4 December 2024

AUSTRALIAN GDP Q3 BULLETIN

Australian national accounts, September quarter 2024.

Key points

- The Australian economy continued to tread water in the September quarter. At 0.3%qtr, growth was below our expectations, with household consumption noticeably weaker. Increased spending by governments continues to drive growth in domestic demand.
- New private demand again showed no growth in the quarter. Consumer spending was flat in the quarter, despite a growing population and the 0.8% lift in disposable incomes from the Stage 3 tax cuts. Business investment was also a drag on output. A pick-up in dwelling investment was about the only bright spot for private sector demand.
- A little more positively, domestic inflation pressures across the economy continue to ease. Earnings per hour are now running well below their pre pandemic average where underlying inflation was below the RBA's target.

GDP: September quarter 2024

	% qtr		% yr	
	Jun	Sep	Jun	Sep
Household consumption	-0.3	0.0	0.4	0.4
Dwelling investment	0.7	1.2	-1.8	-0.5
Business investment*	0.2	-0.2	3.0	1.5
Private final demand*	0.0	0.1	0.9	0.7
Public spending*	0.8	2.2	3.3	4.1
Domestic demand	0.2	0.7	1.6	1.7
Stocks – private non–farm #	-0.4	0.0	0.5	-0.3
– other #	0.1	0.0	0.2	0.6
GNE	-0.1	0.2	2.3	1.5
Exports	0.6	0.2	-0.1	-1.1
Imports	0.2	-0.3	5.8	2.7
Net exports #	0.1	0.1	-1.4	-0.9
Statistical discrepancy #	0.1	0.0	0.1	0.3
GDP, real	0.2	0.3	1.0	0.8
GDP, nominal	0.2	0.4	4.4	3.5
GDP deflator	0.0	0.1	3.4	2.7
Household deflator	1.0	0.7	4.4	3.6
Earnings per worker (non–farm)	0.7	0.1	4.0	2.3
Real household disp income	-0.1	1.5	1.1	3.1

*adjusted for asset sales. # ppt contribution to growth
Source: ABS, Westpac Economics.

Q3 GDP: 0.3%qtr, 0.8%yr
Q3 New private demand: 0.1%qtr, 0.7%yr

Broad based private sector weakness continues

Westpac Economics
Luci Ellis, Pat Bustamante, Matthew Hassan, Justin Smirk, Mantas Vanagas, Ryan Wells, Jameson Coombs, Neha Sharma

The overall picture for the Australian economy is soft, with very little momentum on the private side. The public sector remains the primary locus of growth. New public demand expanded by 2.2% in the September quarter (4.1%yr) and now represents 27½% of total GDP, a new record. Both public consumption and investment expanded solidly. Some of the strength in public consumption was re-allocated private consumption, given the way electricity and other subsidies are treated in the accounts. Growth in spending on some other major programs such as the NDIS was reportedly subdued.

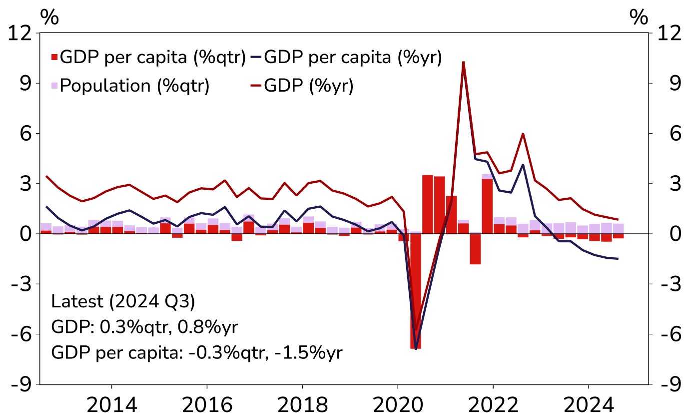
Meanwhile private final demand was essentially unchanged in the quarter. The expected modest recovery in private sector demand did not eventuate. The Australian household sector continues to be squeezed, with disposable income growth remaining surprisingly weak given the tax cuts in the quarter. This may go some way towards explaining the previously reported weak spending response to the tax cuts.

Household consumption was flat in the quarter, in line with the RBA's stated expectation but weaker than our read of the partial data. While spending on goods was in line with recent indicators, services spending (excluding electricity) was weaker than we expected. The increase in household saving in the quarter almost completely offset the extra disposable income resulting from the Stage 3 tax cut. Also noteworthy was that the recent history for consumption was revised down; this, and the related upward revision to household saving, was flagged in the annual national accounts.

