



Prudential Practice Guide

DRAFT APG 210 - Liquidity

September 2016

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About this guide

Prudential Practice Guides (PPGs) provide guidance on APRA's view of sound practice in particular areas. PPGs frequently discuss legal requirements from legislation, regulations or APRA's prudential standards, but do not themselves create enforceable requirements.

Prudential Standard APS 210 Liquidity (APS 210) sets out APRA's requirements for authorised deposit-taking institutions (ADIs) in relation to the management and measurement of liquidity risk. This PPG aims to assist ADIs in complying with those requirements and, more generally, to outline prudent practice in relation to the management and measurement of liquidity risk.

Not all the practices outlined in this PPG will be relevant for every ADI and some aspects may vary depending upon the size, complexity and risk profile of the ADI.

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Liquidity risk appetite and tolerance

1. An ADI's liquidity risk tolerance defines the level of liquidity risk that the ADI is willing to assume. APS 210 requires that the liquidity risk tolerance be set by the Board and that it is documented and appropriate for an ADI's operations and strategy and its role in the financial system.
2. The Board-approved risk appetite statement will normally include an articulation of liquidity risk appetite and identify its liquidity risk tolerance.
3. Risk appetite is an articulation of the nature and level of risk that is acceptable in the context of achieving an ADI's strategic objectives. Not all aspects of risk appetite are quantifiable. Risk tolerance is a quantitative articulation of the maximum level of acceptable risk after taking into account appropriate mitigants and controls to reduce the risk.
4. An ADI is expected to take into account its business objectives and strategic direction with the aim of achieving certain budgetary and financial performance outcomes. Critical to this process is the Board's risk tolerance, which informs the acceptability of risks, including liquidity risk, associated with planned business activities. The risk tolerance will generally also reflect the ADI's financial condition and funding capacity as well as its role in the financial system.
5. APS 210 requires an ADI to set and document its liquidity risk tolerance. APRA expects an ADI's liquidity risk tolerance to be explicit, comprehensive and designed with the particular vulnerabilities of the ADI in mind. The risk tolerance is required to be subject to sensitivity analysis.
6. Liquidity risk tolerance would generally be expressed using measurable limits that will enable a clear and transparent monitoring process to ensure that the ADI remains within these risk tolerances.

7. Good practice would be to set liquidity risk tolerances for risks including:
 - a) quality and diversification of liquid asset portfolios, e.g. by instrument and counterparty;
 - b) liability diversification, e.g. by market, product, counterparty and maturity;
 - c) reliance on short-term and long-term funding sourced from offshore markets;
 - d) the overall level of maturity mismatch;
 - e) the management of liquidity risk across borders and legal entities;
 - f) currency mismatch, including cash flow mismatches arising from the use of derivatives associated with funding sourced from offshore markets; and
 - g) contingent liquidity exposures irrespective of whether they fall within the 30-day Liquidity Coverage Ratio (LCR) timeframe.

Management of liquidity risk

8. APS 210 requires an ADI to identify, measure, monitor and control its liquidity risk positions for the future cash flows of its assets and liabilities and sources of contingent liquidity demands from its off-balance sheet positions, across all currencies in which the ADI is active, and any correspondent, custody and settlements activities.
9. An ADI would generally be expected to estimate its prospective cash flows for assets, liabilities and off-balance sheet commitments (including derivatives) over a variety of time horizons, under normal conditions and for a range of stress scenarios - including scenarios of severe stress (both systemic and idiosyncratic). Such estimates will assist in enabling an ADI to efficiently meet its needs without affecting either its daily operations or financial condition.
10. APRA envisages that an ADI will assess the total volume of funding sourced from wholesale markets, the capacity of those

markets and its contribution to the overall funding position of the ADI.

Future cash flows of assets and liabilities

11. APRA expects that cash flow forecasts would be made with sufficient granularity such that they capture all material sources of potential liquidity risk. In addition, it would be expected that assumptions about future short- and long-term liquidity needs reflect the complexities of the ADI's underlying businesses and products.
12. An ADI would generally be expected to analyse the quality of assets that could be used as collateral in order to assess their potential for use in secured funding transactions in times of stress.
13. In estimating cash flows arising from assets, effective liquidity management would include monitoring the concentration of expected inflows across counterparties. This would assist to ensure that the ADI's liquidity position is not overly dependent on the arrival of expected inflows from one or a limited number of counterparties.
14. In estimating cash flows arising from liabilities, effective liquidity management would include assessing the propensity for withdrawal of the ADI's liabilities in a time of stress. In particular, an ADI with a material reliance on wholesale funding would generally need to assess the likelihood of rollover of funding and the potential for the behaviour of fund providers to change in stress conditions, and thus the possibility that funding might not be available.
15. An ADI would generally be expected to assess the level of potential draws on facilities that it provides to support the term funding programs of other entities and the circumstances under which they can be utilised.
16. In forecasting retail deposits, an ADI might also consider factors that influence the stickiness of these deposits – such as size,

interest-rate sensitivity and the nature of the deposit channel, e.g. direct, internet or broker.

17. Internationally active ADIs would generally be expected to consider differences in deposit insurance regimes across the jurisdictions in which they are active and assess the impact on the propensity for withdrawal of customer deposits. In times of stress, the coverage and actual or perceived speed with which a depositor is paid out through a national deposit insurance regime, as well as the manner in which problem banks are resolved in a jurisdiction, can affect the behaviour of retail depositors.
18. Whilst historical analysis of ADI deposit loss is informative, it may not be a solid foundation for determining propensity for withdrawal given available data for Australia is unlikely to represent a stress event at the severity required for prudent liquidity risk management.

Sources of contingent liquidity demand and related triggers associated with off-balance sheet positions

19. An ADI would be expected to project the potential consequences of undrawn and other off-balance sheet commitments being drawn. Consideration should be given to the nature of the commitment and the creditworthiness of the counterparty as well as exposures to business and geographical sectors, as counterparties within the same sector may be affected by stress at the same time.
20. An ADI's processes for identifying and measuring contingent funding risks would be expected to consider the nature and size of the ADI's potential non-contractual obligations as such obligations can give rise to the ADI supporting associated off-balance sheet vehicles in times of stress. Similarly, in times of stress, reputational concerns could be a source of additional liquidity risk. For example, an ADI could support investment funds that it manages or with which it is otherwise affiliated, or accept early

redemption of investment products it has provided or sponsored.

