INFORMATION PAPER

Review of APRA's prudential measures for residential mortgage lending risks

29 January 2019

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Executive summary

Residential mortgage lending is an important segment of the Australian financial system and the economy, representing the largest single asset class held by the banking system and the largest source of household debt. Mortgage lending has important benefits for households, lenders and the economy, but needs to be undertaken prudently. APRA has a mandate both to protect depositors in authorised deposit-taking institutions (ADIs) and to promote the stability of the financial system as a whole. As a result, APRA has long been alert to risks inherent in ADIs' mortgage lending activities.

From 2014 through to 2018, APRA substantially increased the intensity of its prudential oversight of residential mortgage lending by ADIs. This action was prompted by an environment of high and rising household debt, subdued household income growth, historically low interest rates and rising house prices. At the same time, there were signs of competitive pressures amongst lenders leading to a loosening of loan underwriting standards and an increasing share of higher risk forms of lending.

Over this period, APRA undertook a range of both tactical and strategic actions, which together were designed to meet two primary goals: to strengthen the resilience of individual ADIs and to promote the stability of the financial system overall. APRA's actions have focused on improving lending standards and practices at individual banks and reducing the share of higher risk lending across the system. Tactical, temporary constraints in the form of supervisory benchmarks for ADIs on lending to property investors and on an interest-only basis have also played a role in reducing the growth of higher risk lending; these benchmarks have since been removed for most ADIs. In addition, APRA conducted detailed reviews of ADIs' lending practices and issued additional prudential guidance on its expectations, which have had a longer-term, strategic impact.

This Information Paper summarises the rationale for and impact of these measures, including how APRA has balanced financial soundness and stability objectives with the other elements of its mandate. This is consistent with the Government's *Statement of Expectations* which sets out the expectation that APRA:

- publicly communicate how it has balanced its regulatory responsibilities and objectives in acting to promote financial system stability in Australia; and
- provide regular external communications on key decisions to demonstrate how they align with APRA's statutory objectives and strategic priorities.[1]

APRA considers that the prudential measures taken in the residential mortgage lending sector have been effective in meeting the objectives of strengthening resilience at both an ADI and financial-system level. Data on ADI lending demonstrates that there has been a sustained reduction in higher risk forms of lending. The share of potentially speculative lending for property investment has been significantly reduced, as has the proportion of interest-only mortgages, which could otherwise have led to a further build-up of systemic risk. APRA's supervisory guidance has driven a range of improvements to strengthen ADI

[1] APRA, Statement of Expectations (2018).

lending standards and in the management of risks in mortgage portfolios. ADIs are now obtaining and analysing more comprehensive data on their borrowers to reduce the risk that they cannot repay their loans, and have improved controls to more consistently meet prudential and responsible lending obligations. Although the composition of housing credit changed, the overall rate of credit growth for housing remained broadly stable, indicating that APRA's measures have not had an undue impact on credit availability.

Had APRA not taken these actions, it is likely that higher risk forms of mortgage lending would have continued to outpace more traditional mortgage borrowing as well as household income growth. This concentration would have left the banking sector increasingly vulnerable to future adverse developments, and would have allowed imbalances in the housing market to escalate.

This reduction in risk has come with some trade-offs, particularly in terms of the operational impact of industry-wide adjustments to lending standards, as well as industry competitive dynamics and the repricing of higher-risk mortgages. In the short term, the shift to improved and more consistent industry-wide lending standards, as well as the expectation that ADIs constrain their investor and interest-only lending within APRA's growth benchmarks, involved some uncertainty and disruption for borrowers and lenders, as well as other parties such as mortgage brokers, as new lending policies and processes were put in place. These operational impacts on the mortgage lending sector were significant, due to the extent of deterioration in lending standards that had previously occurred, inconsistencies in practices across the industry, and the often poor quality of data maintained by ADIs on their mortgage portfolio.

In addition, many ADIs ultimately decided to resort to pricing changes to manage volumes of higher risk loans in line with APRA's expectations, after initially trying to manage lending flows through other means. As intended, APRA's mortgage measures resulted in a more level playing field for ADIs in terms of their borrower risk assessments, which also reduced their ability to compete for customers through easier credit standards. The consistent industry-wide constraints on lending to investors and interest-only lending also tended to preclude significant shifts in market share over the period the benchmarks were in effect. However, given concerns about potential impacts on competition, APRA took a more flexible approach in implementing the investor benchmark with the smaller ADIs, particularly with respect to timing. Overall, the share of mortgage lending by smaller ADIs increased after the measures were introduced.

In 2018, APRA announced the removal of the benchmarks on lending to investors and interest-only lending. In addition, there has been a notable shift in housing market dynamics more recently, which by some accounts has in part been driven by some lenders adopting a highly cautious approach to lending. Nevertheless, many of the underlying structural risks associated with high household debt remain and will do so for some time. In consultation with the other agencies on the Council of Financial Regulators (CFR), APRA will continue to monitor risks in residential mortgage lending and apply supervisory measures as needed.

Background

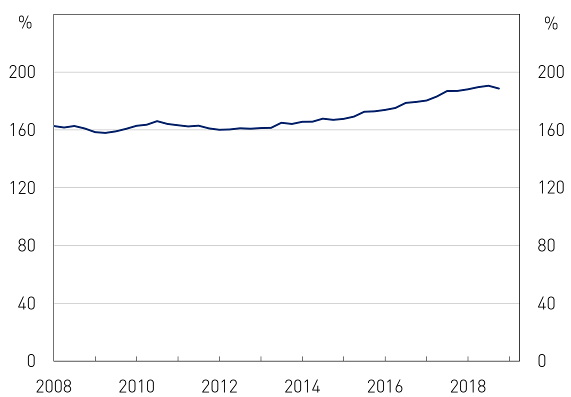
Mortgage lending risk environment

APRA's role includes prudential supervision and oversight of banks and other ADIs. ADIs act as intermediaries between borrowers and savers by extending credit in the form of mortgages and other loans, funded by deposits and other funding. Mortgage lending has important benefits for households, ADIs and the economy, but needs to be undertaken prudently and responsibly by both lenders and borrowers. The *Banking Act 1959* also gives APRA specific responsibilities with respect to promoting the stability of the financial system.

The concerns that APRA identified with respect to the quality of mortgage lending emerged in the years following the Global Financial Crisis. During 2008 to 2010, as housing markets collapsed in a number of countries overseas, ADIs and other Australian mortgage lenders tightened their lending standards in response to rising risks. While mortgage loan defaults increased over this period, the Australian housing market was not substantially affected by the deteriorating global conditions, in part because lending policies and practices had remained generally conservative over the preceding period.

