

Australia in 2023

'Superpower' potential, cyclical slowdown

Free to View
Australia

- ◆ Growth is set to slow in 2023, as inflation needs to decline and the RBA has tightened aggressively
- ◆ A 'hard landing' is a risk but not our central case, partly due to global demand for resources and China's reopening
- ◆ Policymakers should focus on growth drivers, including Australia's 'superpower' renewable energy opportunities

Paul Bloxham
Chief Economist, Australia, New Zealand & Global
Commodities
HSBC Bank Australia Limited

Jamie Culling
Economist, Australia, NZ & Global Commodities
HSBC Bank Australia Limited

Focus ought to be on growth engines

Much like other countries, Australia is still dealing with the residual economic effects of the pandemic and the Russia-Ukraine War. In 2022, the main challenge was the sharp pick-up in inflation. As a result, the RBA lifted its cash rate by a substantial 300bp from May 2022. More of the effects of this are set to feed through the economy in 2023. We forecast growth to slow from 3.6% in 2022e to 1.6% in 2023e; the unemployment rate to rise from 3.5% in late 2022 to 4.1% by end-2023e; and, CPI inflation to fall from 7.4% y-o-y in 4Q22e to 3.5% by 4Q23e.

The main driver of the slowdown is household spending, as high inflation and rising interest rates weigh on real household disposable incomes, falling house prices drive declines in household wealth, and savings accumulated through the pandemic are rundown. We forecast a slowdown, not a recession, but it is a narrow pathway for this soft landing outcome. We see the risks as tilted to the downside, although China's reopening and the support it gives to commodity and services exports should help mitigate some of this risk.

That's the cyclical story. But too often the focus is on the near-term at the expense of the bigger, longer-term picture. With the pandemic effects mostly past, policymakers should lift their gaze and look to make reforms that drive long-term growth.

We continue to advocate tax and competition policy reform, and advancing trade policy. We also suggest policymakers focus on three key growth engines:

- (1) A significant and well targeted migration programme that drives population growth, in turn supporting demand in the economy and labour supply.
- (2) Supporting the building of physical and social infrastructure, including education and health systems, that enhance productivity growth.
- (3) Policies that support Australia's energy transition and its potential to produce renewables for domestic use and export – what local eminent academic economist, Ross Garnaut, refers to as Australia's 'superpower' opportunities.

This is a Free to View version of a report with the same title published on 20-Jan-23. Please contact your HSBC representative or email AskResearch@hsbc.com for more information.

Disclosures & Disclaimer

This report must be read with the disclosures and the analyst certifications in the Disclosure appendix, and with the Disclaimer, which forms part of it.

Issuer of report: HSBC Bank Australia Limited

View HSBC Global Research at:
<https://www.research.hsbc.com>

‘Soft landing’ expected...but it’s a narrow pathway

- ◆ The RBA has sought to deal with Australia’s recent high inflation challenge by delivering 300bp of cash rate hikes...
- ◆ ...and we expect the lagged effect of this to see further cooling in the housing market and a marked slowdown in consumer spending
- ◆ We see the RBA as likely to take a cautious and dovish approach, so as to stay within the narrow pathway and prevent a recession

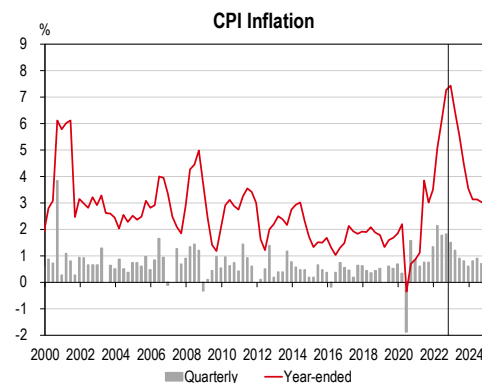
Inflation is high, but set to slow

Much like that which has occurred in many other countries, inflation has risen sharply in Australia, is well above the central bank’s target, and the surge came as a surprise. On the most recent quarterly print, y-o-y CPI inflation was 7.3%, which is its highest rate since the late 1980s (Chart 1).

Inflation is high, but past the peak on a quarterly basis

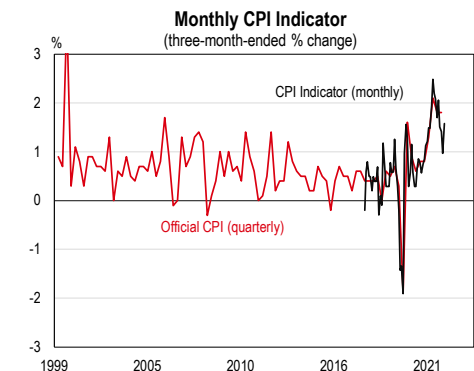
However, there are also signs that inflation has peaked. On a quarterly basis, headline CPI inflation appears to have peaked in 1H22. The fairly new ABS monthly CPI indicator also suggests that inflation has peaked (Chart 2). The three-monthly ended rate of this measure appears to have peaked at a rate of just over 2% (8% annualised) in March 2022.

1. High inflation has been broad based



Source: ABS, HSBC estimates

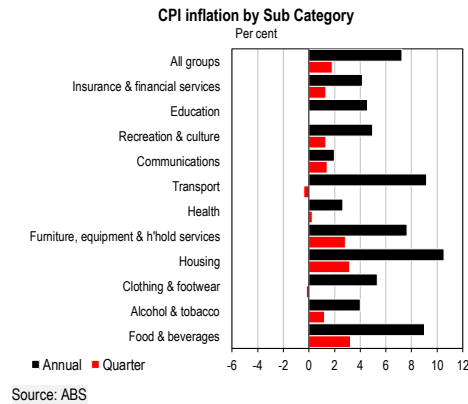
2. The monthly CPI is past its peak



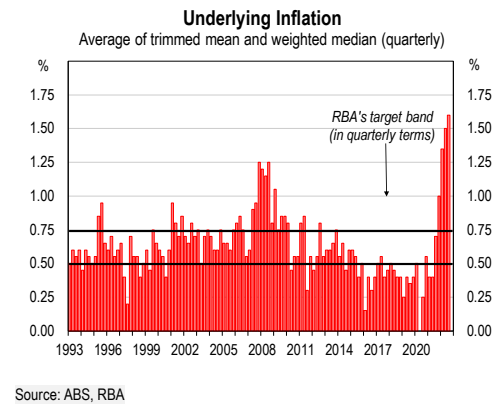
Source: ABS

The broad-based nature of the price pressure has seen the main underlying (core) measures of inflation also well above the RBA’s 2-3% target band, on a year-end and quarterly basis (Charts 3 and 4).

3. CPI inflation appears past its peak q-o-q



4. Core measures are well above target too



High inflation is a key challenge for local policymakers. The RBA has lifted its policy rate by 300bp since May 2022, from 0.10% to 3.10%, and the government took a very cautious approach in its October 2022 budget, saving much of its upside surprise to tax revenue so as to not add to the high inflation challenge.

High inflation has been demand and supply driven

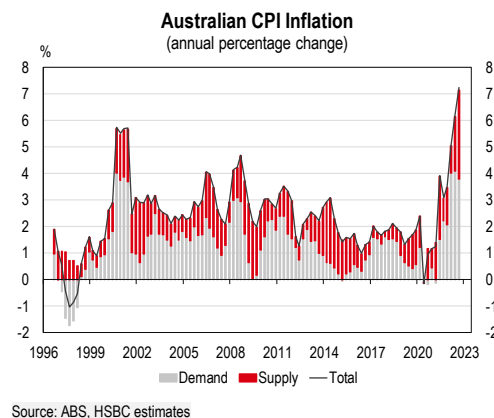
Like elsewhere, the sharp pick-up in inflation was driven by a combination of a recovery in demand, as the economy reopened following the removal of the strict pandemic management policies, and constrained supply, due to the pandemic effects, geopolitics, and the weather.

Demand has been particularly boosted by the drawdown of high household savings accumulated during the pandemic, partly a result of sizeable fiscal transfers to households through that period. Supply factors include the sharp rise in energy prices in 2022, largely due to the Russia-Ukraine war, high shipping costs through much of the pandemic, pandemic-related disruptions to supply chains, and weather and geopolitical disruptions to agricultural product supply.

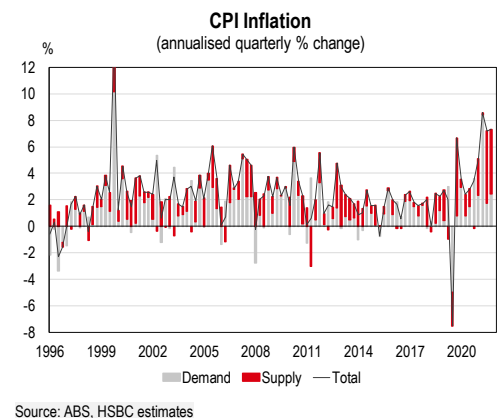
To seek to get some idea of the contribution of demand and supply to the inflation surge, we have used an empirical model developed by the US Federal Reserve (Shapiro, 2022) and applied it to Australian quarterly CPI numbers (Charts 5 and 6).

Strong demand and constrained supply both played a role in lifting inflation

5. Both demand and supply factors have driven inflation...



6. ...but the supply-side has had more of a role over the past few quarters



This methodology involves applying rolling regressions to historical inflation components that take account of spending in each of those components (demand) to seek to identify exogenous supply changes.¹

Our estimates suggest that demand and supply impacts on inflation have been fairly even, both contributing similar amounts to year-end inflation recently. In short, these estimates suggest that even without the supply shocks, the pick-up in demand alone would have been enough to lift inflation above the RBA's 2-3% target band.

Of course, the recent rate hikes should slow demand – we discuss the evidence for this already happening below. Rate hikes will do little to fix the supply-side challenges, although many of these including oil prices, shipping costs, and many of the manufacturing supply chain disruptions have already reversed. Finally, looking at these estimates on a q-o-q basis shows some signs that the demand pressures on inflation may have started to ease and that the last couple of quarters were more marked by supply-side factors.