21. Given the customised nature of many of the contracts that underlie undrawn commitments and off-balance sheet instruments, clearly identifying events that trigger contingent liquidity risks can be difficult. It is incumbent upon the management of the risk-originating business activity, as well as the liquidity risk management function, to implement systems and tools to analyse potential liquidity trigger events effectively and to measure how changes to underlying risk factors could cause cash outflows against these facilities, even if there has been no historical evidence of such flows. This analysis would include appropriate assumptions on the behaviour of both the ADI and its obligors or counterparties.
22. The management of liquidity risks of certain off-balance sheet items is of particular importance due to their prevalence and the difficulties that many ADIs have in assessing the related liquidity risks that could materialise in times of stress. These items include special purpose vehicles (SPVs), financial derivatives and guarantees and commitments.

Special purpose vehicles

23. It is good practice for an ADI to have a detailed understanding of its contingent liquidity risk exposure and event triggers arising from any contractual and non-contractual relationships with SPVs. Where an ADI provides contractual liquidity facilities to an SPV, or where it would otherwise need to support the liquidity of an SPV under adverse conditions, the ADI will generally need to consider how its liquidity might be adversely affected by illiquidity of the SPV. In such cases, the ADI could need to monitor the SPV's inflows (maturing assets) and outflows (maturing liabilities) as part of the ADI's own liquidity management, including in its stress testing. In this case, the ADI could assess its liquidity position with the SPV's liquidity draws (but not its liquidity surplus) included.

24. Where securitisation SPVs are used as a source of funding, an ADI would generally consider whether these funding vehicles would continue to operate effectively under adverse scenarios, noting that experience suggests that they might not. An ADI experiencing adverse liquidity conditions often will not have continuing access to the securitisation market as a funding source. This would be reflected in the ADI's liquidity risk management framework.

Financial derivatives

25. An ADI would generally incorporate cash flows related to the repricing, exercise or maturity of financial derivatives contracts in its liquidity risk analysis, including the potential for counterparties to demand additional collateral in an event such as a decline in the ADI's credit rating or creditworthiness or a material change in the value of the derivative.

Guarantees and commitments

26. Undrawn loan commitments, letters of credit and financial guarantees represent a potentially significant drain of funds for an ADI. An ADI would be expected to ascertain a level of expected cash outflows under normal conditions and then estimate the scope for an increase in these flows during periods of stress.
27. Similarly, liquidity issues can arise when an ADI relies on committed lines of credit or guarantees provided by others. For example, an ADI that holds assets whose creditworthiness is dependent on the guarantees of a third party, or that has raised funds against such assets, could face significant demands on its liquidity if the third party's credit standing is highly correlated with the credit quality of the underlying assets.

Currencies in which an ADI is active

28. Effective liquidity management for an ADI active in multiple currencies would see it maintain liquid assets consistent with the distribution of its liquidity needs by currency.

29. An ADI active in a number of offshore jurisdictions would generally give consideration to operational restrictions on its ability to liquidate assets in a time of stress. If, for example, a significant portion of the offshore liquid assets portfolio is held in United States Government debt issues to cover outflows in multiple currencies in multiple jurisdictions, both time zone differences and currency conversion risks will need to be considered in establishing a strategy for the liquidation of such assets.
30. An ADI would generally be expected to assess its liquidity needs in all currencies in which it undertakes business activity and to determine acceptable currency mismatches. An ADI could undertake a separate analysis of its strategy for each currency in which it has significant activity, considering potential constraints in times of stress.
31. The size of foreign currency mismatches will generally need to take into account:
 - a) the ADI's ability to raise funds in foreign currency markets;
 - b) the ability to transfer a liquidity surplus from one currency to another and across jurisdictions and legal entities; and
 - c) the likely convertibility of currencies in which the ADI is active, including the potential for impairment or closure of foreign exchange markets for particular currency pairs.
32. An ADI will need to be aware of, and have the capacity to manage, liquidity risk exposures arising from the use of foreign currency funding to fund domestic currency assets as well as the funding of foreign currency assets with domestic currency. An ADI would be expected to take account of the risks of sudden changes in exchange rates or market liquidity, or both, that could materially affect liquidity mismatches and impact on the effectiveness of foreign currency hedges and hedging strategies.

Correspondent, custody and settlement activities

33. An ADI's management would be expected to understand, and have the capacity to manage, how the provision of correspondent, custodian and settlement bank services can affect its cash flows. Given that the gross value of customers' payment inflows and outflows can be very large, unexpected changes in these flows can result in large net cash flows that impact on the overall liquidity position of a correspondent or custodian bank, both on an intraday and overnight basis. An ADI's management would also be expected to understand and have the capacity to manage the potential liquidity needs that the ADI would face as a result of the failure-to-settle procedures of payment and settlement systems in which it is a direct participant.

Measurement tools

34. APS 210 requires an ADI to have in place sound processes for measuring liquidity risk. An ADI would be expected to employ a range of customised measurement tools for this purpose.
35. An ADI's liquidity measurement tools would generally cover vulnerabilities across normal and stressed conditions over various time horizons. Under normal conditions, prospective measures would identify needs that would arise from projected outflows relative to routine sources of funding. Under stress conditions, prospective measures would be able to identify funding gaps at various horizons and, in turn, serve as a basis for liquidity risk limits and early warning indicators.
36. An ADI's pro-forma cash flow projections are a critical tool for adequately managing liquidity risk. These projections serve to produce a cash flow mismatch or liquidity gap analysis that can be based on assumptions of the future behaviour of assets, liabilities and off-balance sheet items, and be used to calculate cumulative net cash flows over a given time frame. Measurement can be performed over incremental time periods to identify projected

and contingent flows taking into account the underlying assumptions associated with potential changes in cash flows from assets and liabilities.