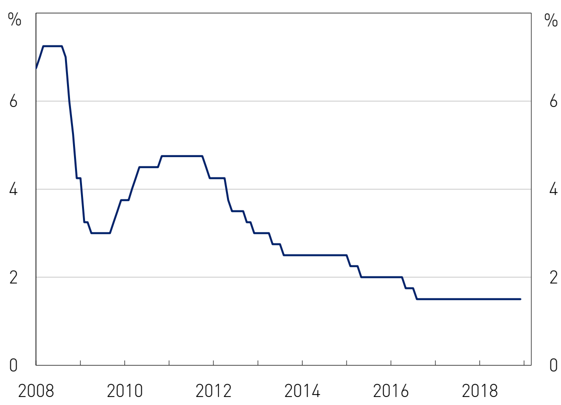
In the years after the crisis, however, falling interest rates and other economic measures to bolster the economy led to a surge in mortgage lending activity. Along with subdued wage growth, this contributed to continued increases in the ratio of household debt to income, largely due to mortgage debt.

Household debt to income

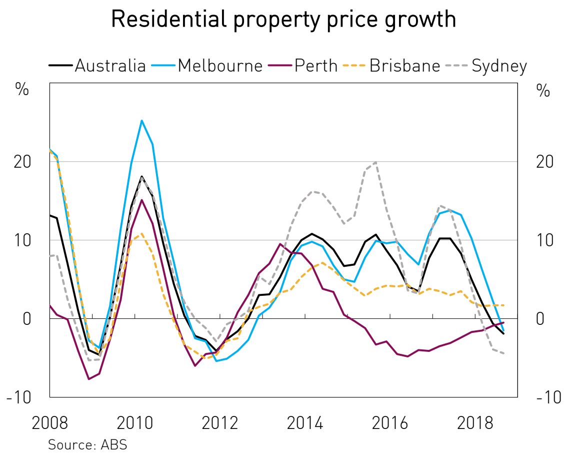


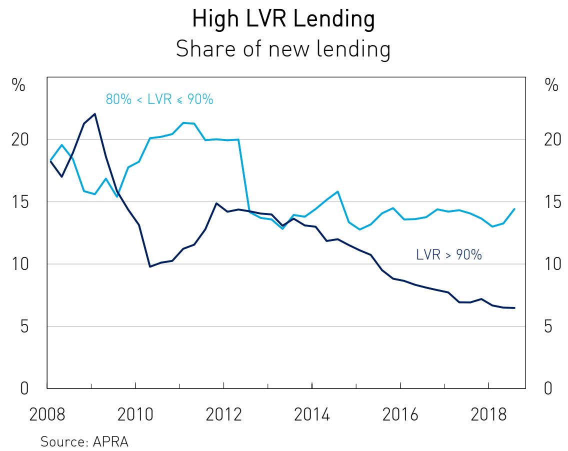
Source: RBA

RBA cash rate target



Source: RBA





In this environment of rising household debt, APRA observed a loosening of mortgage lending standards as lenders competed for market share. This included, for example, ADIs advertising an increased range of income categories they would accept in assessing borrowers' capacity to service a requested loan, loosening terms for applications by non-resident borrowers and reducing the interest rate buffer used to test potential borrowers' repayment capacity. An increasing share of loans was made at high loan-to-value ratios (LVRs), for property investment purposes rather than owner occupation, or on an interest-only basis with no principal repayments for periods of up to 15 years. The maximum possible loan size based on a borrower's income and other characteristics also appeared to be increasing, based on loan calculator web sites. At the same time, APRA noted through its supervisory activities that many ADIs did not have robust portfolio monitoring processes and data or internal limits on higher risk types of mortgage lending.

Due to rising concerns about credit quality, including lending at high LVRs, APRA sought assurances from ADI boards in 2011 about the strength of mortgage lending standards and portfolio monitoring. Similar assurances were again sought in early 2014. However, in hindsight it did not appear that all ADI boards had sufficient visibility of their own lending practices, or the impact of their activity in the context of overall financial system risks, for this approach to drive effective changes in practice.

APRA itself did not have sufficiently comparable or detailed information to reliably assess the apparent deterioration in lending standards and its impact on ADI loan portfolios. As a result, in 2013 APRA began collecting additional regular information from the larger ADIs on their mortgage lending and underwriting standards in order to better understand the risk profile of ADIs' portfolios and changes in their lending practices. This included, for example, more granular data on loans by LVR and loan purpose, borrower loan-to-income and serviceability assessments, as well as any internal limits the ADI had set on components of its portfolio. Thus, while systemic risks were rising between 2010 and 2014, there was not yet sufficient evidence to justify a shift away from APRA's traditional supervisory focus. However, by 2014 it was becoming clear to APRA, with support from the other CFR agencies, that more intrusive action was needed.

Considerations in developing APRA's approach

In the context of these rising risks to the financial system, and using the more extensive data set that APRA began collecting in 2013, APRA considered a range of options in determining how best to strengthen prudential and systemic resilience. The objectives were to develop a response that was:

- efficient and well-targeted on the specific risks identified;
- consistent and competitively neutral across the industry in application, but with flexibility where warranted, particularly for smaller ADIs;
- able to be implemented quickly and relatively simply; and
- able to be 'dialled up' or 'dialled down' as required.

With this framework in mind, as well as the need within APRA's statutory mandate to balance the objective of financial safety with efficiency and competition objectives, APRA considered a range of possible approaches, which included both short-term tactical responses as well as more strategic options. These included:

- traditional supervisory approaches of conducting ADI specific on-site visits covering credit risk management frameworks and processes;
- capital requirements, such as increased capital requirements for ADIs with practices or portfolios of greater concern, activation of the counter-cyclical capital buffer or increases in risk weights on some or all types of mortgage lending;
- assurances from ADI boards to monitor and control more closely their lending and risk profile;
- prudential guidance on better mortgage lending practices, potentially with a self-assessment or review by independent auditors;
- establishing minimum expectations for borrower serviceability assessments, including building more conservatism into serviceability calculations;
- quantitative limits, such as expectations for ADIs to set internal limits on higher risk mortgage lending or APRA-imposed quantitative constraints.

