



# Major Banks Analysis

May 2017



## Hard work ahead

*Australia's major banks had to work hard to return to growth in the first half of 2017 and will have to work harder to maintain momentum given an uncertain domestic outlook. Growth in the half came predominantly through non-interest income and reductions in bad debt expense as pressure on interest margin largely offset solid housing credit growth in particular. The results demonstrate, if it was ever in doubt, the critical role that the domestic, predominantly retail operations of the banks, will continue to have on their results and the criticality of margin benefits and cost management in the outlook.*

Having seen significant action over recent periods from the banks to refocus on the 'core' of their businesses, we believe we are entering a new phase of focus on 'how' to deliver these products and services, namely reshaping their operating models. There are early signals in the half that suggest concerted action is being taken, particularly on costs, but it remains to be seen how fast and significant these changes will be.

If domestic performance drives a steady earnings backdrop (not ignoring the growth generated by markets businesses in the half), the majors will have time to invest and adjust. With the regulatory focus squarely on the engine room of housing growth, the outlook for this is notably uncertain.

### Solid growth in the half

Cash earnings for the half were \$15.7bn, an increase of 4.6% on the previous half (hoh) and an increase of 6.1% on the first half of 2016 (pcp). The results in all periods were impacted by a number of 'specified items', such as sales of assets/businesses, restructuring costs and software write-downs. Adjusting for these and other significant 'one-off' items, combined cash earnings for the four banks rose slightly by 3.3% hoh and 2.3% on pcp.

At a headline level there remain some real differences across the banks, but at a sector level growth remained resilient and has rebounded from the decline in the second half of 2016, driven in particular by the banks' retail banking divisions, low bad debts and a strong trading income environment.

Return on Equity (RoE) was 13.96% for the half, up 31 basis points (bps) hoh and 16bps versus pcp. Adjusting for one-off items, RoE was 14.04%. RoE hit its lowest level since 2009 during the previous half and, despite the earnings environment, did not bounce back significantly in the current half.

The combined CET1 capital ratio of the majors increased by 18bps hoh and decreased 2bps versus pcp, which reflects a total 112bps increase since the Financial System Inquiry in 2014. While APRA still has elements of capital reform to finalise, it is remarkable to reflect that since 2014, combined absolute CET1 increased \$37.1bn against a risk weighted asset increase of \$214.1bn.

## Four major banks combined performance chart

	1H17	2H16	1H17 vs 2H16	1H17	1H16	1H17 vs 1H16
Net interest income	30,245	30,060	0.6%	30,245	30,248	(0.0%)
Other income	12,812	11,844	8.2%	12,812	11,825	8.3%
Total income	43,057	41,904	2.8%	43,057	42,073	2.3%
Operating expense	18,676	18,337	1.8%	18,676	18,872	(1.0%)
Core earnings	24,381	23,567	3.5%	24,381	23,201	5.1%
Bad debt expense	2,206	2,612	(15.5%)	2,206	2,524	(12.6%)
Tax expense	6,475	5,948	8.9%	6,475	5,875	10.2%
Outside equity interests	22	22	0.0%	22	24	(8.3%)
Cash earnings	15,678	14,985	4.6%	15,678	14,778	6.1%
Statutory results	14,570	14,511	0.4%	14,570	14,286	2.0%

RoE has stabilised at a significantly lower level than the longer term average of 16% to 18% of equity. Given prior period comparatives now include the capital increases that followed the Financial System Inquiry, it is meaningful to consider this lower rate of return as a 'new normal'. Shareholders and commentators appear to have accepted this structural adjustment as prudent but are nonetheless questioning the sustainability of dividend payout ratios as further capital increases are anticipated.

### Home lending critical to the results and outlook

The banks' retail operations and in particular home lending have been their growth engines for several years. This half was no exception, though margin management was critical to supporting momentum. Business lending growth rates slowed dramatically in the half, which in part reflects a deliberate deleveraging in large ticket loans but with personal lending declining, home lending remained the critical asset growth driver in the half.



**Home lending remained the critical asset growth driver in the half**

Home lending now represents approximately 62% of total credit in Australia and 65% of the major banks' gross lending and has been steadily rising as a proportion – in 2009 it was 53% of total credit and 59% for the major banks. For the half, 80% of the major banks lending asset growth came from home lending. Regulators, and indeed some banks, are understandably concerned about the growing concentration of risk to the banks in mortgages as a result.

The increased focus on domestic mortgages from the banks is understandable and reflects the Australian context, particularly when you unpick the credit growth story for the last six months. But it also shows why caution is being expressed regarding the outlook.

Industry credit growth was a solid 5.0% p.a. on a rolling 12 month average but continued a slowdown in growth rates in the previous half from 6.4% p.a. growth a year ago. Total housing credit rose 6.5% p.a. however over the past year, up slightly on the half but down from 7.1% p.a. growth in the twelve months leading up to March 2016.

Business lending in contrast rose only 3.4% p.a., a sharp decline on 6.5% growth a year ago and personal lending declined 1.5% p.a., reflecting a continued trend away from bank unsecured lending in particular.

By annualising the growth rates for the last six months it is clear how important housing lending has been in the half. The annualised growth rate in housing credit was 7.8% for the six months, having been 6% six months ago. The prior half was significantly impacted by a sharp slowdown in investor lending growth in response to APRA's 10% growth cap, which rebounded later in the current half.

The significant focus on housing affordability and mortgage underwriting standards is further evidence that a more 'hands on' regulatory environment, including growth restrictions, is here to stay. This, combined with the lack-lustre broader economic factors raises questions as to whether housing will continue to deliver the asset growth and earnings performance to which the banks are accustomed to. The banks have flagged similar concerns with regard to credit growth, highlighting in addition the importance of business confidence into translating in to capital investment, which in turn should result in increased demand for business credit.

In the meantime the banks have been responding to the current 'speed limits' imposed by APRA by restricting lending to certain groups and repricing lending on a number of occasions over the last year.

