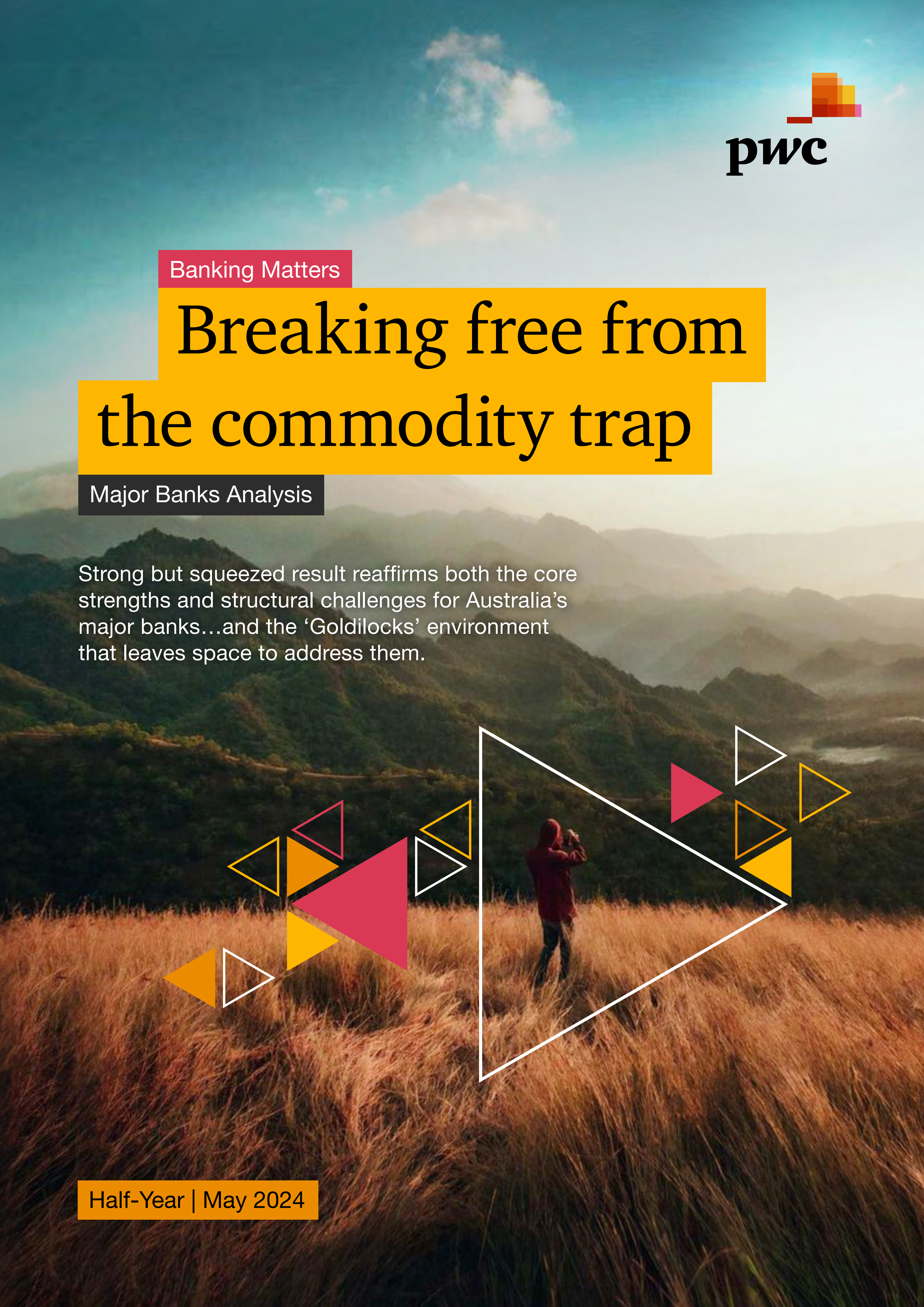
Banking Matters

Breaking free from the commodity trap

Major Banks Analysis

Strong but squeezed result reaffirms both the core strengths and structural challenges for Australia's major banks…and the 'Goldilocks' environment that leaves space to address them.



Half-Year | May 2024

Earnings and returns

Cash earnings

+0.8% hoh
-9.4% pcp

$15.5bn

Significant reduction on 1H23, driven by a close to 11bp reduction in margin and close to flat on the half and the second-highest half-year earning since 2017 (behind record $17bn 1H23 result). Lending growth couldn't quite offsite continued NIM contraction of 4bps hoh, while expense (and tax) increase was balanced by lower costs for credit, continued decline in notables and an uptick in non-interest income.

Return on equity

-2 bps hoh
-141 bps pcp

11.2%

Over 140bp reduction on the 'rate bounce' 1H23 and flat (down 2 bps) hoh. Although down on 1H23's 12.6%, at just over 11% the RoE for the past three halves remains substantially better than anything seen since before the pandemic.

Revenues

Net interest income (ex notables)

-0.8% hoh
-2.4% pcp

$36.8bn

Slight reduction hoh as modest overall growth in interest earning assets was short of balancing continued fall in NIM. Volume/margin tradeoffs remain critical in the outlook for NII - interest income hovered around $32b for nine consecutive halves before 2H22 before jumping to its record $38bn in the following.

Other operating income (ex notables)

+3.9% hoh
+1.6% pcp

$7.9bn

For the first time since the Royal Commission, OOI rose for a reason other than markets income. 1H24 saw the first notable rise in bank fees since the Royal Commission, albeit only 2.9% hoh, or $121m.

Lending

Net interest margin

-4.4 bps hoh
-10.5 bps pcp

1.8%

NIM fell a remarkable 11bps on the 'rate bounce' pcp and 4bps hoh, indicating the continued competition in mortgages and deposits may be slowing but remained acute in the half. On a simple basis, margin reductions in retail were circa 32bps on pcp and 9bps hoh, with business margins declining only modestly. Significant competition from, and some loss of share to, non-majors continued in retail.

Lending growth

-237 bps hoh
-266 bps pcp

2.1%

Lending growth slowed, driven by mortgages which continue to grow more slowly than business lending. In addition, the majors continue to lose share, accounting for just 50 percent of net lending growth in Australia for the half (net flow), versus a share (stock) of total lending which in March fell below 67% for the first time ever.

Expenses

Operating expenses (ex notables)

+3.4% hoh
+6.4% pcp

$21.3bn

Unsurprisingly given the inflationary environment, expenses rose again. They broke $20bn (ex notables) a year ago for the first time and surpassed $21bn for the half. The increase was primarily technology spend, which rose over 8% hoh, wages which rose with inflation, and small (~1,000, or ~60bps) decrease in FTE.

Expense-to-income ratio (ex notables)

+156 bps hoh
+362 bps pcp

47.6%

Expenses rose and total income was close to flat hoh, so naturally the expense-to-income ratio rose accordingly. At over 47%, it is back at the elevated levels of the pandemic. It fell dramatically thanks to rate rises which added +$5bn to income within 12 months. As the inflation which triggered those rises persists, cost pressures continue.

Asset quality

Credit impairment expense (ex notables)

-12% hoh
-15% pcp

$1.2bn

Impairment expense down from $1.4bn in each of the prior halves to $1.2bn. The benign environment saw another fall in impaired assets, in the cost of new impairments, and a rise in write backs and recoveries.

Credit impairment loss rate (ex notables)

-1 bp hoh
-2 bps pcp

8bps

Similarly to the credit expenses, the loss rate has fallen 1 bp from 9 to 8 bps. Recall that it had reached 41 bps in both halves in 2020. Gross impaired assets relative to GLAA also fell 1 bp hoh to 23 bps, having come down more than 40 percent from the 40 bps it reached in 2020.

Balance sheet

Provision cover

+1 bp hoh
+1 bp pcp

67bps

Provision cover broadly flat, with total provisions (up 2% to $21.3bn) rising with GLAA as credit conditions remain benign. Despite emerging signs of stress in specific segments often seen as 'early-warning' indicators, including unsecured consumer credit, early-vintage non-bank mortgages and parts of commercial real estate, these have been slowly building for two years now, with so-far no indication (yet) of broader contagion.

Core equity T1

+11 bps hoh
+39 bps pcp

12.6%

CET1 rose again as RWA (and asset risk weights) fell hoh while CET1 capital rose $0.2bn. T2 capital also increased $8bn.

Westpac no longer report cash earnings and amounts included above are as reported on the statutory basis, without adjustment.

Executive Summary

In some ways, it's back to the future for Australian banks - a strong (amongst records), steady result providing the flexibility for returns of capital. It was the second highest half year result since 2017… however long term trends appear to be resuming. Earnings were up slightly for the half and down significantly on a year ago, with margin pressure on mortgages and deposits yet to relent and not quite balanced by growing balance sheets. Non-interest income rose for the second time in twelve months but remains a small component of income. Expenses rose but were offset by falling notables and credit expense, as the economy continued its 'Goldilocks' course.

Long-term challenges for the industry remain unchanged however, as 'commodity trap' dynamics continued in the half though the window to address them remains wide open. In principle, banks have everything they need to do just that. They have got themselves in great shape: healthy returns, simpler and safer. It's remarkable to observe that a question now being asked is whether they might in fact be *too* simple or even *too* safe.

That's because the slow, but significant, trends of the last 15 years, combined with the expanding set of options and challenges we see ahead, may require transformation more fundamental, and faster, than anything the industry has experienced in a very long time. They are also emerging at what looks like an accelerating pace.

1 / Strong, steady result, though with long-term trends resuming

Australia's major banks delivered a cash earnings result for first half 2024 that was objectively strong and compares favourably to most other global banking markets. At $15.5bn, cash earnings were up slightly on 2H23 but significantly down on 1H23 and consistent with past levels to which the industry had become accustomed. Of course, with average equity up by almost half since 1H15 (the first time HY earnings broke $15bn), RoE is now 11.2%, versus 16.7% then.

The reasons behind the result are familiar subjects. NIM, having shot up during rate repricing to drive the 1H23 record, continued to be competed down, particularly in retail, and now represents only a c.5bp increase over the rate tightening cycle. On a simple basis, margins in the retail bank segments fell close to 32bps on pcp and 9bps hoh, in contrast to a more modest 5bp reduction for both periods in the business segment.

Other operating income rose slightly to $7.9bn but is still substantially eroded since 2015. Back then it represented over 30% of total income and was over $10bn for a half. Today it represents just under 18% of total income and is amongst the least diversified in global banking markets. Thus what kept earnings up outside of OOI was everything in balance. Balance sheet growth, while not sufficient to fully offset margin compression, saw growth in interest-earning assets of 1.9% hoh and 3.3% on pcp. Credit losses were down $0.2bn, remaining fortunately benign, early tremors notwithstanding. Cost growth, arguably well-contained at 3.4% hoh (7% annualised) given the inflationary environment, nevertheless exceeded revenue growth, leading industry cost-to-income to rise.

2 / Banks strong and safe today - but need to break free for tomorrow?

These results were delivered in the context of a 'Goldilocks' economy that is, for now, still going strong. Despite the fears last year about the *accumulated* impacts of shock after shock, the Australian economy, along with most of the world, has remained remarkably resilient.

Likewise, Australia's major banks' performance remains enviable on the global stage and with capital, both reputational and financial, at levels that place them arguably stronger than they've been in modern history. This is why we say the 'window' for success and transformation is as wide open as it's ever been.

It's so strong, in fact, that the industry is starting to ask itself whether, after 15 years or more of de-risking, up-regulating and simplification, the banking system might have become 'too simple and too safe' (or at least too accustomed to stability), to support and adapt to the challenges facing the industry, and indeed Australia.

3 / Fundamental change still in focus, perhaps at even faster pace

There is no doubt change is needed, and probably at a faster pace than in the past. The reasons are common across many banking markets across the world and are threefold:

01 **Commodity-trap dynamics:** Notwithstanding a history of superlative returns when compared to other markets, the dominant drivers of growth in the industry appear to have developed into a commodity trap. That trap was hard to recognise when RoE was in the high teens. But it has slowly but surely developed as competition, simplification to fewer offerings and regulation created an industry with a narrower focussed, more commoditised offering and less willing to (or free to) take risk. The reality for many banking markets around the world is that writing new business above cost-of-capital is harder than ever, reiterating the challenges (and importance) of scale. Perhaps the clearest illustration of this is margin compression and non-interest income. Over the course of the rate tightening, margins have risen less than 10bps in aggregate and in retail margins fell 32bps hoh and 9bps on pcp. While business margins held up stronger, it is plausible that intense competition now shifts to that segment, slowly eroding the differential.