All of these options involve trade-offs in terms of likely effectiveness, costs and impact on ADIs and the community. The options were not mutually exclusive, and indeed APRA ultimately utilised a combination of most of these tools at different times.

In examining the potential to introduce constraints, APRA also had regard to measures that had been taken by regulators internationally at the time. In particular, restrictions on maximum LVRs or the amount of lending at high LVRs had been imposed by New Zealand and a number of other countries. By 2013, a number of countries had imposed debt-service constraints or other borrower-assessment requirements, or were considering additional capital requirements on mortgage lending to address systemic concerns in their mortgage lending markets (Table 1).

Table 1: Regulatory options to address housing market risks internationally

Regulatory measure	Description	Examples
Capital based		
Countercyclical capital buffer	An additional capital requirement that may be applied in periods when credit growth is deemed excessive	Norway, Sweden, Switzerland
Dynamic provisioning	Banks increase provisions during periods of rapid credit growth	Spain
Risk weights	Changes to risk weights and/or IRB parameters	Hong Kong, New Zealand, Norway, Sweden, Switzerland, UK
Limits on capital distributions	Capital distributions (e.g. dividends) restricted when risks are considered heightened	Poland, Turkey
Lending based		
LVR caps	Restrictions on the share of new bank lending with a high LVR and/or maximum LVR	New Zealand, Canada, Hong Kong, South Korea, Norway, Sweden
Exposure limits	Limits on exposures to certain credit segments	Ireland
Debt servicing ratio (DSR) caps	Limits on the maximum amount of a borrower's income that can be used for debt servicing	Canada, Hong Kong, South Korea
Borrower serviceability requirements	Reductions in maximum allowable loan terms; minimum interest-rate buffers on variable-rate loans	Canada, Hong Kong, South Korea

In the context of APRA's actions, it is important to note the role of the CFR. Alongside APRA, other members of CFR include the RBA, the Australian Securities and Investment Commission (ASIC) and the Australian Treasury. Each of these agencies has a role to play in ensuring the efficiency and effectiveness of financial regulation and to promote stability in the financial system. The agencies have collaborated closely on mortgage-related risks and issues over many years, and this included forming a working group focused on housing risks in 2014. The result of this collaboration has been actions taken and messages conveyed to the industry in a coordinated manner, such as with respect to investor and interest-only lending, and in relation to responsible lending more generally.

Summary of actions taken

After considering the advantages and disadvantages of different actions, in consultation with the CFR agencies, APRA initiated a package of measures. This included:

- directly reducing industry-level risks by setting temporary quantitative supervisory benchmarks on ADIs' lending for property investment purposes (December 2014) and lending on an interest-only basis (March 2017);
- strengthening lending standards through consistent prudential expectations for borrower serviceability assessments, based on a deep-dive investigation into loan underwriting practices;
- the publication of new prudential guidance, reinforced by independent ('targeted') reviews and a rolling program of on-site reviews across the ADI population over a multi-year period; and
- taking steps to enhance the prudential framework, including in the data used to monitor and assess risks in mortgage lending and proposed changes to the capital framework.[2]

APRA adopted these measures after considering the costs and benefits of intervention, the trade-offs between aspects of its mandate and alternative options, and formulations of the above options that could achieve similar outcomes.

APRA's assessment in 2014 was that the prevailing environment would place further pressure on lending standards, as lenders offered looser terms to attract customers, often via mortgage brokers, in an attempt to build market share. The 'first mover disadvantage' was a powerful disincentive for ADIs to mitigate their future credit risks by strengthening lending standards.[3] APRA's view was that the risks to financial stability were such that it needed to act quickly and in a clear and consistent manner across the industry.

As a result, APRA's response ultimately involved both tactical, temporary measures and more strategic ongoing requirements to enhance lending practices. The quantitative benchmarks, in particular, were time-bound measures designed to provide a temporary 'brake' on growth in forms of lending that were contributing most to systemic risk.

Although used internationally, industry-wide quantitative constraints represented a new approach for APRA. As such, APRA analysed a range of alternatives. This included many of the options listed above that had been adopted internationally, such as high LVR lending caps, debt-to-income or loan-to-income limits, and minimum serviceability thresholds, or some combination. The likely impact across ADIs of different forms of lending constraints

[2] To support its ongoing monitoring of ADIs' mortgage lending practices and risks, APRA also developed and introduced from 2018 *Reporting Standard ARS 223.0 Residential Mortgage Lending* (ARS 223.0). APRA has in 2018 proposed changes to the capital framework, see Media Release: APRA proposes changes to make the Australian ADI capital framework more transparent, comparable and flexible, August 2018.

[3] See APRA, Speech – Wayne Byres, Banking on housing, August 2015.

was relevant to this assessment, in particular flow or stock (portfolio) measures, as well as growth rates and lending shares.

In that respect, APRA recognised that quantitative constraints could have impacts on competitive dynamics by restraining some segments of the market, as well as impacts on pricing. However, given the intended temporary nature of these benchmarks, and the need to act quickly, APRA concluded that these trade-offs were warranted.

APRA chose not to adopt LVR limits, as was done in New Zealand and some other countries. By 2014, high LVR lending had already begun to diminish and continues to fall as a share of total lending. The more significant risks appeared to be the unprecedented share of interest-only lending and loans for potentially speculative investment purposes, and that low interest rates in conjunction with lending methodologies were allowing larger loans to be extended relative to a borrower's income. Caps on higher LVR lending would have also had a major adverse impact on first-time home buyers, which were not considered a significant source of systemic risk at that time.

In addition, in light of the potential for impacts on competition, APRA considered applying the quantitative benchmarks only to the largest ADIs, given the activity of smaller lenders was unlikely to influence the overall risks in the system. However, it is likely that this would have resulted in higher risk lending simply spilling over to the smaller ADIs, leading to a concentration of risk in smaller entities less equipped to manage it. Indeed, APRA did observe this spillover effect to some degree when the benchmarks were initially introduced. As it was, many smaller ADIs found themselves with an unanticipated surge in demand for credit that in some cases was difficult to manage. APRA sought to address concerns about impacts on smaller ADIs' ability to compete by adopting a more flexible approach to application of the benchmarks in the early stages, as discussed later in this paper. As a result, the market share of small ADIs grew through the period.