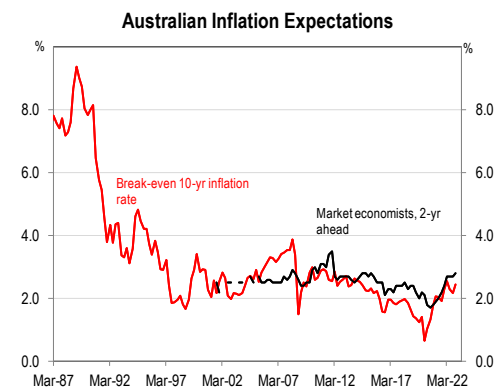
Inflation expectations appear to be well anchored

Despite the rise in inflation, measures of inflation expectations for Australia have remained fairly well anchored (Charts 7 and 8). In part, this reflects the inertia in Australia's wages setting process, which we discuss further below.

In part, Australia has also benefitted from low and backwards-looking inflation expectations prior to the pandemic. Pre-pandemic, Australia struggled with below-target inflation, which saw short-term inflation expectations drift lower. While this was a challenge at the time, with inflation below target, in hindsight, it provided Australia with a better starting position for the recent high-inflation period, relative to some international peers.

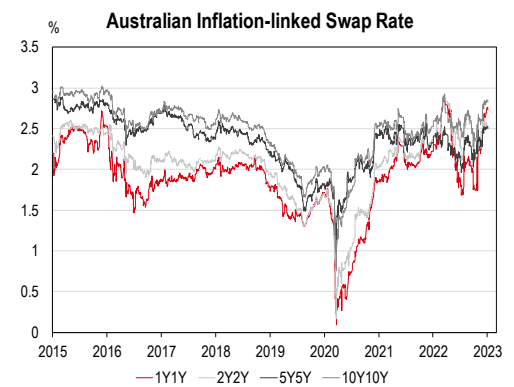
Despite high inflation, inflation expectations appear to be well anchored

7. Surveyed inflation expectations remain anchored...



Source: RBA, HSBC

8. ...but financial market measures have lifted higher



Source: Refinitiv Datastream, HSBC

As a result, measures of inflation expectations have remained broadly consistent with the RBA's inflation target. While short-term measures have risen, longer-term measures have remained more-stable, suggesting the current high inflation is not expected to be persistent. Market measures of longer-term inflation expectations also remain stable and well anchored, suggesting that the anticipated monetary tightening is expected to be sufficient to keep inflation around the target range over the medium term.

¹ We follow the methodology outlined in Shapiro (2022). We assess inflation rates at a category level, dividing the basket into supply and demand side in a given quarter. Demand-driven categories are identified as those where an unexpected change in price moves in the same direction as the unexpected change in quantity in a given quarter; supply-driven categories are identified as those where unexpected changes in price and quantity move in opposite directions.

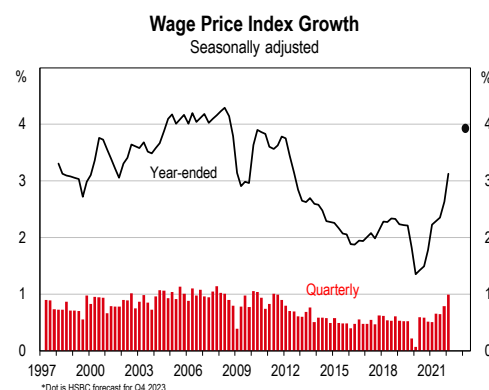
Wages growth picking up...but only back to a 'normal' rate

A key focus for the RBA through 2022, in gauging the likely persistence in inflationary pressure, was wages growth. The RBA placed a large amount of emphasis on its view of where wages growth would need to be for consistency with its inflation target. The RBA's stated view was that wages growth of around 4% would be consistent with CPI inflation at the RBA's 2-3% target.

Wages growth has picked up but is not worryingly excessive

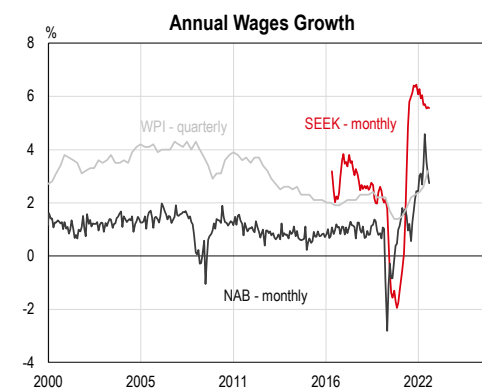
At an aggregate level, wages growth has picked up, and risen above the sluggish rates seen pre-pandemic (Chart 9). Although, it is worth noting that it is still tracking at rates that are below or around what the RBA sees as consistent with its inflation target.

9. Wages growth has picked up, but needed to, and is now at normal rates



Source: ABS

10. Timely measures suggest further significant wages acceleration is unlikely



Source: ABS, Refinitiv Datastream, SEEK, HSBC

The tight labour market, as we discuss below, and labour shortages have resulted in employers bidding up wages, alongside cost-of-living pressures. The governments' Fair Work Commission decision to lift the National Minimum Wage by 5.2% in 2022-23e has also likely contributed.

We expect wages growth to continue to increase from here, rising from 3.1% y-o-y in 3Q22 (on the wage price index) to peak around 4% y-o-y in mid-2023e. This reflects some inertia in the wages-setting process that is unique to Australia, delaying the pass-through from a tight jobs market to wages growth. Timely measures of wages growth suggest some loss of momentum in recent months (Chart 10).

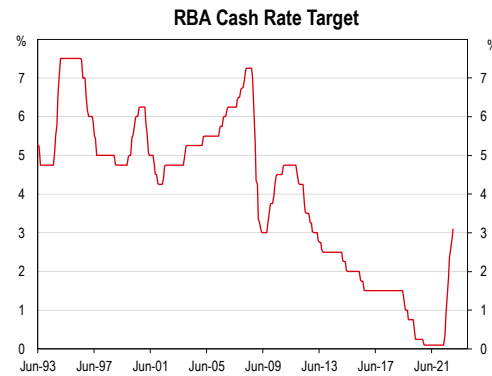
The RBA's response to the inflation challenge

The RBA has tightening policy rapidly and substantially

The sharp rise in inflation made 2022 an eventful year for monetary policy. At the beginning of the year, the RBA's forward guidance was that it was unlikely to lift interest rates until 2023, but by May 2022 a sharp hiking phase began (Chart 11).

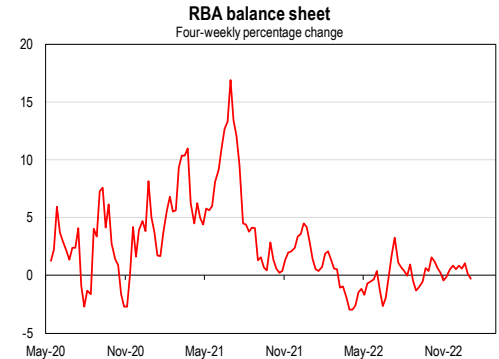
The RBA also promptly ended its quantitative easing programme in May 2022, having removed its 3-year yield target in November 2021. The RBA has chosen to allow the accumulated bonds on its balance sheet to mature, rather than to deliver quantitative tightening by selling them. Growth in its balance sheet has, nevertheless, stalled (Chart 12). It is set to shrink rapidly as the Term Fund Facility lending rolls off through 2023 and 2024.

11. Interest rates have risen sharply



Source: RBA

12. Growth in the RBA's balance sheet has slowed



Source: RBA

There is clear evidence the tightening is working...

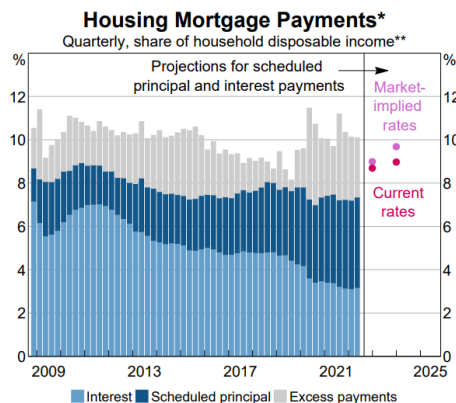
Like other central banks, the late start in tightening monetary policy meant that the RBA had to move its policy rate quickly and substantially. Unlike in the early 2000s hiking phase, when moving slowly allowed incremental assessment of the impact of the monetary tightening, the rapid pace of tightening has made it much more difficult to judge the impact on the economy.

There is clear evidence that the monetary tightening is working, as we discuss further below, but how much tightening will be needed to lower inflation sufficiently, but not deliver a recession is a difficult question to answer. As the RBA has noted, there is a 'narrow pathway' to an economic 'soft landing'.

...and much of the effect is yet to come

One thing the RBA has provided is a range of its estimates of the likely impact of its tightening, particularly on the household sector. In particular, the RBA estimated (as of early October 2022) that if its cash rate were to rise to around 4.00% by end-2023e (market pricing at the time), the required payments on mortgages (interest and scheduled principal) would rise to levels that would absorb all of households typically previous excess (or buffer) payments (Chart 13). This would be a substantial squeeze.

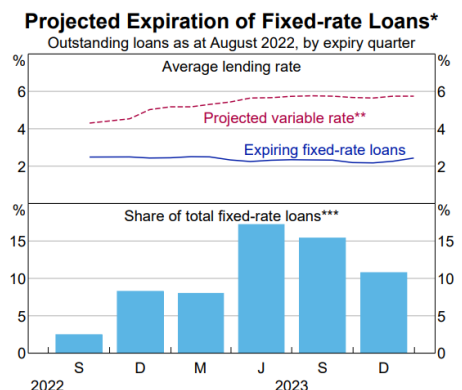
13. Mortgage interest bills to rise sharply



* Dots show projections for the sum of interest and scheduled principal payments as a share of income. Based on OIS projections for the cash rate as end 2022 and end 2023. Assumes full pass-through to variable-rate mortgages and that fixed-rate loans roll onto variable-rate mortgages.
** Seasonally adjusted and break-adjusted.

Source: RBA

14. Much of the rate rise effect still due



* Assumes fixed-rate loans are not repaid early or refinanced.
** Based on OIS market path for the cash rate as at 4 October and assuming full pass through to variable mortgage rates.
*** Another 38 per cent of fixed-rate loans will expire in 2024 and beyond.

Source: RBA

Other estimates released by the RBA at the same time suggested that, for a similar rise in interest rates, households' (with variable-rate loans) 'spare cash' flows would fall, or even turn negative for 15% of households.

A further complication for assessing the impact of the monetary tightening is that its effect is set to be more delayed than usual.