Other operating income rose slightly for the half to $7.9bn but, as is well understood, now sits at more than $4bn lower per half than 2015 and at less than 18% of total income (in 2015 OOI was over 30% of total income), leaving Australia as one of the least diversified banking markets (in terms of income) amongst major economies.

02 **Gathering headwinds:** The preconditions for growth of the past, unfortunately, have been steadily eroding. Earnings growth for the last few periods for the industry has rested on one key pillar: that lending continues growing faster than margins contract. The headwinds to that are greater than they have ever been.

03 **From Banks to banking - Technology unlocking potential:** As trite as it may sound, the state of technology capability, speed of developments and reach of technology-players into the banking value chain opens up myriad possibilities. Incumbent banks can legitimately entertain ambitions once considered infeasible for any but the most sophisticated, such as core-banking system replacement, step changes in productivity, and creating truly data-rich customer propositions. And at the same time, 'hyperscale' tech players on both ends of the broader 'banking' value chain continue to gain presence, power and advantage. Could they emerge as a new 'choke point' of the FS and Banking supply chain? Recent focus on 'Tech-Reg' and the level playing field for Banks vs Tech companies globally is symbolic of this concern. No matter the industry, as choke points form, value and profit tends to follow. 'Big Tech' needn't ever disrupt, disintermediate or otherwise replace banks to draw value out of their franchises.

4 / Strength leaves window wide open - but requires taking some risk

As mentioned, the window for transformation is wide open. Fortunately, the strategic themes and imperatives are well known as we've explained in prior reports, with some additional emphasis added:

01 **Address the squeeze on the core**

02 **Doubling down on digital**

03 **Meet coming tests of resilience and trust**

04 **Find new sources of value and growth**

For this report, we pay special attention to the need for new sources of value and growth. Finding them will require more than just strategic intent. It will require taking a fresh look at the customer offer, finding new ways to create value from data and being strategic (and judicious) about embedded finance.

It will also require an appetite to be more active in addressing structural impediments to many of Australia's critical needs. From housing to climate change to many things besides, there are opportunities to put capital to use that are not (yet) going to be as straightforward as simply making loans. It will be about making new markets rather than simply winning deals.

That may require a fundamentally new operating model. We call it 'shallow in the stack, deep into relationships', and it may be what's possible as technology continues to advance. We aren't suggesting it's feasible now. It could easily be a decade away (or more). But planning for such a transition is something banks must start talking about today.

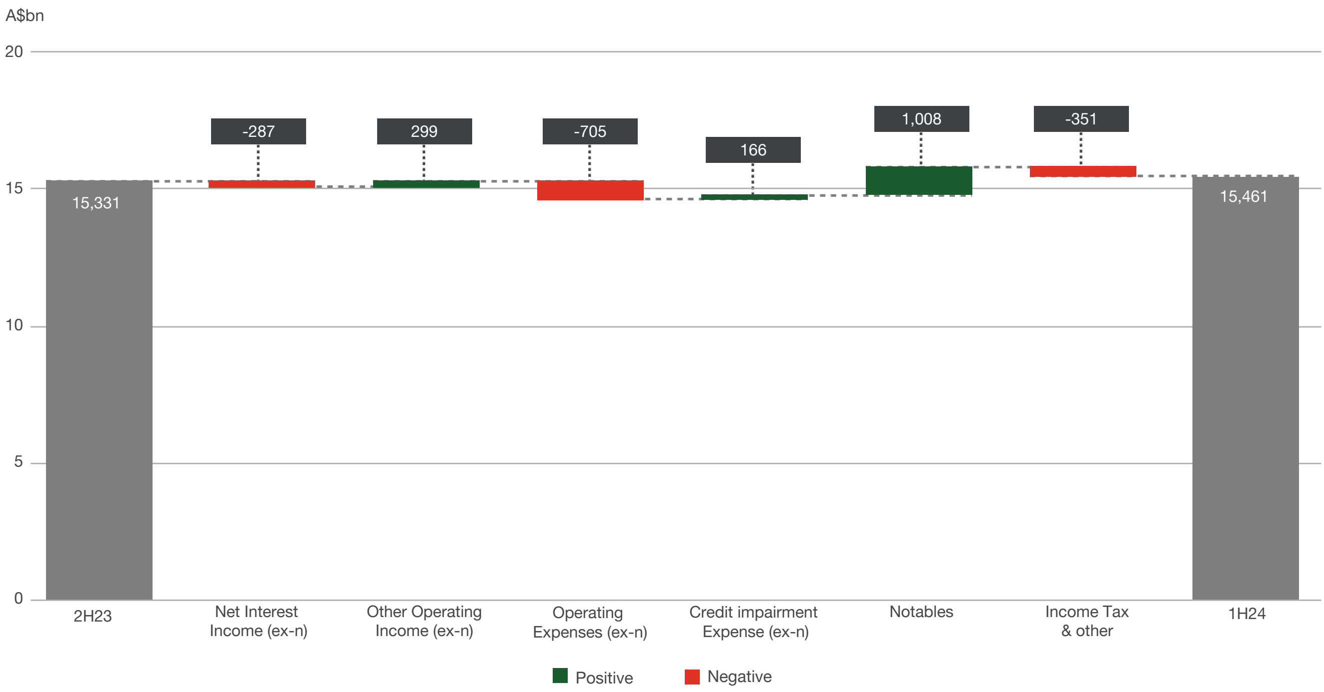
01

Decent result, though with long-term trends resuming

Cash earnings up to $15.5bn but down 9% on pcp.

As shown in *Figure 1*, 1H24 earnings were up slightly on the prior half. Despite lending growth slowing, the growth remained sufficient to balance the contraction in NIM and keep interest-income 'flat' (which for us means within 2% of the prior period result), while expenses (and tax) increased. As in many previous periods, continued falls in credit expense compensated for these negatives. Meanwhile, an (uncommon) increase in non-interest income (OOI) delivered the balance.

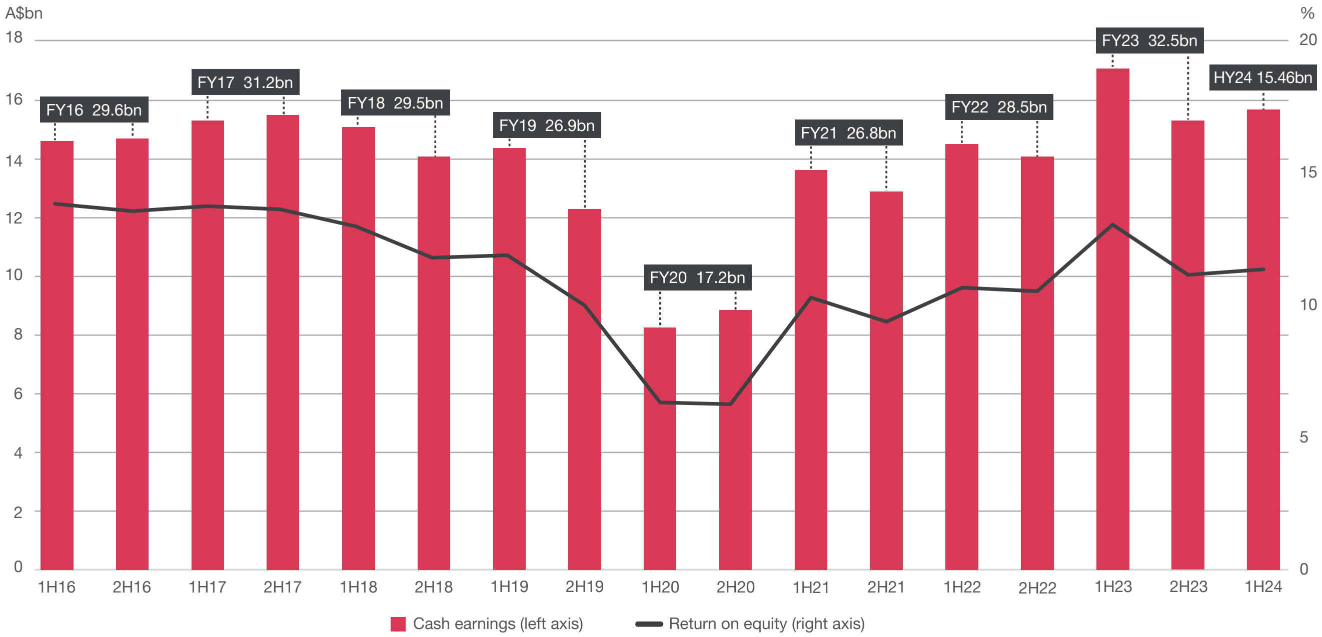
Figure 1 **Earnings growth driven by non-repeat of large scale notables**



Source: Bank reports, PwC analysis

Return on equity (ROE) (as shown in *Figure 2* overlaying cash earning) was flat on the half, as the rise in equity balanced earnings. Although down on 1H23's 12.6% 'record' (at least in the recent past), at over 11% for the past three halves, ROE is still higher than the vast majority of banks around the world.

Figure 2 **Earnings almost $15.5b, and ROE flat**



Source: Bank reports, PwC analysis

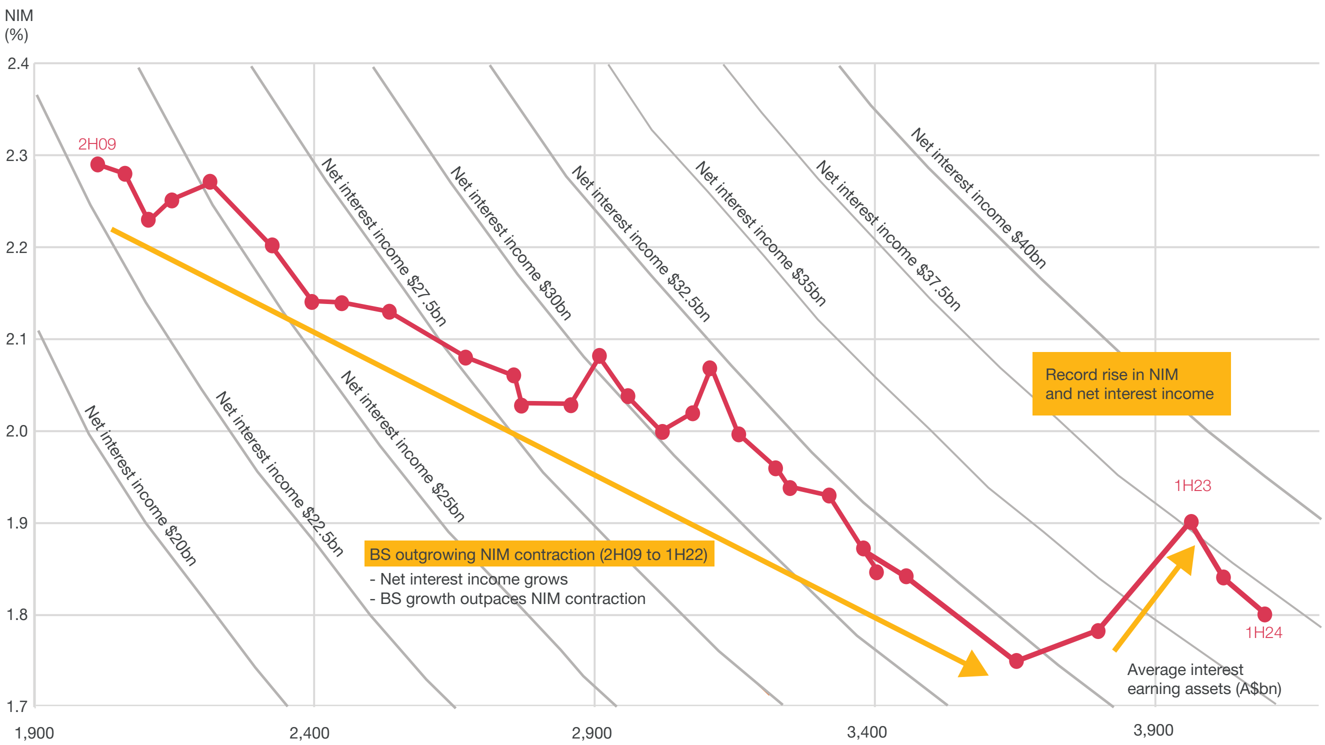
Lending growth continued to sustain net interest income, OOI once again up

Net interest income just under $37bn in 1H24, broadly flat on the half.

As shown in *Figure 3*, the contraction in NIM was partially balanced by rising interest-earning assets. The history of competition in this market suggests that it can be quite common for NIM and asset growth to balance each other this way for a long time, especially when growth in demand for lending is at levels that can be efficiently met with supply.