APRA was also aware that the surge in lending for investment purposes was more acute in certain cities and regions. APRA could also have chosen to introduce constraints on lending in particular cities or regions, as had been suggested, but concluded this would not be a practical or effective approach. Even if APRA and ADIs could have developed the necessary data reporting infrastructure to implement lending restrictions at a regional level, there was a strong risk that imposing constraints on only a particular city or region would cause higher risk lending to migrate or expand in other regions. More fundamentally, APRA's view was that sound lending standards were appropriate across all regions. Regionally based constraints would also have been extremely difficult to calibrate.

There was a risk that the introduction of quantitative constraints would lead to increases in mortgage interest rates of certain types of loans. Price increases would be consistent with restrictions on supply; in addition, differential risk-based pricing is common in other areas of financial services and can also reflect differences in capital and funding costs. As discussed below, differential pricing has been one outcome of APRA's measures.

Definitions of APRA's quantitative lending benchmarks were also set out in more detailed guidance provided to ADIs, and were generally based on APRA's existing reporting requirements. As discussed further below, data reporting and definitions proved challenging, particularly for lending to investors, due to limitations in existing lending systems and data quality at many ADIs. APRA also considered the possibility of 'leakage' of activity outside the benchmarks, through reporting or other changes, as well as to the non-prudentially regulated sector, as discussed later in this paper.

In light of the somewhat innovative nature of the interventions, APRA officials provided regular ongoing public commentary about the rationale for and impact of its actions in the mortgage lending sector, including through speeches, publications and regular appearances before Parliament.[4] In addition, APRA conducted its usual public consultation for the new prudential guidance APG 223, which allowed stakeholder views to be reflected in the analysis and final decision-making. APRA had also conducted extensive discussions with industry participants regarding the expectations for enhanced serviceability methodologies.

Impact of the measures

The following section provides a high-level summary of the outcomes of APRA's prudential measures. For a more detailed discussion and analysis of broader housing market impacts, see the Reserve Bank of Australia's October 2018 *Financial Stability Review*.[5]

While the tactical, temporary investor and interest-only lending benchmarks received significant attention, APRA's clear expectations on permanent improvements to serviceability methodologies were equally, if not more, important in delivering improvements in how ADIs conducted their mortgage lending activities.

Benchmark on mortgage lending to investors

As noted above, the downturn in the Australian property market over the years immediately following the Global Financial Crisis was relatively mild, with the accompanying reductions in mortgage interest rates supporting mortgage borrowing capacity.

At an industry level, there was a rapid rise in the share of residential mortgage lending extended to investors, particularly in the years leading up to late 2014. The Reserve Bank of Australia (RBA) had expressed concern about emerging imbalances in the housing market, and noted that strong growth in investor activity could increase the risk of amplifying the housing price cycle.[6]

A distinctive feature of this upswing was a notable divergence in the growth rates of lending to investors and owner-occupiers. By mid-2014, lending to investors was growing at close to 10 per cent annually, with growth in lending to owner-occupiers tracking at approximately half that pace. While this was not an unprecedented level of growth, lending to investors had also come to comprise a substantial and historically high share (above 40 per cent) of all

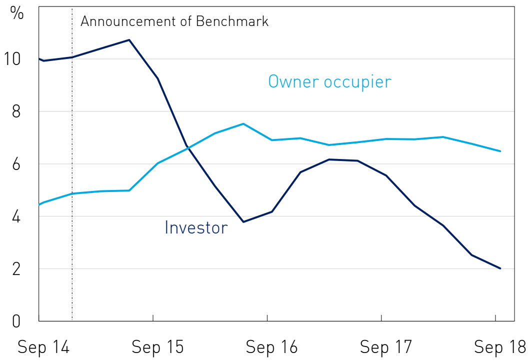
[4] See APRA, Speech – Wayne Byres, Banking on housing, August 2015; APRA, Speech – Heidi Richards, A prudential approach to mortgage lending, March 2016; APRA, Insight, Residential mortgages: Update on interest-only lending, Issue 4 2017.

[5] See Reserve Bank of Australia, Financial Stability Review, October 2018.

[6] See Reserve Bank of Australia, Financial Stability Review, September 2014.

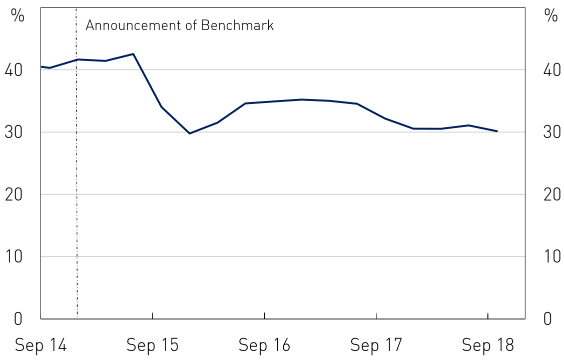
residential mortgage loan approvals. Investors are typically more sensitive to house prices movements, and may more readily contribute to instability as a result. APRA and the other CFR agencies were concerned that a growing dominance of these investors could skew behaviour in the market.

Housing credit growth
By borrower type



Source: APRA

Investor loan approvals
Share of total loan approvals



Source: APRA

In December 2014, following discussions with other members of the CFR, APRA announced the introduction of a 10 per cent benchmark on the annual growth of housing lending to investors.[7,8] The benchmark was not set as a hard limit: it was expressed as a trigger point for supervisors to consider whether more intense supervisory action, including higher capital requirements, could be warranted. In practice, the benchmark operated as an effective constraint on lending activity, given the prospect of higher capital requirements was a deterrent to many ADIs.

Subsequently, over the first half of 2015, APRA supervisors took coordinated action to reinforce the objectives of the benchmark with all ADIs and obtain action plans for meeting it, as well as the other elements of APRA's December 2014 letter (discussed below). In a number of cases, supervisors agreed on an appropriate timeline for meeting the expectations with individual ADIs, appropriate to the ADI's situation. This took into account factors such as projected lending approval pipelines, the need to obtain accurate data on loan purpose, and the impact of mergers and portfolio sales/acquisitions.

As a result, by mid-2015 all ADIs were taking action to either slow the growth in lending to investors, or ensure they did not accelerate above the benchmark. APRA did not specify the method by which ADIs were to meet the benchmark, as the benchmark was intended to be simple and achieved in the manner most effective for each particular ADI. APRA found that many ADIs had difficulty implementing processes that would allow them to maintain a particular rate of lending. While some relied on tightened lending policies, such as reducing maximum LVRs or limiting availability of interest-only or refinanced loans to achieve this, for many this was not sufficient. As a result, some ADIs struggled to remain consistently below

[7] See APRA, Letter to all ADIs, Reinforcing sound residential mortgage lending practices, December 2014.