This repricing, particularly in the prior periods, has reduced the negative impact of margins from the full impacts of wholesale funding costs and deposit competition. The combined net interest margin of the banks fell to 2.01%, (-3pbps hoh, -7bps pcp) as a result of funding costs and deposit competition, much of which appears to be attributable to the full-year impact of preparations in recent periods for the Net Stable Funding Ratio requirements and some large movements due to markets and treasury activity.

We believe there is scope that the banks will see margins improve in the second half as they experience the full-year impact of recent (and potentially future) repricing, coupled with deposit competition and absent any shock impacting wholesale funding costs.

Adjustments to pricing are always delicate to make and given concerns about borrowers' indebtedness and capacity to repay, and the potential for knock-on impacts to consumer spending, the banks will consider changes carefully. We would also expect competition to intensify in the owner-occupier segment as regulators work to constrain investment lending, putting some downward pressure on margins.

The underlying credit quality performance of the banks remained strong in the half, with some limited signs of deterioration in retail portfolios, particularly in unsecured lending and some expected areas of the home lending portfolios. Bad debt expense (BDE) fell by a notable \$406m or 15.5% hoh to \$2.2bn and was down \$318m or 12.6% on pcp. The prior periods included a number of provisions taken for lending connected to resources and mining that were not repeated in the current half.

As the RBA recently noted, average measures of credit quality are instructive but may not be strong lead indicators of loss, particularly in a benign, low interest rate environment. Given how low bad debt experience has been in the 8 years since the GFC and how crucial the retail lending businesses will be to the banks' growth, the banks will be closely monitoring for any indication of more systemic deterioration.

### Starting to reshape the cost base

Unpicking the banks' costs has become more difficult in the past 12 months due to the banks reporting more one-off items as they take steps to rationalise their businesses and reassess assets. Significant one-offs in costs in each half included acceleration of software amortisation, restructuring costs, and the costs related to divestment of businesses.

After adjustment for one-off items, the banks' expense-to-income ratio fell to 42.6%, 25bps down hoh and 23bps down on pcp. This means costs rose only a modest 1.1% hoh and 1.0% versus pcp. While the story varies bank by bank, it is clear from the results that in a subdued growth environment, much is being done to manage cost growth.

It is very evident the banks are taking some larger steps to reconsider their operational approaches to take advantage of technology opportunities and respond to a faster-moving, demanding environment, reshaping their cost bases in the process.

Average FTE for the banks fell 1.1% during the half and fell 1.7% against pcp and the largest growth in payroll expense for an individual bank was 3.6% versus the prior half. We believe this reflects a broader realignment that is taking place around operating models and it was particularly interesting, for example, to see ANZ announce a change in management approach to facilitate this. There are also indications in the banks' commentary that using robotics and automation in processes is gaining momentum and can be expected to deliver more savings.

Management of costs was also evident in IT and investment expenditure. After adjusting for CBA's acceleration of software amortisation, IT expense for the banks rose only slightly by \$76m or 2.6% hoh.

At the same time, the value of expenditure considered as 'investment spend' declined 10.7% hoh and 1.0% on pcp as the banks flagged completion of IT projects and, for one bank, reassessment of investment needs for a 'simpler' bank. The proportion of this spend that is capitalised has continued to reduce, which is indicative of the shorter lifespan of the technology investment curve. Is it time for a rethink on operating models?

All of these changes can be described as a start. However, it is probably too early to say whether these initial adjustments mark the successful start of more structural changes to the cost base.

### Outlook- more radical changes to come?

We expect the combination of regulatory focus and subdued economic growth to translate into a constrained outlook for housing credit growth in particular with flat or declining margins other than a short-term spike off the back of recent repricing. It is reasonable to expect the banks will need to continue to reassess their priorities for the foreseeable future as a result.

The banks have already taken some significant steps in this direction, having adjusted their businesses and refocused on the 'core' of what they believe sets them apart for customers, particularly customers based in Australia.

As the banks truly focus on their points of differentiation, we expect to see more changes to align their organisation capabilities behind their chosen point of difference in the market. We believe more attention will now be paid to how their operating models need to change to support these capabilities and maintain performance.

Factors the banks will consider is what they need to build versus buy; how they set up their IT infrastructure; whether they partner with other organisations; and whether they are a distributor or manufacturer of product.

In our Hot Topic – *Banking 2020: Future Operating Models*, we ask whether it is time for a radical rethink of bank operating models. Our contribution takes a deeper look into operating models and their need to evolve to enable differentiation, promote decision and innovation agility, while also preserving the essence of scale and scope.

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*Is it time for a rethink on operating models?*



# Balance sheet dynamics

## Credit growth

The Australian credit growth environment has, as always, been critical to the banks' results and demonstrates why bankers, commentators and regulators are so focused on housing credit and whether the outlook will continue to deliver.

On an overall 12 month rolling average, total credit in Australia rose 5.0% p.a. which is a continued decline from the prior half (5.4%) and a year ago (6.4%).

Housing credit continued to grow strongly at 6.5% in the twelve months to March 2017, up 10bps on six months ago but down 60bps on a year ago as the investor lending 'speed limits' from December 2015 took hold.

Business credit growth over the same period has seen a dramatic reduction to 3.4% p.a at March 2017 compared to 4.8% p.a. at the prior half and 6.5% p.a. a year ago. It is important to note that this includes both larger institutional customers and small to medium size enterprise across segments. However, the sharp slow-down in growth, including that the stock of business credit contracted in two of the last six months, is certainly worthy of note.

Other personal lending, which includes credit cards and personal loans has been steadily contracting for the last eighteen months and fell 1.5% in the year to March 2017, an increased rate of contraction relative to the prior half (-1.3%) and a year ago (-0.5%).

For the major banks, the balance of credit growth in the half was increasingly weighted to housing. Given the existing concentration of the banks' lending to residential housing, it is understandable why there is some caution from observers as to the increased risk this could represent.

As at March 2017, 65% of the major banks' gross loans were residential housing related and the concentration has been increasing rapidly given the size of the balance sheets. In 2009 the same figure was 59%.