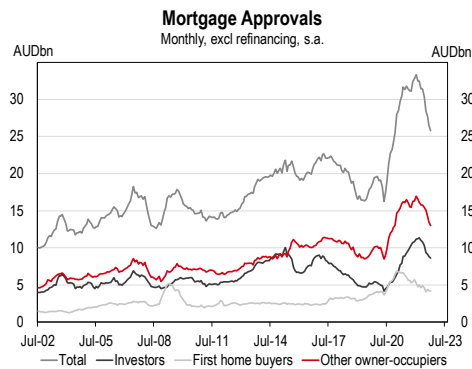
There will be a large mortgage rate reset for many borrowers in 2023

This is because a larger proportion of borrowers than normal currently have 2-year and 3-year fixed rate mortgages, as a result of very low interest rates on these products through the pandemic, and many of these loans reset to higher rates in 2023. Many of these fixed rate products were for interest rates around 2%, but will reset to rates around 5-6%, which is a substantial step up. A large share of these resets begin in 2Q23 (Chart 14).

There is evidence that the tightening is working

The policy tightening has shown up clearly in the timely indicators of activity and sentiment, particularly in areas of the economy that are interest-rate sensitive, such as housing (Charts 15 and 16).

15. New housing lending falling sharply



Source: ABS

The housing market correction has further to run

New loan approvals for housing have fallen sharply since the RBA began to lift its cash rate. This has been across all types of borrowers – first home buyers, investors, and repeat-buyers – and has occurred in all of the states, which is further evidence that the decline has been driven by rising interest rates.

The monetary tightening has also driven a decline in housing prices, which have been falling since the cash rate started rising in May 2022. National housing prices have fallen by 9% since their peak and expect them to decline further through much of 2023.

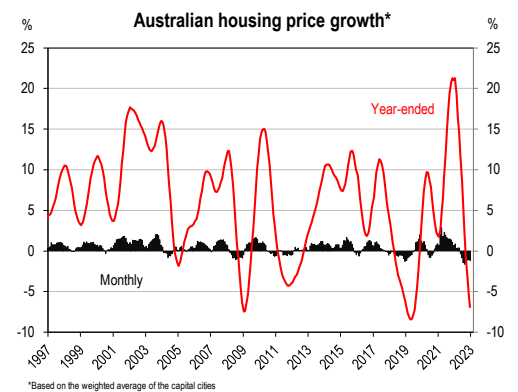
The 'complicated consumer' is set to cool

For the RBA, a key part of the transmission mechanism of monetary policy is that higher interest rates also translate into weaker consumer demand. A slowdown in consumer demand is likely to be the key way in which tighter monetary policy contributes to slowing inflation. As illustrated above, the pick-up in inflation reflects both demand strength and supply constraints. Supply challenges are difficult to fix and monetary policy has a limited effect, but higher interest rates can slow demand.

Consumer spending has not cooled much yet...

However, patterns of consumer spending and indicators have been complicated by the impact of the pandemic, large fiscal transfers, and sharply higher interest rates. The starkest contrast is

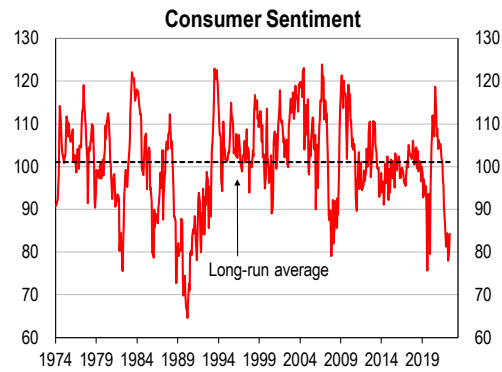
16. Housing prices are falling sharply



Source: CoreLogic

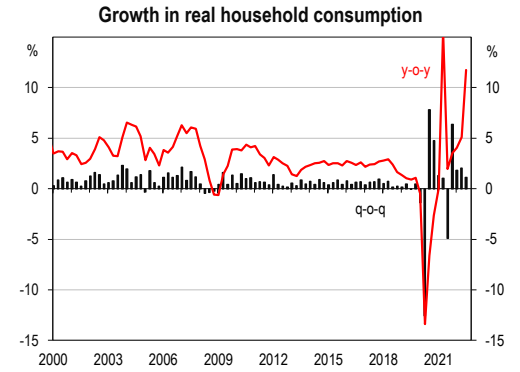
between measures of consumer sentiment, which have plummeted to levels reached in previous recessions, and those of consumer spending, which have been strong (Charts 17 and 18).

17. Consumer sentiment has fallen sharply



Source: Refinitiv Datastream

18. Household consumption has been volatile and strong but slowing



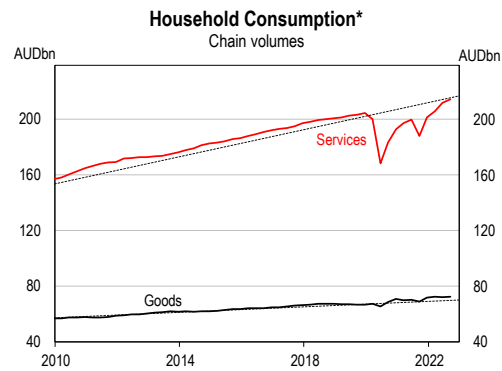
Source: ABS

It seems that consumers are quite unhappy, but have been continuing to spend anyway.

...but we expect a marked slowdown in 2023...

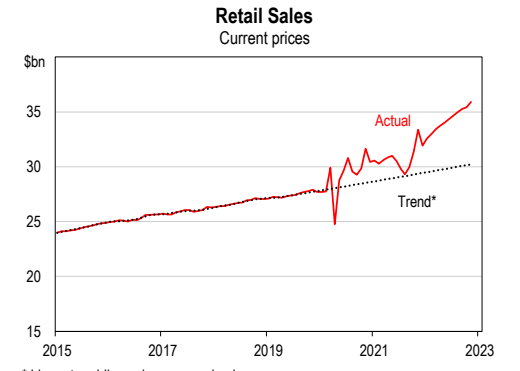
Part of this seems to reflect a strong desire to return to normal spending patterns. After the pandemic constrained consumer's ability to spend on services such as travel and dining out. Much of the recent strength in consumer spending has been on services (Chart 19).

19. Much of the strength has been a return to normal spending on services



Source: ABS

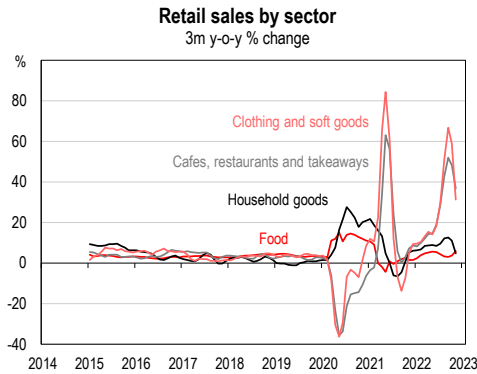
20. Retail sales have been well above their pre-pandemic trend



Source: ABS

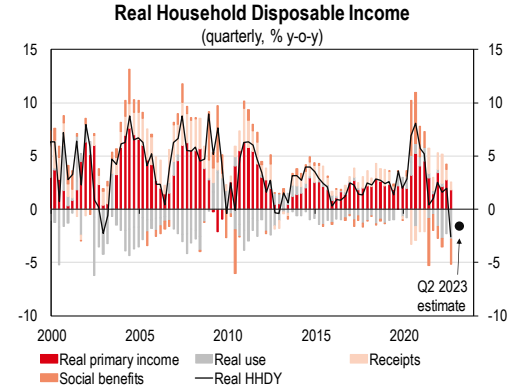
However, this is not the full story. Spending on goods has also been above its pre-pandemic trend levels. During the earlier stages of the pandemic this reflected that being unable to consume the usual services, such as dining out and travel, households instead spent more on food and household goods, such as home gym and office equipment. The more recent strength in spending on goods has been on clothing and footwear. These trends have been reflected in the retail figures (Charts 20 and 21).

21. A sharp slowdown in spending on clothing and eating out is expected



Source: ABS

22. Real household disposable income is declining and set to fall further



Source: ABS, HSBC estimates

...as higher interest rates, high inflation, and falling housing prices...

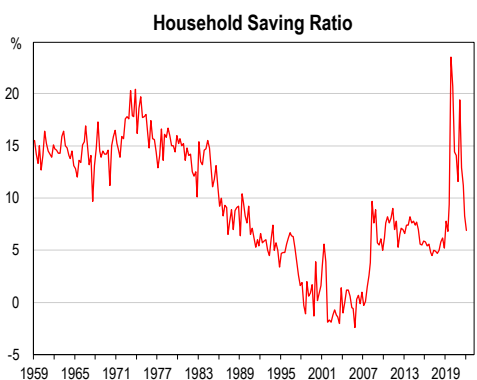
Of course, in principle, the high inflation (described above), sharply higher interest rates, and falling housing prices should weaken consumer spending. In particular, real household disposable income is falling sharply because of rising interest rates, and high inflation, with inflation far exceeding wages growth (that is, real wages are declining) (Chart 22).

When this has happened in the past it has driven a fall in consumer spending. Indeed, our consumption model, suggests that the fall in household incomes and housing prices (as a proxy for wealth) that is expected over the coming year would typically knock around 2.5ppt off household consumption spending.

...weigh on consumers...

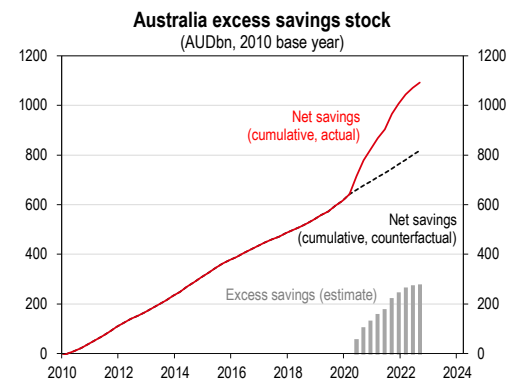
A key factor that has been different this time has been that households accumulated a substantial amount of savings through the pandemic, which they have been recently running down to support consumer spending (Chart 23).

23. The household saving rate was very high, but has now fallen



Source: Refinitiv Datastream

24. Accumulated savings is high, but how much will be spent is a big question



Source: ABS

What makes assessing the outlook for consumer spending particularly difficult is that it is hard to assess when households will stop running down their accumulated household savings. If we compare how much households have been saving each period to the amount that they would typically save prior to the pandemic we can estimate how much households have saved more than normal. Based on our numbers, this sums to AUD280bn, or 25% of annual household consumption (Chart 24).

