



PRUDENTIAL PRACTICE GUIDE

APG 223 – Residential Mortgage Lending

February 2017 ~~November 2014~~

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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.

This PPG aims to outline prudent practices in the management of risks arising from lending secured by mortgages over residential properties, including owner-occupied and investment properties. It applies to authorised deposit-taking institutions (ADIs) as well as to other APRA-regulated institutions that may have exposures to residential mortgages. It should be read in conjunction with prudential standards for ADIs, including:

- *Prudential Standard APS 220 Credit Quality* (APS 220);
- *Prudential Standard CPS 220 Risk Management* (CPS 220) ~~{effective 1 January 2015}~~;
- *Prudential Practice Guide CPG 220 Risk Management* (CPG 220)[†]; and
- *Prudential Standard CPS 510 Governance* (CPS 510).

Subject to meeting APRA's prudential requirements, and legislative and regulatory requirements governing consumer lending by ADIs and third parties acting on their behalf, an APRA-regulated institution has the flexibility to manage residential mortgage lending in a manner that is best suited to achieving its business objectives. Not all of the practices outlined in this PPG will be relevant for every institution and some aspects may vary depending upon the size, complexity and risk profile of the institution.

[†] At the time of publication, CPG 220 was in draft form.

Background

1. Lending secured by mortgages over residential property (residential mortgage lending) constitutes the largest credit exposure in the Australian banking system, and for many authorised deposit-taking institutions (ADIs) constitutes over half their total credit exposures. This concentration of exposure warrants ADIs paying particular attention to residential mortgage lending practices.
2. This prudential practice guide (PPG) summarises prudent lending practices in residential mortgage lending [in Australia](#), including the need to address credit risk within the ADI's risk management framework, sound loan origination criteria, appropriate security valuation practices, the management of hardship loans and a robust stress-testing framework. In developing this PPG, APRA has had regard to the Financial Stability Board's (FSB) *Principles for Sound Residential Mortgage Underwriting Practices*² (FSB principles), which sets out minimum underwriting (loan origination) standards that the FSB encourages supervisors to implement. [Although the exact details may differ somewhat to reflect local conditions, APRA would expect a prudent ADI undertaking residential mortgage lending outside of Australia to apply lending standards and risk management practices that are similarly conservative to those outlined in this PPG.](#)

Risk management framework

Consistent with *Prudential Standard CPS 220 Risk Management* (CPS 220), where residential mortgage lending forms a material proportion of an ADI's lending portfolio and therefore represents a risk that may have a material impact on the ADI, it would be prudent for the Board of directors (the Board) and senior management to specifically address residential mortgage lending in its risk management framework, in particular in the risk appetite statement, risk management strategy and business plans.

APRA's expectations of an ADI Board for residential mortgage lending

3. Where residential mortgage lending forms a material proportion of an ADI's lending portfolio and therefore a risk that may have a material impact on the ADI, APRA expects that the Board would take reasonable steps to satisfy itself as to the level of risk in the ADI's residential mortgage lending portfolio and the effectiveness of its risk management framework. This would, at the very least, include:
 - a) specifically addressing residential mortgage lending in the ADI's risk appetite, risk management strategy and business plans;

² www.financialstabilityboard.org/publications/r_120418.pdf

- b) seeking assurances from senior management that the approved risk appetite is communicated to relevant persons involved in residential mortgage lending and is appropriately reflected in the ADI's policies and procedures; and
- c) seeking assurances from senior management that there is a robust management information system in place that:
 - i) tracks material risks against risk appetite;
 - ii) provides periodic reporting on compliance with policies and procedures, reasons for significant breaches or material deviations and updates on actions being taken to rectify breaches or deviations; and
 - iii) provides accurate, timely and relevant information on the performance and risk profile of the residential mortgage lending portfolio.

Risk appetite including residential mortgage lending

4. The overarching risk appetite statement required under CPS 220 would typically include an expression of the level of credit risk an ADI is willing to accept. Such a statement would be expected to adopt a forward-looking view of the ADI's credit risk profile and align with its business plan and risk management strategy.
5. Where residential mortgage lending forms a material proportion of an ADI's lending portfolio and therefore represents a risk that may have a material impact on the ADI, the accepted level of credit risk would be expected to specifically address the risk in the residential mortgage portfolio. Further, in order to assist senior management and lending staff to operate within the accepted level of credit risk, quantifiable risk limits would be set for various aspects of the residential mortgage portfolio. When setting risk limits for the residential mortgage portfolio, a prudent ADI would consider the following areas:
 - a) loans with differing risk profiles (e.g. interest-only loans, owner-occupied, investment property, reverse mortgages, home equity lines-of-credit (HELOCs), foreign currency loans and loans with non-standard/alternative documentation);
 - b) loans originated through various channels (e.g. mobile lenders, brokers, branches and online);
 - c) geographic concentrations;
 - d) serviceability criteria (e.g. limits on loan size relative to income, (stressed) mortgage repayments to income, net income surplus and other debt servicing measures);
 - e) loan-to-valuation ratios (LVRs), including limits on high LVR loans for new originations and for the overall portfolio;
 - f) use of lenders mortgage insurance (LMI) and associated concentration risks;

- g) special circumstance loans, such as reliance on guarantors, loans to retired or soon-to-be-retired persons, loans to non-residents, loans with non-typical features such as trusts or self-managed superannuation funds ([SMSFs](#));
 - h) frequency and types of overrides to lending policies, guidelines and loan origination standards;
 - i) maximum expected or tolerable portfolio default, arrears and write-off rates; and
 - j) non-lending losses such as operational breakdowns or adverse reputational events related to consumer lending practices.
6. Good practice would be for the risk management framework to clearly specify whether particular risk limits are 'hard' limits, where any breach is escalated for action as soon as practicable, or 'soft' limits, where occasional or temporary breaches are tolerated.
7. In keeping with good practice, an ADI would balance the need to regularly review its risk appetite and risk limits in relation to residential mortgage lending, with the need to avoid too-frequent and disruptive change. APRA would be concerned if risk limits were frequently redefined in a manner that leads to obscured limit breaches or to greater risk-taking outside the ADI's overall risk appetite. This could include, for example, changing between portfolio and origination limit measures, or between including and excluding capitalised LMI premiums in risk limits.

Oversight and review

8. Consistent with CPS 220, an ADI would have policies and procedures for identifying, measuring, monitoring and controlling material risks in the residential mortgage lending portfolio.
9. Typically, senior management is responsible for monitoring compliance with material policies, procedures and risk limits and reporting material breaches or overrides to the Board. Further, where risk limits are routinely breached or policies and procedures overridden, senior management and the Board could consider whether this is indicative of a less prudent lending culture than that reflected in its risk appetite and what steps could be necessary to remedy any identified deficiency.
10. In order to establish robust oversight, the Board and senior management would receive regular, concise and meaningful assessment of actual risks relative to the ADI's risk appetite and of the operation and effectiveness of internal controls. The information would be provided in a timely manner to facilitate early corrective action.
11. A prudent ADI would have controls in relation to its residential mortgage portfolio that have appropriate regard to the level of risk within the portfolio. Portfolios that have higher inherent risk, for example where the portfolio is usually operating at the higher end of risk limits, would typically be accompanied by stronger controls, including:
- a) increased senior management oversight;

- b) increased monitoring and more granular reporting to the Board and senior management;
- c) increased level and frequency of reviews by the risk management function;
- d) increased level of internal audit;
- e) stronger default management and collection capabilities; and
- f) provisioning and capital levels reflective of the risk of the portfolio.