For the six months to March 2017 however, 80% of the banks' growth in loans outstanding was attributable to housing, which effectively grew at twice the rate of other lending on the banks' balance sheets.

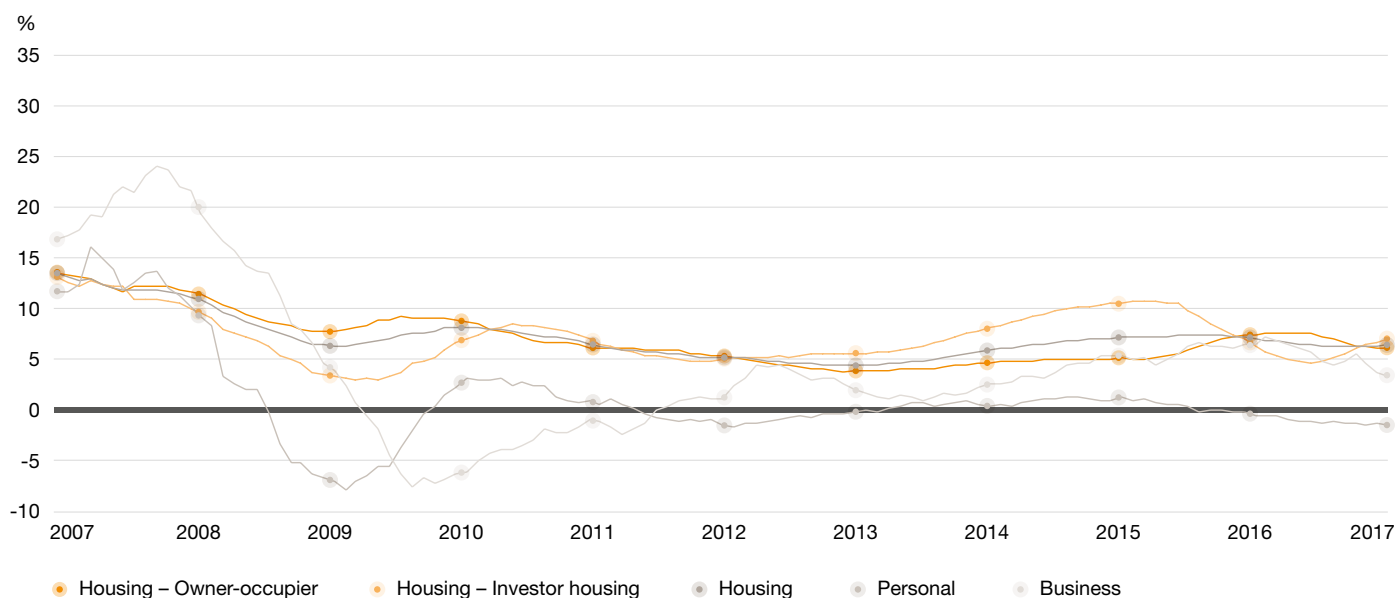
It is important to acknowledge that this bias towards housing is reflective of the current Australian context.

Nevertheless, it is clear why regulators are taking note, setting further growth limits and reiterating conduct expectations to ensure risk is not allowed to build beneath the surface of the very low cost of debt at present.

These are delicate adjustments to make given the significant increase in household leverage in the last decade and the broader economic implications of a change in credit supply or demand. There is not consensus even among the banks on what exactly this could, or indeed should, mean for Australian credit growth but it does appear that the sentiment is one of 'active' caution and we expect a more proactive stance from regulators as a result.

Clearly, any further slowing in housing credit growth would flow quickly to the major banks, given their 91.5% share of the lending market in Australia.

### Domestic credit growth (Annual % growth – 12 month rolling average)



Source: RBA

### Funding

Deposit growth during the half more than covered the increase in gross lending for the banks. Deposits increased \$55bn or 9.0% hoh while gross loans and advances increased by \$47bn.

The deposit-to-loan ratio rose accordingly with 69.9% of loans effectively funded by deposits from individuals and corporations, up from 68.7% six months ago.

The major banks maintained 78% share of bank deposits as a whole and 80% market share of retail deposits.

The profile of funding between ‘stable’ sources (such as customer deposits, equity and longer term wholesale funding) compared to shorter term more volatile funding has been changing in preparation for the Net Stable Funding Ratio (NSFR) requirements from 2018.

At the half, the banks reported that 79% of their funded balance sheet was obtained from stable funding sources, up from 78.3% at the prior half and from 77.1% a year ago. All the banks noted a progressive lengthening of tenor of wholesale funding during recent periods. This has had a consequential impact on margin as older debt that was issued at the height of global quantitative easing is replaced with longer dated, higher cost debt.

All of the banks have now stated that they are prepared for Net Stable Funding Ratio compliance when it is introduced from 2018.

