	$0
Substantive Compliance Costs	$50,510,000	$0	$0	$50,510,000
Delay Costs	$0	$0	$0	$0
Total by Sector	$50,510,000	$0	$0	$50,510,000
Annual Cost Offset				
	Agency	**Within portfolio**	**Outside portfolio**	**Total by sector**
Business	$0	$50,510,000	$0	$50,510,000
Community organisations	$0	$0	$0	$0
Individuals	$0	$0	$0	$0
Total by source	$0	$50,510,000	$0	$50,510,000
Proposal is cost neutral? □ **yes** **Proposal is deregulatory** □ **no** **Balance of cost offsets $0**				

A more detailed breakdown of these numbers is provided in table 2 on the next page. The average major bank is spending around $30 million as a one-off upfront cost of liquidity systems and framework enhancement. It is reasonable to consider that around 80 per cent of this cost is directly attributable to APRA's decision to implement Basel III liquidity in Australia, while the residual 20 per cent represents costs that would have been incurred due to investor and other pressures to enhance liquidity management.

Table 2: Detailed cost breakdown

Sector	Cost type	Category	Total value per entity	Attributable rate	Attributable value per entity	Entity per annum	Number of institutions	Sector per annum
Major bank	Upfront		$ 30.000	80%	$ 24.000	$ 2.400	4	$ 9.6
Major bank	Ongoing	Staffing	$ 1.500	100%	$ 1.500	$ 1.500	4	$ 6.0
Major bank	Ongoing	Reporting	$ 2.500	100%	$ 2.500	$ 2.500	4	$ 10.0
Major bank	Ongoing	Other	$ 1.000	100%	$ 1.000	$ 1.000	4	$ 4.0
Other LCR ADI	Upfront		$ 1.519	80%	$ 1.215	$ 0.122	36	$ 4.4
Other LCR ADI	Ongoing	Staffing	$ 0.076	100%	$ 0.076	$ 0.076	36	$ 2.7
Other LCR ADI	Ongoing	Reporting	$ 0.127	100%	$ 0.127	$ 0.127	36	$ 4.6
Other LCR ADI	Ongoing	Other	$ 0.051	100%	$ 0.051	$ 0.051	36	$ 1.8
MLH ADI	Ongoing	Reporting	$ 0.056	100%	$ 0.056	$ 0.056	131	$ 7.4
							Total	$ 50.5

On a per annum basis, this results in a cost for each major bank of around $2.4 million and $9.6 million in total.

For the ongoing costs, APRA estimates that each major ADI will spend around $5 million per annum. This is shown separately above as ‘Staffing’, ‘Reporting’ and ‘Other’ in proportion, as provided by an ADI.

Other industry segments

In order to appropriately estimate costs for other sectors of the ADI industry, APRA has scaled the costs of implementation based on the size of each sector, applying a further scale factor to acknowledge that the cost of implementation as a proportion of the asset base is larger for smaller entities.

This second scale factor is conservatively estimated using APRA data that summarises the costs in basis points of bank audit fee expenses. We consider this a reasonable proxy for liquidity compliance costs, given the nature of audit expenses and compliance costs are broadly similar. The scale factors inferred from this data imply that due to their relative size, upfront and ongoing costs for Other LCR ADIs should be scaled up by around a factor of two, and by around a factor of 13 for MLH ADIs.

Hence the formula used to estimate the upfront and ongoing cost for the other sectors is as follows:

[Cost for major banks] x ([Asset base of sector] / [Asset base of major banks]) x [Scale factor]

Other costs associated with Basel III liquidity

APRA has further discussed with ADIs the potential for additional costs associated with Basel III liquidity such as product innovation. One particular product innovation highlighted was the 31-day notice period product. As this product is subject to its own RIS, it is not appropriate to estimate costs associated with it in this RIS.

Upfront and ongoing costs are included for those ADIs that are subject to the LCR, while only ongoing reporting costs are included for MLH ADIs. For MLH ADIs, the additional compliance costs are marginal to existing systems, processes and infrastructure, requiring no material upfront expenditure.

Regulatory Offset

A regulatory offset has been identified and agreed with by the OBPR from within the Treasury portfolio.