For this reason, interest income appeared 'trapped' at just under $32bn for nine consecutive halves before 2H22, when the disruption of rate rises coupled with a spike in asset values and credit demand pushed interest earnings to its record in 1H23. It remains to be seen whether we have found a new level.

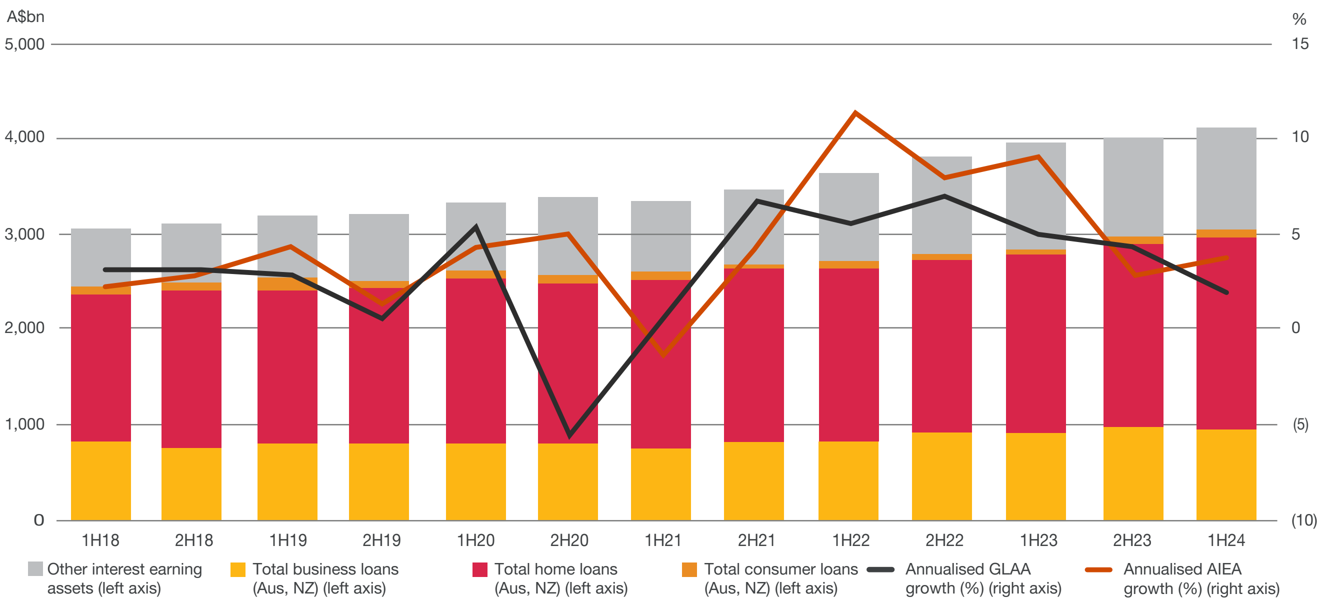
Figure 3 **Net interest income has reduced slightly as NIM contraction exceeded lending growth**



Source: Bank reports, PwC analysis

Lending growth continues to slow as rate rises ripple through the economy. This growth is illustrated in *Figure 4*, illustrating the composition and growth of the major banks' over $4tn interest-earning assets. Consumer loans experienced a reduction in balances over the period (11.4% reduction hoh), whilst business and home loans experienced around a 1% reduction in the lending growth rate over the same period.

Figure 4 **Growth continues to slow**

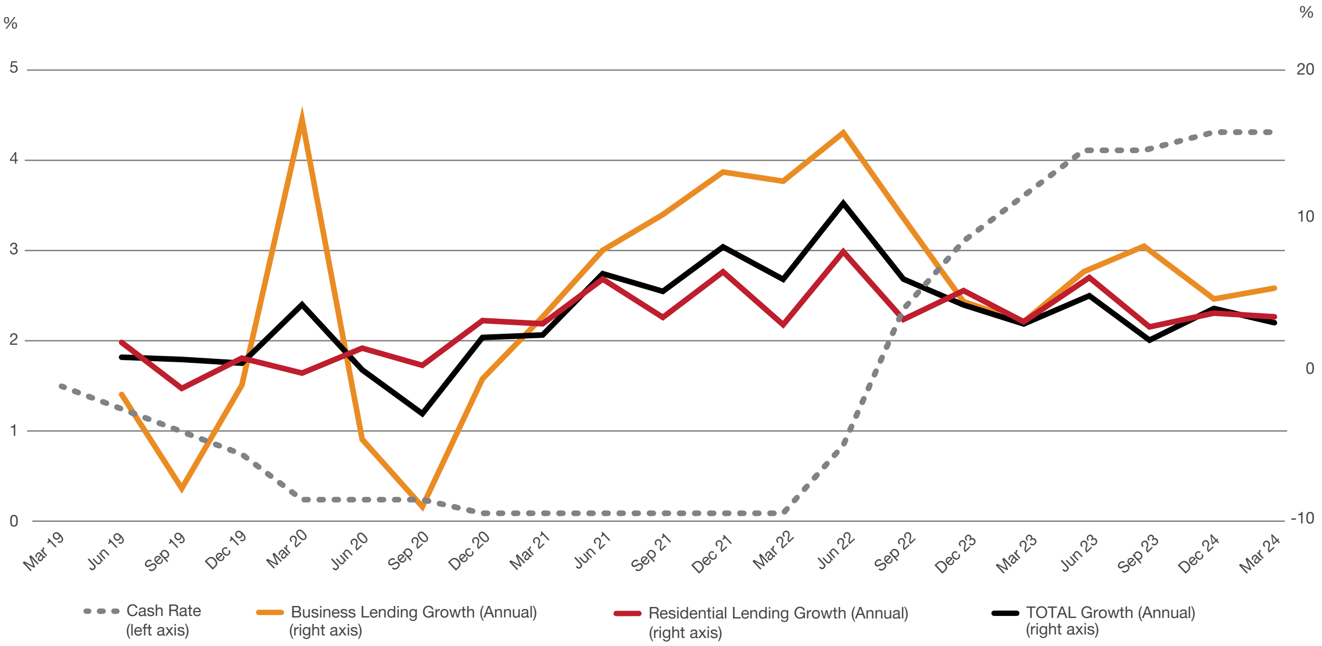


Source: Bank reports, PwC analysis

Looking at Australia only, where lending statistics are disclosed monthly, growth in loans outstanding (stock not flow) slowed again to just under 4%. It was driven by a downturn in mortgage lending, while business lending picked up, outpacing mortgages in Australia as it has done for several years. As we've written in the past, we believe this is a secular trend that has been a long time coming, and we suspect it may last a very long time.

Another secular trend is that regardless of driver, lending growth overall is a long way from the levels with which we've become accustomed. In the 15 years after 2008, the majors' mortgage portfolio grew over 8% per year on a compounded basis, and the portfolio of business loans grew almost 7%.

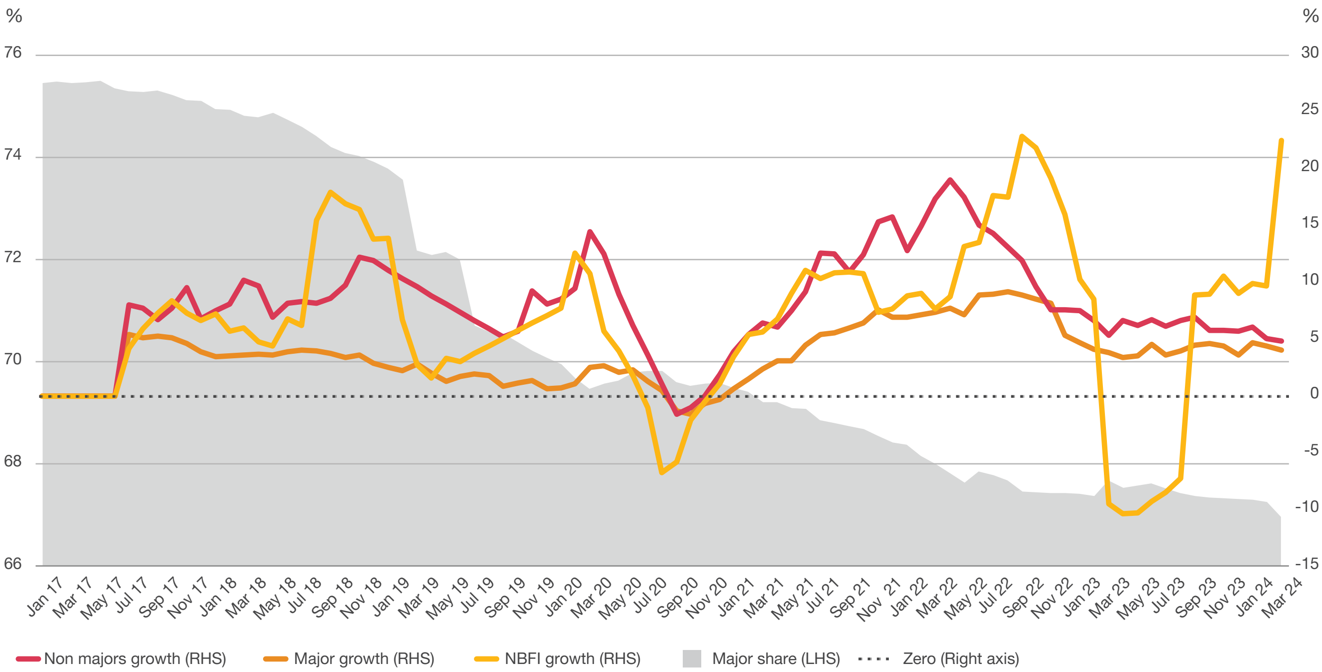
Figure 5 **Business lending outpacing mortgages for the majors since 1H21**



Source: APRA Monthly Banking Statistics, RBA Cash Rate Target, PwC analysis

Unfortunately, even as the growth of lending markets slows, the majors' share continues to erode. As illustrated by the area in *Figure 6*, major bank share of loans outstanding (stock) in Australia fell below 67% for the first time ever in March. In that same month, non-banks (which are clearly back in the market following the disruptions to securitisations and wholesale funding last year) grew over 22% (rolling 6-month basis, annualised) and accounted for over half of all net lending growth (flow) in Australia. For the half overall, they accounted for 28% of net lending growth, while the majors just 50%. During this time non-majors remain competitive as a sector, growing faster than majors for the half (4.8 vs 4.1%, again on an annualised rolling six-months basis)

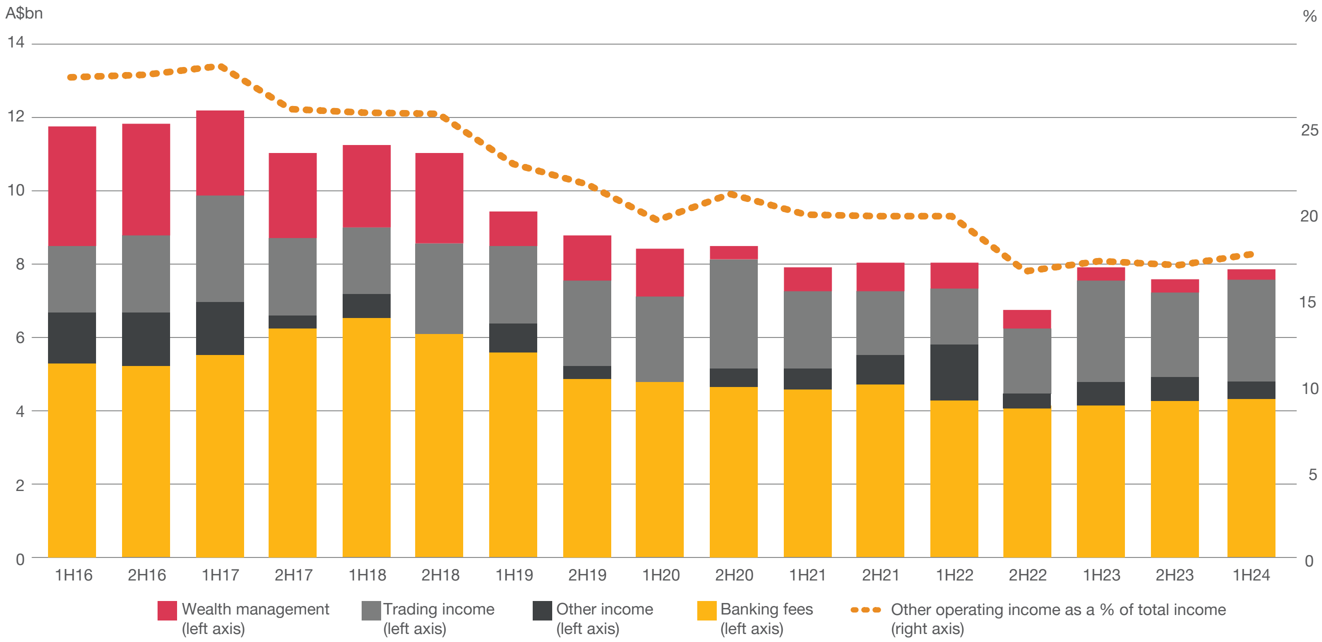
Figure 6 **Majors' share still eroding**



Source: Bank reports, PwC analysis

Finally, as illustrated in *Figure 7*, OOI increased (ex-notables). As regular readers of our reports know, this is not a common occurrence, but is a welcome one, and is in fact essential for the economic future of this industry. The rise in OOI was driven by an increase in trading income, interestingly fees from banking continue to contribute in excess of 50% of the OOI in the period.