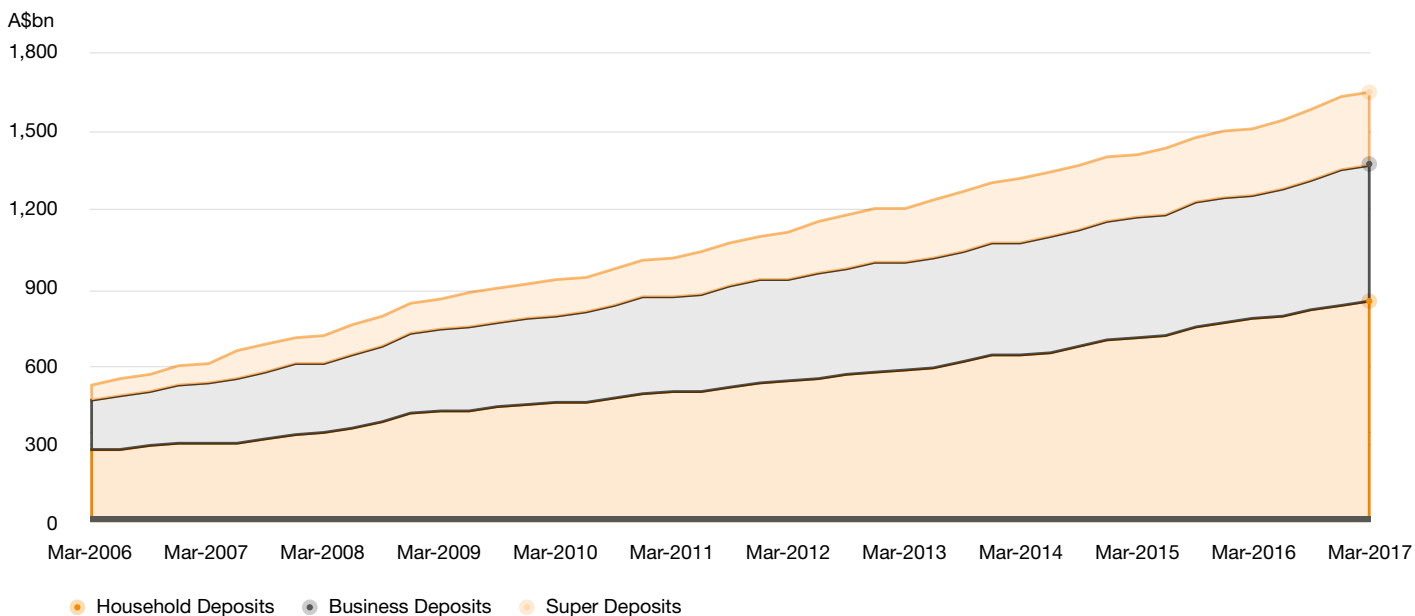
The drive to lengthen funding stability and maturity – both in retail deposits and wholesale funding – has weighed on margins, and the carry-forward of this may be evident in the next half’s results. With the expected requirements of NSFR now met, competition may ease slightly for term deposits, although ultimately this may depend on the outlook for lending growth and any further adjustments required to meet APRA’s unquestionably strong objective.

Bank deposits in the system overall grew 8.0% over the last year, compared with 7.1% p.a. at the prior half and 6.9% p.a. at pcp. Household deposits grew by 8.2% p.a., higher than six months and a year ago.

Business deposits growth rose to 10.2% p.a., compared to 4.4% p.a. at September 2016 and higher than the 2.2% p.a. growth rate at March 2016.

Superannuation deposits grew by 8.8% p.a., lower than a year ago at 9.2% p.a. but higher than 8.4% six months ago.

### Composition of bank deposits



Source: RBA, ABS

### Capital

Two and a half years after the Financial System Inquiry, it is interesting to take note of the increase in capital adequacy of the major banks since 2014.

The combined CET1 ratio of the banks rose a further 18bps in the half and has now risen 112bps from 8.91% in 2014 to 10.03% at March 2017.

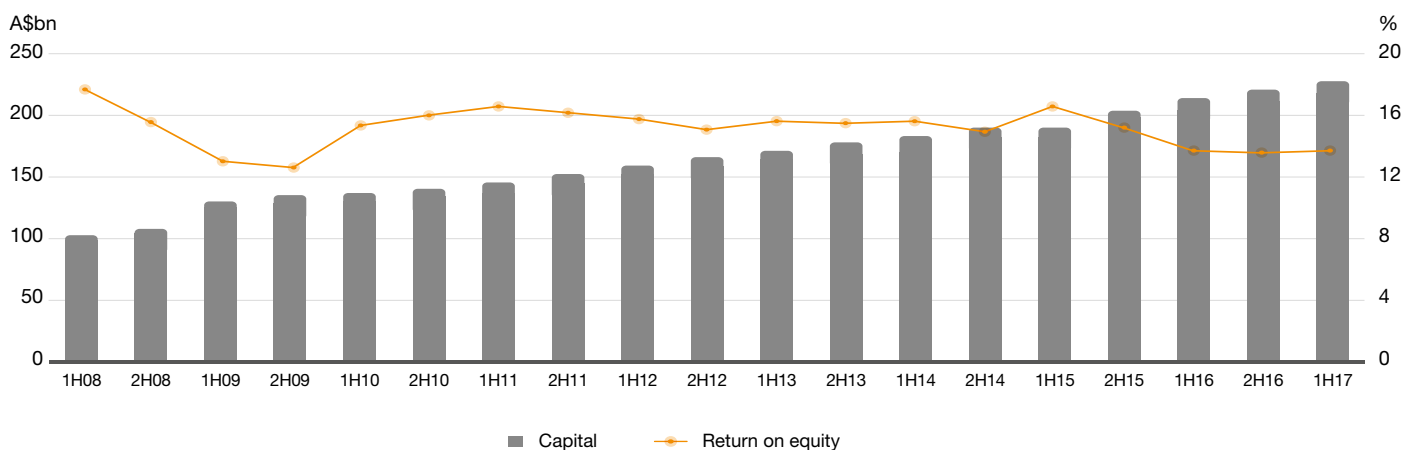
In aggregate, CET1 capital, the numerator, has increased by \$37.1bn, or 29.8%, since the second half of 2014, \$27.2bn of which has been additional, non-organic capital.

During the same period, risk weighted assets have grown by only 15.3%, or \$214.1bn even after the changes made to RWA requirements for residential mortgages. The banks have made very deliberate choices to optimise their balance sheet growth relative to capital, for example by reducing exposure to particular segments of the market.

These are not easy adjustments to make and there remains the possibility of further increases in capital requirements, as ‘Basel IV’ unfolds and as APRA develops its focus on the “unquestionably strong” prudential objectives.

Return on Equity was 13.96% for the half, up 31bps from the previous half. Adjusting for one-off items, RoE rose 22bps hoh to 14.04%. After a period of declines, average bank returns seem to have stabilised at this level, and investors seem generally accepting that this represents a “new normal”. It remains to be seen what the impact of a difficult growth outlook and potentially more capital could hold.

### Capital and Return on Equity



# Revenues

## Net interest income

Net interest income rose only very slightly in the half to 30.2bn (a 0.6% increase hoh) and was flat on pcp. Net interest income fell for the first time since the GFC in the prior half and remains under pressure with modest average interest earnings growth being close to offset by continued net interest margin pressure.