37. For assets, liabilities and off-balance sheet items with uncertain cash flows, the assumptions regarding potential cash flows during times of liquidity stress are of particular importance. Assumptions about the market liquidity of such positions would need to be adjusted according to market conditions or ADI-specific circumstances.

38. Early warning indicators for use in identifying emerging liquidity risks can be qualitative or quantitative in nature and could include, but are not limited to:

- rapid asset growth, especially when funded with potentially less stable liabilities;
- growing concentrations in assets or liabilities;
- a reduction in the rate of deposit growth, unusual deposit loss or a material increase in notices given on minimum notice deposit periods;
- increases in currency mismatches;
- a decrease in the weighted-average maturity of liabilities;
- inability to issue debt securities or demand is only for shorter maturity dates than normal;
- repeated incidents of liquidity risk profile approaching or breaching limits;
- negative trends or heightened risk associated with a particular product line, such as rising delinquencies;
- significant deterioration in the ADI's earnings, asset quality and overall financial condition;
- negative publicity;
- a credit rating downgrade or negative change in rating outlook;
- material share price declines;

- rising wholesale or retail funding costs, or credit-default-swap spreads, in either absolute terms or relative to peers;
- requests for additional collateral for credit exposures from counterparties or where counterparties are reluctant to enter into new transactions;
- the elimination or decrease of credit lines from correspondent banks; and
- increasing redemptions of certificates of deposit or other debt securities before maturity.

Intraday liquidity

39. The management of intraday liquidity risk is of particular importance for those ADIs that are active in payments systems.

40. It is important that an ADI's management understands the rules of all payment and settlement systems in which it participates; identifies key counterparties (and their correspondents or custodians) that act as the source of incoming or outgoing gross liquidity flows; identifies key times, days and circumstances where liquidity flows and possible intraday credit needs might be particularly high; and understands the business needs underlying the timing of liquidity flows and intraday credit needs of internal business lines and key customers.

41. In meeting the operational needs for intraday liquidity management, an ADI would be expected to apply appropriate tools and resources that are tailored to the ADI's business model and its role in the financial system. An ADI would also need to consider how it conducts its activities for a particular market, e.g. via direct participation in a payment or settlement system or via correspondent or custodian banks, and whether it provides correspondent or custodian services and intraday credit facilities to other banks, firms or systems. If, for example, an ADI relies heavily on collateralised funding markets, monitoring positions in securities settlement systems may

be just as important as monitoring positions in real time gross settlement systems.

Funding and liquidity transfer pricing

42. APS 210 requires an ADI to develop and implement a costs and benefits allocation process for funding and liquidity.
43. An effective costs and benefits allocation process will seek to align the risk-taking incentives of individual business lines with the liquidity risk exposures their activities create for the ADI as a whole. This is also the case for new product approvals, which will generally need to incorporate the allocation process (both on- and off-balance sheet).
44. Prudent practice would mean that senior management appropriately incorporates funding and liquidity costs, benefits and risks in the internal pricing, performance measurement and new product approval process for all significant business activities (both on- and off-balance sheet).
45. For senior management, this would involve ensuring that an ADI's liquidity management process includes measurement of the liquidity costs, benefits and risks implicit in all significant business activities, including activities that involve the creation of contingent exposures. These costs and benefits would then be explicitly attributed to the relevant activity so that incentives are consistent with and reinforce the liquidity risk strategy of the ADI, with a liquidity charge assigned as appropriate to positions, portfolios or individual transactions. This allocation of funding and liquidity costs and benefits will incorporate factors related to the anticipated holding periods of assets and liabilities, their market liquidity risk characteristics and any other relevant factors.
46. When modelling the costs of maintaining a liquidity buffer within a liquidity costs and benefits allocation process, good practice would be to assume that assets are costed on

a basis that reflects prudent funding over a longer term.

47. APRA would expect the allocation and underlying analytical framework to be reviewed periodically to reflect changing business and financial market conditions, so as to maintain an appropriate alignment of incentives. For larger, more complex ADIs this review is expected to be conducted on at least an annual basis.

Funding strategy

48. APS 210 requires an ADI to develop and document a three-year funding strategy incorporating a funding plan that can be provided to APRA upon request.
49. While the funding strategy covers a three-year period, it is expected that the period covering the first 12-18 months of the strategy would be relatively more detailed.
50. The Board-approved funding strategy will generally include both qualitative and quantitative items, key outcomes and the strategies that will be used to achieve the outcomes. The funding strategy would combine expected funding outcomes with sensitivity analysis. The strategy would include the base-case balance sheet projection, consistent with an ADI's medium-term business plan, that represents the ADI's best estimate of its future funding needs and sources, as well as key sensitivities in the base case.
51. APRA envisages that an ADI that is reliant on wholesale funding would maintain a relatively higher proportion of unencumbered, highly liquid assets than an ADI that relies primarily on retail funding. Where an ADI is active in multiple currencies, access to diverse sources of liquidity in each currency would generally be expected.
52. APRA considers it prudent for an ADI to include second-order effects on its funding sources in developing its funding strategy. For example, an ADI's source of funding under normal

conditions from a particular source may not be available in a market-wide stress event. It would be prudent to consider alternative funding scenarios for changing market conditions.

53. Maintaining an active presence in markets in which an ADI obtains funding requires an ongoing commitment and investment in adequate and appropriate infrastructures, processes and information collection. An ADI cannot generally assume it will be able to access markets in a timely manner where it has not established the necessary infrastructure or market presence, or where these arrangements have not been periodically utilised.

Contingency funding plan

54. APS 210 requires an ADI to have in place a formal contingency funding plan (CFP) that clearly sets out the strategies for addressing liquidity shortfalls in emergency situations.
55. A CFP contains the policies, procedures and action plans that would be used to respond to severe disruptions to an ADI's ability to fund some or all of its activities in a timely manner.
56. For an ADI that has retail deposits, APS 210 requires the ADI to include in its CFP a plan for a retail deposit run. As a starting point, an ADI could consider the principles outlined in the Australian Payments Clearing Association (APCA) 'Code of Conduct - Retail Run'. In addition, APRA expects that the ADI's plan would be focussed on the repayment of retail depositors as a priority and within contractual terms. Cessation of withdrawals of retail deposits would be considered untenable under most scenarios.
57. It is particularly important in developing and analysing the CFP that an ADI's management is aware of the operational procedures needed to transfer liquidity and collateral across entities located in different jurisdictions and from other business units within the ADI and the restrictions that apply to such transfers.