12. Consistent with CPS 220, the aspects of the risk management framework that apply to the residential mortgage lending portfolio would be subject to a comprehensive review by an operationally independent and competent person at least every three years. The person would report the results of reviews to the Board, providing an independent and objective evaluation of the appropriateness, adequacy and effectiveness of the risk management framework with respect to the portfolio.

12.13. Failure to meet responsible lending conduct obligations, such as the requirement to make reasonable inquiries about the borrower's requirements and objectives, or failure to document these enquiries, can expose an ADI to potentially significant risks. A prudent ADI would conduct a periodic assessment of compliance with responsible lending conduct obligations to ensure it does not expose itself to significant financial loss.

Management information systems

13.14. It would be prudent for an ADI with material exposure to residential mortgage lending to invest in management information systems that allow for appropriate assessment of residential mortgage lending risk exposures. Such a system would typically capture a range of risk metrics related to individual loans at the point of application and throughout the life of the loan.³

14.15. Further, a prudent ADI would have analytical capability that allows it to monitor, analyse and report key metrics against risk appetite and to assess the residential mortgage portfolio at both the individual loan level and portfolio level. The data, when collectively presented to the Board and senior management, would enable an accurate and meaningful assessment of the residential mortgage portfolio. A history of low defaults does not justify under-investment in management information systems.

15.16. A robust management information system would be able to provide good quality information on residential mortgage lending risks. This would typically include:

- a) the composition and quality of the residential mortgage lending portfolio, e.g. by type of customer (first home buyer, owner-occupied, investment etc), product line, distribution channel, loan vintage, geographic concentration, LVR bands at origination, loans on the watch list and impaired;

³ Refer to *Prudential Practice Guide CPG 235 Managing Data Risk* (CPG 235) for guidance on managing data risk.

- b) portfolio performance reporting, including trend analysis, peer comparisons where possible, other risk-adjusted profitability and economic capital measures and results from stress tests;
- c) compliance against risk limits and trigger levels at which action is required;
- d) reports on broker relationships and performance;
- e) exception reporting including overrides, key drivers for overrides and delinquency performance for loans approved by override;
- f) reports on loan breaches and other issues arising from annual reviews;
- g) prepayment rates and mortgage prepayment buffers;
- h) serviceability buffers including trends, performance, recent changes to buffers and adjustments and rationale for changes;
- i) missed payments, hardship concessions and restructurings, cure rates and 30-, 60- and 90-days arrears levels across, for example, different segments of the portfolio, loan vintage, geographic region, borrower type, distribution channel and product type;
- j) changes to valuation methodologies, types and location of collateral held and analysis relating to any current or expected changes in collateral values;
- k) findings from valuer reviews or other hindsight reviews undertaken by the ADI;
- l) reporting against key metrics to measure collections performance;
- m) tracking of loans insured by LMI providers, including claims made and adverse findings by such providers;
- n) provisioning trends and write-offs;
- o) internal and external audit findings and tracking of unresolved issues and closure;
- p) issues of contention with third-parties including service providers, valuation firms, etc; and
- q) risk drivers and other components that form part of scorecard or models used for loan origination as well as risk indicators for new lending.

Remuneration

16.17. *Prudential Standard CPS 510 Governance* (CPS 510) requires the Board-approved ADI remuneration policy to be aligned with prudent risk-taking. CPS 510 requires the remuneration policy to apply to responsible persons, risk and financial control personnel and all other persons whose activities may affect the financial soundness of the regulated

institution.⁴ Where the residential mortgage lending portfolio is material, a prudent ADI would apply its remuneration policy to the persons involved in residential mortgage lending. This would include remuneration of third parties, particularly mortgage broker firms, when they are responsible for origination of a material proportion of the residential mortgage loan portfolio. For the avoidance of doubt, the ADI remuneration policy is intended to capture an ADI's engagement with its brokers, not how a broking firm pays its staff. Alternatively, the ADI may address such remuneration arrangements within its risk management framework with appropriate senior management or Board oversight.

17.18. In Australia, it is standard market practice to pay brokers either an upfront commission or a trailing commission, or both. A prudent approach to the use of third parties for residential mortgage lending would include appropriate measures to ensure that commission-based compensation does not create adverse incentives. Such measures would include consideration of appropriate clawback provisions and ensure that incentive arrangements discourage conflicts of interests and inappropriate behaviour.

18.19. Regardless of the commission structure, a prudent ADI would recognise the incentives and potential risks inherent in its broker remuneration structure. It would have in place appropriate monitoring and controls to guard against incentives to pursue loans with inadequate or false verification, marginal serviceability, excessive leverage or unsuitable terms for a borrower.

19.20. A prudent ADI relying on brokers to originate a material proportion of its residential mortgage portfolio would closely monitor performance at the broker firm or, where relevant, the individual broker level. Where loans originated by a broker or broker firm have unexpectedly elevated levels of loan defaults, or materially deficient loan documentation and processing, a prudent ADI would take measures to address such matters including restricting or terminating such relationships.

Loan origination

Sound loan origination practices are necessary for prudent residential mortgage lending whether the loans are originated directly by an ADI or are sourced from other distribution channels. As well as considering individual loans, effective risk management requires a portfolio view of originations.

20.21. Residential mortgage lending risks change over time. A prudent ADI would have regard to the impact on the portfolio of varying conditions, such as low or recently changed interest rates, rapid house price increases or decreases and large changes in housing supply or demand in particular markets. [Changes to consumer credit conduct obligations, including responsible lending obligations, also need to be considered.](#)

⁴ Refer to [paragraph 48 of CPS 510 \(effective till 31 December 2014\)](#), paragraphs 59 and 60 of CPS 510 commencing 1 January 2015 and [Prudential Standard APS 330 Public Disclosure](#).

21-22. When an ADI is increasing its residential mortgage lending rapidly or at a rate materially faster than its competitors, either across the portfolio or in particular segments or geographical areas, a prudent Board would seek explanation as to why this is the case. Rapid relative growth could be due to an unintended deterioration in the ADI's loan origination practices, in which case APRA expects that an ADI's risk management framework would facilitate rapid and effective measures to mitigate any consequences.

22-23. ADIs typically use various direct and indirect origination channels to source mortgage loans, for example, branches, telephone, brokers and online. A prudent ADI would recognise and address the risks arising from different origination channels in its risk management framework. An ADI would typically exercise a higher level of diligence when the credit approval decision is made distant from the location of the borrower or the underlying collateral. A degree of local knowledge (e.g. local house price levels, levels of available stock, local employment and competition issues) by assessors can be useful. In APRA's experience, ADIs that extend loans away from their core geographic market tend to be more reliant on third-party originators. If not closely monitored, this reliance can potentially lead to additional risk and give rise to higher levels of exposure that may be outside an ADI's risk appetite.