[8] On the same day, ASIC announced that it would conduct a surveillance into the provision of interest-only loans by banks and non-bank lenders to determine how they are complying with their responsible lending obligations. See Australian Securities and Investments Commission, Media Release: 14-329MR ASIC to investigate interest-only loans, December 2014.

the 10 per cent benchmark. Some ADIs ceased writing investment loans altogether for a period of time.

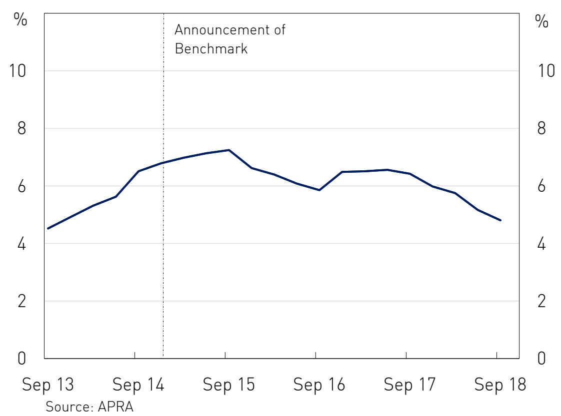
After several months, many ADIs ultimately resorted to pricing increases to reduce demand, increasing mortgage rates for loans to investors (see discussion later) and introducing a differential in pricing levels for investors and owner-occupiers. At an aggregate level, growth in lending to investors fell below APRA's 10 per cent benchmark in August 2015 and has remained below since.

This process brought intense scrutiny and attention to the recording of loan purpose. ADIs were motivated to ensure that they were correctly categorising loans to avoid over- or under-reporting their lending to investors. Owner-occupier borrowers also had incentives to ensure that they were not categorised as investors given the introduction of differential pricing.

The additional scrutiny brought to these areas resulted in significant movements in the underlying data being used to monitor the benchmark, which required focus from both ADIs and APRA to ensure an accurate and consistent approach was being taken. As a result, a large volume of loans were reclassified between investment and owner-occupier loan purpose. APRA's methodology for calculating growth in lending to investors for the purposes of the benchmark was constructed on a 'look through' basis; that is growth rates were measured excluding the impact of any switching in loan purpose.

Both APRA and the RBA closely monitored the impact of the introduction of the investor benchmark on total credit growth. The aggregate trend remained broadly unchanged. Total housing credit grew at between 6 to 7 per cent both before and after introduction of the investor benchmark and remained at this level until relatively recently. This is reflective of the significant changes ADIs made to their lending profile, with growth in owner-occupier lending largely offsetting the reduction in the investor segment.

Total housing credit growth



Source: APRA

Impact by industry segment

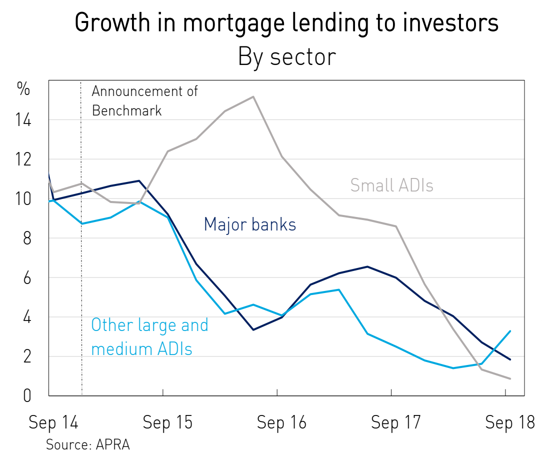
The impact of the benchmark varied across segments of the industry. The effect on large banks was the most noticeable, as they tended to have higher shares of their portfolio and rates of growth in lending to investors. Their actions also had the largest overall impact on the industry aggregates. After the first 12 months, all of the major banks were operating with lending growth to investors below 10 per cent on an annualised basis.

However, a number of smaller ADIs were also growing quite strongly in the period leading up to APRA's announcement. At the time the benchmark was announced, 36 ADIs were increasing lending to investors by greater than 10 per cent per year, out of the 125 ADIs which conduct residential mortgage lending. Over the next year, aggregate growth had reduced below 10 per cent and the number of ADIs exceeding this level had also reduced to 32 ADIs. By 2018, this had reduced further to only 9 small ADIs.

Number of ADIs with growth in lending to investors above 10 per cent

	December 2014	December 2015	April 2018
Major banks (4 total as at Dec 2014)	3	0	0
Other large and medium ADIs (13 total as at Dec 2014)	6	2	0
Small ADIs (108 total as at Dec 2014)	27	30	9

APRA was aware of the operational difficulties and competitive impacts that smaller ADIs potentially faced in restricting their lending growth. As a result, APRA took a proportionate approach to the introduction of the benchmark, particularly with the smallest ADIs. For ADIs with housing loan portfolios of below $1 billion, a longer time horizon was considered appropriate to meet the benchmark. The impact of this approach was that in aggregate, the lending growth of smaller ADIs decreased at a much slower rate than that of the larger ADIs. Growth in lending to investors for smaller ADIs dropped below 10 per cent in early 2017 and only became comparable with larger ADI growth rates in early 2018. Smaller ADIs' share of housing lending to investors has therefore increased from 2.2 per cent in December 2014 to 2.5 per cent in September 2018.



Removal of the benchmark

In April 2018, APRA announced the removal of the benchmark on lending to investors for those ADIs where the board provided assurances and commitments to APRA on their lending policies and practices.[9] At this time, aggregate growth in lending to investors was around 3 per cent, and there were very few ADIs with lending growth close to or above the 10 per cent benchmark. Most ADIs are no longer subject to the benchmark. To date, however, there has been limited appetite amongst most ADIs to materially increase the amount of lending to investors.

APRA will continue to monitor growth in lending to investors, but expects that the more prudent approach to lending to this cohort, together with the weaker market conditions that have emerged more recently, will prevent a resurgence of imbalances in the near term. In addition, APRA's proposal for changes to the capital framework to implement the recent revisions to the internationally agreed Basel III capital framework include increases in capital requirements for lending to investors, which should also serve to maintain some degree of pricing differential as well as provide added resilience for this form of lending going forward.[10]

Interest-only lending benchmark

While APRA observed an effective response to its tactical benchmark on investor lending over 2015 and 2016, APRA and the other CFR agencies remained concerned about the rising share of lending on an interest-only basis, particularly to owner-occupiers who have no tax incentive to borrow on this basis. By early 2017 lending on interest-only terms represented around 40 per cent of total residential mortgage lending by ADIs. This share was high by both historical and international standards.