Realistic timelines for such transfers would be incorporated into liquidity modelling.

58. APRA expects that roles and responsibilities in the CFP would be appropriate for a liquidity stress event and be broadly understood. This is of particular importance as roles and responsibilities under the CFP are likely to be materially different to those under normal circumstances. In addition, an ADI would be expected to ensure that:
- contact information in its CFP is up to date; and
 - the necessary legal and operational procedures are in place to execute the plan at short notice.
59. An ADI would be expected to regularly test key assumptions, such as the ability to sell or repo certain assets for liquidity purposes. Senior management would be expected to review all aspects of the plan following each exercise.
60. Building strong relationships with various key providers of funding can give an ADI insight into the funding providers' behaviour in times of ADI-specific or market-wide stress and provide a line of defence if a liquidity problem arises.
61. Although developing and maintaining strong relationships with funds providers is important, an ADI would generally also be expected to take a prudent view of how those relationships could become strained in times of stress. Institutions that routinely provide funds in normal conditions may not do so in times of widespread stress because of uncertainty about their own liquidity needs or a change in risk appetite. In the formulation of its stress test scenarios and contingency funding plan, an ADI would be expected to consider these second-order effects and take into account the possibility that sources of funds could become constrained and that markets could contract or close. Consideration of alternative funding sources under such a scenario would be prudent.

62. In addition, increased uncertainty about an ADI's repayment ability can cause significant deterioration in the willingness of counterparties to provide funding. An ADI could mitigate some associated impacts by using stress test scenarios and contingency funding plans that consider the effects that the various potential causes of a loss of confidence can have on the ADI's ability to maintain funding relationships. In such situations, the quality and quantity of an ADI's capital base can positively influence the willingness of counterparties to maintain funding relationships.

63. Depending on the nature, severity and duration of a liquidity shock, potential sources of funding during a crisis include the following:

- deposit growth;
- new issues of short- and long-term debt instruments;
- intragroup fund transfers;
- new capital issues;
- asset sales;
- asset securitisation; and
- the sale or repo of unencumbered, highly liquid assets.

64. An ADI would also need to consider that not all of these options will be available in all circumstances and some could be available only with a substantial time delay.

65. Many ADIs include new issues of securitised assets in their analysis of available sources of funds. Over-reliance on the securitisation of assets as a source of funds during an ADI-specific stress event, when markets may not make liquidity available, could exacerbate a liquidity stress event. This reinforces the need for an ADI to have access to a diversified funding base.

66. The global market disruptions of 2007-2009 confirmed that asset securitisation markets can close very quickly in times of stress. ADIs need to consider contingencies against

potential limitations on asset securitisation activity.

67. The CFP would give consideration to the size of an ADI's level of self-securitised assets and the situations under which these might be used.

68. For an ADI with a Committed Liquidity Facility (CLF) with the Reserve Bank of Australia (RBA), APRA expects the level of the ADI's self-securitised assets would be well in excess of that used as collateral for the CLF.

Stress testing

69. APS 210 requires an LCR ADI to conduct stress tests on a regular basis for a variety of short-term and protracted institution-specific and market-wide stress events.

70. Stress tests assist an ADI to identify and quantify exposures to possible future liquidity stresses. Stress tests would therefore be expected to analyse possible impacts on the ADI's cash flows, liquidity position, profitability and solvency.

71. To ensure an ADI has taken into account the impact of its consolidated group-wide liquidity position, management would be expected to understand where the ADI's liquidity stresses could arise, regardless of its organisational structure and whether it manages liquidity risk on a centralised or decentralised basis. Management would be expected to assess whether additional tests are warranted for individual entities, e.g. subsidiaries and branches within the group that are exposed to significant liquidity risks. Tests could consider the implications of the scenarios across different time horizons, including on an intraday basis.

72. Stress tests will generally cover a spectrum of events relevant to each ADI. Doing so will help deepen management's understanding of vulnerabilities. Flexible and imaginative stress tests will better identify hidden vulnerabilities. A 'failure of imagination' could

lead to an underestimation of the likelihood and severity of extreme events and to a false sense of security about an ADI's resilience.

73. Stress tests would generally cover forward-looking scenarios to incorporate changes in portfolio composition, new information and emerging risk possibilities that are not covered by relying on historical analysis or replicating previous stress episodes. Being forward-looking requires combining the knowledge and judgement of experts across the organisation. Senior management dialogue and judgements will ideally be used as the basis for such forecasts.
74. An appropriate framework would comprise a broad range of scenarios covering risks at different levels of granularity, including firm-wide, as well as customer type, product, business, currency and entity-specific stress events. The materiality of particular business areas and their vulnerability to liquidity stress related conditions will give guidance to the types of scenarios that could be run.
75. Stress tests can include various time horizons depending on the risk characteristics of the analysed exposures and whether the particular test is intended for tactical or strategic use. A natural starting point will consider the relevant risk management horizon of the target portfolio and the liquidity of the underlying exposures. However, there is need to cover substantially longer periods as liquidity conditions can change rapidly in stressed conditions. ADIs would be expected to note the increased importance of assumptions as the time horizon of a scenario is lengthened. An ADI could also consider incorporating feedback effects and firm-specific and market-wide reactions into such tests.
76. Stress test results would generally be expected to be discussed thoroughly by senior management and timely mitigating actions taken to adjust the ADI's liquidity profile in accordance with its liquidity risk tolerance. Also, APRA expects the results to be utilised in

the ADI's CFP, particularly in dealing with events of liquidity stress.