23-24. Where there are material changes to distribution channels, a robust risk management framework would include the need to assess changes to an ADI's risk profile and address this risk.

Serviceability assessments

24-25. Accurately assessing a borrower's ability to service and ultimately to repay a loan without undue hardship, including under periods of economic stress, is an inherent component of sound credit risk management, particularly for residential mortgage lending. An ADI's serviceability tests are used to determine whether the borrower can afford the ongoing servicing and repayment costs of the loan for which they have applied the maximum allowable loan for a particular borrower. APRA expects an ADI to undertake a new serviceability assessment whenever there are material changes to the current or originally approved loan conditions. Such changes would include a change of repayment basis from principal and interest to interest-only, or the extension of an existing interest-only period. A change from a fixed-rate basis to a floating-rate basis (or vice versa), or an extension in the tenor of the loan are other examples of material changes. A new serviceability assessment would be appropriate for any change that increases the total repayments over the life of the loan, even when immediate periodic repayments are lower than under the previous loan conditions.

25-26. A robust risk management framework would have clearly stated policies and procedures for evaluating loan serviceability. Material policies and procedures would be reviewed at least annually and updated where required to align with the changing external environment and any resultant changes to the risk appetite. APRA expects that any material changes to an ADI's serviceability policy would be analysed and the potential impact on the risk profile of new loans written would be reported to appropriate risk governance forums. Reference to competitors' policies as the primary justification for policy changes would be seen by APRA as indicative of weak risk governance.

26-27. Loan serviceability policies would include a set of consistent serviceability criteria across all mortgage products. A single set of serviceability criteria would promote consistency by applying the same interest rate buffers, serviceability calculation and override framework across different products offered by an ADI. Where an ADI uses different serviceability criteria for different products or across different 'brands', APRA expects the ADI to be able to articulate and be aware of commercial and other reasons for these differences, and any implications for the ADI's risk profile and risk appetite.

27-28. ADIs generally use ~~some form of three kinds of serviceability models to assess a borrower's ability to repay a residential mortgage. The models are the~~ net income surplus (NIS) model ~~to make an assessment as to whether the borrower can service a particular loan, based on the nature of the borrower's income and expenses, the debt service ratio (DSR) or a combination of both. The basic approach in these models is that a maximum residential mortgage loan is derived by assessing a potential borrower's income, living expenses, residential mortgage loan repayments and other debt commitments.~~

28-29. Good practice would ensure that the borrower retains a reasonable income buffer above expenses to account for unexpected changes in income or expenses as well as for savings purposes. It would be prudent for ADIs to monitor the level of, and trends for, lending to borrowers with minimal income buffers. High or increasing levels of marginal borrowers may indicate elevated serviceability risk.

29-30. A sound serviceability assessment model applied to a residential mortgage borrower would include consideration of any existing and ongoing debt commitments (both secured and unsecured), interest rates and outstanding principal on such debt and any evidence of delinquency. In addition, good practice is that ongoing serviceability would not rely on longer-term access to 'honeymoon' or discounted introductory rates.

30-31. A prudent ADI would include various buffers and adjustments in its serviceability assessment model to reflect potential increases in mortgage interest rates, increases in a borrower's living expenses and decreases in a borrower's income, particularly for less stable income sources available to service the debt. APRA's expectation is that the combination of buffers and other adjustments in these models would seek to ensure that the portfolio, in aggregate, would be able to absorb substantial stress, such as in an economic downturn or rising interest rate environment, without producing unexpectedly high loan default losses for the lender.

31-32. Good practice would apply a buffer over the loan's interest rate, ~~usually the standard variable rate,~~ to assess the serviceability of the borrower (interest rate buffer). This approach would seek to ensure that potential increases in interest rates do not adversely impact on a borrower's capacity to repay a loan. The buffer would reflect the potential for interest rates to change over several years. APRA expects that ADI serviceability policies should incorporate an interest rate buffer of at least two percentage points. A prudent ADI would use a buffer comfortably above this level.

32-33. In addition, a prudent ADI would use the interest rate buffer in conjunction with an interest rate floor, to ensure that the interest rate buffer used is adequate when the ADI is operating in a low interest rate environment. Prudent serviceability policies should incorporate a minimum floor assessment interest rate of at least seven per cent. Again, a

prudent ADI would implement a minimum floor rate comfortably above this level. The interest rate floor would be based on the average mortgage interest rate over an appropriately long time period, being at least one cycle in interest rates. The interest rate buffers and floor rates would apply to both new and existing debt commitments.

34. APRA expects ADIs to fully apply interest rate buffers and floor rates to both a borrower's new and existing debt commitments. APRA expects ADIs to make sufficient enquiries on existing debt commitments, including consideration of the current interest rate, remaining term, outstanding balance and amount available for redraw of the existing loan facility, as well as any evidence of delinquency. ADIs using a proxy to estimate the application of interest rate buffers and floor rates to the servicing cost of existing debt commitments would, to be prudent, ensure that such a proxy is sufficiently conservative in a range of situations, updating the methodology to reflect prevailing interest rates.

35. APRA also expects ADIs to use a suitably prudent period for assessing the repayment of credit card or other revolving personal debt when calculating a borrower's expenses. For example, an ADI may assess a borrower's repayment obligation for credit card or other revolving personal debt using a rate of three per cent per month on the total committed limit for such facilities.

36. For interest-only loans, APRA expects ADIs to assess the ability of the borrower to meet future repayments on a principal and interest basis for the specific term over which the principal and interest repayments apply, excluding the interest-only period.

33-37. A prudent ADI would regularly review its interest rate buffers and floors. The method for reviewing buffers would allow an ADI to ascertain whether the current buffer is appropriate in relation to the interest rate cycle, and would take into account historical interest rate movements and interest rate forecasts, as well as key economic indicators over an appropriate time horizon. Reviews would typically be undertaken on a quarterly basis and when interest rates change.

Assessment and verification of income, living expenses and other debt commitments

34-38. As part of its serviceability assessment, an ADI would typically assess and verify a borrower's income and expenses having regard to the particular circumstances of the borrower.

35-39. When assessing a borrower's income, a prudent ADI would discount or disregard temporarily high or uncertain income. Similarly, it would apply appropriate adjustments when assessing seasonal or variable income sources. For example, significant discounts are generally applied to reported bonuses, overtime, rental income on investment properties, other types of investment income and variable commissions; in some cases, they may be applied to child support or other social security payments, pensions and superannuation income. Prudent practice is to apply discounts of at least 20 per cent on most types of non-salary income; in some cases, a higher discount would be appropriate. In some circumstances, an ADI may choose to use the lowest documented value of such

income over the last several years, or apply a 20 per cent discount to the average amount received over a similar period.

36.40. Future changes in a borrower's Individual circumstances, such as the likely lower income and repayment capacity during the impending retirement of a borrower, would also be considered by a prudent ADI. It would be prudent not to rely on the presumption of future superannuation lump sums unless the lump sum is verifiable and reasonably imminent.