Figure 7 **OOI up for second time in three halves**



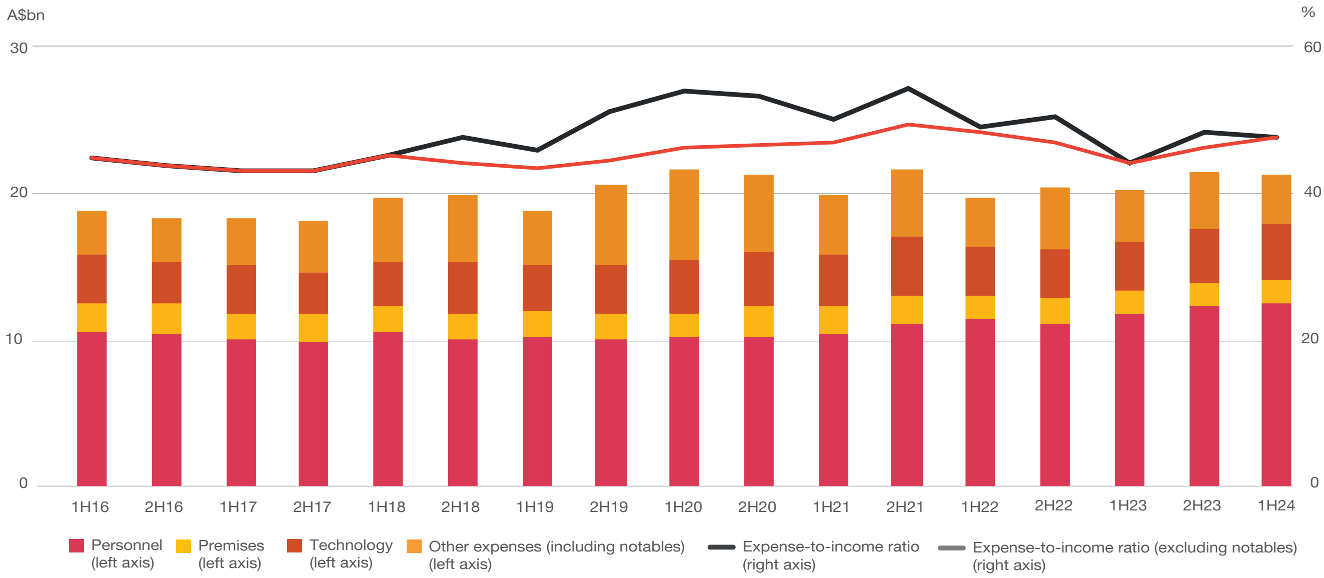
Source: Bank reports, PwC analysis

Expenditure still controlled, but inflationary pressures remain

Operating expenses (ex notables) rose again, unsurprisingly given the inflationary environment. A year and a half ago they broke $20bn (ex notables) for the first time, and now exceed $21bn. The increase is primarily from spending on technology, which rose more than 8% (17% annualised), and wages (or, more precisely, average personnel cost per FTE, which is a function of both wages and mix). This rise was comparable to inflation, and balanced by a small (~1,000, or ~60bps) decrease in FTE.

Other expenses were broadly flat (ex notables), though it appears the era of falling costs for premises triggered by post-pandemic work habits may be over. They were up over 3% (5% annualised) on the half. This is all illustrated in *Figure 8.*

Figure 8 **Opex over $21bn for the first time ever**



Source: Bank reports, PwC analysis

Underlying profit falling once again

The rise in expenses outpaced the rise in total income, resulting in a reduction in underlying profit accordingly (3% hoh). Despite the reduction, at around $23.4bn, the underlying profit is still very good compared to historical levels.

Credit losses benign and notables continue falling

Credit expenses were down from $1.4bn in each of the prior halves, to $1.2bn. The benign environment saw the volume of impaired assets fall along with the cost of new impairments. For that same reason, write backs and recoveries were up.

Mirroring the fall in credit expenses, the loss rate fell 1 bp from 9 to 8 bps. It had reached 41 bps in both halves in 2020. Gross impaired assets relative to GLAA have remained flat over the period at around 23bps, having come down more than 40% from the 40 bps it reached in 2020.

During this period, there were no notable charges reported by any of the banks.

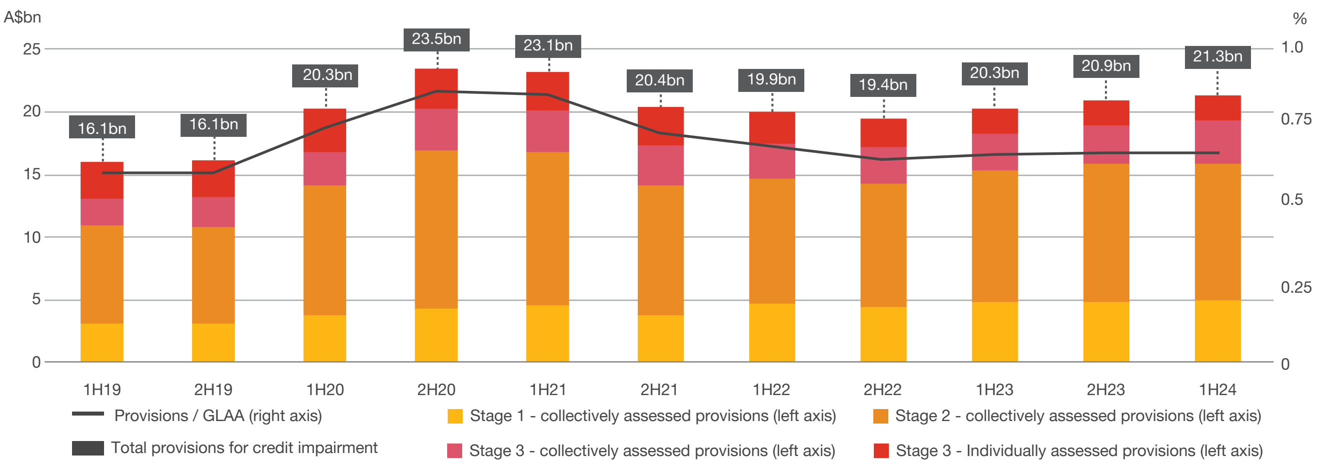
Balance sheets still strong

As we've written in the past, Australia's major bank balance sheets remain in good shape. In contrast to banks around the world (notably in the US), they operate in a market where interest-rate risk is distributed across Australian households rather than concentrated in the banking system. They also operate under a relatively conservative regulatory regime that has imposed rigorous requirements in areas such as credit risk.

As shown in *Figure 9*, provision cover was broadly flat (at around 67bps), with total provisions up slightly, rising with GLAA as credit conditions remain benign. Although there are certainly emerging signs of stress in specific segments often seen as 'early-warning' indicators (including unsecured consumer credit, early-vintage non-bank mortgages and parts of commercial real estate), these have been building for two years. While these indicators should never be disregarded, there is no sign (yet) of broader contagion.

Comparing the level of credit provisions to gross impaired assets indicates that banks are able to withstand losses to cover the current impaired assets almost 3 times over (this compares to 1.5 times back in 2018), consistent with the likelihood of larger losses emerging over time.

Figure 9 **Collective provisions rising but still within range of historic variability**



Source: Bank reports, PwC analysis

Total capital rose $9.5bn to $374bn (vs $276bn shareholder equity). Tier 1 capital contributed $1.2bn of the increase in total capital (of which $0.2bn from Core Tier 1), with the remainder of the increase mostly coming from Tier 2 ($8.3bn increase). RWA is down over $100bn (over 1%) since the finalised Basel III reforms took effect in January 2023. The overall CET1 ratio is now back over 12.6%, higher than it was even at the height of the pandemic before being brought down again with capital returns and dividend payments.

02

Banks strong and safe today - but need to break free for tomorrow?

Results delivered in context of a 'Goldilocks' economy that is still going strong

The most important thing to be said about this result is that it occurred in the context of a 'Goldilocks' economy still going strong. Inflation may be higher than we'd like, but it is coming down slowly. While we don't think it will be feasible (or wise) to bring inflation to levels seen in the past, inflation expectations are nowhere near the risk of losing their anchor. Rates, likewise, are higher than (some) might like, but the economy is coping.

Frankly, it's not what we expected. Shocks weathered by both the global financial system and economy over the past five years (pandemic, lockdown, wars, supply chain disruptions, demand snapback and rates changes), especially given the unprecedented levels of leverage around the world, would have been enough in prior eras to trigger at least one severe bout of financial and economic contagion, if not a rolling series of them.

At the start of 2024, with many household savings reducing, cost of living up, office buildings still empty and unrealised losses on the balance sheet still weighing down many overseas banks, many said this would be the year when the levy would finally break.

Bank franchises strongest than they've ever been, perhaps in their history

We were wrong, and are delighted to be so. However, this was no accident. Thanks to 15 years of sustained effort, restructuring, investment and regulation, banks all around the world are far more resilient than perhaps ever in history. From requirements on capital to rules on managing risks, from the microstructure of markets to the role of central banks, the modern financial system has built-in buffers, stabilisers and guardrails that would have been inconceivable to any banker 20 years ago, much less 100 years ago. That was evident in the numbers discussed in the section above. There is a reason bank failures are so rare now. Once upon a time they were a regular occurrence.

While banks have become more solid, so too has the modern economy. In part it's just the natural evolution from a goods to a services economy: supply-chain 'bullwhip' effects don't seem to be as frequent. The world got a taste of that during the pandemic, when an entire generation who grew up never even hearing the term 'bullwhip effect' suddenly got an education in what older Australians remember very clearly. Governments are now also practised in the use of both monetary and fiscal stabilisers in a way that not even Ben Bernanke, the world's leading scholar on the Depression, fully understood.

Finally, thanks to over a decade of remediation and reform in such areas as culture, risk management, compensation, performance assessment and professional development, banks' leaderships enjoy reputational capital which their conduct during the pandemic only enhanced. So while no industry is ever impregnable, it is hard to think of a time when this industry was more fundamentally solid than it is today.

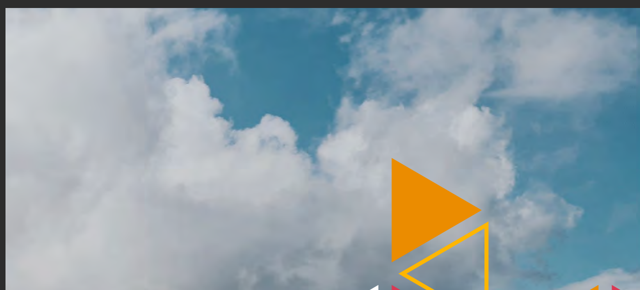
Which raises two questions: Could it ever be too strong and safe? And if it were, how would we know?

Safety vs flexibility and capacity for change

The most obvious answer to the first question is that banks are too 'safe' when they are unable to change. While that may sound trivial, it's the lens through which we think about the question. We aren't sure how one can ever determine the 'optimal' level of capital, market risk, credit obligations or other regulatory requirements. This is important because much of the discussion about whether banks have become 'too safe' for their social or economic purpose tends to centre around these issues. Of course, such issues can be benchmarked, lessons for history learned, and impact-analyses can add clarity to specific choices at hand. Nevertheless, definitive, holistic, determinations are impossible to make.

What we prefer to say is that while banks get better and better at the business they've always been in, that business is rapidly changing. So when it comes to bank strength and solidity, the pertinent questions are:

- Can they move fast enough to meet the changing requirements of a changing Australian economy?
- Are they afforded the risk appetite appropriate for necessary future bets?