77. Where relevant, stress tests would be expected to include adverse assumptions regarding the following:
 - asset market liquidity and the erosion in the value of liquid assets;
 - the run-off of retail funding;
 - volume of notices for minimum-notice deposit products;
 - the availability of secured and unsecured wholesale funding sources;
 - the correlation between funding markets or the effectiveness of diversification across sources of funding;
 - additional margin calls and collateral requirements;
 - funding tenors of new issues;
 - contingent claims and potential draws on committed lines extended to third parties or the ADI's subsidiaries, branches or head office;
 - the liquidity absorbed by off-balance sheet vehicles and activities (including conduit financing);
 - the availability of contingent lines extended to the ADI;
 - liquidity drains associated with complex products or transactions;
 - the impact of credit rating triggers;
 - foreign currency convertibility;
 - the ability to transfer liquidity across entities, sectors and jurisdictions, taking into account legal, regulatory, operational and time-zone restrictions and constraints;
 - access to central bank facilities;
 - the operational ability of the ADI to monetise assets;
 - the ADI's remedial actions and the availability of necessary documentation and operational expertise to execute

them, taking into account the potential reputational impact when executing these actions; and

- estimates of future balance sheet growth.

Liquid asset diversification for LCR ADIs

78. ADIs are expected to ensure that their liquid assets portfolios are appropriately diversified. Liquid asset diversification aims to provide greater confidence that the assets can be readily liquefied in times of liquidity stress with limited erosion of value. Diversification would be expected to be considered along product, issue and counterparty lines.
79. When assessing the need to diversify, the liquidity quality of the assets being held is a primary consideration. The stock of liquid assets would be expected to be well diversified within the asset classes themselves, except for Commonwealth government securities, sovereign debt in other jurisdictions in which the ADI operates, central bank reserves and cash. For other asset classes, liquid asset diversification would be considered; as an example, an ADI that is holding only a single issue of another ADI's debt may experience difficulty selling the asset in a time of stress.
80. An ADI that has established a secured CLF with the RBA, as discussed below, would still be expected to have holdings of both Commonwealth Government and semi-government securities, as well as to diversify their third-party holdings of CLF-eligible debt securities both external and internal to the Australian banking system.
81. Recognising the limited supply of Commonwealth Government and semi-government securities, APRA, in consultation with the RBA, will take a pragmatic approach when considering the appropriate level of holdings of such assets in ADI liquid assets portfolios.
82. An ADI would be expected to give consideration to liquid asset diversification in

the context of both the size and nature of its operations and the size of its liquidity portfolio. In considering an ADI's liquid asset diversification, APRA would not expect to see holdings of lower-rated debt securities that are concentrated on either an individual name or aggregate basis.

The CLF and the LCR

83. In recognition of jurisdictions with insufficient supply of high-quality liquid assets (HQLA), the Basel III liquidity framework incorporates scope for alternative treatments for the holding of HQLA. As the current supply of HQLA in Australia is not adequate to satisfy ADIs' LCR requirements, APRA and the RBA announced in December 2010 that an ADI will be able to establish a secured CLF with the RBA for the purposes of meeting its LCR requirement in Australian dollars.
84. The CLF can be used by an ADI to cover the shortfall between the ADI's holdings of HQLA and its LCR needs (both in Australian dollars). An ADI is required to make an annual application to APRA outlining its Australian dollar liquidity needs in the context of the LCR and a resulting forecast of its required CLF size.
85. Following an assessment of an ADI's CLF application, APRA will inform the ADI of the size of its total CLF approved for inclusion in the LCR. The assessment process and the material required from an ADI will be advised by APRA each year.
86. APRA expects CLF and net cash outflow (NCO) projections to be appropriate for the ADI's business plan, asset composition, credit rating and access to various funding sources, and contain realistic assumptions about the funding market environment over the funding plan period. In particular, lending growth would generally be expected to be matched by more stable sources of funding.

Size and composition of the CLF

87. APRA will take into account forecast asset growth, funding composition and the average NCO position of an ADI in the LCR scenario projected over the CLF approval period.
88. The CLF is only to be used to manage any shortfall in net cash outflows in Australian dollars. In the event that APRA is not satisfied with an ADI's efforts to prudently fund its balance sheet, appropriate supervisory action will be taken.
89. Given the projected net Australian dollar cash outflow position and the holdings of Australian dollar HQLA, a CLF will be approved that incorporates projected growth in inputs over the CLF review period as well as the need for a management buffer above an LCR of 100 per cent.

Inclusion of the CLF in the LCR scenario

90. Within the CLF approval period, an ADI will be able to report the value of CLF-eligible assets within both Level 1 and Level 2 reports. The included amount will be the minimum of the holdings of CLF-eligible assets after the application of RBA margins, and the approved size of the CLF adjusted to recognise secured funding and lending transactions backed by CLF securities. The composition of HQLA and CLF-eligible assets will be monitored by APRA on an ongoing basis, with particular attention given to the proportion of self-securitised assets.
91. APRA will inform the RBA of the size of the CLF that has been approved for inclusion in the LCR. An ADI will then enter into a contract with the RBA for the provision of the facility.

Other matters

92. APRA would expect an ADI, in the normal course of business, to have no need to amend the size of its CLF contract within the CLF approval period. However, should circumstances change materially, an ADI will be able to approach APRA with a request to

amend the approved facility size based on an updated submission.

93. APRA will continue to assess the funding position of ADIs to ensure that the Australian banking system maintains a liquidity profile that is consistent with other relevant jurisdictions.
94. APRA will benchmark LCR ADIs against their international counterparts, with particular focus on the LCR-related metrics of NCOs compared to total assets or liabilities. ADIs will also be benchmarked using other relevant and internationally comparable metrics.

The modelling of CLF-eligible debt securities

95. Within the LCR framework, HQLA are always considered to be HQLA and are not included, or double-counted, as cash inflows. To maintain consistency with the treatment of HQLA in this regard, a debt security held as part of a CLF will continue to be included in the numerator of the LCR when that debt security has less than 30 days to maturity, and will not be included as a cash inflow.