Average interest earning assets grew only 2.1% hoh and 3.6% on pcp. The impact of banks reshaping away from non-core lending segments, a lower-growth business lending environment, and falling unsecured lending was offset by another strong period of housing credit growth.

The banks' combined net interest margin fell to 2.01%, a 3bps fall (after restatements) from 2.04% hoh and 7bps decrease on pcp.

The banks saw some significant margin benefit from loan repricing in prior halves and the current half, in large part responding to regulator limits on growth rates for investor lending and, more recently, interest-only lending. This was more than offset however by the drag of deposit competition in recent periods, rising wholesale funding costs and markets/treasury pressures relative to previous periods.

The banks have been adjusting their funding bases, both in deposits and wholesale, to meet the regulatory Net Stable Funding Ratio over recent periods, which has driven higher levels of competition for deposits and a lengthening of tenure of wholesale funding, replacing older, cheaper debt. This may be partly subsiding as they have now all declared they adequately meet the ratio, though it remains to be seen whether there is any residual drag on margins as the fuller period impact of these changes are felt.

There were some large margin decreases driven by markets and treasury results in the half. One bank called out a large decrease due to hedging activity (which was offset in other income) and all highlighted the lower rate of earnings on capital (free funding) due to rate cuts in the half and a continued increase in liquidity books that have lower earning rates.

We believe there is some scope for margins to rebound slightly in the second half as the full period impact of more recent loan repricing carry through, decisions are made on responding to regulator demands to moderate growth in certain sections of the market and some of the pressures on funding subside slightly. Whether any increase endures is very difficult to call.

### Lending

**+2bps hoh, +5bps pcp**

The banks experienced the full half impact of previous loan repricing in response to regulator-imposed caps on growth in particular market segments.

### Deposits

**-2bps hoh, -4bps pcp**

Competition for term deposits that was evident in the prior halves carried over to the half as the banks sought stable funding in preparation for the Net Stable Funding Ratio requirements. The RBA rate cut impacted margins on lower rate deposits.

### Wholesale funding

**-1bps hoh, -3bps pcp**

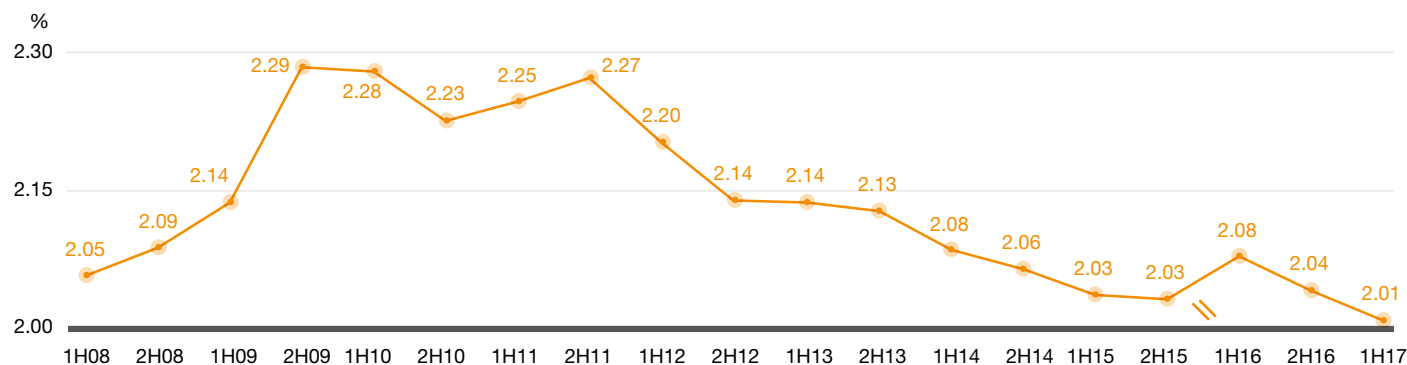
The banks continued to feel the impact of older, lower cost funding rolling off and being replaced by higher priced, longer dated funding as they have sought to lengthen the tenure of funding.

### Treasury and markets

**-2bps hoh, -6bps pcp**

The combined impact of lower interest rates on free equity funding, continued increases in lower earning liquidity books and hedging had a large impact in the half. One bank highlighted the significant impact of hedging activity versus the prior half but with an offsetting increase in other income.

### Combined net interest margin



1H16 and 2H16 restated to reflect changes to bank calculations of net interest margin.



# Other income

Non-interest income was, for once, a significant growth driver in the half, rising 8.2% or on the prior half and 8.3% on pcp and making up 30% of the total operating income growth half on half.

This is in part reflective of some larger specific items for each bank including gains on sale of assets in the half and a large economic hedging gain for one bank that was offset by a reduction in net interest margin.

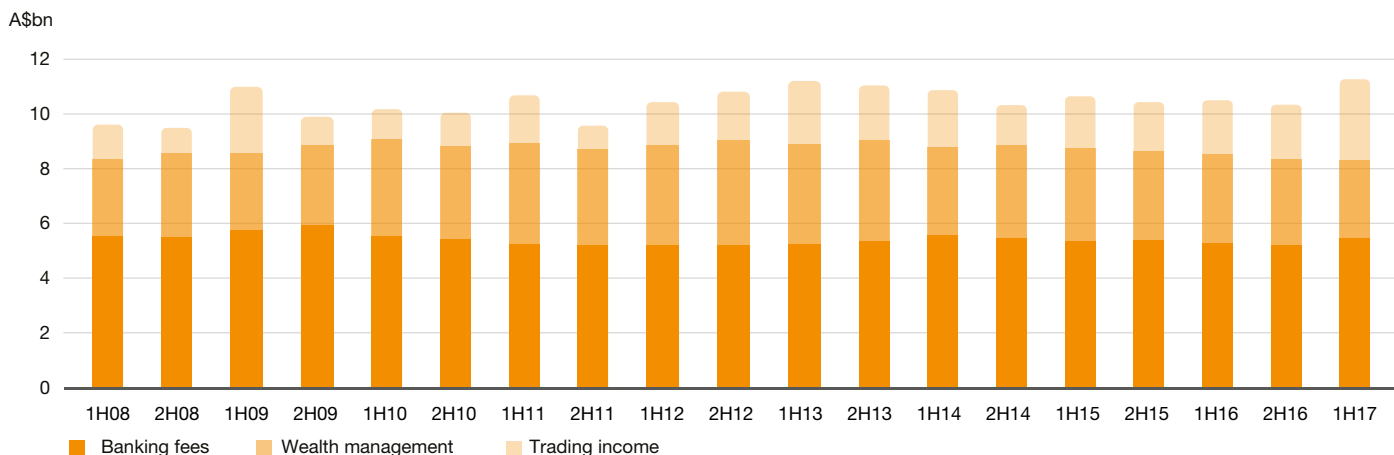
After adjusting for the larger of these items, non-interest income still rose 4.5% on the prior half as trading income in particular saw very strong growth in favourable markets conditions and with valuation adjustments in both periods.