37.41. A prudent ADI would be expected to make reasonable inquiries and take reasonable steps to verify a borrower's available income. Verification of a borrower's stated income would normally be achieved through a combination of factors, for example:

- a) confirming employment status, i.e. whether permanent, casual, part-time, contractor or fixed term contract;
- b) reviewing recent payslips detailing regular salary or wage income of the borrower, including usual shift penalties;
- c) seeking written advice from the borrower's employer or accountant/tax advisor confirming actual or likely income levels;
- d) reviewing income tax assessment notices and returns;
- e) reviewing bank statements that confirm regular salary credits;
- f) reviewing other documents pertaining to income (e.g. business activity statement); and
- g) making independent enquiries into the borrower's credit history (e.g. through credit reporting bodies).

38.42. Self-employed borrowers are generally more difficult to assess for borrowing capacity, as their income tends to be less certain. Accordingly, a prudent ADI would make reasonable inquiries and take reasonable steps to verify a self-employed borrower's available income. Verification of a self-employed borrower's stated income is normally achieved through a combination of obtaining income and cash flow verification and supporting documentation, including third-party verification. This could include, for example:

- a) seeking written advice from the accountant/tax advisor confirming actual or likely income levels;
- b) reviewing income tax assessment notices and returns;
- c) reviewing bank statements from an ADI that confirm income;
- d) reviewing other documents pertaining to income (e.g. business activity statement); and

- e) making independent enquiries into the borrower's credit history (e.g. through credit reporting bodies).

39-43. In the case of investment property, common industry practice is to include expected rent on a residential property as part of a borrower's income when making a loan origination decision. However, it would be prudent to make allowances to reflect periods of non-occupancy ~~and other costs~~. ADIs would normally place less reliance on third-party estimates of future rental income than on actual rental receipts from a property. In APRA's view, prudent serviceability policies incorporate a minimum haircut of 20 per cent on expected rental income, with larger haircuts appropriate for properties where there is a higher risk of non-occupancy. A prudent ADI would also account for a borrower's investment property-related fees and expenses (e.g. strata requirements), for example, by including property expenses in estimates of living expenses or by deducting property expenses from expected net rental income. Good practice would be for an ADI to place no reliance on a borrower's potential ability to access future tax benefits from operating a rental property at a loss. Where an ADI chooses to include such a tax benefit, it would be prudent to assess it at the current interest rate rather than one with a buffer applied.

40-44. A borrower's living expenses are a key component of a serviceability assessment. Such expenses materially affect the ability of a residential mortgage borrower to meet payments due on a loan. ADIs typically use the Household Expenditure Measure (HEM)⁵ or the Henderson Poverty Index (HPI)⁶ in loan calculators to estimate a borrower's living expenses. Although these indices are extensively used, they might not always be an appropriate proxy of a borrower's actual living expenses, ~~which are likely to be considerably higher. Reliance solely on these indices generally would therefore not meet APRA's requirements for sound risk management.~~ APRA therefore expects ADIs to use the greater of a borrower's declared living expenses or an appropriately scaled as a more representative measure of their actual living expenses than version of the HEM or HPI indices, ~~which may nonetheless contribute to the serviceability assessment. Where one of these indices~~ That is, if the HEM or HPI is used, a prudent ADI would apply a margin linked to the borrower's income to the relevant index. In addition, an ADI would update these indices in loan calculators on a frequent basis, or at least in line with published updates of these indices (typically quarterly). Prudent practice is to include a reasonable estimate of housing costs even if a borrower who intends to rely on rental property income to service the loan does not currently report any personal housing expenses (for example, due to living arrangements with friends or relatives).

41-45. A prudent ADI would have effective procedures to verify a potential borrower's existing debt commitments and to take reasonable steps to identify undeclared debt commitments.

46. In addition, it would be prudent for an ADI to retain complete documentation of the information supporting a residential mortgage approval, including paper or digital copies of documentation on income and expenses and the steps taken to verify these items. This documentation would be retained for a reasonable number of years after origination.

⁵ Refer to <http://www.abs.gov.au/ausstats/abs@.nsf/12ce1aabe68b47f3ca256982001cc5da/5f1422f1af472d80ca256bd00026aee6!OpenDocument>

⁶ Refer to <http://www.melbourneinstitute.com/miaesr/publications/indicators/poverty-lines-australia.html>

Sound documentation practices provide a clear audit trail, demonstrate appropriate verification of serviceability and can assist in identifying misrepresentations or fraud.

~~Integrating the buffer arrangements~~

~~42.—In summary, an ADI would typically apply some or all of the following adjustments when assessing a loan application:~~

- ~~a.—a buffer for potential interest rate increases;~~
- ~~b.—an absolute floor on interest rates;~~
- ~~c.—a buffer above the HEM or HPI estimates of living expenses; and~~
- ~~d.—a haircut/exclusions for uncertain income streams.~~

~~Where an ADI chooses to apply only one buffer in lieu of the range of buffers described above, it would be prudent to use an appropriately large buffer.~~

Overrides

~~43-47.~~ An override occurs when a residential mortgage loan is approved outside an ADI's loan serviceability criteria or other lending policy parameters or guidelines. Overrides are occasionally needed to deal with exceptional or complex loan applications. However, a prudent ADI's risk limits would appropriately reflect the maximum level of allowable overrides and be supported by a robust monitoring framework that tracks overrides against risk tolerances. It is also good practice to implement limits or triggers to manage specific types of overrides, such as loan serviceability overrides. APRA expects that where overrides breach the risk limits, appropriate action would be taken by senior management to investigate and address such breaches/excesses.

~~44-48.~~ There are varying industry practices with respect to defining, approving, reporting and monitoring overrides. APRA expects an ADI to have a framework that clearly defines overrides. In doing so, it is important that any loan approved outside an ADI's serviceability criteria parameters should be captured and reported as an override. This includes loans where the borrower is assessed to have a net income surplus of less than \$0 (even if temporary) or where exceptions to minimum serviceability requirements have been granted, such as waivers on income verification. ADIs may have their own definitions that include other types of loans (such as those outside LVR limits) as overrides for internal risk monitoring purposes. For example, a sound framework would clarify that overrides include escalation to a higher Delegated Lending Authority (DLA), where standard policy requirements are not being met in a loan application.

~~45-49.~~ In addition, thea sound framework would also detail the approval process, documentary requirements for an override approval (including acceptable reasons for an override) and an oversight mechanism to monitor and report such overrides. It is also good practice to monitor and report/document the reasons for an overrides, to provide an aggregate view for senior management and enable an assessment of trendsapproval.

46-50. Deliberate misreporting or non-reporting of overrides is indicative of poor practice. A sound risk management framework would capture such instances, prompting appropriate investigation and swift and appropriate action where necessary.

47-51. Good practice is for regular override reporting to be provided to senior management and to the Board. Such reporting would include:

a) delinquency rates for residential mortgage loans approved as overrides and exceptions;

b) tracking against risk tolerance limits for overrides;

c) reasons for overrides; and

d) distribution of overrides across business units, products, locations, third-party originators and, where relevant, ADI officers associated with a disproportionate number of overrides.