The method for allocating a retail deposit

96. APS 210 requires that, within the LCR and NSFR, retail deposit accounts be divided into categories representing stable, less stable and higher run-off less stable deposits. APS 210 outlines the process for allocating each account or product to one of these categories.
97. Only retail deposits in Australia and in jurisdictions that have not implemented Basel III are to be assessed against the scorecard. Retail deposits in other jurisdictions that have implemented Basel III are to be allocated a run-off rate as per the rules of that jurisdiction.
98. To adequately assess retail deposits against the relevant criteria, APRA expects, to the greatest extent possible, that modelling is

conducted at an individual customer level. This is essential for some criteria, such as having 'other established relationships'. However, recognising the complexities this may entail, APRA acknowledges that this level of analysis may not be practical in all circumstances. Through its ongoing supervisory activity, including the annual review of the approved size of the CLF for LCR purposes, APRA will discuss the appropriate granularity of modelling with an LCR ADI.

99. As set out in Attachment A of APS 210, each deposit is first considered against the criteria for stable deposits; those that satisfy the criteria are given a run-off rate of five per cent. For balances that are greater than the Financial Claims Scheme (FCS) limit, where all other criteria are met, only that balance below the scheme's limit will receive a run-off rate of five per cent. This is consistent with the application of the FCS on an aggregated basis across all eligible deposit accounts held by an account holder with an ADI. Subject to meeting these conditions a deposit less than, and up to the FCS limit, can be treated as stable and any excess balance above that limit is to be treated as less stable.
100. As a part of the retail deposit allocation process, each ADI will need to complete an assessment of the relationship and transactional nature of the insured deposit as set out in Attachment A of APS 210.
101. When assessing a depositor to determine whether other established relationships exist, an ADI can take into account the nature and breadth of the customer relationship, including other accounts and products the depositor has with the ADI, in total number, nature and longevity. Other considerations are whether the customer has both asset and liability relationships with the ADI and the account access method (via the branch network, through multiple channels or only through online access). APRA expects an ADI to adopt a multi-faceted approach that includes factors such

as the length of the customer relationship and consideration of the strength of the customer relationship.

102. Transaction accounts are those commonly used for customers' day-to-day banking requirements. Criteria for eligibility as a transactional account would include consideration of whether the product is designed as a transaction account and if the account is used, in practice, for customers' day-to-day banking requirements. An examination of the nature of transactions would be expected to ensure both depositor-initiated inflows and outflows are present and consistent with basic banking activity (e.g. whether a salary is automatically deposited into the account, paying bills and other expenses). APRA accepts that where a deposit is in a product designed to be a transaction account, and is non-interest bearing or pays a rate of interest significantly below similar products (available to a depositor) with the same ADI, then it might be appropriate to classify such accounts as transaction accounts.
103. The remaining deposits are then to be considered against the criteria in the scorecard in Attachment A of APS 210. Assessment against the scorecard will identify all deposits that receive a score of three or more and hence a run-off rate of 25 per cent. All remaining deposits not identified as having a five or 25 per cent run-off rate, receive a run-off rate of 10 per cent.
104. For a less stable deposit of total value greater than the FCS limit, the deposit may be split into two portions. The amount of the deposit less than the FCS limit will receive a score of zero against the FCS limit criteria; the amount of the deposit above the FCS limit will receive two points.
105. The scorecard is to also be applied to jurisdictions where Basel III has not been implemented. If there is no effective government deposit guarantee within such a jurisdiction, a similar treatment to

paragraph 104 above is to be made, with the limit to be applied equivalent to AUD 250,000.

106. The on-line account classification is expected to exclude typical transaction and savings accounts offered by ADIs where on-line access is incidental to the account design and is one of a range of access options. The on-line account classification seeks to capture those accounts where the engagement between the ADI and the depositor, at all points through the account lifecycle is expected to be minimal, and the sole means of withdrawal is via transfer to an account at another ADI.
107. Heavily rate-driven deposits describe those deposits that have an interest rate materially above comparable products offered by the ADI or its peers, or products offering an introductory or promotional rate that decreases after a set period. This is often coupled with advertising that emphasises the interest rate. Term deposits with similar features would also fall into this category.
108. Given the very limited number of members allowed in a self-managed super fund (SMSF), SMSF deposits can be considered as retail for the purposes of the LCR. An SMSF depositor is considered to be a self-selected, financially sophisticated individual who is undertaking an asset allocation investment choice. This activity is not consistent with the description of typical activity under a transaction account, as outlined in Attachment A of APS 210. As a result, the deposit of an SMSF customer is to be categorised as less stable.

Modelling of the minimum 31-day notice period deposit

109. Certain deposit products in the Australian market are callable by the depositor subject to a minimum 31-day notice period. These deposits may have been written for an original term of greater than 31 days or

alternatively as a deposit subject to a notice period.

110. In the LCR, all balance sheet items are to be modelled based on their next call date. For the 31-day notice period deposit, this means that in the LCR there will be no cash outflow when its maturity date or next possible withdrawal date is 31 days or more and the deposit has not been called. In the event that the deposit has been called, its maturity date will now be fixed, and as the term to maturity reduces to 30 days or less it is to be modelled in the LCR with an outflow that reflects the customer's intent. If the ADI has been informed of the customer's intent to withdraw the deposit from the ADI, the deposit is to be modelled with a 100 per cent run-off rate. If the deposit is not intended to be withdrawn from the ADI, the outflow is modelled as per the depositor's characteristics.
111. If an ADI issuing a 31-day notice period deposit is required to provide the depositor with a grace period (e.g. of seven calendar days) before the ADI can lock the deposit in for either a new term or notice period, those deposits that are currently in a grace period are, for LCR purposes, to be modelled on an equivalent basis to the demand deposit portfolio.
112. APRA expects that in both stress tests and CFPs, an ADI would analyse the impact of excessive volumes of notices provided, including 100 per cent of all financial institution depositors giving notice.

Intermediated deposits - look-through approach

113. APRA expects that an ADI will conduct a self-assessment against the requirements in paragraph 34 of Attachment A of APS 210 prior to applying the look-through approach to a deposit from an intermediary.
114. APRA's expectation is that in order to satisfy the conditions in Attachment A that enable a deposit to be treated as a retail

deposit, there would be a contract in place between the ADI and the intermediary. The contract details would be set out in the ADI's self-assessment.