03

Fundamental change still needed, perhaps at even faster pace

Why might banks need to fundamentally change? One reason is that, like in many banking markets around the world, the majors no longer enjoy superlative returns, at least collectively, and a combination of legacy, structural and market dynamics mean that returns above cost of capital are not assured for some products (and indeed, some non-major banks). In future, delivering *superior* returns will require each bank to adopt a distinct strategy.

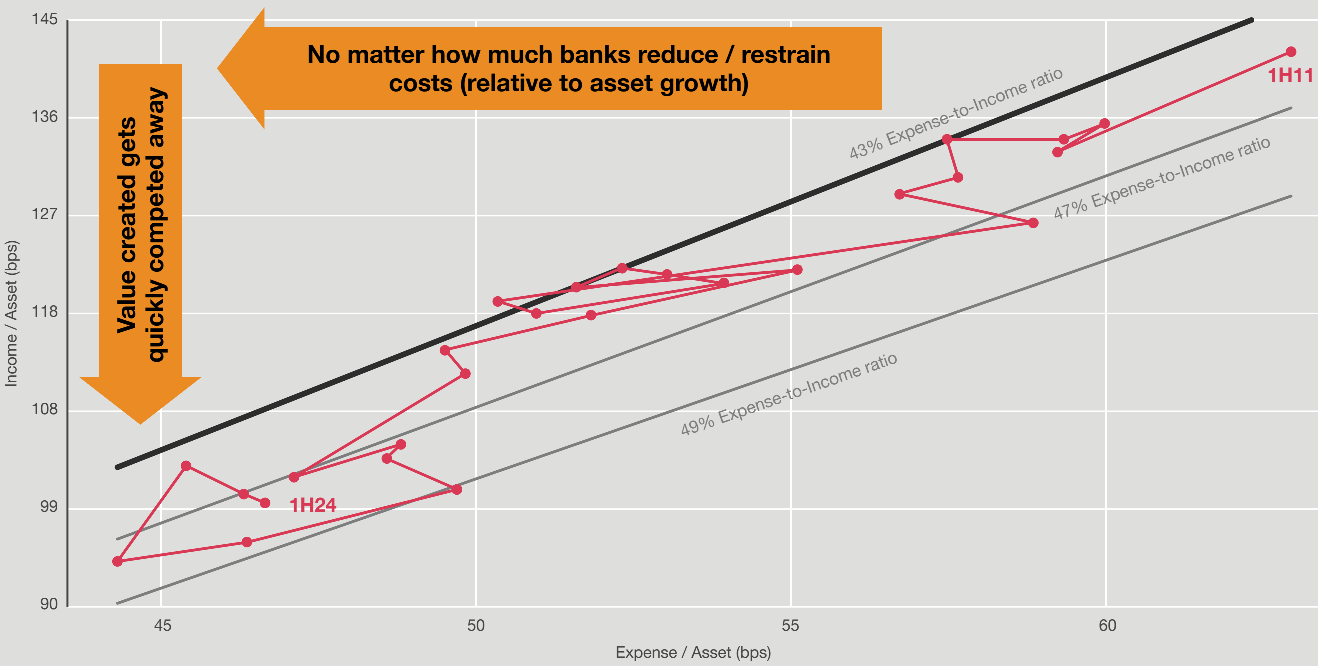
Commodity-trap dynamics

As in many banking markets around, the challenges facing Australian banking can be broadly characterised into 4 interconnected features that, depending on the bank, represent the challenges and burning platform to 'break free' from commodity-trap dynamics.

The first, is that during the intense period of financial and conduct scrutiny following the Global Financial Crisis and each country's bank conduct crisis, larger banks in most markets have significantly simplified (reduced) the breadth of markets, products and services offered. This has exacerbated an existing traditional feature of banking - the industry has become highly concentrated, and therefore dependent, on net interest income to generate returns. This, it follows, has increased the dependency of the industry on credit growth and particularly asset price appreciation and has intensified price competition on both sides of the balance sheet, placing sustained downward pressure on margins even as rates have risen.

Even in Australia, where our banks generate enviable overall returns, many banks trade close to book value (with some notable exceptions), and all have recently spoken to the struggle to recover marginal cost of capital in mortgages in particular. Looking at the history of the major banks in Australia, the benefits of operating cost savings and efficiencies have largely and consistently been passed on to customers as soon as they are realised. *Figure 10* illustrates the way falling costs (per dollar asset) has been matched (and often exceeded) by falling revenue yield since 2011, bounding the expense-to-income ratio above 43% throughout this time.

Figure 10 **The banking 'Commodity Trap' - cost savings passed to customers**



Source: Major bank financial statements, PwC analysis

The second characteristic is the structural challenge of the cost base of large incumbent banks, amplified by legacy technology and periods of underinvestment that all banks have recognised and are seeking to address. This is not to say that banks around the world have not focused intensely on controlling cost, but material inroads when complexity has accumulated over many decades is simply hard work. The intensity of competition and thinner margins make the case more than ever for maximising scale benefits and limiting diseconomies of scale - something technology may finally be able to realistically address.

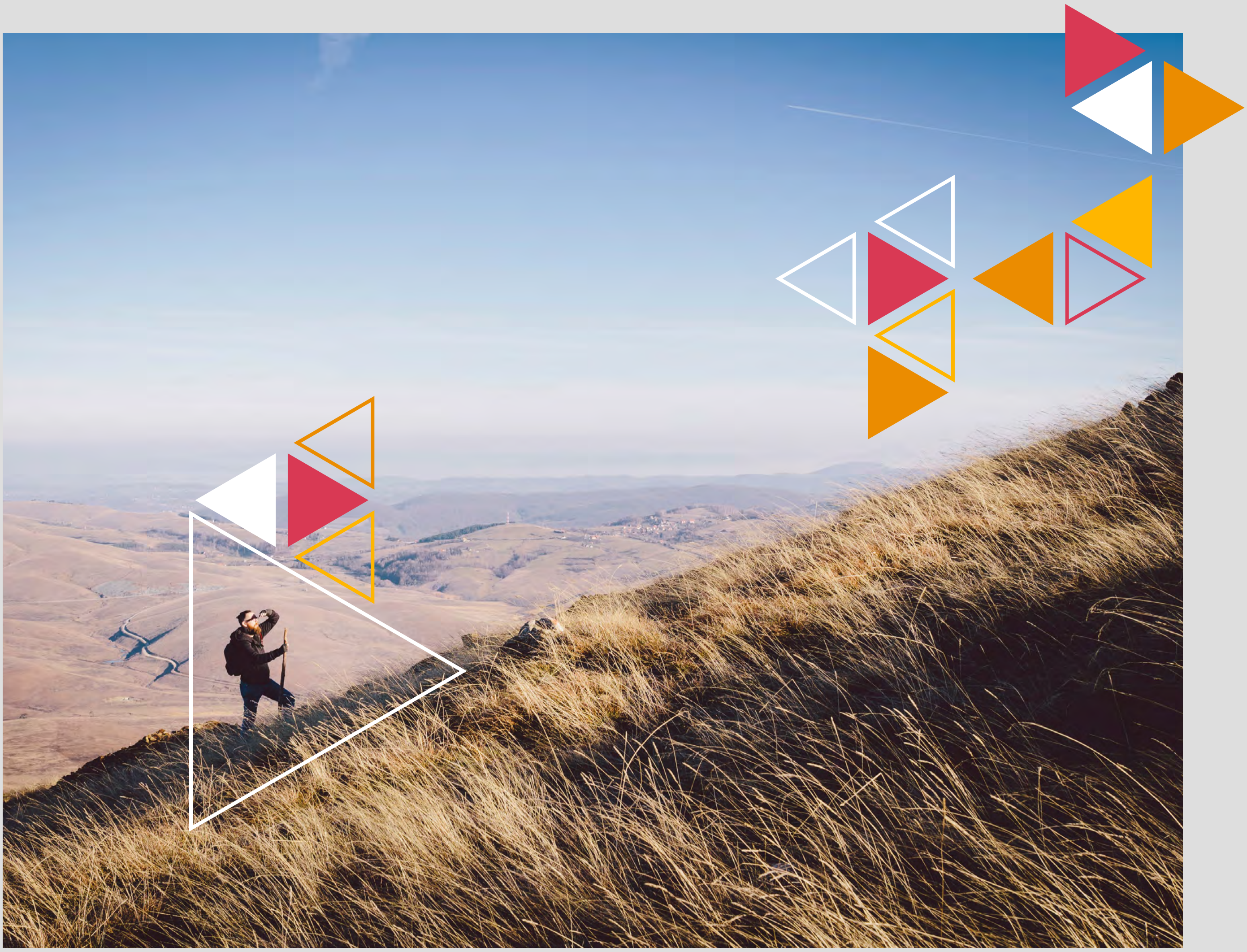
Third, incumbent banks of all sizes have no shortage of demands on continued investment spend. While the intense reset of regulation and remediation may have eased, expectations continue to expand particularly for technology security, resilience and customer-protection. At the same time, even more investment is required to address legacy technology and create new, fast-to-market, modern customer experiences. The allocation of investment spend may be shifting more towards the future than addressing the past, but the levels of spend are likely to remain elevated for some time.

Finally, and as we explained above, Banks (emphasis on the 'B') operate in a highly and still increasingly regulated sector that has become far safer and accustomed to stability - leading to an understandable risk aversion. One valid way of looking at this is that this is the necessary cost of the social licence afforded to banks. However, as innovation requirements increase and new entrants encroach onto the banking value chain, risk appetite and level playing field questions are understandably in focus.

Of course, even commodity producers can enjoy periods of superior profits when demand is growing strongly. Even in the freest and most competitive markets, supply and demand almost always take longer to respond than economics textbooks suggest. That's been the story of major bank super-profitability since 2010, as we described in our 2016 report when industry RoE was 16%. We said that without radical change, margins, returns and valuations would steadily erode. That's exactly what they did, though we had not anticipated the reputational, rate or (de)risk environment that would amplify the trend.

What we specifically said was that most of the (past) success banks enjoyed was driven by asset growth, most of which was from housing, and most of that was from rising values of existing stock rather than *'fixed-capital formation'* (i.e. the building of new homes). Without making any predictions, we asked:

- How long could that last?
- If asset growth was (and still is) the driver of value, what happens if it stops?
- What happens to credit if the trajectory of valuations fundamentally changes?



Outlook for banks fundamentally changes if assets boom ceases

One could argue that those questions were academic in 2016. House prices, asset values and lending kept growing. However, the world is fundamentally different today, and there are now eight fewer years to prepare for what may still be coming.

Inflation appears sticky and rates are likely to be high (or even higher) for longer

As we've written in the past, the 'easy' phase of inflation reduction appears over, and further reductions are harder to achieve, as we are seeing. That's because it's not driven by interruptions to supply chains and tradable goods, but by the cost of services and domestic wages in most developed markets. If inflation is going to be sticky coming down, then so will rates. That's a problem for those expecting relief from rate cuts, which we expect to continue to be further delayed, especially if the RBA decides to hold rates on the day of this report. This also raises important questions about what is the long-term steady state for rates - i.e. how much can we expect to be cut in any event.

It's always dangerous to make predictions about the 'long term' and 'steady state'. Markets and prices reflect realities (and information) at any given day. Nevertheless, the longer-end of the yield curve still pricing rate cuts (at time of writing the 10-year CGB yields 4.46%). Should those never come, long-term risk-free rates in Australia could have to rise at least ~50-60bps before the yield curve displayed a meaningful slope. Should the cash rate rise further, and expectations settle there, long term rates (and thus discount rates) will have to move even more than that.

In short, rather than coming to the rescue for asset values, it is just as possible that we'll see further downward pressure ahead.

Leverage hitting new levels of resistance?