Other expectations with respect to loan origination by third parties

48-52. As noted in *Prudential Standard CPS 231 Outsourcing* (CPS 231), an ADI retains both the risk and responsibility for material outsourced functions, including origination and ongoing management of residential mortgage lending. Where lending authority is delegated to third parties, robust mechanisms need to be implemented to ensure that the delegation is appropriate and is subject to oversight by the ADI's senior management. In addition, adherence to policies and procedures by the delegated authority would be subject to regular audit.

49-53. In circumstances where third parties (such as a mortgage broker) accept or complete applications, but have no ability to approve a residential mortgage loan, a sound oversight process is necessary. In particular, a prudent ADI would have appropriate procedures in place to verify the accuracy and completeness of the information provided.

50-54. Good practice would be for an ADI, rather than a third party, to perform income verification. However, if a third party does perform such a role, an ADI would be expected to implement appropriate oversight processes covering income verification. Such oversight would extend to third parties that are granted any form of DLA, even if the ability to approve transactions is within policy limits. An ADI would also monitor and test the integrity of the third-party approval and verification processes periodically, either directly or through operationally independent persons.

51-55. Consistent with CPS 231, a prudent ADI would ensure that its arrangements with third-party residential mortgage loan originators allow for timely cessation of such arrangements should the ADI form the view that it is no longer able to place reliance on the third party.

Scorecard approvals

52-56. Some ADIs use rules-based scorecards or quantitative models in the residential mortgage loan evaluation process. In such cases, good practice would include close oversight and governance of the credit scoring processes. Where decisions suggested by a scorecard are overridden, it is good practice to document the reasons for the override.

53-57. Scorecards or models would be subject to regular monitoring and validation to ensure that they remain effective over time. A prudent ADI would develop and document an effective governance framework and benchmarks to assess the performance of a scorecard or model, which would be overseen by the ADI's senior management.

54-58. It would be good practice for an ADI using scorecards or similar models to develop its own tests, using internal or external expertise as appropriate. Reliance upon the model or scorecard vendor to provide model validation services can create a material conflict of interest, which an ADI would need to manage. In such cases, it would be prudent to seek an independent third-party assessor to mitigate the potential conflict of interest.

Specific loan types

APRA expects that an ADI will recognise, in its risk appetite, portfolio limits for loans that may be more vulnerable to serviceability stress and possible material decreases in property value in a housing market downturn, and could therefore generate higher losses.

Interest-only loans

55-59. ~~Borrowers may have~~ ~~There are several~~ legitimate reasons to prefer interest-only loans in some circumstances, such as for repayment flexibility or tax reasons ~~for an ADI to offer interest-only lending to owner-occupiers~~. However, interest-only loans ~~such lending may carry~~ indicate that an ADI is accepting a higher credit risk in some cases, and may not be appropriate for all borrowers than for loans where repayments consist of both principal and interest. ~~This~~ Any such willingness to accept higher risk w ~~should~~ need to be reflected in the ADI's risk management framework, including its risk appetite statement, and also in the ADI's responsible lending compliance program. APRA expects that an ADI would only approve interest-only loans for owner-occupiers where there is a sound and documented economic basis for such an arrangement and not based on ~~borrowers' inability to~~ qualify for ~~service~~ a loan on a principal and interest basis. APRA expects interest-only periods offered on residential mortgage loans to be of limited duration, particularly for owner-occupiers. As noted above, a prudent serviceability assessment would incorporate the borrower's ability to repay principal and interest over the actual repayment period.

Foreign currency loans

56-60. In APRA's view, it is not prudent to extend foreign currency-denominated loans against domestic currency (e.g. Australian dollar) income streams or against domestic

currency collateral. However, an ADI may occasionally extend a foreign-currency loan to a borrower with a foreign currency-denominated income stream. In such cases, the ADI could face additional challenges in validating offshore income streams. Loans extended on such a basis require substantial loan origination expertise. It would also be good practice to discount offshore income in assessing a borrower's loan servicing capacity.

Loans with non-standard/alternative documentation

57-61. Loans with non-standard/alternative documentation can involve circumstances where the borrower is self-employed or has an uncertain income stream and is unable to provide standard documentation that enables easy verification of income. Good practice is to ensure that a loan with non-standard/alternative documentation is warranted due to the borrower's situation rather than reluctance by the borrower to provide income documentation. It is not good practice to underwrite loans on limited verification of a borrower's income where full verification is reasonably available.

58-62. Where a borrower is unable to provide standard documentation, such as pay slips, an ADI would usually seek alternative documentation such as extensive cash flow history through bank statements, business activity statements, recent tax assessment notices or third-party confirmations from accountants or other professionals.

59-63. In assessing serviceability, a prudent ADI would seek to address any increased risk through appropriate pricing and significantly lower LVRs.

Reverse mortgages

60-64. Reverse mortgage loans give rise to unique operational, legal and reputational risks, including in relation to consumer protection laws, which could affect loan enforceability. An ADI undertaking such lending would need to take appropriate measures to address these risks. Such measures could, amongst others, include:

- a) assessment of the need for actuarial advice;
- b) LVR caps related to the age of the borrower;
- c) documented procedures applicable to the regular revaluation of properties underpinning reverse mortgages;
- d) cautioning borrowers against waiving independent legal and financial advice; and
- e) higher levels of controls and monitoring when marketing such loans through third-party channels.

61-65. APRA's capital standards are based upon amortising rather than reverse mortgages. An ADI undertaking a material volume of reverse mortgages could, as a matter of supervisory discretion, be required to hold additional capital against the unique risks associated with this product.

Home equity lines-of-credit

62-66. The revolving nature of home equity lines-of-credit loans may increase the risk of outstanding balances at default. As a generalisation, HELOCs can result in different delinquency and default outcomes compared to traditional principal and interest products. A prudent ADI would establish checks and limits for such loans as part of its risk appetite statement. Examples include portfolio limits and limits on the non-amortising portion of such loans.

Loans to self-managed superannuation funds

67. Some ADIs provide loans to property held in SMSFs. The nature of loans to SMSFs gives rise to unique operational, legal and reputational risks that differ from those of a traditional mortgage loan. Legal recourse in the event of default may differ from a standard mortgage, even with guarantees in place from other parties. Customer objectives and suitability may be more difficult to determine. In performing a serviceability assessment, ADIs would need to consider what regular income, subject to haircuts as discussed above, is available to service the loan and what expenses should be reflected in addition to the loan servicing. APRA expects that a prudent ADI would identify the additional risks relevant to this type of lending and implement loan application assessment processes and criteria that adequately reflect these risks. APRA also expects that a decision to undertake lending to SMSFs would be approved by the ADI at an appropriate governance forum and explicitly incorporated into the ADI's policy framework.

63-68. For the purposes of *Prudential Standard APS 112 Capital Adequacy: Standardised Approach to Credit Risk (APS 112)*, loans to SMSFs that are secured by residential mortgages (SMSF loans) are to be treated as 'non-standard' eligible mortgages. For the purposes of *Prudential Standard APS 113 Capital Adequacy: Internal Ratings-based Approach to Credit Risk (APS 113)*, APRA expects that the risk estimates assigned to SMSF loans under the internal ratings-based (IRB) approach to credit risk would be modelled separately. If there is insufficient data available to support such modelling, required capital for SMSF loans should be determined under the standardised approach (APS 112) in line with the above guidance.