The high level of interest-only lending was a particular concern in an environment of rising household indebtedness, modest wage growth and with the prospect of interest-rate rises at some point in the future, which could leave these borrowers particularly exposed relative to borrowers who have been paying down the principal on their loans. In addition, interest-only borrowers may face 'repayment shock' when interest-only periods expire and higher principal and interest payments begin, typically after five to 10 years. This repayment shock is largest when interest rates are low, as they are currently in Australia.

While ADIs may have viewed each individual lending decision as prudent, at an aggregate system level, these decisions led to growth in higher risk segments which represented a concerning systemic trend.

APRA considered options such as encouraging ADIs to impose internal limits on interest-only lending or further tightening lending standards on interest-only loans, such as limiting interest-only loans at high LVRs. However, the experience with the benchmark on lending to

[9] See APRA, Letter to all ADIs, Embedding sound residential mortgage lending practices, April 2018.

[10] See APRA, Discussion Paper: Revisions to the capital framework for authorised deposit-taking institutions, February 2018.

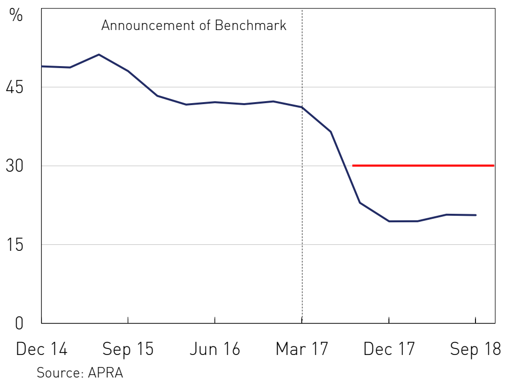
investors indicated that the industry would respond most quickly and decisively to a tactical industry-wide regulatory expectation.

As a result, in March 2017, APRA announced the introduction of a 30 per cent benchmark on the flow of new interest-only lending as a share of total new residential mortgage lending. The interest-only benchmark was a tactical measure aimed to quickly reduce the risks posed by interest-only lending to ADIs, and the industry as a whole. Similar to its approach with the investor benchmark, APRA stated that supervisory action (including the possibility of imposing additional capital requirements) would be considered where an ADI's interest-only lending exceeded the benchmark. APRA gave ADIs six months to adjust their lending flows in response to the announcement. APRA also indicated it expected ADIs to set strict limits on the level of interest-only lending at high LVRs, but did not prescribe what these should be.

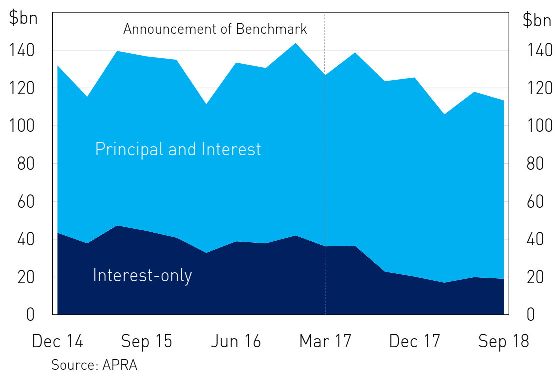
APRA's action occurred alongside ongoing work by ASIC on interest-only lending from a responsible lending perspective.[11]

At an aggregate level, ADIs were able to quickly reduce interest-only lending below the 30 per cent benchmark by September 2017. Since then, the share of interest-only lending has stabilised at around 20 per cent. Principal and interest lending has remained stable over the past few quarters.

Interest-only loans funded
Share of new lending



Quarterly residential mortgage loans funded



Impact by industry segment

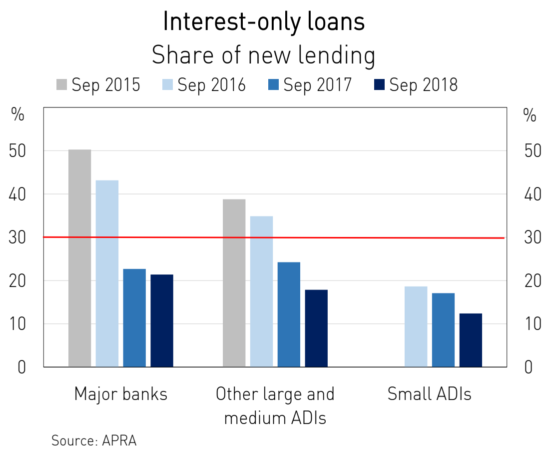
In March 2017 when APRA announced the interest-only benchmark, 21 ADIs were operating above the benchmark. Interest-only lending was also much more concentrated among the largest ADIs than is lending to investors; that is, most small ADIs did not have significant shares of the loan portfolios on an interest-only basis.

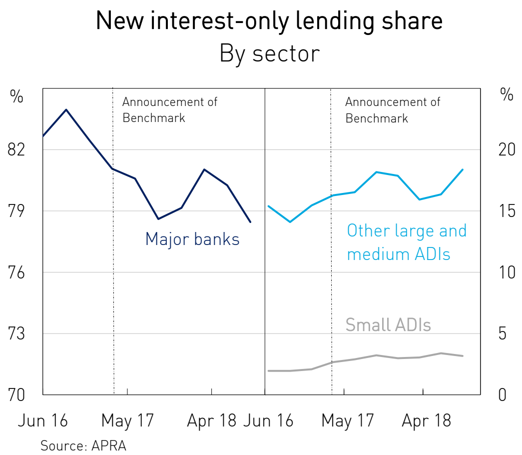
[11] See Australian Securities and Investments Commission, Report 445: Review of Interest Only Home Loans, August 2015.

Number of ADIs with interest-only lending share above 30 per cent

	March 2017	September 2017	September 2018
Major banks (4 total as at Mar 2017)	4	0	0
Other large and medium ADIs (13 total as at Mar 2017)	9	0	0
Small ADIs (88 total as at Mar 2017)	8	2	3

The proportion of interest-only lending to total residential mortgage lending among larger ADIs has been consistent with trends in the broader industry over time. The major banks' lending peaked in 2015 at over 50 per cent of total, and declined fairly steadily thereafter.