Business investment also unexpectedly dragged on overall growth. Expansions in machinery & equipment as well as software and other intellectual property were offset by a decline in non-residential construction activity. A pick-up in dwelling investment was about the only bright spot in the private sector side of the expenditure account, suggesting that backlogs are being worked down.

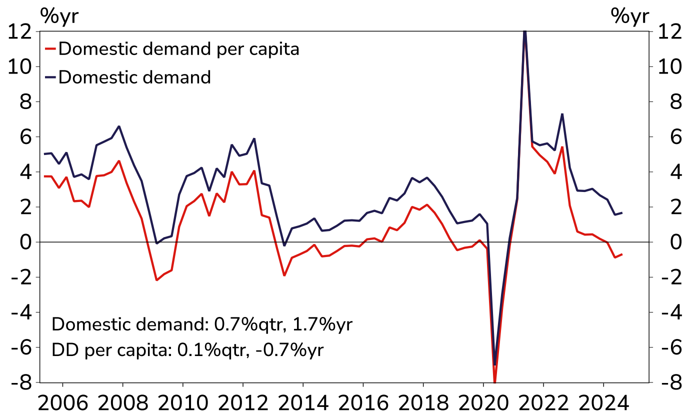
With aggregate demand growth well below trend for an extended period, any reasonable estimate of the output gap will have narrowed further. The further slowing in the various measures of price and cost growth in the accounts arguably points to the output gap having closed. While the overall productivity outcome in the quarter disappointed, our assessment is that this is explained by the shift to non-market industries and the decline in mining output, and that reasonable trend growth in supply capacity is being achieved.

GDP: weak growth, per capita declines



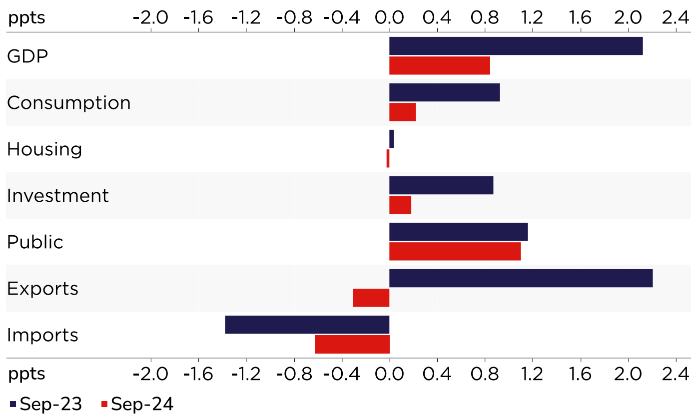
Source: ABS, Macrobond, Westpac Economics

Domestic demand: public sector drives gains



Source: ABS, Macrobond, Westpac Economics

GDP: year-end contributions



Sources: ABS, Macrobond, Westpac Economics

Looking forward, an issue arises when electricity and other subsidies unwind. Some current public consumption will be reallocated back to private consumption. What will then remain in the growth rate for public demand will be increased spending on other programs; as noted above, this has been more modest lately, though multi-year infrastructure projects will continue apace. The subdued pace of aggregate demand growth currently seen is therefore the best guide to near-term momentum.

Currently, employment growth in the non-market sector (health & social assistance, education and public administration & defence) is holding up overall demand for labour and keeping the labour market tighter than it would otherwise be. If the pace of spending growth in this part of the economy remains where it is, employment growth in these sectors is likely to slow and no longer make an outsized contribution to overall employment growth. It is not clear that other sectors would bounce back quickly enough to fill the gap. Spare capacity in the labour market could accumulate quickly.

GDP: the expenditure estimate

The big surprise was the lacklustre performance in private demand. New private demand has effectively stalled, remaining flat over two consecutive quarters. What makes this particularly concerning is that population has grown by a solid 1.3% (or by around 350k persons) over the past two quarters. New public demand on the other hand continues to power ahead, up 2.2%qtr to be 4.1% higher in annual terms (and 3.1% higher over the past two quarters).