Security valuation

The valuation of underlying collateral can be undertaken in a range of ways. A full on-site valuation is good practice, although APRA acknowledges the benefit of tailoring an ADI's valuation policy to its circumstances. APRA expects that an ADI will document its valuation policy.

Valuation methods

64-69. Techniques such as desk-top assessments, kerb-side assessment, automated valuation methods (AVMs) and reviews of contracts of sale are all acceptable valuation assessments, in the appropriate context. As the risk associated with collateral increases, or the coverage of a given loan by collateral decreases, the need for specialist valuation also increases.

65-70. A prudent ADI contemplating the use of alternative valuation methods such as AVMs would subject proposals to thorough analysis and develop a risk management capability that includes:

- a) a hierarchy of acceptable methods of determining value that is appropriate to the level of risk;
- b) analysis of the strengths and weaknesses of the relevant approaches/models being considered, including an understanding of the methodologies used, sources of data employed and how the service provider may be able to assist in re-engineering the ADI's processes;
- c) details of any back-testing of a statistically random sample of AVMs and desk-top assessments or auditing arrangements undertaken by the service provider;
- d) clarity of the output to be provided and how it would be integrated with the ADI's processes;
- e) ongoing monitoring of tools used, processes that capture evidence of action taken when values are deemed to be unreliable and periodic back-testing undertaken by the ADI to independently validate reliability of outcomes; and
- f) appropriate training for staff on operational requirements.

66-71. Where an ADI relies on a panel of approved valuation professionals, sound credit risk management practice would provide for the panel to be periodically reviewed by senior risk management staff of the ADI. Valuer selection would be conducted by the ADI's risk management area, rather than sales staff, and the involvement of ADI sales or product staff in panel management would be minimal.

67-72. An ADI is required to have regard to the requirements governing security valuation practices, including valuation of security in the form of property, as detailed in Attachment B of *Prudential Standard APS 220 Credit Quality* (APS 220). Sound risk management practices would include valuation reports prepared with professional skill and diligence, valuers selected on the basis of appropriate professional qualifications and maintaining comprehensive valuation documentation for the term of the loan. The scope and extent of a valuation report would be commensurate with the property value and inherent risks.

68-73. Attempts by an ADI or third-party lending staff to pressure valuers to over-value properties are an indicator of poor practice and improper behaviour. A robust risk management framework would capture such instances, prompting appropriate investigation and swift and appropriate action where necessary.

~~69.74.~~ The valuation management process itself may be outsourced to third parties. When the valuation management is outsourced, the oversight and control would be retained by the ADI's credit risk management. For example, it is good practice for any override of valuation requirements to be limited to senior credit risk management of the ADI.

~~70.75.~~ Good practice would be to ensure that claims against collateral are legally enforceable and could be realised in a reasonable period of time if necessary. This would include the ADI confirming that:

- a) the borrower has, or will have when the loan is extended, a clear title to the property;
- b) the characteristics of the property are as they have been represented; and
- c) the property serving as collateral is appropriately insured at the time of origination and is maintained under the contractual terms of the mortgage.

~~71.76.~~ An ADI would typically seek to ensure that property serving as collateral could be readily linked to related residential mortgage lending facilities. Underinvestment in such collateral tracking capability could leave an ADI open to increased operational risks and losses.

~~72.77.~~ To access mortgage risk-weight treatments of less than 100 per cent under *Prudential Standard APS 112 Capital Adequacy: Standardised Approach to Credit Risk* (APS 112), an ADI is required to ensure loans are secured by residential property (either as a single property or in a group where loans are secured by more than one property). The lower risk-weight does not apply in circumstances involving property used for mixed purposes, i.e. where the property also accommodates a component of non-residential use. In addition, if a borrower's income/business is to invest or speculate in or develop multiple residential properties, the concessional risk-weight for residential loans is not applicable.

~~73.78.~~ An ADI would, as a matter of good practice, develop a policy on when a borrower (or connected group of borrowers) providing collateral in the form of mortgages over multiple residential properties is more akin to commercial lending than residential lending. This is particularly the case where one borrower holds multiple housing stock in the same title/deposited plan. In addition, where a developer or commercial borrower chooses to hold a number of residential properties longer term, as opposed to selling them, the risks are more likely to be of a commercial rather than residential nature. In such cases, APRA would not expect the provisions in APS 112 applying to loans secured by residential mortgages to be applied. Instead, the exposures would be treated as commercial real estate and risk-weighted at 100 per cent (refer to paragraph 22 of Attachment A to APS 112). For ADIs accredited to use the ~~internal ratings-based (IRB)~~ approach to credit risk, such exposures would be treated as 'retail IRB', 'corporate IRB' or 'income producing real estate' (IPRE) under *Prudential Standard APS 113 Capital Adequacy: Internal Ratings-based Approach to Credit Risk* (APS 113), as appropriate. APRA's guidance on identifying IPRE exposures was outlined in a letter to ADIs in October 2009.⁷

⁷ <http://www.apra.gov.au/adi/Publications/Documents/22-October-2009-IPRE-letter-website.pdf>

74-79. Risk-weights for capital adequacy purposes determined by reference to APS 112 are based on the LVR calculated at the point of origination. Reliance on a valuation other than the valuation at origination would generally require a subsequent formal revaluation by an independent accredited valuer. In particular, it would be imprudent for an ADI to use indexed-based valuation methods that calculate capital adequacy on a dynamic LVR basis. This is because an index does not necessarily mean that all properties in a particular area have exhibited the same increase or decrease as reflected in the index. That said, APRA supports efforts by an ADI to better understand its portfolio on a dynamic LVR basis for internal management purposes, such as overall portfolio risk assessment.

Loan-to-valuation ratios

75-80. Although mortgage lending risk cannot be fully mitigated through conservative LVRs, prudent LVR limits help to minimise the risk that the property serving as collateral will be insufficient to cover any repayment shortfall. Consequently, prudent LVR limits serve as an important element of portfolio risk management. APRA emphasises, however, that loan origination policies would not be expected to be solely reliant on LVR as a risk-mitigating mechanism.

76-81. A prudent ADI would monitor exposures by LVR bands over time. Significant increases in high LVR lending would typically be a trigger for senior management to review risk targets and internal controls over high LVR lending, with Board oversight. APRA has not formally defined 'high LVR lending', but experience shows that LVRs above 90 per cent (including capitalised LMI premium or other fees) clearly expose an ADI to a higher risk of loss.

77-82. Lending at low LVRs does not remove the need for an ADI to adhere to sound credit practice or consumer lending obligations. A prudent lender would seek to ensure that a residential mortgage loan has reasonable expectations of being repaid without recourse to the underlying collateral. An overall sound assessment would be based on the borrower's repayment capacity at the time of loan origination rather than an overriding presumption that the value of collateral will appreciate.