In contrast, interest-only lending has traditionally formed a smaller share of lending for smaller ADIs. As a result, the interest-only benchmark had a minimal impact on interest-only lending shares within this sector as a whole, being well under 30 per cent even prior to the announcement of the benchmark. With the larger banks more constrained, small and medium ADIs have, during the period the benchmark was in place, marginally increased their market share.

Removal of the benchmark

In December 2018, APRA announced the removal of the interest only benchmark for ADIs that were no longer subject to the investor benchmark.[12] The interest-only benchmark had served its purpose in reducing the level of interest-only lending in the sector. APRA expects

[12] See APRA Letter to all ADIs, Residential Mortgage Lending: Interest-only Benchmark, December 2018.

ADIs to maintain prudent internal risk limits on both the level and type of new interest only lending to help counter the possibility of re-acceleration across the industry.

Strengthening of lending standards

While the application of supervisory benchmarks to manage higher risk lending were temporary, tactical measures, the changes that APRA has instituted to strengthen lending standards are intended to be permanent. Over 2015 and 2016, APRA oversaw a range of changes designed to improve the rigour with which ADIs assess borrowers' ability to repay their loans, given the risk that this can be over-estimated in a low interest rate environment.

There were, in essence, three phases to the program of supervision to permanently strengthen lending standards:

- Establishing prudent serviceability tests: the introduction of consistent interest rate tests of borrowers' ability to repay their loans at potentially higher future interest rates, which APRA announced in late 2014 should be the higher of 2 per cent above the product rate or a floor rate of at least 7 per cent. These buffers help ensure that borrowers are able to service their loan even if interest-rates were to rise to more historically normal levels.

- Improvements in broader lending policies: in 2014 APRA published *Prudential Practice Guide APG 223 Residential Mortgage Lending* (APG 223). APG 223 outlines minimum expectations in relation to residential mortgage lending standards, including how ADIs manage and assess mortgage credit risk and ensure an appropriate level of conservatism is built into borrower serviceability assessments. In 2017, APG 223 was updated to include the expectations for quantitative serviceability assessments.

- Strengthening lending practices: ensuring that changes in lending policies consistently translate to changes in actual lending decisions. This included ensuring greater accuracy in the information collected from borrowers and improving controls to manage exceptions to policy.

In addition, supervisors increased their scrutiny of higher risk lending beyond investor and interest-only lending. APRA encouraged ADIs to limit their lending in higher risk segments, such as loans with high LVRs, loans with very long terms, interest-only loans to owner occupiers and interest-only loans with high LVRs.

To assess the robustness of ADIs' serviceability tests, APRA conducted hypothetical borrower exercises in 2015 and 2016. The aim of these exercises was to understand how ADIs apply their serviceability policies, including the interest rate buffers and floors, to a number of hypothetical borrower situations. These exercises were both innovative and illuminating in highlighting how lending policies were applied, providing deep insights into other areas of policy that needed to be tightened.

APRA supervisors followed up on this exercise to ensure guidance on lending policies was duly considered by ADIs. This incorporated a wide range of aspects that need to be considered in prudent and responsible assessments of loan affordability. The key elements included the application of buffers and floors on interest rates to new and existing debts to cater for potential changes in interest rates, haircuts to be applied on non-salary and variable sources of income where these are uncertain, haircuts on expected rental income, and for interest-only loans an assessment of serviceability for the period over which the principal and interest repayments apply (excluding the interest-only term).

In 2016, APRA required ADIs to commission detailed assessments of loan serviceability assessments, focusing on borrower financial information. The aim of this exercise was to test the extent to which improvements in lending policies were consistently translating into stronger practices on the ground. The targeted review identified several areas that needed to be addressed, including the collection and use of borrowers' actual expenses, the verification of borrowers' existing debt commitments, and the management of exceptions to policy. The review initially included only the larger lenders, but was extended to smaller ADIs over time.

Data analysed by APRA indicates that the stronger lending standards have produced more prudent lending decisions. This is evident through aggregate and ADI-specific information on LVRs, serviceability outcomes and debt-to-income ratios. The changes to serviceability parameters, in particular, had the effect of reducing the maximum amount that a given borrower would be extended, as demonstrated by APRA's hypothetical borrower exercises.[13] For a number of ADIs, these changes involved significant operational changes, including training and systems updates. The collection of borrower expense information (consistent with responsible lending obligations) has also been an area of focus for ADIs.

It is important to recognise that the industry has also taken steps to adopt more prudent practices across other areas of mortgage lending activity, for example lending to non-resident borrowers. These changes to credit policies, particularly those taken since 2016, have been driven by individual lender commercial decisions.

Post-implementation feedback

Although APRA did not conduct a formal consultation in advance of announcing the benchmark for lending to investors in late 2014, APRA did undertake an internal post-implementation review of its actions during 2016, which involved a number of roundtable and bilateral discussions with industry participants. APRA took this feedback into account in designing and implementing the interest-only benchmark. The feedback included the following points:

- The industry's view was that APRA was justified in taking more prescriptive and intrusive action than it had in the past. Individual ADIs often felt that they were not the cause of the concerns and had strong lending practices, but understood the concerns about systemic-level risks and imbalances.
- The investor lending growth benchmark as a tool for limiting higher-risk lending across the system was considered effective and no other viable options were suggested by industry.
- The primary concerns expressed by industry participants related to what they perceived as uneven treatment of their competitors with respect to the timing of compliance with the benchmark and implementation of changes to lending standards. APRA had

[13] See APRA, Speech – Heidi Richards, A prudential approach to mortgage lending, March 2016.

deliberately taken a more flexible approach for smaller institutions to avoid undue market or competitive impacts, and this clearly had advantages and disadvantages.

- ADIs faced significant organisation challenges in implementing the benchmarks and changes to serviceability practices. These challenges were not just systems and process-related, but also around culture and communications to staff, customers and brokers.
- The industry would have appreciated the opportunity for greater consultation ahead of APRA announcing the measures in December 2014, which may have helped to iron out some of the operational issues.