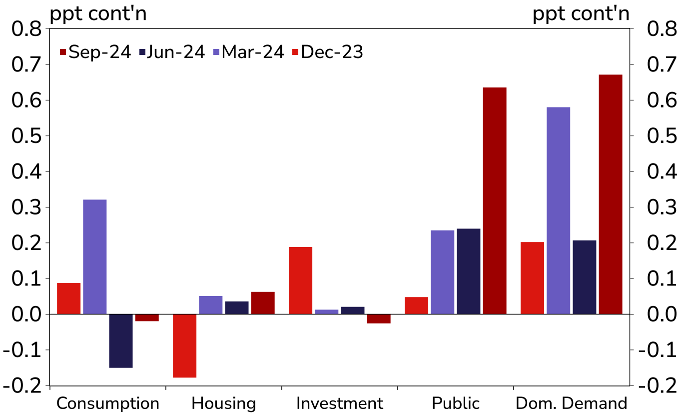
Household consumption was unchanged from the June quarter and grew only 0.4%yr in annual terms. This was weaker than the RBA's forecast which have household consumption up 1.0% in annual terms by the end of 2024. Actual consumption is estimated to have been around 0.4ppts higher in the quarter, as governments used rebates and other cost of living measures to pick up the tab for certain consumption items such as electricity, public transport, cheaper car rego etc. The benefits of costs of living measures, including the stage 3 tax cuts, were largely saved, with the household savings ratio increasing to 3.2% in the September quarter.

New business investment declined 0.2%qtr in the September quarter to be 1.5% higher in annual terms. Non-dwelling construction unexpectedly fell in the quarter, in part due to larger transfers to the public sector. Machinery and equipment increased 0.6%qtr in Q3 but was 0.7% lower in annual terms. CAPEX data showed the industries at the forefront of the underlying structural changes impacting the economy (such as investment in clean energy and renewables) continue to invest, which is being offset by businesses at the coalface of the consumer led slowdown.

The one bright spot was investment in dwellings which stabilised to grow 1.2%qtr but remained 0.5% lower than a year ago. The pickup in Q3 was driven by the construction of new dwellings (1.7%qtr) and alteration and additions (+0.4%qtr).

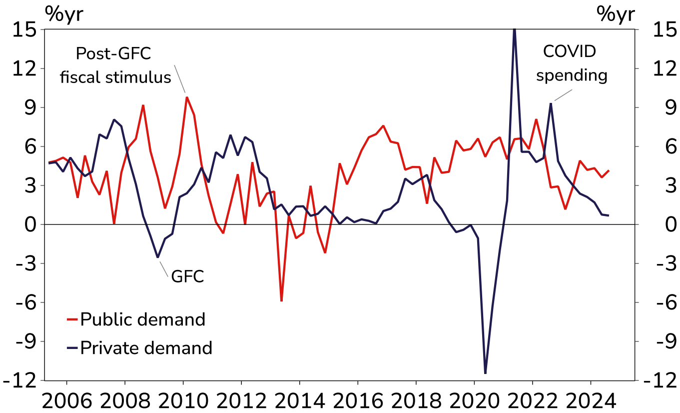
In stark contrast, total new spending by governments continues to grow strongly and is now at a record share of the economy (27.5% of GDP from the previous peak of 26.9% of GDP last quarter). New public investment increased 6.1%qtr, off the back

Domestic demand: year-end contributions



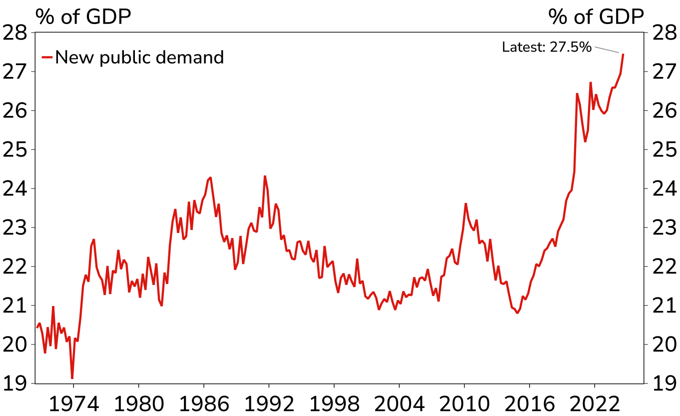
Source: ABS, Macrobond, Westpac Economics

Public demand versus private demand



Source: ABS, Macrobond, Westpac Economics

New public demand: fresh record high



Source: ABS, Macrobond, Westpac Economics

of a spike in defence-related spending and increased investment in infrastructure. Public consumption continued to grow at a solid pace (1.4%qtr and 4.7%yr), as cost-of-living measures announced in recent budgets kicked in from 1 July.