78-83. ADIs typically require a borrower to provide an initial deposit primarily drawn from the borrower's own funds. Imposing a minimum 'genuine savings' requirement as part of this initial deposit is considered an important means of reducing default risk. A prudent ADI would have limited appetite for taking into account non-genuine savings, such as gifts from a family member. In such cases, it would be prudent for an ADI to take all reasonable steps to determine whether non-genuine savings are to be repaid by the borrower and, if so, to incorporate these repayments in the serviceability assessment.

79-84. A prudent ADI would exhibit greater caution when relying on collateral values in periods of rapid growth in property prices. It may be appropriate for an ADI to strengthen its LVR constraints or re-assess its risk appetite in markets exhibiting rapid price appreciation.

80-85. Sound credit practice would include recalculating LVRs at the time of any top-up loan and other formal loan increases during the life of the loan. Any subsequent refinancing, including any second mortgage, charge or lien, would also typically result in the

calculation of a new LVR at the point of refinancing. Such calculations would be based on appropriate and contemporary property valuations. Further, particular caution would need to be exercised in relation to any draw-down on the equity in the property, especially if the draw-down would increase the current LVR above the level originally agreed. Finally, any significant increase in loan exposure would normally be subject to a full assessment of the borrower's repayment capacity.

81-86. In the case of valuation of off-the-plan sales, developer prices might not represent a sustainable resale value. Consequently, in such circumstances, a prudent ADI would make appropriate reductions in the off-the-plan prices in determining LVRs or seek independent professional valuations. Similarly, developer discounts would not be treated as part of the borrower's deposit for LVR calculation purposes: such discounts reduce the sale price, but do not increase the borrower's deposit.

82-87. Where an ADI's risk appetite allows for higher LVR lending, good practice would provide that the additional risk in this lending would be mitigated by measures such as stronger serviceability-adjusted loan pricing and, in the case of IRB banks, higher expected loss provisions and capital. APRA does not consider the sole use of coverage of loans by LMI as a sufficient control to mitigate high LVR risk.

Guarantors

83-88. Although some loans include guarantor relationships, e.g. from a parent of the borrower, to cover shortfalls in minimum deposit requirements, these loans potentially carry a higher risk of default. A prudent ADI would assess the guarantor's income and conduct independent checks on the creditworthiness of the guarantor, the enforceability of potential claims and the value of any collateral pledged by the guarantor. As with other product types, a prudent ADI would consider the need for appropriate portfolio limits within its risk appetite for such lending.

APRA expects that an ADI, as part of its credit risk appetite framework, will define its approach to resolving troubled loans, both individually and under conditions where an unusually large number of borrowers are distressed at the same time.

Hardship loans and collections

84-89. An ADI would typically formulate policies for dealing with delinquent residential mortgage loans. These policies would assist the ADI to appropriately balance the need to recover as much of the loan as is reasonably achievable with the need to observe the substantial body of law and community expectation as to how troubled borrowers would

be treated. APRA's experience is that reputational risk can be underestimated in such circumstances.

85.90. An ADI's risk management framework would typically detail a formal plan for managing the collection process, including for periods where delinquency and loss rates are higher than expected.

86.91. APRA does not require or expect that an ADI's management of hardship would focus solely upon rapid resolution and recovery of a defaulted residential mortgage loan. Rather, APRA's expectation is that an ADI's policy would strive to maximise its longer-term financial and reputational position, as it addresses hardship among borrowers.

87.92. ADIs are obliged, under consumer laws and banking codes, to consider hardship variations to credit contracts for borrowers experiencing temporary financial difficulty. Hardship concessions can include a reduction in the interest rate or payment, lengthening of loan maturity, or full or partial deferral (capitalisation) of interest for a temporary period. Failure to comply, particularly where multiple residential mortgage loans may be involved, can carry a heavy cost for an ADI. A prudent ADI would seek to ensure it is fully cognisant of legal obligations in this respect and that such obligations are satisfied. Good practice would include testing and other mechanisms to ensure satisfactory outcomes can be achieved.

88.93. An ADI would be expected to have a full understanding of the risk profile of hardship loans and to ensure that these risks are appropriately reflected in internal management reporting, provisioning and capital adequacy calculations.

89.94. Where a residential mortgage loan is in default⁸, a prudent ADI would usually undertake a full revaluation when assessing the value of the collateral. However, valuations other than a full valuation may be appropriate in limited circumstances, for example, a very low LVR.

90.95. Upon receiving a notice of hardship from a borrower, or where there is an increased risk of non-payment, an ADI would normally re-assess the borrower's income, living expenses, assets and liabilities. The ADI would also assess whether the status of the loan is performing or non-performing and whether there is a need to apply provisioning and/or revised capital charges.

91.96. It would not be prudent for an ADI to establish long-term capitalisation of principal and interest payments on troubled residential mortgage loans in the expectation that the market value of the mortgaged properties will increase from the current value.

92.97. An ADI following good practice would include a carefully considered collections strategy in its credit risk management framework for residential mortgage lending. The framework could include:

- a) a thorough understanding of the external environment that is used to proactively assess customers at risk of default;

⁸ Refer to paragraph 76 of Attachment A of APS 113.

- b) segmentation of borrowers depending on whether they are willing/not willing and able/not able to repay;
- c) adequate training for staff responsible for collection strategies to handle defaulting customers in a sensitive and efficient manner having regard to the ADI's statutory and contractual rights and obligations;
- d) feedback into any risk models the ADI may use to calculate probability of defaults; and
- e) appropriate reporting to senior management and the Board on delinquencies, including recoveries and cost of collections.

~~93.98.~~ APRA has observed varying practices with respect to ~~the treatment of and~~ prudential reporting on loans with hardship (or similar payment concessions)~~hardship loans~~. Sound practices in this area would include:

- a) arrears would continue to accrue based on the original scheduled payments until the loan is brought back into performing status. For prudential reporting purposes, ADIs would not freeze or re-age loans where hardship (or other similar payment) concessions have been granted~~If necessary, an ADI could have a separate means of reporting arrears where the loan has been reclassified as a hardship loan;~~
- b) hardship or collections decisions and activities that include some form of ongoing concession beyond that normally available (non-commercial terms) are required to be reported as 'restructured items' in various APRA prudential returns. Non-commerciality is not merely the application of renegotiated ongoing provision of a presumed normal interest charge. It could potentially include longer periods of interest-only lending and/or loan tenors beyond those normally offered for the product and purpose. Non-commercial terms could include agreements to capitalise interest and fees, awaiting property sale or other agreements, consistently renegotiating terms to avoid further collections activity and any 'pay-what-you-can' type structures; and
- c) appropriate loan-loss collective provisioning for loans subject to hardship applications, given the potentially higher ultimate loss rates on these loans.

Stress testing

Prudential Standard APS 110 Capital Adequacy (APS 110) requires ADIs to conduct enterprise-wide stress testing as part of internal capital planning. A core element of enterprise-wide stress testing is the development of loss expectations on material credit exposures, including residential mortgage lending (where relevant).

~~94.99.~~ In addition to enterprise-wide stress tests, portfolio-level and risk-specific stress tests of residential mortgage lending portfolios are considered good practice.⁹

~~95.100.~~ A prudent ADI would regularly stress test its residential mortgage lending portfolio under a range of scenarios. Scenarios used for stress testing would include severe but plausible adverse conditions.