Fee and commission income also rose for the first time since the second half of 2014, up 4.0% on the prior half as the banks noted increases in corporate and institutional lending fees in particular.

Wealth management related income fell 4.0% hoh and 9.8% on pcp, driven most significantly by increased insurance claims costs and some margin pressure due to mix of products in asset management businesses.

It is extremely hard to call whether non-interest income will continue to grow given the possibility of specific transactions influencing individual periods and particularly as it relates to calling the trading income environment. However it seems likely that some of the momentum gained in the half will carry to the remainder of the year.

## Analysis of other operating income



**Banking fees rose** 


4.0% hoh  
2.9% & pcp

Improved lending fees on corporate and institutional lending and some increases period on period for merchant income.

**Trading income rose** 

40.5% hoh  
62.1% & pcp

The banks experienced strong underlying growth in trading income due to favourable market conditions, some large one-off items.

**Wealth management down** 

4.0% hoh  
9.8% & pcp

Insurance claims experience and adjustments for 'loss recognition' more than offset increases in assets under management.

# Expenses

Total operating expenses rose 1.8% hoh but fell 1.0% pcg as the banks work hard to maintain cost growth lower than income growth (“positive jaws”) in a more constrained growth environment.

The major banks’ combined expense-to-income ratio for the six months fell to 43.4% as a result, down 38bps from the previous six months and down 148bps on pcg.

After adjusting for a number of larger one-off items in each period, expense-to-income improved 25bps hoh to 42.6%. Significant one-off events in the six months included software amortisation, restructuring costs related to divestment of businesses.

There is clear action being taken on costs. The average number of full time equivalent staff fell 1.1% or 1,801 hoh and fell 1.7% or 2,783 versus pcg. Personnel expenses were \$10.3bn for the half, down by \$68m hoh and \$195m versus pcg as a result.

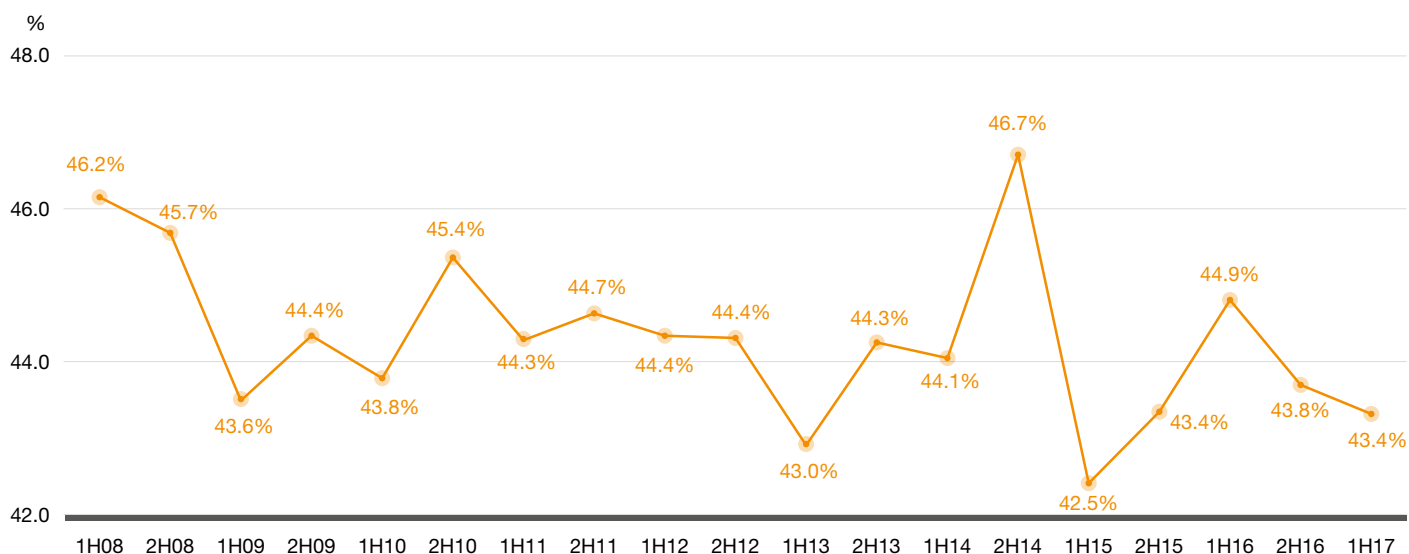
Total investment spend fell 10.7% hoh and fell 1.0% versus pcg to \$2.1bn. The reduction was across all categories and was attributed in particular to the completion of a number of projects and for one bank some structural changes to their investment profile as they simplify. Investment in transformation and productivity rose from 48% to 51% of total investment spend.

Each of the banks has reassessed and reduced the useful lives of software investments in recent periods in recognition of the rapid rate of change and obsolescence for technology. The proportion of investment spend directly expensed has increased as a result. 45% of investment spend was directly expensed in the half, compared to 49% a year ago but closer to 35% for a number of years prior.