115. APRA's view is that cash allocations within a managed fund deposited with an ADI are deposits from a financial institution with an associated 100 per cent run-off, unless the deposits are subject to a minimum 31-day notice period.
116. An ADI would be expected to conduct a stress test to determine the impact of all intermediaries terminating their deposit contracts with the ADI. Such a stress event would normally be considered in an ADI's CFP.

Small to medium enterprise (SME) deposits and the AUD 2 million threshold

117. As per paragraph 45 of Attachment A of APS 210, deposits from SME customers, where the SME has less than AUD 2 million in total on deposit with the ADI, can be modelled as retail where the SME depositor has similar liquidity risk characteristics to retail depositors.
118. As a result, an ADI would be expected to consider the characteristics of each SME depositor in order to ensure that they are appropriately classified for LCR purposes. It will not be sufficient to apply a simple filter to the non-financial corporate portfolio, separating customers with less than AUD 2 million in aggregate from those with more than AUD 2 million.
119. An ADI would be expected to analyse the portfolio to ensure, firstly, that only SME customers and not large corporate customers with small deposits are being captured for a retail treatment and, secondly, only those SMEs with similar liquidity characteristics to a retail depositor are given a retail treatment.
120. Where an ADI is modelling inflows or contingent outflows against asset products, it may be the case that the definition of an SME in APS 210 cannot be applied because an SME client does not have deposits with the ADI. In this event, to assist categorisation, the definition of an SME in *Prudential Standard APS 113 Capital Adequacy: Internal Ratings-based Approach to Credit Risk* can be used.

Operational deposits

121. In the LCR, an operational deposit will receive a lower run-off rate than other deposits from the same customer. The operational deposit describes those where the ADI is providing a service to the customer that involves either clearing, custody or cash management services.
122. For the purposes of the operational deposits classification in Attachment A of APS 210, a simple product test or interest rate test (unless the interest rate is zero) alone is not sufficient to classify an account as operational. Term deposits are not considered operational deposits.
123. One of the key characteristics of operational deposits is that there will be a practical impediment to the customer's ability to withdraw the funds given they are central to the ongoing business activities of the customer. ADIs are generally aware when they are the 'main banker' to a non-retail customer, and this is a key factor when considering whether a deposit is operational.
124. An ADI would generally be expected to conduct an assessment on each customer account that is considered to be operational in order to identify that portion of the deposit deemed to be for operational purposes. Excess balances within the account are to receive the appropriate non-operational deposit treatment. If an ADI is unable to determine the amount of the excess balance, the entire deposit will be

- assumed to be excess to requirements and, therefore, considered non-operational.
125. An ADI is to determine the methodology for identifying excess balances. The methodology would be expected to take into account relevant factors such as the likelihood that wholesale customers have above-average balances in advance of specific payment needs, and consider appropriate indicators (e.g. ratios of account balances to payment or settlement volumes or to assets under custody).
 126. Such an assessment could also include an analysis of historical average and minimum balances in the deposit account in order to estimate the threshold below which balances are considered operational.
 127. Where a depositor has options to readily shift funds to accounts paying a materially higher interest rate, such operational accounts could be considered to have no excess balance. For operational accounts paying interest or where the depositor does not have a readily available alternative to transfer excess funds to a higher paying account, APRA would expect there to be robust analysis to determine the level of excess and operational balances of the account.
 128. APS 210 identifies wholesale deposits with operational relationships as clearing, custody or cash management only. The nature of these deposits is described below:
 - clearing relationship: a service arrangement that enables customers to transfer funds (or securities) indirectly through direct participants in domestic settlement systems to final recipients. Such services are limited to the following activities: transmission, reconciliation and confirmation of payment orders; daylight overdraft, overnight financing and maintenance of post settlement balances; and determination of intraday and final settlement positions;
 - custody relationship: the provision of safekeeping, reporting or processing of assets or the facilitation of the operational and administrative elements of related activities on behalf of customers in the process of transacting and retaining financial assets. Such services are limited to the settlement of securities transactions, the transfer of contractual payments, the processing of collateral and the provision of custody-related cash management services. Also included are the receipt of dividends and other income, client subscriptions and redemptions. Custodial services can furthermore extend to asset and corporate trust servicing, treasury, escrow, funds transfer, stock transfer and agency services, including payment and settlement services (excluding correspondent banking) and depository receipts;
 - cash management relationship: the provision of cash management and related services to customers. Cash management services refers to those products and services provided to a customer to manage its cash flows, assets and liabilities, and conduct financial transactions necessary to the customer's ongoing operations. Such services are limited to payment remittance, collection and aggregation of funds, payroll administration and control over the disbursement of funds.
 129. Correspondent banking and prime brokerage relationships (described below) do not meet the criteria for an operational deposit.
 - correspondent banking: arrangements under which one bank (correspondent) holds deposits owned by other banks (respondents) and provides payment and other services in order to settle foreign currency transactions. An example is nostro and vostro accounts used to settle foreign currency transactions for the provision of clearing and settlement of payments;
 - prime brokerage: a package of services offered to large active investors,

particularly hedge funds. These services usually include: clearing, settlement and custody; consolidated reporting; financing (margin, repo or synthetic); securities lending; capital introduction; and risk analytics.

Derivative transactions

Collateral that would need to be posted as a result of a downgrade of three notches

130. Often contracts governing derivatives and other transactions have clauses that require the posting of additional collateral, drawdown of contingent facilities or early repayment of existing liabilities upon the ADI's downgrade by a recognised credit rating organisation. The LCR therefore requires that for each contract in which 'downgrade triggers' exist, the ADI assumes that 100 per cent of this additional collateral or cash outflow will have to be posted for up to and including a three-notch downgrade of the ADI's long-term credit rating. Triggers linked to an ADI's short-term rating are to be assumed to be triggered at the corresponding long-term rating in accordance with published ratings criteria. When considering the impact of the downgrade, an ADI would consider impacts on all types of margin collateral and contractual triggers that change rehypothecation rights for non-segregated collateral.