...and they stop running down pandemic-related excess savings

A key question is whether households will treat this recently accumulated saving like recent income, and spend more of it, or like accumulated wealth, of which households only tend to spend a small proportion.

If we treated all of this household excess savings as wealth, our model suggests that it would marginally impact consumption (<0.1ppts on annual consumption growth over 2023). If it was treated as income, it would boost spending by 12% (3ppts on annual consumption growth over the next year). This wide range highlights the difficulty faced by policymakers when considering appropriate policy settings.

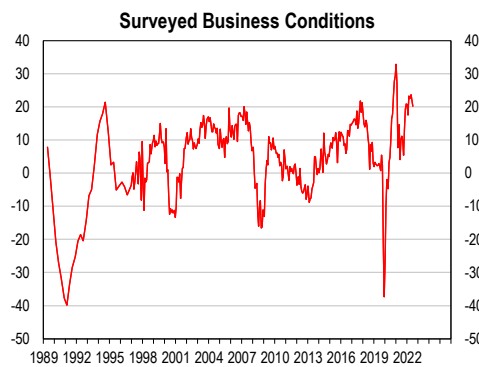
Business sector positive...but becoming less so

Timely indicators suggest that the conditions in the business sector were strong through most of 2022. Business conditions, in particular, rose sharply following Australia’s reopening and changing COVID-19 approach, and have coincided with elevated retail sales (above) (Chart 25). Conditions are strong across most industries other than construction, where profitability remains a challenge.

Business confidence is weakening

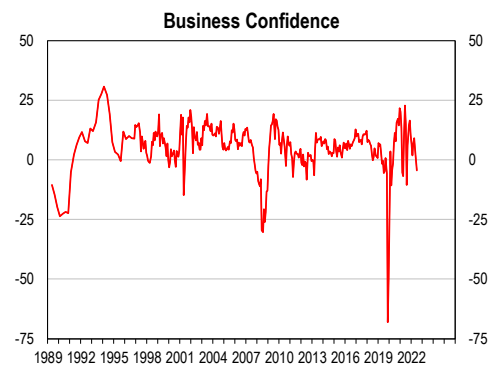
Confidence was also elevated, but has taken a hit following the rise in interest rates (Chart 26). In November, business confidence turned negative for the first time since December 2021. There is now an unusually large gap between conditions and confidence, with the surveys pointing to heightened concerns about the resilience of the economy in the period ahead as inflation and higher rates weigh on consumers and global growth slows.

25. Businesses have been very positive about current conditions...



Source: Refinitiv Datastream

26. ...but are becoming less confident



Source: Refinitiv Datastream

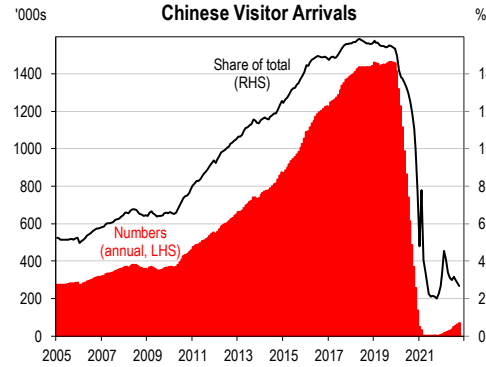
This theme has been corroborated by the Australian Chamber of Commerce and Industry, with the ACCI-Westpac survey of businesses noting that the “burst of demand enjoyed...on the reopening of the economy...has come to an end.” Forward looking indicators, such as new orders, have fallen, and profit expectations have swung deeply negative.

A likely boost from China’s reopening

China’s reopening is set to be positive for Australia

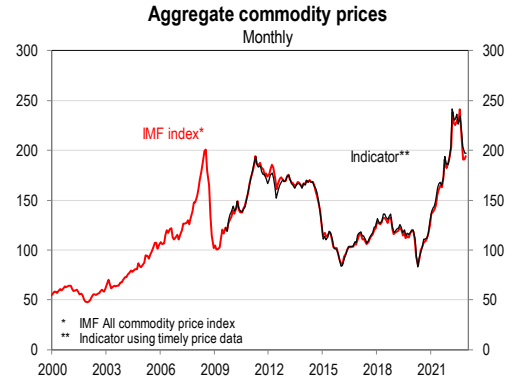
In the first instance, China’s economy is facing marked headwinds, weighing on near-term growth. However, China’s growth story is expected to quickly turn positive, with HSBC’s China team expecting a strong pick-up in GDP from 2Q23 onwards. This should be good for Australia and one of the factors that helps to prevent Australia from having a recession in 2023. A return of Chinese tourists and students should support services exports (Chart 27).

27. China's reopening should see a strong pick-up in visitor arrivals...



Source: ABS

28. ...and support demand for commodities



Source: IMF, Bloomberg, HSBC

Stabilisation in China's housing sector and a ramp-up in infrastructure should drive demand for commodities (Chart 28). China's focus on the energy transition should help Australia's 'green' metals exporters and help drive investment in the hydrogen space. A recent thawing in the previously chilly Australia-China trade relationship is positive for growth.

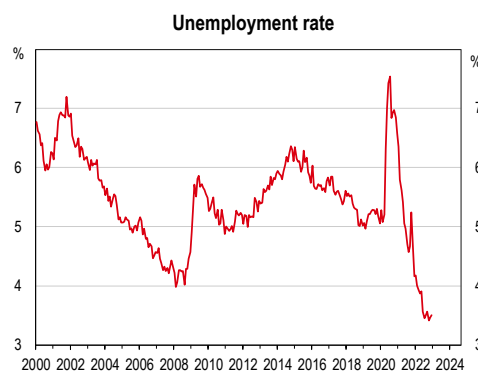
Tight labour market to loosen...

Australia's jobs market had an impressive recovery from the early stages of the pandemic, with the unemployment rate falling to a multi-decade low of 3.5% by December 2022 (Chart 29).

We expect the jobs market to loosen...

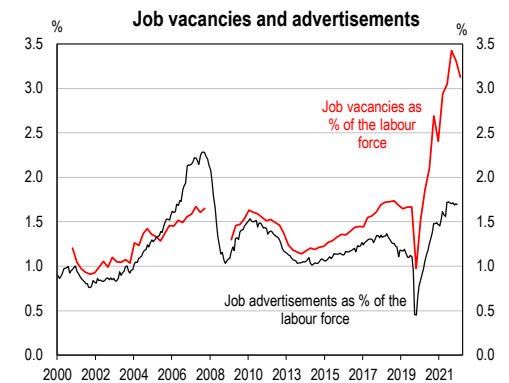
One of the key factors driving a tight labour market has been the inability of supply to meet demand, largely due to Australia's closed international border through much of the pandemic. However, strong economic activity resulted in elevated labour demand from firms. Both advertisements and vacancies rebounded sharply through 2021 and 2022 (Chart 30).

29. The jobs market is tight...



Source: ABS

30. ...but forward indicators are easing



Source: ABS

As the growth momentum in the economy fades, we expect the cooling economy to also feed through to the labour market.

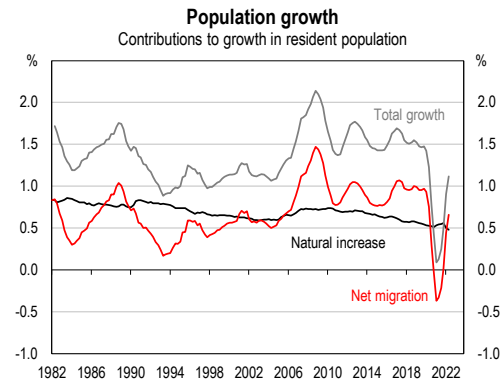
...as a reopened border is set to keep delivering labour supply

Part of the cooling labour market is also likely to come from an improved supply side, now that the international border has reopened (Chart 31). Australia also recorded a record-high labour force participation rate of 66.8% in November 2022.

...particularly as labour supply is boosted by inward migration

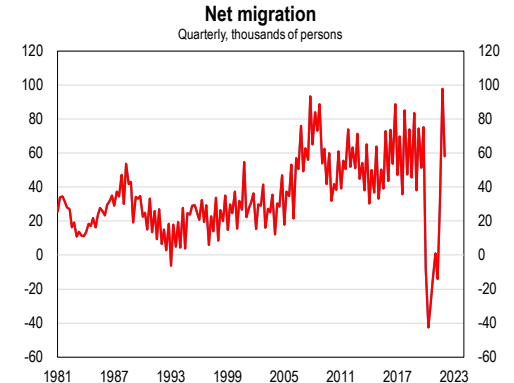
The reopened international border is already seeing a sharp recovery in population growth. Although it has taken time to get going, Australia's reopened border is now seeing a strong rebound in arrivals, migrants, workers, and students. Net inward migration in 1Q22 was the strongest quarter on record (Chart 32). International student visa issuance was near an all-time high in July.

31. A ramp-up in net migration...



Source: ABS

32. ...should loosen the jobs market



Source: ABS

One of the challenges facing the government with the reopened international border was the backlog of visa applications, around 1 million worth, in June 2022. Since then, the government has processed more than 4 million visas, with Working Holiday Makers visas being finalised as quickly as one day, as the government seeks to streamline the return of migrants.

The future of Australia's migration system is a more-complex challenge. In November 2022, the government began its review and a new national strategy, A Migration System for Australia's Future, with an interim report due on 28 February 2023.

The 'narrow pathway'

Although inflation is well above the RBA's 2-3% target band and needs to come down, the central bank appears to have opted for an approach that seeks to deliver disinflation but also prioritises avoiding an economic recession.

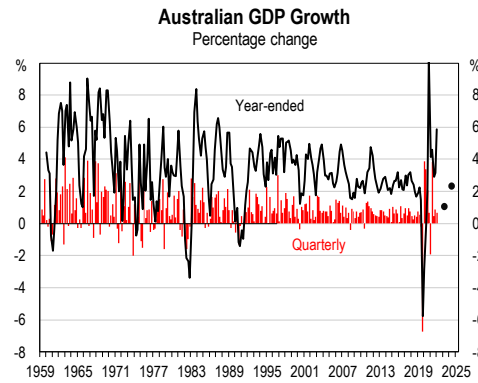
The RBA has a narrow pathway to slowing inflation sufficiently, but not causing a recession

To do this, the RBA was one of the first major central banks to pivot to smaller interest rate hikes, in October 2022, and we expect that the RBA is likely to pause its hiking phase in early 2023.

We expect the impact of the monetary tightening that has already been delivered, as well as the global disinflation that is likely to continue to stem from the global downturn in 2023, to help Australia by delivering a local disinflationary impulse.