Given the income growth outlook is uncertain, the banks are certainly not done on costs yet. We expect a significant increase in focus on absolute costs as well as the jaws position by the banks in future periods and there are indications in some of the results that more fundamental analysis of their operating models is taking place. ANZ’s announcement of a change in management approach to adopt ‘agile’ practices is one example. It was also interesting to note the level of discussion of robotics and automation as a factor of cost management for some banks, which we believe is taking hold faster than anticipated and will accelerate.

Each bank will need to choose their response to these challenges to suit their strategic focus, which we believe will be more nuanced and precise in the future, possibly requiring some more radical steps in the outlook.

## Combined expense-to-income ratio



# Asset quality

At 18bps, bad debt expense over loans and acceptances has been at or around this extremely low level for a remarkable period of time.

Bad and doubtful debt expense has remained at extremely low levels at \$2.2bn, decreasing on the prior half by \$406m or 15.5% and \$318m or 12.6% on pcp as a result of provisions taken for specific industries and regions in previous periods that did not repeat.

Average credit performance metrics have remained very strong. Impaired assets to total loans and advances declined slightly to 0.42% from 0.44% six months ago. Non-performing loans - those 90 days past due – have remained low at 0.43% of total loans in line with the prior half.

Each bank has highlighted some deterioration in unsecured lending arrears and small changes (or in some cases improvements) in housing arrears. Any deterioration to date is of little consequence to the bad debt costs of the banks but will be closely monitored to ensure it is not indicative of anything deeper.

As recently highlighted by the RBA, the capacity of home borrowers to absorb any change in rates, whether from the RBA or repricing, is receiving particular focus. The steps taken by regulators of late indicate a willingness to be more active to ensure buffers are adequate to absorb changes without large credit or economic consequences.

The outlook for bad debts is heavily dependent on housing as a result. The impact of the resource industry adjustment and related regions appears to have been as expected and provided for and so to date there is no reason to expect bad debt expense to rise significantly, absent any shock.

## For more information

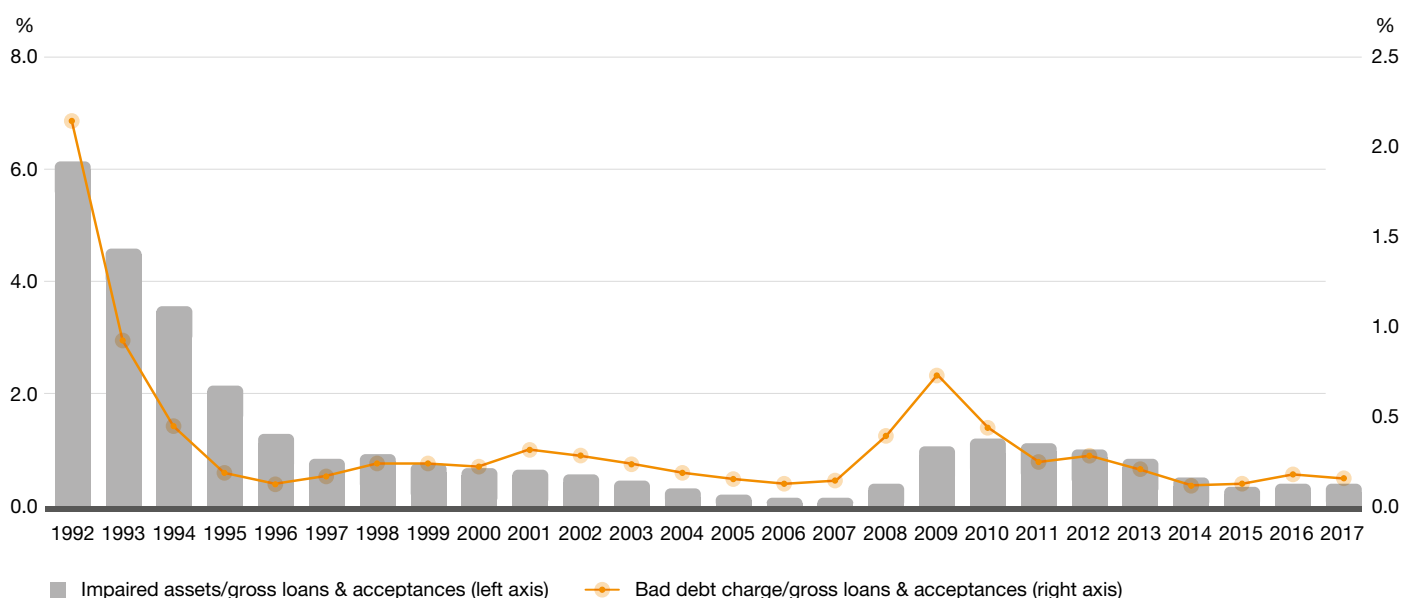
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## Impaired assets and bad debt expense