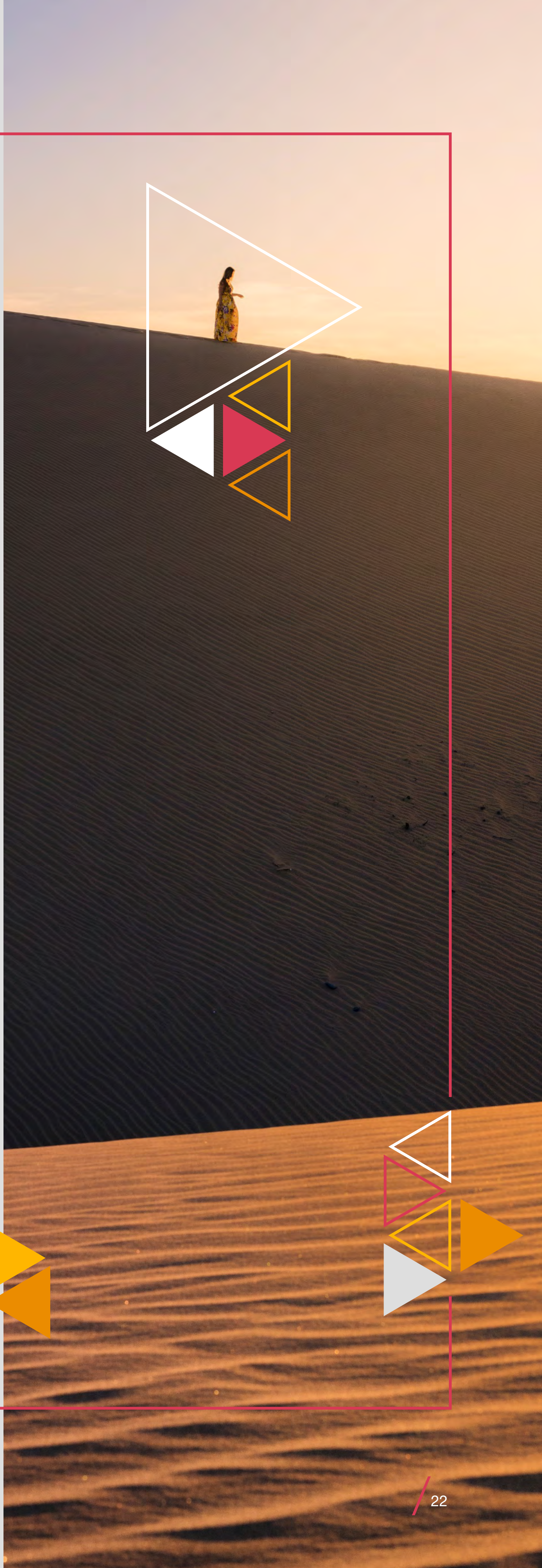
Even without rising rates, lending growth may be encountering other, more basic constraints. Average household leverage (whose steady growth is the other side of the growth of bank lending and literally finances the growth of house prices) appears to have stopped rising. It has been stuck at ~1.8x since 2017. A chartist might say it has found its 'resistance'.

Given concerns about structural inflation as well as government debt, we expect a much more conservative bias to both fiscal and monetary settings in the decade ahead. We see this already not just in Australia but all over the world, and suspect it won't change even if many governments change as expected in this year of elections around the world.

In short, all the main accelerants to asset prices in decades past, not just rates, are changing. That includes quantitative easing and other central bank money creation, private bank lending, and government deficit spending.

This doesn't mean a crash is likely or that we are predicting it. Nor does it even mean balance sheet growth will stop. Valuations are just one driver. Population is still rising. Houses are still being built. Businesses are still investing. Capital is still being formed and will still require financing. However, unless we expect the ratio of house prices to disposable incomes to double again (they went from 3X to 6X over the past three decades), the outlook for balance sheet growth, particularly in mortgages, may be fundamentally different. What's more, should we as a society decide that Australia was a better place when houses were more affordable, as many people argue today, then short of a crash, decades of house prices rising slower than (nominal) GDP is the only way that can happen.

In short, any business model that has been so tightly aligned to asset growth as banks have been must plan for this possibility.



Technology unlocking myriad possibilities

Finally, it's worth pausing to take stock of the profound impact that technology is having, right now, on the outlook for banking incumbency and the implication of the 'hyperscale' tech players. The state of technology capability, speed of developments and reach of technology into the banking value chain opens up myriad possibilities.

Incumbent banks can legitimately contemplate unlocking the untouchable legacy

As trite as it may sound, the art of what is possible in technology 'modernisation' in an incumbent bank has materially shifted. Today, it is legitimately possible for a 'big bank' to contemplate transitioning its core to a cloud-native third party, to unlock structural productivity gains and customer contact through Generative AI, or to realise data-rich, tailored customer propositions through quick, easy-to-develop analytical capability. Speed-to-market, resilience, security, flexibility and lower-cost are all realistically in reach with a level of confidence that has been uncommon for incumbents. That is not to say it is cheap, or easy to execute, but simply that it is possible.

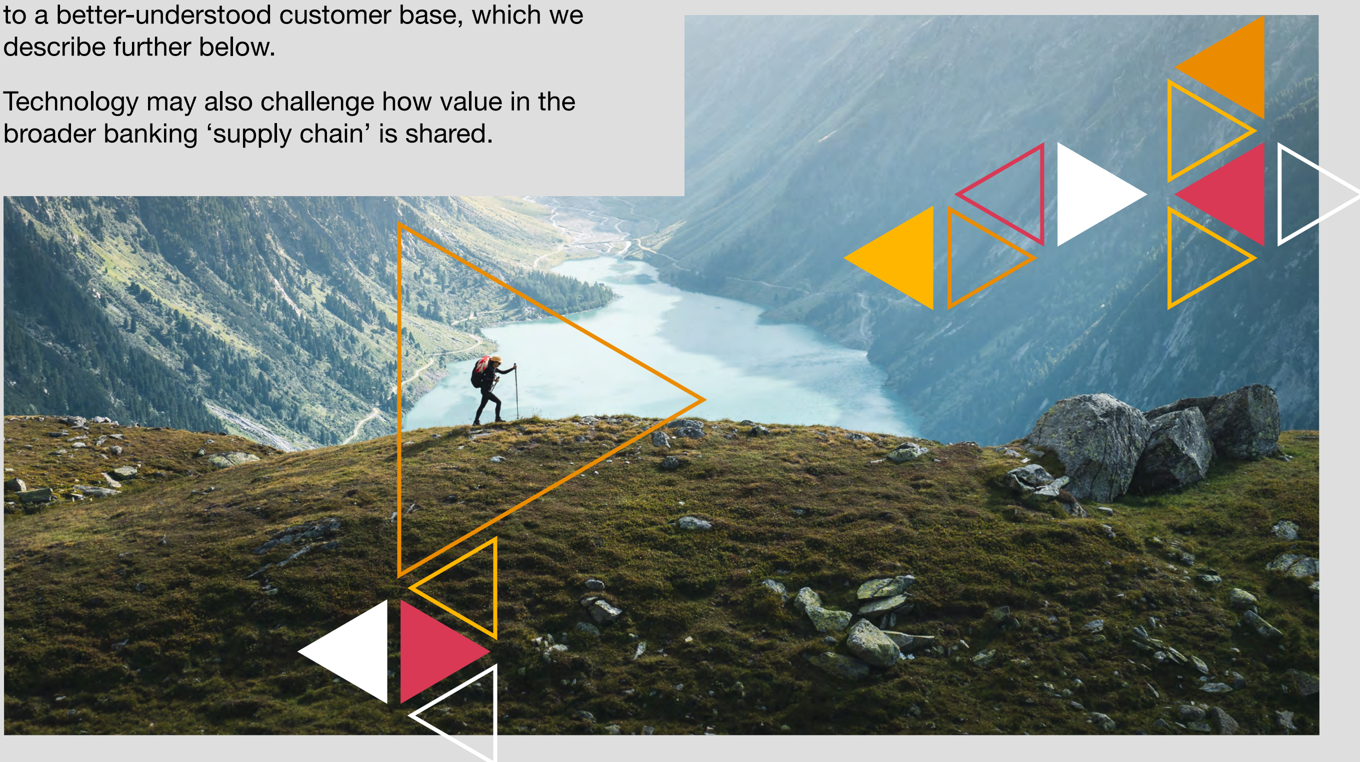
Much of this represents the opportunity to address the burning platform of removing many of the things which have prevented banks from exploiting economies of scale (legacy, technology, stubborn cost base). However, it also represents the opportunity to deliver something new and different to a better-understood customer base, which we describe further below.

Technology may also challenge how value in the broader banking 'supply chain' is shared.

New dynamics of value and advantage

Much has been said about the concentration of control in a handful of hyper-scale payments companies and the quality of regulation - the so-called 'tech-reg' arguments. At its core, this is a discussion about how value is created (investment) and extracted/controlled in the banking value chain, starting first with the element closest to the customer - particularly payments, digital wallets and mobile technology - all centred on data. Much of the focus from incumbent banks (and increasingly regulators and lawmakers) has been on how 'fair' and 'open' the power and control dynamics appear to be operating and how to effectively allow for customer-focused innovation without ignoring the significant investment and obligation of banks in the system.

Even as banks consider partnerships, the key tension points are in how much of the value is retained by the 'new' entrants, who may have the power to control access to the customer, and how much is shared with the bank manufacturing the product. That's a critical question for bankers who are facing into the opportunities in embedded finance. And also for those who note with satisfaction - after 30 years of predicting it - that 'big tech' could enter and disintermediate banking. It hasn't happened yet. But one doesn't have to disrupt or disintermediate an industry to extract value from it. By dominating one or both ends, it can become the 'choke point' capturing value (just as our iron ore mines have become the choke point for the world's steel products industry).

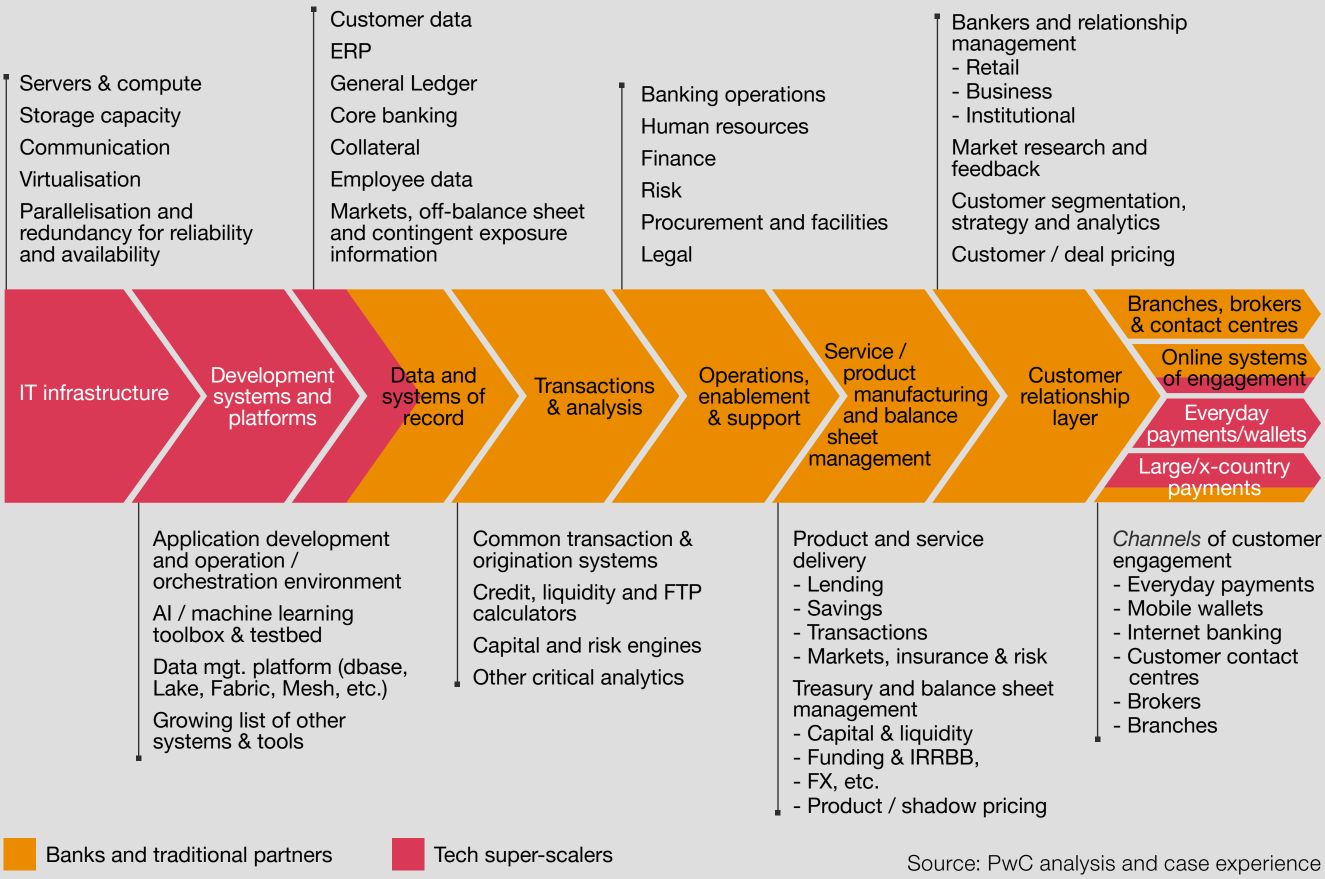


Regardless of industry, value tends to accumulate at choke points along the value chain

Regardless of the industry, (surplus) profits across value chains tend to accumulate at choke points. That's true for steel, fast food service (franchisor/landlord vs franchisees), shopping malls, diamonds, electronics, movie making, apparel, etc. It is also true for banking and financial services.