The RBA's approach may mean a slower fall in inflation than otherwise (we forecast inflation to be above the RBA's 2-3% target in 2023 and 2024). However, the RBA's flexible inflation targeting regime allows for extended periods of below and above target inflation.

We see GDP growth slowing from 3.6% in 2022 to 1.6% in 2023e and 2024e (Chart 33). We forecast CPI inflation to have averaged 6.5% in 2022 and to slow to 5.1% in 2023e and 3.1% in 2024e. We see the unemployment rate rising from 3.6% in 2022 to 4.5% in 2024e (Chart 34).

33. We expect growth in GDP to slow, but do not see an outright contraction


Note: The dots represent our GDP forecasts for 4Q23 and 4Q24, respectively.
 Source: ABS, HSBC estimates

34. We expect the unemployment rate to rise


Source: ABS, HSBC estimates

A harder landing is a risk

A key risk is that inflation is higher, or more persistent, than we expect and that this requires the RBA to tighten by more and deliver a bigger economic slowdown. A related risk is that this drives a bigger fall in housing prices, which would lead to broader implications for the economy. Another downside risk is that the global economic downturn has larger negative implications for Australia than we are assuming.

Longer-term growth drivers and ‘superpower’ potential

- ◆ With the pandemic largely behind us, policymakers should focus on Australia’s potential growth drivers and how to support them
- ◆ These include population growth, through targeted migration, and the building of physical and social infrastructure to support this...
- ◆ ...and Australia’s vast potential opportunity to be a large producer and exporter of renewables...a renewable energy ‘super-power’

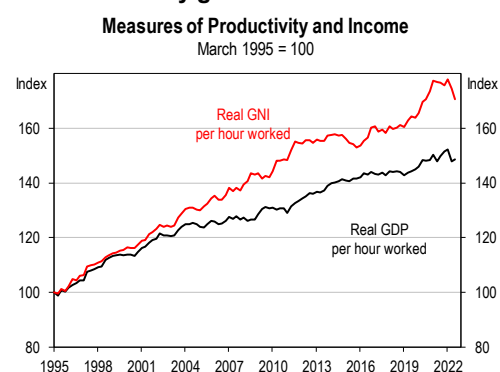
No serious reform for many years...

Even before the pandemic, Australia’s growth was lacklustre. Despite having one of the longest spans of positive GDP growth across the OECD – 28.5 consecutive years – growth was notably weak through the 2010s. As we pointed out at the time, the achievement was low volatility, not strong growth.

Weak productivity growth is a key challenge

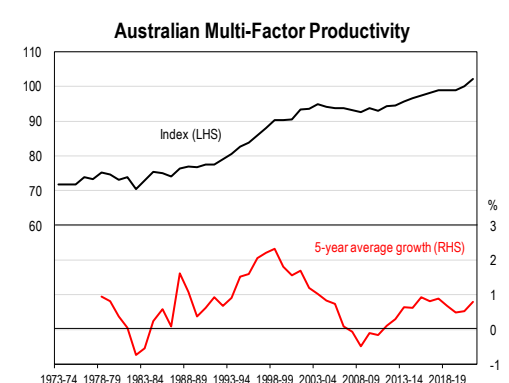
Australia’s key problem has been sluggish productivity growth. This is partly due to a lack of reform, with the latest large major economic reform having been, arguably, the introduction of the GST in 2000 (Charts 35 and 36). In the years prior to the pandemic, we actively and regularly advocated reform to enhance Australia’s productivity growth.

35. Productivity growth has slowed...



Source: ABS, HSBC

36. ...across labour and MFP

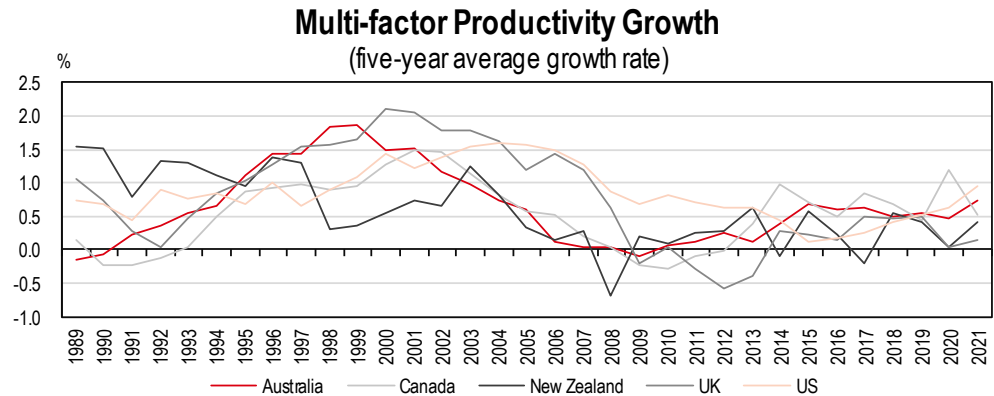


Source: ABS, HSBC

The pandemic shifted the national policy focus to managing its consequences, rather than focusing on medium-term growth and productivity. However, as we pointed out, by 2021 more of the fiscal spending should have been conditional on economic reform that could have supported productivity growth.

Economic reform is needed

37. Australia has an opportunity to lift productivity growth



Source: OECD

...now is the time to change that

We believe the time is right for Australia to begin addressing some of the more structural challenges in the economy. There is a sense of opportunity to do this, following the federal election in 2022 and the reopening after the pandemic.

With the pandemic emergency largely over, economic reform should be in focus

For economic policymakers, while the cyclical issues are typically front-and-centre, Australia's longer-term challenges are opportunities, such as boosting productivity growth, should be one of the ultimate goals.

Policymakers have a key role to play in improving Australia's productivity and competitiveness to best take advantage of the opportunities. Not only would this help support potential output, and Australia's longer-term growth outlook, it would also likely support a lift in real wages growth. It is the only way to lift living standards over the medium term – that is, it is the only way to sustainably make the economic pie bigger.

Much reform is needed

After a burst of big reforms – such as labour and product market deregulation and lowered tariffs – in the 1980s and 1990s, policymakers have largely shied away from reform agenda.

The lack of reform came despite much research into the productivity slowdown and reform opportunities through the same period. For instance, the IMF and OECD have both advocated for a range of reforms through the year, while the Productivity Commission has consistently provided recommendations.²

We see a few key areas for reform, ranging from tax, to competition policy, to trade and migration. Below, we briefly discuss each area. It is also worth noting, the Productivity Commission's five-yearly review is also set to be handed to the Australian government in February 2023 – we expect some of our views below to be aligned with the report.

Tax reform: Encourage labour market participation and investment

Australia's tax system has had little reform in recent years and is becoming increasingly inefficient. The 2015 Intergenerational Report highlighted the benefits tax reform could have, including promoting jobs and growth.

² See the work included in the OECD's Economic Survey of Australia, IMF's Article IV Consultation, or Productivity Commission's Productivity Bulletin/Update prior to the pandemic.

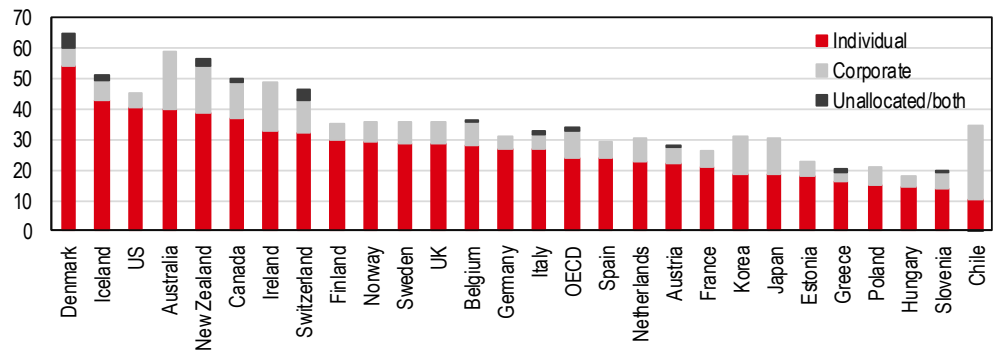
Tax reform ought to be part of the solution

Tax reform should focus on shifting the mix of the tax system away from direct taxes on personal and corporate income, towards indirect taxes that are less likely to distort economic behaviour.

When compared with other economies, Australia’s tax system has a high proportion of its revenue drawn from the personal income and corporate tax systems and a low proportion of its tax revenue from consumption tax, Australia’s Goods and Services Tax (Chart 38). Personal income and corporate taxes are quite inefficient taxes as high income taxes discourage participation in the labour market while high corporate taxes discourage business investment.

38. Australia’s tax system relies heavily on inefficient taxes

Income Tax Share of Total



Note: Data for 2020 year, or latest available.
Source: OECD; HSBC

A key platform for tax reform was the Henry Tax Review in 2008, which made 138 recommendations. Almost none of the recommendations of the Henry Review were implemented, and the few that were, such as a (modified version) of the proposed mining tax, were subsequently repealed. As such, many of the recommendations may still be valid today.

Regulatory: Lower barriers and enable technology

Australia tends to rank quite well among other economies, on indicators such as ease of doing business. However, this should not form complacency, given the constantly changing nature of business and technology. Reducing unnecessary or duplicative regulatory costs, or streamlining zoning and planning regulation, are clear ways to enhance productivity. In particular, regulation that is technology neutral is important. There is also role for more regulation in some areas, such as high-risk scenarios, such as in respect of cyber security.

Competition: General improvements and enhanced consumer choice

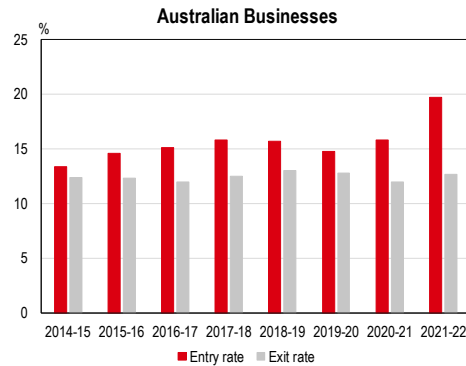
In Australia, standard metrics suggest that business entry and exit rates are quite low and market concentration has been rising (Charts 39 and 40). Competitive pressures often lead businesses to innovate and to invest in improved means of production.