## Key banking statistics – Half year 2017

	ANZ			CBA			NAB (iii)			WBC		
	6 months Mar-17	6 months Sep-16	6 months Mar-16	6 months Dec-16	6 months Jun-16	6 months Dec-15	6 months Mar-17	6 months Sep-16	6 months Mar-16	6 months Mar-17	6 months Sep-16	6 months Mar-16
<b>Balance sheet</b>												
Total assets	896,511	914,869	895,278	971,719	933,001	902,991	790,227	777,622	868,730	839,993	839,202	831,760
Risk weighted assets	397,040	408,582	388,335	436,481	394,667	392,662	374,487	388,445	361,433	404,382	410,053	363,248
Gross loans and acceptances	579,776	579,515	565,451	719,250	701,730	675,728	550,043	545,760	532,313	670,208	665,256	644,054
<b>Asset quality &amp; provisioning</b>												
Gross impaired assets	2,940	3,173	2,883	3,375	3,116	2,788	2,393	2,642	2,174	1,978	2,159	2,487
Net impaired assets	1,671	1,866	1,645	2,193	1,989	1,756	1,645	1,930	1,572	948	1,092	1,302
Gross impaired assets as a % of gross loans and acceptances	0.51%	0.55%	0.51%	0.47%	0.44%	0.41%	0.44%	0.48%	0.41%	0.30%	0.32%	0.39%
Individually assessed provisions	1,269	1,307	1,238	1,007	935	900	747	706	596	787	869	952
Individually assessed provisions as a % of impaired assets	43.16%	41.20%	42.94%	29.84%	30.01%	32.28%	31.22%	26.72%	27.41%	39.79%	40.25%	38.28%
Collective provisions	2,785	2,876	2,862	2,782	2,783	2,763	2,373	2,408	2,453	2,726	2,733	2,717
Collective provisions as a % of non-housing loans & acceptances	1.12%	1.12%	1.14%	1.13%	1.13%	1.16%	1.04%	1.04%	1.07%	1.27%	1.25%	1.27%
Total provisions	4,054	4,183	4,100	3,789	3,718	3,663	3,120	3,114	3,049	3,513	3,602	3,669
Total provision as a % of gross loans & acceptances	0.70%	0.72%	0.73%	0.53%	0.53%	0.54%	0.57%	0.57%	0.57%	0.52%	0.54%	0.57%
<b>Profit &amp; loss analysis (i)</b>												
Net interest income	7,416	7,527	7,568	8,743	8,508	8,427	6,393	6,330	6,600	7,693	7,695	7,653
Other income	2,887	2,742	2,757	4,399	3,819	3,993	2,476	2,394	2,109	3,050	2,889	2,966
Operating expenses	4,731	4,951	5,488	5,677	5,224	5,210	3,785	3,683	3,755	4,483	4,479	4,419
Core earnings	5,572	5,318	4,837	7,465	7,103	7,210	5,084	5,041	4,954	6,260	6,105	6,200
Bad debt expense	720	1,038	918	599	692	564	394	425	375	493	457	667
Profit before tax	4,852	4,280	3,919	6,866	6,411	6,646	4,690	4,616	4,579	5,767	5,648	5,533
Income tax expense	1,433	1,166	1,133	1,950	1,765	1,827	1,347	1,293	1,295	1,745	1,724	1,620
Minority interest	8	7	4	9	9	11	0	0	0	5	6	9
Cash earnings	3,411	3,107	2,782	4,907	4,637	4,808	3,343	3,323	3,284	4,017	3,918	3,904
Statutory results (ii)	2,911	2,971	2,738	4,895	4,600	4,623	2,857	3,196	3,224	3,907	3,744	3,701
<b>Key data</b>												
Other operating income as a % of total income	28.02%	26.70%	26.70%	33.47%	30.98%	32.15%	27.92%	27.44%	24.22%	28.39%	27.30%	27.93%
Interest spread	1.81%	1.86%	1.84%	1.91%	1.94%	2.02%	1.63%	1.65%	1.76%	1.90%	1.93%	1.95%
Interest margin	2.00%	2.06%	2.07%	2.11%	2.14%	2.15%	1.82%	1.82%	1.93%	2.07%	2.11%	2.14%
Expense/income ratio (as reported ratio)	45.90%	48.20%	53.20%	43.30%	42.70%	42.10%	42.70%	42.20%	43.10%	41.73%	42.32%	41.61%
Total number of full time equivalent staff	46,046	46,554	48,896	45,271	45,129	45,221	33,552	34,263	34,780	35,290	35,580	34,964
Operating costs per employee (dollars) – annualised	203,650	208,511	224,476	251,195	231,278	228,586	222,641	211,454	218,759	255,209	255,235	254,207
Return on average equity (as reported)	11.80%	10.90%	9.70%	16.00%	15.60%	17.30%	14.00%	14.30%	14.30%	13.95%	13.84%	14.15%
Return on average assets (underlying cash)	0.74%	0.68%	0.62%	1.03%	1.00%	1.06%	0.84%	0.76%	0.75%	0.93%	0.92%	0.94%
<b>Capital ratios</b>												
Common equity	10.10%	9.60%	9.80%	9.90%	10.60%	10.20%	10.11%	9.77%	9.69%	9.97%	9.48%	10.47%
Tier 1	12.10%	11.80%	11.60%	11.50%	12.30%	12.20%	12.51%	12.19%	11.77%	11.68%	11.17%	12.11%
Tier 2 (net of deductions)	2.40%	2.50%	2.10%	2.20%	2.00%	1.90%	2.20%	1.96%	1.48%	2.32%	1.94%	1.91%
Total	14.50%	14.30%	13.70%	13.70%	14.30%	14.10%	14.71%	14.14%	13.25%	14.00%	13.11%	14.02%
<b>Lending and funding ratios</b>												
Gross loans & acceptances/total assets	64.67%	63.34%	63.16%	74.02%	75.21%	74.83%	69.61%	70.18%	61.27%	79.79%	79.27%	77.43%
Housing loans gross loans & acceptances	57.06%	55.76%	55.41%	65.70%	64.99%	64.70%	58.32%	57.64%	56.94%	68.07%	67.23%	66.76%
Deposits (exclude CDs)/gross loans	87.91%	87.21%	86.52%	75.11%	73.83%	74.08%	72.64%	71.55%	70.76%	71.42%	70.14%	68.62%
Deposits (exclude CDs)/total liabilities	60.78%	58.98%	58.32%	59.37%	59.39%	59.37%	54.04%	53.76%	46.01%	61.32%	59.74%	57.12%

All figures in AUD million unless otherwise indicated

(i) In arriving at "cash earnings", income and expenses exclude certain non-cash items. Non-cash items include acquisition related adjustments, impact of hedge accounting and revaluation of treasury shares and other items reported by the banks. Some components of income and expenses have been reclassified to improve comparability between banks.

(ii) Statutory result as reported by the banks, unadjusted.

(iii) NAB's underlying cash earnings after tax are shown before distributions to holders of National Income Securities, Trust Preferred Securities and National Capital Instruments – 1H17 (\$49m), 2H16 (\$60m) and 1H16 (\$64m).