Treatment of placements with a branch by its head office

131. For the purposes of the LCR, a deposit placed with a branch of a foreign bank by its head office on an overnight basis is treated as equivalent to an at-call deposit placed by a financial institution and receives a 100 per cent run-off rate in the LCR. In a liquidity stress event, the head office will retain the authority to repatriate those funds.

132. An ADI is, however, able to put in place arrangements between the branch and head office stipulating that such funds will only be withdrawn subject to a notice period that is greater than 30 days. The branch would then recognise this notice period when modelling the deposit under APS 210. For such deposits, as the notice period is outside of the LCR stress scenario timeframe, the branch would assume that the deposit will remain with it in the stress event. This treatment may also apply to retained earnings held by the branch.

Contingent funding obligations

Buyback of debt securities

133. In a time of stress, even with a debt buyback policy in place that restricts or even prohibits buybacks, some buyback requests could still be honoured due to reputational considerations or because it could take a period of time for the full extent of the liquidity stress to be realised and restrictions on debt buybacks activated. An ADI can apply to APRA for permission to apply a lower debt buyback run-off rate than that required by APS 210 where:

- the ADI can demonstrate it has taken tangible measures in policy and practice to reduce the incidence of buybacks (e.g. through the implementation of an appropriately prudent hard limit on daily buybacks); and
- the ADI can demonstrate that these measures are operating effectively on an ongoing basis.

Letters of credit and other trade finance instruments

134. For the purposes of this category in the LCR, trade finance instruments consist of trade-related obligations directly underpinned by the movement of goods, such as:

- documentary trade letters of credit, documentary and clean collection, import bills and export bills; and
- guarantees directly related to trade finance obligations, such as shipping guarantees.

135. Lending commitments for non-financial corporate firms can be excluded from this treatment.

Minimum liquidity holdings (MLH) approach

136. The MLH approach is used by ADIs that are designated as MLH ADIs by APRA. The MLH approach is outlined in Attachment B of APS 210.

ADI deposits as MLH eligible assets

137. For a deposit with another ADI to be deemed readily convertible into cash within two business days and qualify as an MLH asset, the ADI depositor needs the unequivocal and documented contractual right to break the deposit at its sole discretion. Further, the ADI that accepted the placement needs to document that funds will be available within two business days of a break request being received by the depositor ADI. Any deposit placements included by an ADI as MLH assets are calculated net of deposits received from other ADIs.

MLH operational capacity to liquidate

138. Market liquidity is a necessary but not sufficient condition for true liquidity, because the holder of a debt security needs to have effective access to the marketplace in order to benefit from market liquidity. Accordingly, APRA's approach is to use a dual test on ADIs that hold debt securities as MLH assets. The debt security itself must meet the specifications for MLH assets in

APS 210 and each individual ADI needs to be able to demonstrate its operational capacity to liquidate that debt security within two business days.

139. Means of accessing the market include direct clean sale or repo to a third party, broker-intermediated clean sale or repo to a third party and repo with the RBA. An ADI would be expected to ensure that it has appropriate operational access to market liquidity, and periodically tests this access. APRA's expectation is that appropriate operational access will mean an ADI having more than one mode of access to the market. Solely relying on the issuer of a debt security to conduct a buyback does not constitute prudent liquidity management.

140. Periodic testing of market access will generally involve executing a transaction to liquefy an MLH asset to demonstrate that the ADI has the operational capacity to satisfy Attachment B of APS 210. This test may be for a small part of the MLH portfolio but would include each liquid asset type held by the ADI.

Liquid assets diversification for MLH ADIs

141. An MLH ADI is expected to ensure that its liquid asset portfolio is appropriately diversified. Liquid asset diversification aims to provide greater confidence that the assets can be readily liquefied in times of liquidity stress with limited erosion of value. Diversification would be expected to be considered along product, issue and counterparty lines.

142. When assessing the need to diversify, the liquidity qualities of the assets being held is a primary consideration. The stock of liquid assets would be expected to be well diversified within the asset classes themselves, except for Commonwealth government securities, sovereign debt in other jurisdictions in which the ADI

operates, central bank reserves and cash. For other asset classes, liquid asset diversification would be considered; as an example, an ADI that is holding only a single issue of another ADI's debt could experience difficulty selling the asset in a time of stress.

143. An MLH ADI would be expected to give consideration to liquid asset diversification in the context of both the size and nature of its operations and the size of its liquidity portfolio. For example, the liquid asset requirement for a small ADI could be satisfied with a small number of highly liquid debt securities and deposits. In considering an ADI's liquid asset diversification, APRA would not expect to see holdings of lower-rated debt securities that are concentrated on either an individual name or aggregate basis.

Net stable funding ratio (NSFR)

144. The amounts of available stable funding (ASF) and required stable funding (RSF) specified in APS 210 are calibrated to reflect the presumed stability of liabilities and the liquidity of assets.
145. For NSFR purposes, retail term deposits are to be treated consistent with their treatment under the LCR. Retail term deposits maturing within one year, or which can be redeemed early, would be classified as either stable or less stable, depending on their characteristics. Retail term deposits maturing after one year or more and which cannot be redeemed early would receive an ASF of 100 per cent.
146. When calculating the RSF of collateral pledged in a repo or secured transaction, the collateral would be considered encumbered for the term of the transaction, even if the collateral matures earlier. This reflects the need to replace the collateral once it matures. Hence, collateral pledged under a transaction that matures beyond a one-

year period would be subject to an RSF factor of 100 per cent regardless of its maturity.

Interdependent assets and liabilities

147. As noted in APS 210, the recognition of interdependent assets and liabilities will be on an exceptions basis only. For this purpose, APRA would expect an ADI to be able to demonstrate the criteria in APS 210 are clearly met by the assets and liabilities in question without exception. APRA will only consider an application where an ADI is able to demonstrate compliance with the criteria.
148. APRA does not consider derivative transactions to be eligible for interdependent asset and liability treatment under APS 210.



 APRA

Telephone
1300 55 88 49

Email
info@apra.gov.au

Website
www.apra.gov.au

Mail
GPO Box 9836
in all capital cities
(except Hobart and Darwin)