However, as the Productivity Commission noted in its research informing the upcoming 5-year review, a broader review of competition policy is required. For instance, the Australian Competition and Consumer Commission considers that the current merger control regime ‘is skewed towards clearance’, while the regulation of dominant firms, particularly in regard to data and advertising of search-related services and social media, is an emerging issue.

Regulatory reform should continue

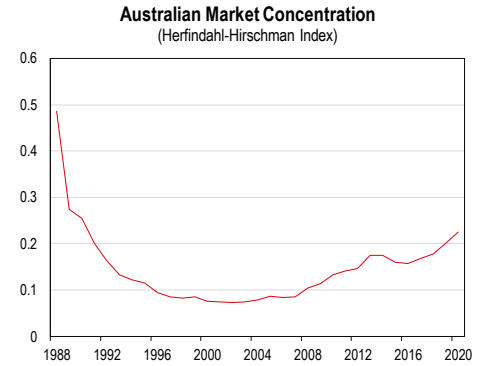
Competition policy reform is needed

39. Australian firms have a low entry and exit rate...



Source: ABS

40. ...and market concentration has been increasing since 2000



Source: WITS

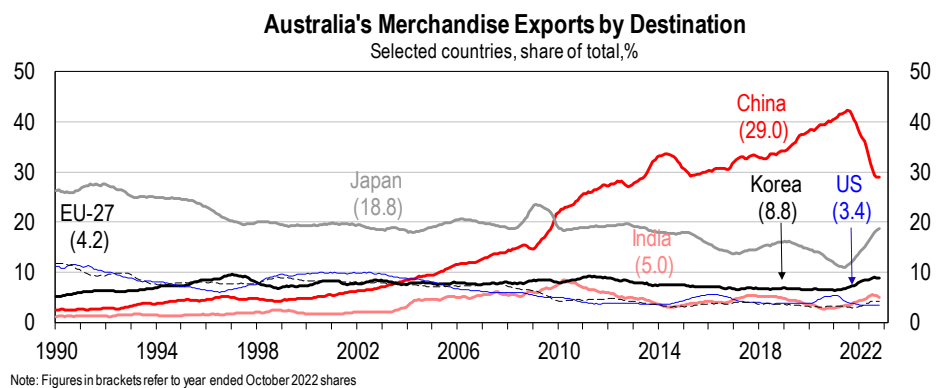
Competition policy could focus on the enhancing the role of the consumer. For instance, continuing to empower consumer choice through information for decision making, or making consumers more aware of the incentive structure around many financial services products.

Trade: Diversifying trade exposure

Since Australia's big trade reforms of the 1980s and 1990s, recent adjustments to trade policy have been more incremental. Australia has joined a range of trade agreements. Australia has also benefitted through the pandemic from a record high trade balance and global demand for key commodity exports.

The main opportunities for trade are continuing to improve access to markets. Australia's trade has become more exposed to China over time, rising from below 10% of exports in the early 2000s, to a peak of over 40% of exports in 2021 (Chart 41).

41. Policymakers could continue to diversify Australia's trade exposure



Source: ABS

However, through 2021, particularly following the rise in geopolitical tensions between Australia and China, and China's targeted sanctions on Australian goods, the share of Australia's exports sent to China has declined sharply. This is an opportunity for Australia to continue to diversify its trade exposure.

A key benefit is likely the lower risk, improved economic outcomes, and lower export volatility for Australia, associated with less exposure to macro-economic shocks or political developments in any single country.

A focus on growth engines could help

The areas for reform, outlined above, are not new. As we noted above, we have been discussing them in one form or another through most of the 2010s.

Reform is hard, but a focus on growth engines could be another approach

Making these reforms has clearly been politically challenging.

Another approach may be for policymakers to focus on growth drivers and for reform to be part of this. With the effects of the pandemic largely in the past, policymakers should lift their gaze and look to make reforms that drive long-term growth.

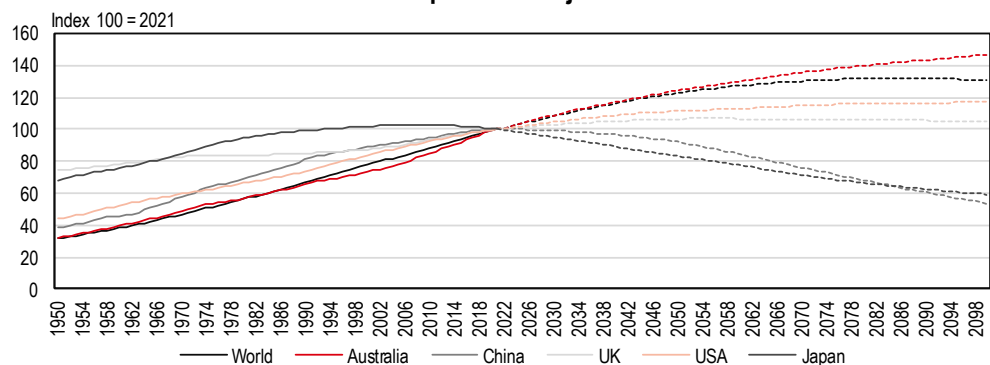
We suggest policymakers focus on three key growth engines – migration, infrastructure, and energy.

A healthy, targeted migration programme

Prior to the pandemic, over half of Australia’s population growth was due to migration and variation in migrant flows drives the cycle in population growth. Looking forward, the UN forecasts Australia to have one of the strongest rates of long-term population growth of any nation (Chart 42).

42. Australia’s population growth is projected to out-pace other economies

UN Population Projections



Source: UN

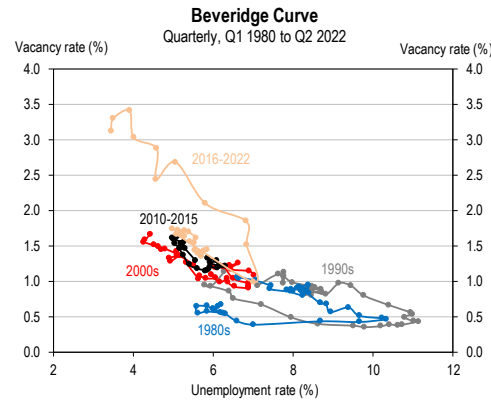
Honing Australia’s migration policies could help support growth

Policymakers could use the pandemic as an opportunity to reassess the way Australia’s international people connections work, particularly given the closed international border through the early stages of the pandemic provided a natural reset for migration.

The key is to get the right skills balance into Australia, improving labour market matching efficiency, which appears to have weakened in recent years, even before the onset of the pandemic (Chart 43).

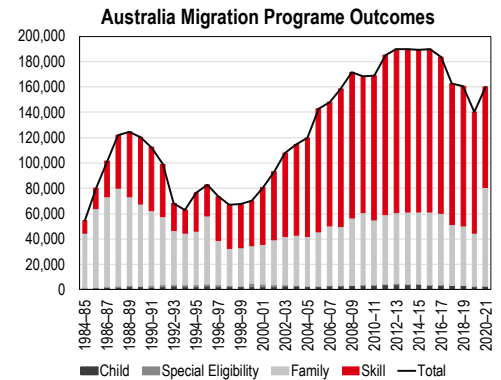
In this sense, it is not just the absolute number of migrants to focus on, but also the composition. This entails the ‘skilled occupations list’ be improved – in its current form, the Productivity Commission (2022) find that “lists of occupational skill shortage tend to be broad, static, costly, and restrictive”. For instance, on flexibility, changing to meet Australia’s needs, and forward looking, given the lags with attracting overseas talent.

43. The skills mismatch may have increased in recent years



Source: ABS, Refinitiv Datastream, HSBC

44. Skilled migration is the main contributor to inwards migration



Source: Department of Home Affairs

A focus on reforms to Australia’s education exports industry could help to make sure the country attracts the right skills to best support a lift in productivity growth. Policy settings on student visas and education quality are important to the medium-term prospects for education exports. One area of opportunity is maintaining the quality of teaching, research and facilities, another would be finding new ways and easier pathways to attract recent graduates, given the international competition to attract skilled migrants.

Better social and physical infrastructure

Improving Australia’s urban infrastructure ought to be a priority. Australia’s major cities are where much of the services activity occurs. As such, improving roads, railways and overall connectivity would help to improve cost competitiveness and efficiency, partly by reducing congestion. Public investment not only contributes directly to aggregate levels of investment, but can also promote private investment.

Improvements could be achieved in the ongoing provision of public infrastructure, both in the project selection stage as well as proficient procurement processes (Productivity Commission, 2014). There are a number of opportunities to promote innovation and efficiency in government procurement.

Australia already has a relatively-large pipeline of infrastructure investment, which means that further infrastructure investment needs to take account of the current capacity constraints and plans to ensure the best utilisation of available resources. New South Wales has the strongest pipeline, from the WestConnex road project, Sydney Metro, and improvements to infrastructure in Western Sydney. Notably, a second airport should allow more air travel capacity between Australia and the rest of the world, particularly China.

Improvements to infrastructure would support productivity growth...

45. Australia's major infrastructure projects

	Cost	State/Territory	Delivery Date (est.)	Type
WestConnex	AUD16bn	NSW	2023	Road
Sydney Metro	AUD12bn	NSW	2024	Rail
Melbourne Metro Tunnel	AUD11bn	VIC	2024	Rail
Melbourne to Brisbane Inland Rail	AUD9.3bn	VIC/NSW/QLD	2020+	Rail
Bruce Highway Upgrade Program	AUD8.5bn	QLD	2023+	Roads
West Gate Tunnel	AUD6.8bn	VIC	2024	Roads
Cross River Rail	AUD5.4bn	QLD	2024	Rail
Western Sydney Airport	AUD5.3bn	NSW	2026	Airport
Melbourne Airport Rail Link	AUD5bn	VIC	2029	Rail
Geelong Fast Rail	AUD4bn	VIC	2029	Rail
Western Sydney Infrastructure Plan	AUD2.9bn	NSW	2017+	Mixed
M80 Ring Road Upgrade	AUD2.25bn	VIC	2023	Roads
METRONET	AUD1.84bn	WA	2023+	Mixed
Northern Australia Roads and Beef Roads Programs	AUD1.1bn	NT/QLD/WA	2030-31	Roads
Midland Highway Upgrade	AUD0.57bn	TAS	2024+	Roads

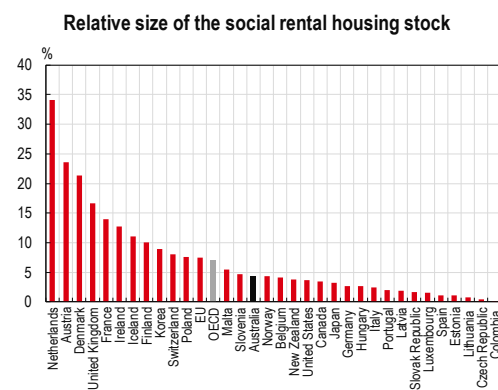
Source: Department of Infrastructure, Transport, Regional Development, Communication and the Arts

...while the importance of housing, water, and digital is clear

Housing, water security, and digital connectivity are also likely to play a key role in Australia's future infrastructure requirements. On housing, more medium-density residential areas alongside infrastructure investment could be supported through revising planning codes at a local and State/Territory level. Australia's social housing stock has also lagged behind the OECD average, accounting for only 4% of Australia's housing stock (OECD, 2020), which provides a clear opportunity for Australia to boost social housing (Chart 46).