Other impacts

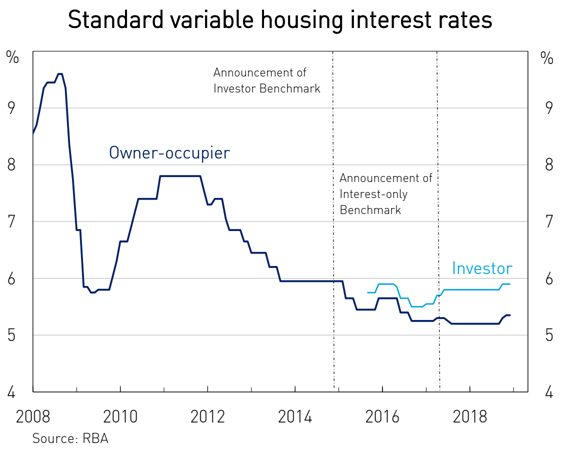
Mortgage pricing

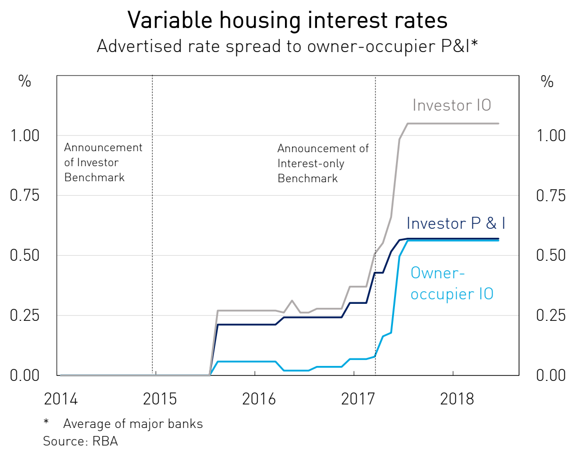
The introduction of the benchmark on investor lending in particular required ADIs to implement strategies to limit the flow of new lending below existing levels of demand. As discussed above, it became evident that few ADIs had reliable means of limiting the demand for new loans. Some ADIs accomplished this through adjusting lending standards, for example, by requiring lower LVRs. However, ADIs also increased their mortgage pricing as a means of reducing demand.

APRA considers mortgage pricing to be a commercial decision for each individual ADI, and APRA did not dictate or challenge these decisions in the context of the prudential measures for mortgage lending. However, few if any ADIs initially flagged the possibility of differential interest rates for lending to investors when APRA sought their plans following the announcement of the benchmark in December 2014. This was perhaps in part because many ADIs faced system challenges with introducing differential pricing; as a result the differential pricing was not introduced until mid-2015, with ADIs initially increasing standard variable rates (SVRs) on investor loans by approximately 25 basis points and some also decreasing rates for owner-occupiers by a lesser amount. Following the introduction of the interest-only benchmark in March 2017, the spread between interest-only and principal and interest (P&I) SVRs increased by around 50 basis points. There were also other factors affecting mortgage pricing over the same period – changes to underlying funding costs and the anticipation of changes to regulatory capital requirements – which complicated the pricing picture.

The Australian Competition and Consumer Commission (ACCC) conducted a detailed investigation into pricing of mortgage loans over 2017-18, which included the pricing impact of APRA's benchmark on interest-only lending.[14] It concluded that APRA's measures provided a focal point for the major banks to increase headline variable interest rates for interest-only loans. Of particular interest was the fact that most ADIs imposed higher pricing on the entire loan portfolio, even though APRA's benchmark only applied to new lending. However, given the other factors at play, such as the potential for higher capital requirements for these types of lending (which would apply to the entire portfolio), it is difficult to disentangle the effects of the imposition of the benchmarks with other drivers.

[14] See Australian Competition and Consumer Commission, Residential mortgage products price inquiry – Final Report, December 2018.





Mortgage lending outside the ADI sector

Lending by financial institutions that are not ADIs has been a longstanding and active segment of the Australian mortgage industry. Prior to the Global Financial Crisis, these non-ADI lenders were successful in financing a material volume of housing lending through securitisation. While moribund for a period of several years, the securitisation market has recently made a modest recovery, and these entities have been able to increase their lending activity. In recent years, the RBA estimates that non-ADIs have been increasing their housing lending at over twice the rate of ADIs. As a result, their estimated share of housing credit has also increased, but remains below 5 per cent.[15]

APRA's supervision mandate does not extend to this sector, and these entities were not subject to the various actions outlined in this paper. Nevertheless, non-ADI lenders are subject to responsible lending obligations, and the transparency expectations around public securitisation markets demands adherence to sound industry practices.

Some concerns have from time-to-time been expressed that non-ADIs may be an avenue for borrowers to circumvent APRA's expectations for prudent mortgage lending. Many of the non-ADI lenders utilise 'warehouse' facilities to fund their lending activity temporarily prior to loans being pooled into residential mortgage backed securities. Total residential mortgage limits extended to non-ADIs in large ADI warehouse facilities increased from $16.5 billion in the September 2017 quarter to $20.6 billion in the September 2018 quarter.

APRA has, however, indicated to ADIs funding such warehouses to ensure that the lenders' mortgage lending standards are consistent with industry-wide sound practices. APRA obtains information from the larger ADIs on securitisation warehouse providers on the types of lending they are funding. In aggregate, the share of investor and interest-only loans held in warehouse facilities is somewhat higher than that of the broader ADI industry, but has reduced in line with the broader market trend.

In 2018, APRA was granted new powers to collect data from non-ADI lenders and to apply rules to these lenders if necessary to address financial stability concerns. APRA expects to

[15] See Reserve Bank of Australia, Financial Stability Review, October 2018.

consult on a data collection in 2019 which will seek information on the volume and nature of lending activities undertaken by non-ADIs. APRA has no plans, at this time, to apply limits to lending by non-ADI lenders, but retains this reserve power in the event it is needed in future.

Conclusion

This Information Paper has summarised the measures that APRA took to strengthen banking sector resilience and address heightened risks in the operating environment in the period 2014-2018. This has included both strategic and tactical actions that were unprecedented in Australia (and indeed more broadly internationally in some cases), and that have had a significant impact on the industry.

In APRA's view, these actions have led to a marked strengthening in residential mortgage lending standards and improvement in the risk profile of mortgage lending in Australia, with a commensurate reduction in systemic risks. Overall, APRA views the measures as having achieved their objectives without undue unintended consequences. As with any regulatory intervention, they have also involved trade-offs for the community.

As detailed in this paper, in developing its approach, APRA considered a wide range of potential options and the advantages and disadvantages of each, and closely monitored the impact of its actions to assess whether they were achieving the intended outcomes. There have been some useful lessons in this process that APRA will bring to bear in considering similar actions in the future, should they be required.

APRA's decision to remove the temporary benchmarks on investor loan growth and interest-only lending reflects the improvements in lending standards, and therefore prudential safety, achieved by the industry over this time. APRA will continue to monitor risks in residential mortgage lending and could look to use similar or different methods in the future to drive appropriate prudential outcomes.

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