~~96.101.~~ In developing scenarios, ADIs could benefit from consideration of international experience, as well as domestic experience and previous APRA stress test scenarios to determine what constitutes sufficient severity for such tests. Assumptions around economic growth, unemployment, property prices and interest rates are particularly important in formulating effective scenarios for residential mortgage portfolios. The scenario and modelling assumptions used for stress testing, and the impact of material variations in these assumptions on the results of the stress test, would be communicated to the ADI's senior management.

~~97.102.~~ The complexity and granularity of stress testing would take into account the scale and proportion of an ADI's residential mortgage lending, and the risk characteristics within it. Good practice would be for an ADI to conduct stress testing at a sufficiently granular level to enable adequate sensitivity to the risk characteristics of different loan types. These characteristics would typically include product type, LVR, LMI coverage (including counterparty credit risk), serviceability, geography, vintage, origination channel and borrower characteristics.

~~98.103.~~ Results from portfolio stress tests enable the Board and senior management to review an ADI's risk appetite, capital adequacy and relevant strategic business decisions in both current and potential environments. For example, stress tests might identify vulnerabilities in certain product or borrower segments that would prompt an ADI to tighten its loan origination criteria or lower risk appetite limits on those products.

~~99.104.~~ Stress test models would ordinarily be appropriately validated and checked by an independent internal group or by an appropriately qualified external party. Vendor models, where used, would be appropriately customised to the specific risk profile of the ADI. Appropriate systems infrastructure and sound data architecture are central to conducting meaningful residential mortgage lending stress tests.

~~100.105.~~ Stress testing arrangements include well-documented policies and procedures governing the stress testing program, including timely communication of the stress test results to the Board, senior management and other relevant staff. When reporting results, sufficient information would be provided to enable the Board and senior management to understand and challenge stress test assumptions and conclusions. This includes quantitative information on the scenario, results, capital impact, key assumptions and recommended actions arising from the stress tests.

⁹ APS 110 requires an ADI to include stress testing and scenario analysis relating to potential risk exposures and available capital resources in its Internal Capital Adequacy Assessment Process (ICAAP). Guidance on the approaches used for stress testing can be found in *Prudential Practice Guide CPG 110 Internal Capital Adequacy Assessment Process and Supervisory Review*.

Lenders mortgage insurance

LMI serves a number of purposes. In particular, it can be used by ADIs as a risk mitigant, to smooth out the normal variability of losses that occurs over time and to diversify regional concentrations of risk. Although LMI is used to protect ADIs by transferring a share of the credit risk on a loan to an LMI provider, residual risks remain. Furthermore, ADI due diligence and other practices may be supplemented or enhanced, but they cannot be replaced by LMI.

101.106. LMI is not an alternative to loan origination due diligence. A prudent ADI would, notwithstanding the presence of LMI coverage, conduct its own due diligence, including comprehensive and independent assessment of a borrower's capacity to repay, verification of minimum initial equity by borrowers, reasonable debt service coverage, and assessment of the value of the property.

102.107. An ADI needs a clear understanding of the specific requirements of an LMI provider at loan origination, for ongoing monitoring and servicing and for collection actions on loans covered by an LMI provider. An ADI would need to ensure compliance with all LMI requirements to avoid invalidating the cover in the event of a claim. The specific LMI requirements, and the obligations of the ADI, are best reflected in an ADI's residential mortgage lending risk management framework. Good practice is for internal audit and/or risk management functions to periodically test and confirm an ADI's compliance with the requirements of an LMI provider.

103.108. Although any review or audit by LMI providers over an ADI's origination process could be insightful, a prudent ADI would not rely solely on the audit and compliance regimes of LMI providers. APRA expects an ADI to have its own hindsight review and audit regime.

Glossary

ADI	Authorised deposit-taking institution as defined in the <i>Banking Act 1959</i> .
Automated valuation methods (AVM)	A system or process that can provide an estimate of real estate property valuations using mathematical modelling, taking account of relevant factors, combined with a database.
Credit reporting body	An organisation that maintains consumer credit data files and provides credit information to authorised users, such as credit providers, usually for a fee.
Cure rates	Proportion of delinquent loans (usually mortgages or other retail loans) that exit that condition over a period of time by being brought current or repaid.
Delegated Lending Authority (DLA)	An authority, e.g. a lending officer or committee, that can approve a loan (based on product, amount, risk grade or other risk characteristics). The authority is usually linked to the seniority or experience of the officer or committee. Also known as delegated credit authority, credit discretions or similar.
Delinquency rates	Percentage of loans that are in default over their contractual payments.
Desk-top assessment	A method of assessment that does not involve a physical inspection of the residential property.
Debt service ratio (DSR)	The proportion of a borrower's income that is used to service the borrower's debt obligations.
Floating rate loan	A loan with a floating or variable interest rate. Also known as a variable rate loan.
FSB	Financial Stability Board
HEM	Household Expenditure Measure
Home equity line of credit (HELOC)	A line of credit based on the amount of equity built up in a borrower's property. As the loan is repaid the money becomes available for re-use.
HPI	Henderson Poverty Index
Interest-only loan	A loan on which only interest is paid during the loan term. The loan may revert to principal and interest repayments at the end of the loan term. The term is usually for a period of one to five years, although it may extend longer.

Kerb-side assessment	An exterior assessment by a valuer to confirm the location and observable condition of a property, used particularly for further advances on an existing mortgage and/or if house prices have not fluctuated significantly. The valuer will often draw on comparisons with properties recently sold in the area to support his/her estimation.
Lenders mortgage insurance (LMI)	Lenders' mortgage insurance has its ordinary commercial meaning and includes insurance under a policy that protects a lender from losses in the event of borrower default on a loan secured by a mortgage over residential or other property.
Loan origination	Process by which a lender determines whether and under what conditions to make a loan.
Loan vintage	Identification of a loan, typically for risk analysis, based on the year in which a loan was originated.
Loan-to-valuation ratio (LVR)	The ratio of the amount of the loan outstanding to the value of the property securing the loan.
Mortgage prepayment buffer	The total balance of mortgage repayments that have been paid ahead of their due date.
Net income surplus (NIS)	The net income available to a borrower after taxes, living expenses and financial commitments.
Off-the-plan valuation	A valuation made on the basis of a development plan, not on the basis of the finished property. The valuer/purchaser may be able to view a display unit and sample finishes.
Override	Approval of a loan that is outside an ADI's lending policy.
PPG	Prudential practice guide
Reverse mortgage	A mortgage that allows a borrower to borrow money using equity in his/her home as security. The loan may be taken as a lump sum, a regular income stream, a line of credit or a combination of these options. Interest is charged as for any other loan, except no repayments are made while the person lives in the home. Interest compounds over time and is added to the loan balance. The loan is repayable in full (including interest and fees) when the person sells the home, dies or moves into aged care.
Scorecard	An automated tool for assessing borrower risk that aids a lender in the granting of consumer credit.
SMSE	<u>Self-managed superannuation fund</u>



 **APRA**