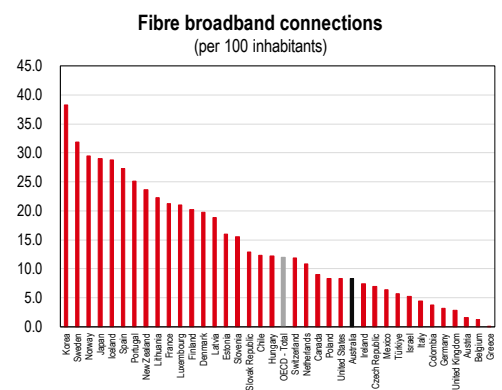
On water security, this is a global challenge that Australia can better prepare for. The adoption of a national water security strategy would be a key first step. Here, the future coordination of water management, particularly between the federal, state, and local level, could be given further guidance, and would help with governance and measuring risks. Ensuring Australia's water supply infrastructure is future-proofed is a crucial consideration for Australia's long-term economic performance.

46. Social housing investment has lagged other economies



Source: OECD

47. High-speed, digital connectivity is likely to be important



Source: OECD

On digital connectivity, there are clear improvements to be made to Australia's National Broadband Network (NBN). Much of the current system relies on some now-outdated technology, such as copper, which left Australia lagging its international peers with slow and poor internet coverage (OECD, 2019). Improving the coverage, quality and reliability of telecommunications will be important, alongside such policies as benchmarks for data speeds (Chart 47).

Climate and energy – the ‘superpower’ opportunity

Australia has a ‘superpower’ opportunity...

Another potential growth engine for Australia, is to accelerate the energy transition and take advantage of Australia’s geography, which favours large-scale production of renewable energy, with lots of land, sunlight, wind and coastal areas, and the globally shifting policy environment.

The economics of renewables have dramatically shifted in recent years due to the sharp fall in the cost of renewables, particularly due to the plummeting prices of solar panels, wind technologies, and batteries for energy storage.

Local academic economist, Ross Garnaut, refers to the energy transition as Australia’s ‘superpower’ opportunity – and we agree.³ He suggests that Australia should have a stronger comparative advantage in energy-intensive minerals and agricultural processing in the zero-emissions world than a fossil fuel driven one.

...supported by vast natural resources

This is helped along by geography. For instance, on a per person basis Australia has more natural resources for the production of renewable energy than any other developed economy. Australia also has a significant opportunity in capturing and sequestering carbon in soils, pastures, woodlands, forests, and plantations.

A difficult starting point...

However, Australia has a challenging starting point, being a large exporter of fossil fuels, with energy production locally still quite carbon-intensive. As such, the scale of investment required for Australia to meet its emissions targets is large. For instance, the Minister for Climate Change and Energy, Chris Bowen, outlined estimates last year, noting:

“ ...we will need to install about 40 seven-megawatt turbines every month [and] more than 22,000 500-watt (solar) panels every day and over 60 million by 2030.

The Hon Chris Bowen MP, 24 Sept 2022

...means the investment equivalent of another mining boom may be needed

Estimates from Deloitte suggest that at least AUD420bn in new investment is required for net-zero by 2050.⁴ This is of a similar scale to the massive resources sector ‘super-cycle,’ driven investment boom of the early 2000s, albeit over a longer horizon.

We outline some considerations for Australia’s ‘superpower’ opportunity below.

Changing global backdrop

The global policy environment is also shifting rapidly (see, for instance, *The climate in 2023: Back to the climate reality*, 4 January 2023).

The ‘energy crunch’ and Russia/Ukraine war has seen the energy transition in focus

A significant recent move has been the European parliament passing legislation that puts tariffs on imported products based on the how much carbon dioxide is used in their production. This means that from 2026, importers of products including iron, steel, cement, fertilisers, aluminium and electricity, will have to buy carbon credits to cover the value of the CO₂ emissions they embody.

Global policy changes could impact Australia’s exports...

Clearly this could create short-run costs for Australia, given its role as a large exporter of these materials. Australia is the world’s largest exporter of coking coal and iron ore, and the second largest exporter of thermal coal and liquefied natural gas.

³ Garnaut (2019) ‘Superpower: Australia’s low carbon opportunity’, Latrobe University Press and Garnaut (2022) ‘the Superpower Transformation: Making Australia’s zero-carbon future’, Latrobe University Press.

⁴ See All systems go: Transforming Australia’s economy to grow (Deloitte, July 2022).

...meaning climate considerations are a must to future-proof exports

Domestically, the federal policy landscape has quickly shifted...

...with a range of ongoing reviews and legislation changes in the works...

However, with the right investments, Australia could be a significant long-term beneficiary of the global energy transition.

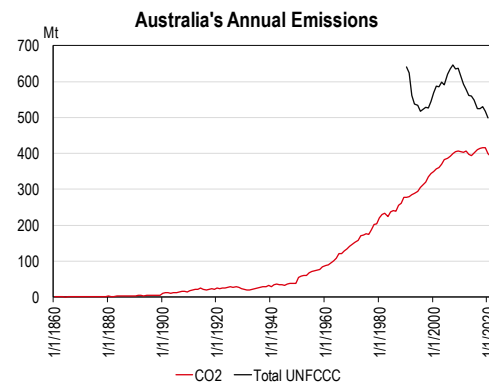
A key near-term opportunity for Australia is to continue to supply energy to the global market, through both coal and LNG. Global energy demand has risen, particularly with hot summers and cold winters in the northern hemisphere over the last year, leading to an energy 'crunch'.

Longer term, there is a case for directly exporting renewable energy, or stored in the form of hydrogen or ammonia, to meet global energy demand. A faster local transition to renewables would put Australia's exports at an advantage, for instance, if the natural resources required less emissions to extract than elsewhere. We discuss this more below.

The political will has increased recently

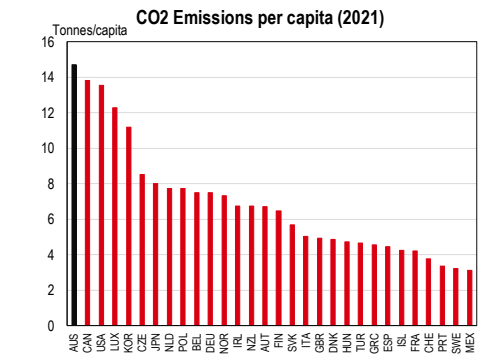
As we have pointed out before, Australia has a vast opportunity in part because of its poor starting point in the climate policy front. Although Australia's carbon emissions have levelled out in recent years, they are high by global standards, and Australia is one of the high carbon emitter's globally on a per capita basis (Chart 48 and Chart 49).

48. Australia's carbon emissions have levelled out...



Source: Our World in Data, HSBC

49. ...but are high by international standards on a per capita basis



Source: OECD, HSBC

Australian climate policy has shifted rapidly recently, particularly following the May 2022 election and change of government. The federal Labor government recently passed its Climate Change Bill 2022. This has locked-in Australia's commitment to achieve a reduction in emissions of 43% by 2030e based on 2005 levels, and net zero by 2050e. This new legislation should provide support for businesses to continue investing in renewables, and is likely to help collaboration to overcome challenges with renewables that businesses alone cannot solve, such as re-designing the energy grid and other parts of the energy system

The government is also consulting on a proposed approach to reforming the Safeguard Mechanism. The Safeguard Mechanism has been in place since 2016, and limits the amount of greenhouse gases that Australia's largest industrial facilities – such as smelters, coal mines, gas processing plants and steelmakers – can emit. Each facility has a limit called a 'baseline' and needs to prove that its net emissions for each year are below that baseline.

The proposal effectively sets a carbon price of AUD75 per tonne of CO₂ in 2023-24e, which will then increase with CPI plus 2%. It also includes flexible compliance options, such as carbon credits and trading, which still needs legislated, domestic, and international offsets, and banking. The government is also proposing to strengthen its enforcement measures, such as civil penalties linked to quantity of emissions, and anti-avoidance measures.

...including the recent review of Australia's carbon market

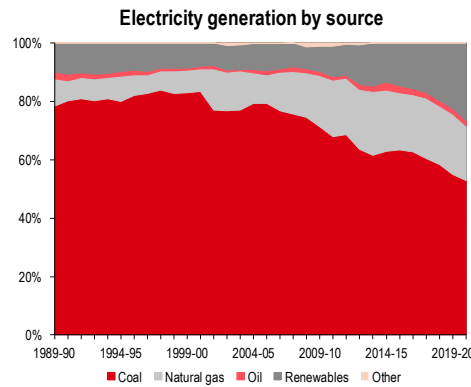
Australia has a carbon market, which should help businesses reduce emissions at the lowest cost, although after many years without reform, the integrity of the carbon market was being called into question. The recent 'Chubb Review' set out 16 recommendations to improve Australia's carbon market.

Domestic acceleration of renewables

The use of renewables has grown, domestically...

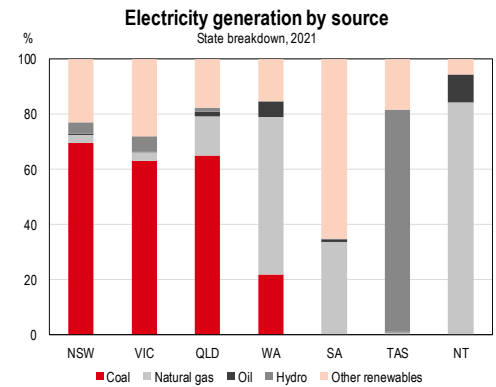
Although it is still the case that, as of 2019, 80.3% of Australia's electricity was produced using fossil fuels (58.5% using coal from 24 coal-fired power stations), it is also the case that the majority of all new electricity generation capacity since 2018 has been solar or wind (Charts 50 and 51). Rooftop solar is the largest contributor to the growth in renewables, and 2021 was the fifth record-breaking year in a row for rooftop solar, helped along by the government's Small-scale Renewable Energy Scheme (SRES).