Conceivably, in the decade to come, banking may no longer be the choke point in the broader 'FS value chain' that it has been. The reason is illustrated in Figure 11. While banks have always depended on service providers for tech services, professional services, facilities, logistics and many other things besides, these 'value chain partners' were historically much smaller than at least the largest banks, and their industries quite fragmented.

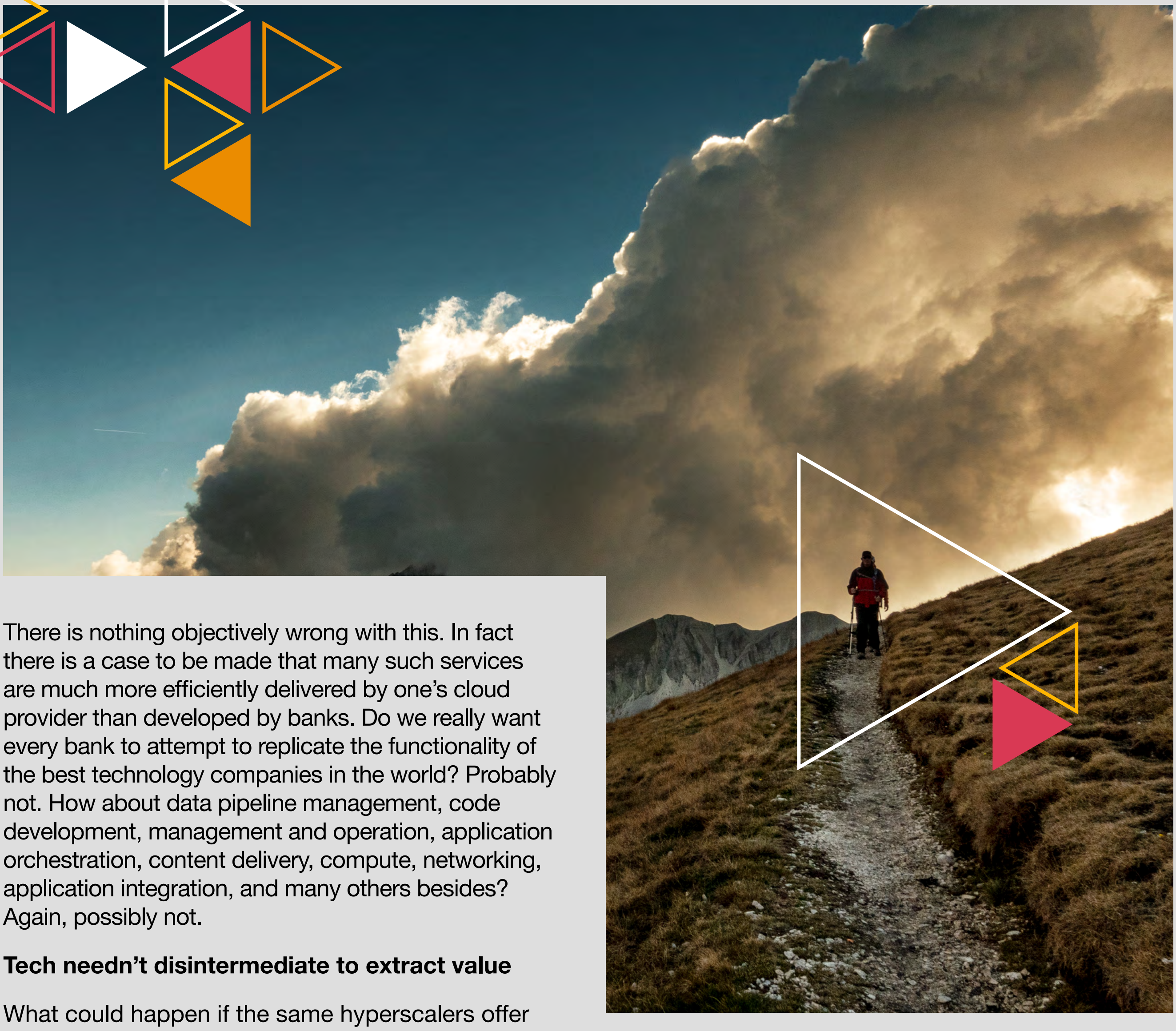
Figure 11 **Powerful partners at both ends of value chain**



Source: PwC analysis and case experience

Those days could be over when it comes to technology. Already, cloud 'infrastructure as a service' (IaaS) is dominated by three 'hyperscalers' who earn the majority of industry revenue[1]. They are rapidly moving up the technology and operational stack, offering customers a 'walled garden' of useful applications and variable-cost services, from raw 'compute' (what technologists call 'computation') to bespoke AI development tools, data management, containerisation and so-called 'serverless computing' where you simply provide code to run without worrying at all about hardware and execution. It is only a matter of time before such companies move up the stack further, offering ready-to-use common banking applications (either directly or through closely integrated partners) like customer management, pricing, product origination and management.

1 AWS, MS and Google account for 65% of industry revenues, while five others (Alibaba, Salesforce, IBM, Oracle and Tencent) account for another 15%, as estimated by Dgtl Infra. That's 80% of global revenue going to just eight firms.



There is nothing objectively wrong with this. In fact there is a case to be made that many such services are much more efficiently delivered by one's cloud provider than developed by banks. Do we really want every bank to attempt to replicate the functionality of the best technology companies in the world? Probably not. How about data pipeline management, code development, management and operation, application orchestration, content delivery, compute, networking, application integration, and many others besides? Again, possibly not.

Tech needn't disintermediate to extract value

What could happen if the same hyperscalers offer first-class systems for such things as AML and fraud detection, core banking, loan origination and identity - all easily-accessible on the same cloud platform one already uses? We would imagine this will be incredibly compelling for many sub-scale players, and especially for new entrants. However, once tied in to a digital 'landlord', it could be hard to move. And a digital landlord who has visibility over all the traffic and economics of your business can be a tough negotiating partner. Banks are rightly aware of this, and work hard to avoid dependency and create modular flexibility. However, that is always harder than one expects.

At the other end of the value chain, as mentioned above, payments are dominated by a handful of global players, one of which is also a cloud superscalar. Although payments aren't as concentrated as cloud, the handful of firms which dominate it have global scale and market caps larger than almost all the world's banks.

Over the next ten years, banks will face not only the possibility that one pillar sustaining growth in their core begins to erode (as described above), but also that they are negotiating for share of value with ~10-20 global hyper-scale tech giants who collectively act as the digital equivalent of landlord, power, gas and telephone company, cashier, receptionist and accountant for almost every bank in the world.

This is the reason why the discussion of tech-reg is so prominent and we expect it to remain so. As with our observations of asset prices, we aren't predicting that banks will suddenly be 'squeezed.' We also aren't articulating a case for antitrust (frankly, that will depend on how superscalers behave in the future). What we do mean is that banks will find themselves operating in a strategic context and power dynamic that no major bank in Australia or even the world has ever faced before.

04

Window still open - but requires taking some risk

In the past few years we've spoken about four themes driving the medium-term strategic imperative in banking today, all of which can be broadly characterised as setting the foundations to 'break-free' from the commodity trap:

01 **Addressing the squeeze on the core:** Commercial discipline, productivity management and, critically, exceptional execution of change.

02 **Double down on digital:** Extracting value from technology investment, completing the 'mega' changes such as digital-only offerings and judiciously taking risk to exploit the exponential power of Generative AI and Quantum.

03 **Meet coming tests of resilience and trust:** Retaining a tight watch on customer protection, security and resilience to protect the reputational asset rebuilt so tirelessly in recent times…and the licence to ask for more flexibility.

04 **Find new sources of value and growth:** Looking up and out for sources of growth that diversify away from the highly concentrated core. From the familiar (business, institutional, payments) to the new/renewed.

They are of course still relevant, and at the top of every bank's agenda. For this report, given the context described above, we'd like to focus on the final point: new sources of value and growth, and models to achieve this.

Finding new sources of value and growth

There are many possible routes to new sources of value and growth. Like many countries around the world, Australia's economy and population is entering a period of profound change as trends such as the technology transition for bank customers, energy transition, ageing and retirement, wealth transition, housing growth, defence investment create familiar and new/renewed needs for customers. To some extent these 'new' sources of growth will be anything but in a product/offering sense and represent a reallocation of capital focus (see the contrasting results of retail v business v institutional in the half), but long-term it is probable that superior growth will need to be grounded in something different.

Every bank will have to choose its own path. Obviously, it's usually best to start with the unique characteristics and needs of the customers they have now.

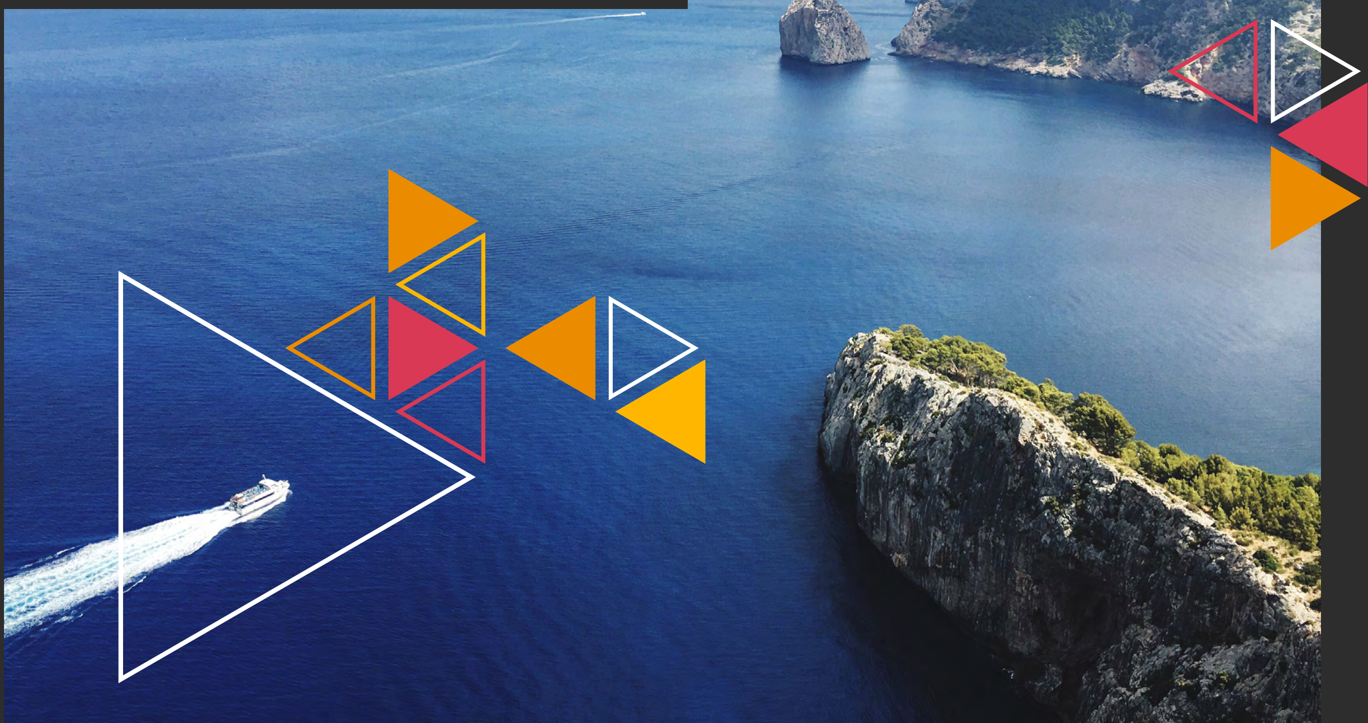
The growth of private credit around the world (even if not yet as significant in Australia) suggests gaps in the offer on both the asset and liability side which banks could seek to close (e.g by finding ways to enable savers to participate in the returns from credit risk more directly, or to access a wider range of savings) or partner with other sources of capital/ funding to address.

New payments protocols, coupled with open banking, will enable entirely new ways to monetise insights from transaction data.

Embedded finance is unquestionably an essential vector for growth. However, the experiences to date illustrate that an embedded finance offer not based on any particular edge or customer insight will never be more than a commodity at the mercy of whoever owns the customer interface and relationship.

Finally, there are growth markets with explosive potential all around us still held down by such things as misaligned organisational incentives, out-of-date regulations, mismatched expectations between sources and users of capital and other assorted constraints. Two weeks before writing, a major Australian professional organisation hosted a conference about financing Australia's net zero transition. Panellists representing superannuation funds and banks spoke about the frustration of having billions of dollars in capital ready to deploy, but finding themselves slowed down by a myriad of impediments.

On the face of it, these are market failures. But every failure is an opportunity. Those bankers who work through and clear away these failures - who become market makers not just deal chasers - will find themselves rewarded disproportionately.



Deep into relationship, shallow in the stack

To rise to these opportunities, how should banks organise themselves? Consider the stylised model of a modern bank illustrated in *Figure 12*. At the risk of oversimplification, today's banks are optimised for asset gathering and funding, with many capabilities, technical assets and ancillary services to support and sustain that activity.

Figure 12 **Stylised four-layer schematic of bank business and operating model**

Customer layer

Channels | Customer relationships | Research, insight, marketing, (deal) pricing

- Branches
- Mobile bankers
- Brokers
- Contact centres
- Internet / mobile
- Pmnts front end
- HNW
- Mass affluent
- Other retail
- Micro / SB
- Business
- Institutional
- Marketing
- Feedback, research & cust insight
- Deal pricing

Manufacturing layer

Product and service delivery | Funding, treasury and balance sheet management

- Internal product and funds-transfer pricing
- Treasury and balance sheet management
- Credit and funding
- Savings & investments
- Payments & transactions
- Markets
- Insurance & risk transfer
- Other services

Operations layer

Internal service delivery and enablement

- Risk, Finance, Strategy, Legal & HR operations
- Lending and transaction services
- Account maintenance & other services
- Procurement, property & internal services
- Secure logistics (cash, cards, statements, records, etc.)

Technology layer

Transactions and analytics | Data and systems of record | Development systems and platforms | Infrastructure

- Transaction / origination engine
- Credit, liquidity, FTP engine
- Capital and risk engine
- Customer and market analytics
- Other analytics
- Customer data
- ERP, GL and Core Banking
- Collateral
- Employee data
- Markets, OBS & contingent exposure
- Application development & operations
- AI / ML development
- Data management
- Other
- Treasury and balance sheet management

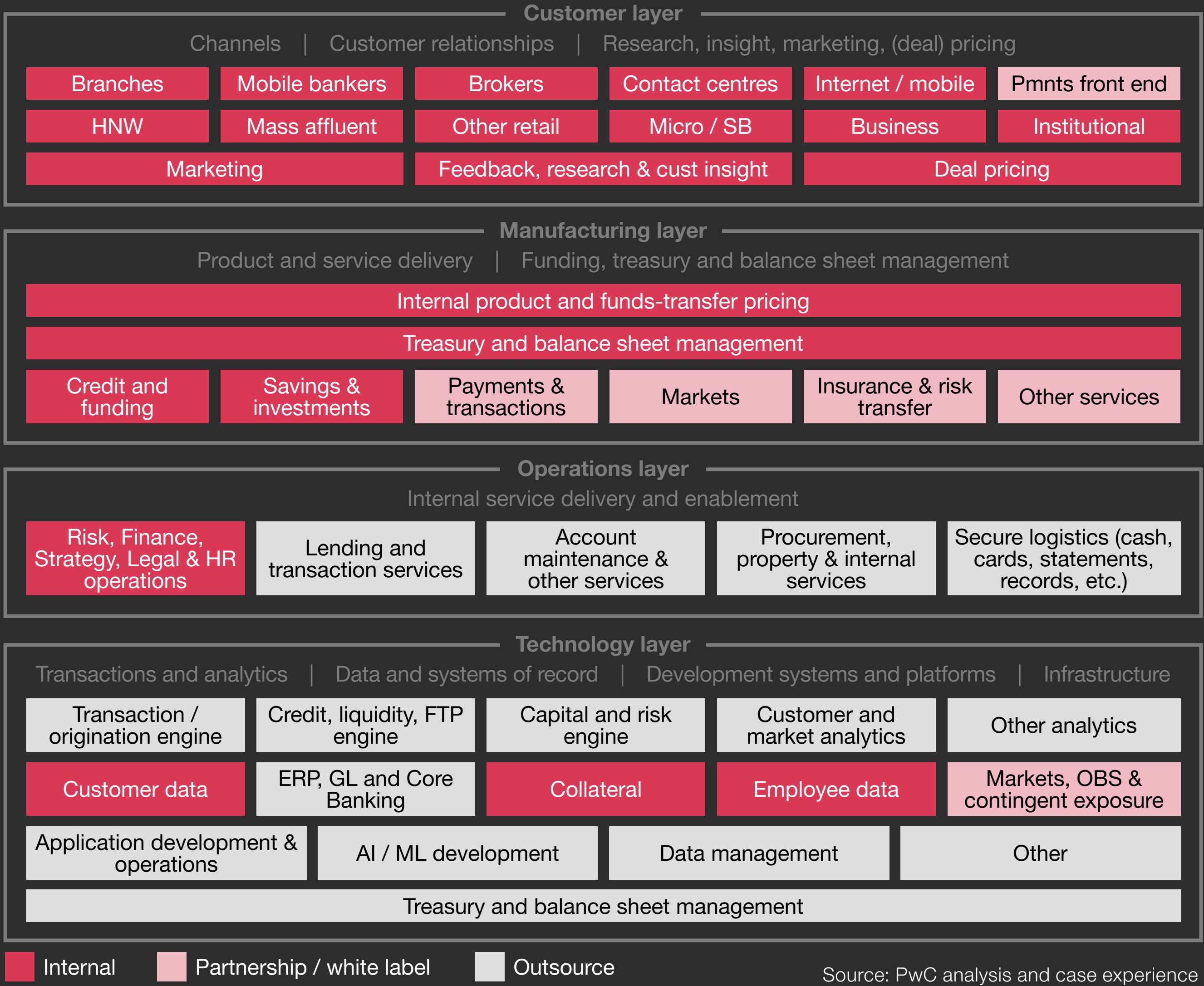
Source: PwC analysis and case experience

In the future, many of those supported activities, as well as the technology to provide them, will be commodities offered by a relatively small collection of global hyperscalers. One can see this already happening today: smaller banks all over the world are increasingly relying on integrated providers to deliver 'bank-in-a-box' solutions, from customer front end to origination all the way to the ERP and Core. Neobanks entering the market in Europe or North America today don't necessarily need to build an operating system from scratch, and few of them do. It's only a matter of time before these same neobanks are offered other services as well: customer contact centres to handle 'mundane' administration or service requests, application verification services, transaction processing and monitoring, and more.

It's not yet relevant for large banks. However, it's easy to see where the market could be heading. At the time of writing, one large US Bank is replacing its retail core banking system with a third-party cloud-based solution - a decision which was unthinkable until recently. As the 'top end' of this market coalesces around a few clear winners, some of which may even be acquired by hyperscale cloud service providers, their appeal to banks with even world-class scale will become greater than ever.

Noting the need to manage supplier dynamics and the relative position of tech hyperscalers described above (which we believe will be necessary for every industry player, no matter what their operating model), it is conceivable that the long-term operating models for (most) successful banks will look something like *Figure 13.*

Figure 13 **Shallow in the stack, deep into relationship**



Source: PwC analysis and case experience

That's because many of the growth opportunities described above can only be exploited with greater customer intimacy, speed to market, insight, trust and understanding.

That's hard. Not because bankers don't care about their customers, nor fail to understand their importance. But because there is so much else that always gets in the way. Transaction monitoring. Digital resilience. Cyber security. Collateral management. Application verification. These things require extraordinary energy, resources and of course attention. Yet they matter to customers only when they go wrong. It's not what customers come to banks for and unlikely what they are willing to pay for.

Making it happen: Five lessons for banking simplification, modernisation and transformation

Whatever the model, 'shallow in the stack, deep into relationship' is a destination, not a journey. Whether one finds it compelling or not, a lot must happen before it's a realistic play. For most banks, the key priority will be to continue the same 'blocking and tackling' of transformation already under way: doubling down on digital, streamlining and simplifying the core, and hardening systems and processes to uphold customer trust. Put simply, maximise scale benefits, minimise diseconomies and create flexibility

Needless to say, execution is crucial. Informed by our transformation experience, we've pinpointed five important lessons for banks in the years ahead.

01 **Tackle endowment bias and psychic costs head on through simplification:** Proactively recognise the fact that attempts to simplify businesses often fail because organisations are subject to 'behavioural economics' biases in decision-making.

02 **Price for psychic comfort: keeping it simple, transparent, and visibly fair:** Recognise that confusing pricing is one of the biggest sources of customer-perceived complexity, and 'I'll figure this out later' is one of the best ways to lose an online transaction or sale. Pricing strategies that attempt to squeeze marginal new revenue at the cost of confusion and psychic comfort are often self-defeating.

03 **Actively guide the omnichannel journey, and equip your people to play their part:** High-cost humans must recognise a mission to do more than simply satisfy customers; they must actively help train and guide customers to proper channels as well. Even where one is committed to customer-directed multichannel, true service is committing to educate and empower customers to make that choice themselves.

04 **Complete tech transformation, staying focused on the 'why':** TThis is about more than moving applications to the cloud. It's also about ensuring architects and technologists explain the critical design decisions they make, like necessary application redesign, security by design, planning for quantum computing and practising responsible AI.

05 **For enablement functions, remember that change isn't transformation:** This is important given the degree of likely operating model change many organisations have already gone through, driven by regulatory and other internal and external pressures. Change fatigue, especially in areas like Finance, HR and Risk, must be identified and addressed as soon as possible.

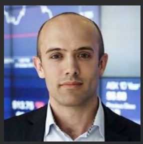
From Banks to banking

John Pierpont Morgan never had a core banking system. Nathan Rothschild didn't have an operations centre in an offshore location. That's because for most of history, banks were 'shallow in the stack' but 'deep into relationships'. They lived among their customers, knew them, witnessed their challenges and shared their dreams.

The next 10-20 years present the tantalising possibility that successful banks needn't worry about such things anymore. Advances in technology and the evolution of the industry create the prospect of banks once again getting deep into customer relationships, because they've allowed themselves to get shallow in the technology and operational stack.

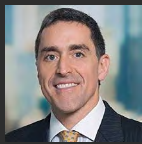
The experience of technology and operational transformation over the past 30 years, however, suggests that even if it takes that long for the technology and market to be ready, managing the transition can take a long time as well. That's why we think it's important to start talking about this now. Just as systems built in the 1970s are still found all over current technology stacks, the choices we make today – about technology, architecture, operating model and more – will matter for decades.

Contact us



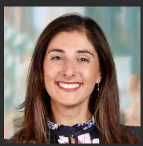
Sam Garland
Banking and Capital Markets Leader

sam.garland@au.pwc.com



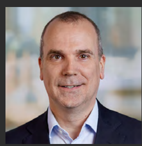
Jim Christodouleas
Banking and Capital Markets Solutions and Capability Development

jim.christodouleas@au.pwc.com



Nina Larkin
Partner, Risk and Regulation

nina.larkin@au.pwc.com



Barry Trubridge
Financial Services Industry Leader

barry.trubridge@au.pwc.com

Contributors

We would like to thank the following PwC team members who have made a significant contribution to the development of this publication:

Analytical Support

Charlotte Boulogne | Rishi Mulavineth | Andrew Siu | Paul Papageorgiou

Additional Support

Harry Lumsden | Grace Cunningham | Lucy Hinton | Vanessa Martinez
Rendy Tjahyadi | Mariluz Garcia Blanes | Steve Radywonik

Banking Matters series

Our regular Banking Matters publications, incorporating our Major Banks Analysis, are aimed at giving clients a leading edge by providing key data, research and analysis, and future-focused insights.

For more information visit https://www.pwc.com.au/bankingmatters

Major Banks Analysis: Record result, but eyes return to the horizon
Full-Year | November 2023

Major Banks Analysis: Beyond the margins
Half-Year | May 2023

Major Banks Analysis: The calm between two storms
Full-Year | November 2022

Major Banks Analysis: Simplicity raises focus on future
Half-Year | May 2022

Major Banks Analysis: Emerging strong - on shifting sands
Full-Year | November 2021

D0647864