50. Fossil fuels still account for a larger share of electricity generation



Source: Department of Industry, Science, Energy and Resources AEMO

51. The use of fossil fuels varies considerably across states

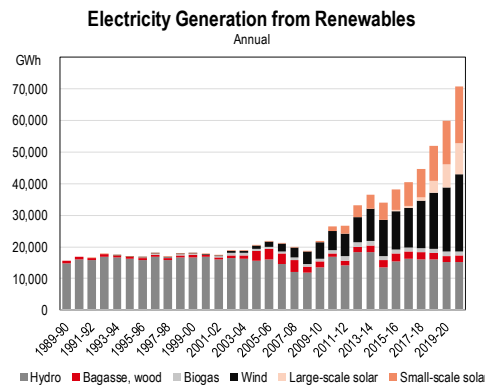


Source: Department of Industry, Science, Energy and Resources AEMO

...notably supported by a strong uptake in small-scale rooftop solar

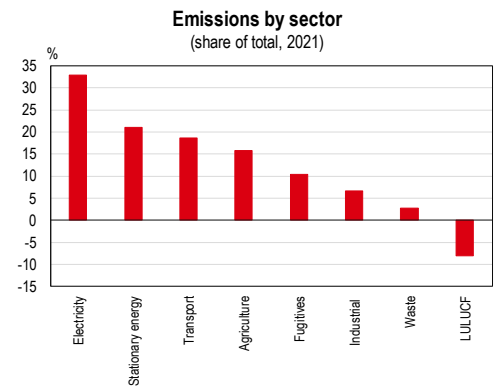
Around 20% of total electricity generation is now done by renewables. Rooftop solar is the largest contributor to renewables growth, followed by wind (Chart 52). As a recent essay by Australia's former Chief Scientist, Alan Finkel, points out, around 30% of suitable dwellings have solar panels in Australia, which is the highest in the world (Finkel 2021).

52. Renewables use is rising, driven by wind and small-scale solar



Source: Department of Industry, Science, Energy and Resources

53. Energy offers the largest potential to reduce emissions



Note: LULUCF = land use, land-use change and forestry (LULUCF) activities. Source: Department of Industry, Science, Energy and Resources

Australia has the potential to export renewables to meet global demand...

The export opportunities

There are significant potential economic opportunities for Australia in exporting renewable energy directly.

Australia has a rich diversity of renewable energy resources (wind, solar, geothermal, hydro, wave, tidal, and bioenergy). Except for hydro where the available resource is already mostly developed and wind energy where use is growing strongly, these resources are largely undeveloped and could contribute significantly more to Australia's future energy supply.

...although this is still potential...

The Australian continent has the highest solar radiation per square metre of any continent and consequently some of the best solar energy resource in the world. Australia receives an average of 58 million PJ of solar radiation per year, approximately 10 000 times larger than its total energy consumption. Australia is also well positioned for wind energy.

The windiest areas are typically coastal regions of continents at mid-to high latitudes, this includes the coastal regions of western and southern Australia. Australia's wind energy resources are located mainly in the southern parts of the continent (which lie in the path of the westerly wind flow known as the 'roaring 40s'). In contrast, much of Australia's economically feasible hydro energy resource has already been harnessed.

...but shows promise, for instance, in the recent export of hydrogen

Hydrogen is also an area where Australia is making progress, and has already developed an export market.

Since the release of Australia's National Hydrogen Strategy in 2019 there is now an AUD127bn pipeline of announced hydrogen investment in Australia (Department of Climate Change, Energy, the Environment and Water, 2022).⁵

In 2022, Australia was also the first in the world to extract, liquefy and transport liquid hydrogen by sea to an international market. The AUD500m pilot project is set to continue research and development for the technical and operational requirements of a commercial-scale project, over the next two years. Australia is investing more than AUD1.3bn to speed up the development of its hydrogen industry, with plans for the Hydrogen Energy Supply Chain to produce an estimated 225,000 tonnes of carbon-neutral liquefied hydrogen. This would help reduce global emissions by around 1.8m tonnes per year. This is the equivalent of emissions from 350,000 petrol cars (Australian Trade and Investment Commission, 2022).

An improved use of renewables in current exports would also help

Another opportunity could come from the energy embodied in processed materials, such as steel and aluminium. Keep in mind, 7-9% of global emissions come from converting iron ore into steel, renewable energy resources are located near the metal mines, and the process of converting materials is highly electricity-intensive. Increasing the share of renewables as an input into Australia's materials exports could indirectly support the global energy transition.

⁵ Note this includes over 15 projects that have passed final investment decision (FID) and over 80 announced renewable hydrogen projects (see HyResource database, CSIRO, 2022).

Disclosure appendix

The following analyst(s), who is(are) primarily responsible for this document, certifies(y) that the opinion(s), views or forecasts expressed herein accurately reflect their personal view(s) and that no part of their compensation was, is or will be directly or indirectly related to the specific recommendation(s) or views contained in this research report: Paul Bloxham and Jamie Culling

This document has been issued by the Research Department of HSBC.

HSBC and its affiliates will from time to time sell to and buy from customers the securities/instruments, both equity and debt (including derivatives) of companies covered in HSBC Research on a principal or agency basis or act as a market maker or liquidity provider in the securities/instruments mentioned in this report.

Analysts, economists, and strategists are paid in part by reference to the profitability of HSBC which includes investment banking, sales & trading, and principal trading revenues.

Whether, or in what time frame, an update of this analysis will be published is not determined in advance.

For disclosures in respect of any company mentioned in this report, please see the most recently published report on that company available at www.hsbcnet.com/research.

Additional disclosures

- 1 This report is dated as at 20 January 2023.
- 2 All market data included in this report are dated as at close 19 January 2023, unless a different date and/or a specific time of day is indicated in the report.
- 3 HSBC has procedures in place to identify and manage any potential conflicts of interest that arise in connection with its Research business. HSBC's analysts and its other staff who are involved in the preparation and dissemination of Research operate and have a management reporting line independent of HSBC's Investment Banking business. Information Barrier procedures are in place between the Investment Banking, Principal Trading, and Research businesses to ensure that any confidential and/or price sensitive information is handled in an appropriate manner.
- 4 You are not permitted to use, for reference, any data in this document for the purpose of (i) determining the interest payable, or other sums due, under loan agreements or under other financial contracts or instruments, (ii) determining the price at which a financial instrument may be bought or sold or traded or redeemed, or the value of a financial instrument, and/or (iii) measuring the performance of a financial instrument or of an investment fund.

Disclaimer

Issuer of report
HSBC Bank Australia Limited

This document has been issued by HSBC Bank Australia Limited, which has based this document on information obtained from sources it believes to be reliable but which it has not independently verified. Neither HSBC Bank Australia Limited nor any member of its group companies ("HSBC") make any guarantee, representation or warranty nor accept any responsibility or liability as to the accuracy or completeness of this document and is not responsible for errors of transmission of factual or analytical data, nor is HSBC liable for damages arising out of any person's reliance on this information. The information and opinions contained within the report are based upon publicly available information at the time of publication, represent the present judgment of HSBC and are subject to change without notice.

This document is not and should not be construed as an offer to sell or solicitation of an offer to purchase or subscribe for any investment or other investment products mentioned in it and/or to participate in any trading strategy. It does not constitute a prospectus or other offering document. Information in this document is general and should not be construed as personal advice, given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on it, consider the appropriateness of the information, having regard to their objectives, financial situation and needs. If necessary, seek professional investment and tax advice.

The decision and responsibility on whether or not to purchase, subscribe or sell (as applicable) must be taken by the investor. In no event will any member of the HSBC group be liable to the recipient for any direct or indirect or any other damages of any kind arising from or in connection with reliance on any information and materials herein.

Past performance is not necessarily a guide to future performance. The value of any investment or income may go down as well as up and you may not get back the full amount invested. Where an investment is denominated in a currency other than the local currency of the recipient of the research report, changes in the exchange rates may have an adverse effect on the value, price or income of that investment. In case of investments for which there is no recognised market it may be difficult for investors to sell their investments or to obtain reliable information about its value or the extent of the risk to which it is exposed. Some of the statements contained in this document may be considered forward looking statements which provide current expectations or forecasts of future events. Such forward looking statements are not guarantees of future performance or events and involve risks and uncertainties. Actual results may differ materially from those described in such forward-looking statements as a result of various factors.

This document is for information purposes only and may not be redistributed or passed on, directly or indirectly, to any other person, in whole or in part, for any purpose. The distribution of this document in other jurisdictions may be restricted by law, and persons into whose possession this document comes should inform themselves about, and observe, any such restrictions. By accepting this report, you agree to be bound by the foregoing instructions. If this report is received by a customer of an affiliate of HSBC, its provision to the recipient is subject to the terms of business in place between the recipient and such affiliate. The document is intended to be distributed in its entirety. Unless governing law permits otherwise, you must contact a HSBC Group member in your home jurisdiction if you wish to use HSBC Group services in effecting a transaction in any investment mentioned in this document.

Certain investment products mentioned in this document may not be eligible for sale in some states or countries, and they may not be suitable for all types of investors. Investors should consult with their HSBC representative regarding the suitability of the investment products mentioned in this document.

HSBC and/or its officers, directors and employees may have positions in any securities in companies mentioned in this document. HSBC may act as market maker or may have assumed an underwriting commitment in the securities of companies discussed in this document (or in related investments), may sell or buy securities and may also perform or seek to perform investment banking or underwriting services for or relating to those companies and may also be represented on the supervisory board or any other committee of those companies.

From time to time research analysts conduct site visits of covered issuers. HSBC policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

In Australia, this publication has been distributed by The Hongkong and Shanghai Banking Corporation Limited (ABN 65 117 925 970, AFSL 301737) for the general information of its "wholesale" customers (as defined in the Corporations Act 2001). Where distributed to retail customers, this research is distributed by HSBC Bank Australia Limited (ABN 48 006 434 162 AFSL No. 232595).

© Copyright 2023, HSBC Bank Australia Limited, ALL RIGHTS RESERVED. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, on any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of insert issuing entity name. MCI (P) 017/01/2023, MCI (P) 027/10/2022

[1208714]