Net exports and inventories were as expected. Net exports contributed 0.1ppts to growth in GDP in the September quarter, on the back of a positive contribution from the net goods balance. Inventories detracted 0.3 ppts from growth in the September quarter, with the private sector running down its stock of inventories for a second consecutive quarter.

In year ended terms, the economy grew 0.8% in the September quarter – the slowest annual rate since the early 1990s recession outside of the pandemic. This was considerably softer than Westpac's forecast of 1.2%yr and the 1.1%yr increase expected by the market.

Household sector

This was another difficult quarter for Australian households, despite welcome relief from tax cuts. Incomes posted a relatively subdued gain. While there was a clear tax boost, most of this looks to have been saved with consumer spending only just keeping up with inflation in the quarter, holding dead flat in real terms. As flagged, revisions have also changed the profile for spending and saving, with annual growth in spending notably lower (following upward revisions to 2023) and average savings rates higher over the last four quarters. 'Net-net' the household picture looks weaker although the figures imply that somewhat more remains of the reserves accumulated during the COVID period.

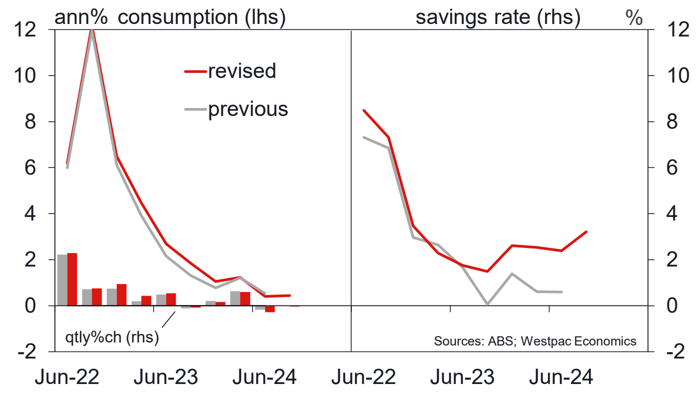
Household consumption was flat in the September quarter, undershooting our expectation of a 0.2% gain. Revisions were also material, annual growth slowing to just 0.4%yr.

Some of the September quarter result is due to lower 'out-of-pocket' costs for households following increased government subsidies for electricity (and, to a lesser extent, transport and rent). The decline in consumer spending on electricity took 0.4ppts off total spending in the quarter. Compared to our expectations, the main downside surprises were around retail segments and services spend, partially offset by a slightly better (but still soft) result for spending on vehicles.

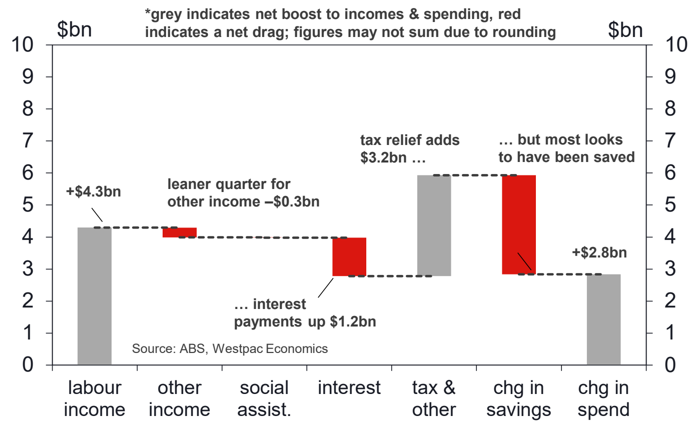
As noted the biggest effective drag was electricity, with the combined spend on utilities down 16.7%qtr, comparable to the decline seen in the September quarter last year. Total utilities spend is 20% below its June 2022 level. Aside from this, there were small drags from lower spending on vehicles (–0.9%qtr, –7.8%yr), alcohol & tobacco (–1.1%qtr, –9.6%yr), transport (–0.4%qtr, +0.4%yr – some of which will reflect increased public transport subsidies in Qld). Spending on food, household goods and cafes & restaurants also dipped slightly (–0.1%qtr, –0.2%yr on a combined basis).

Household incomes had a mixed quarter. On the positive side, wages and salaries posted a 1.3%qtr gain that was in line with expectations, annual growth firming to 5.3%yr. Average non farm earnings per employee rose just 0.1%qtr, 2.3%yr, lagging

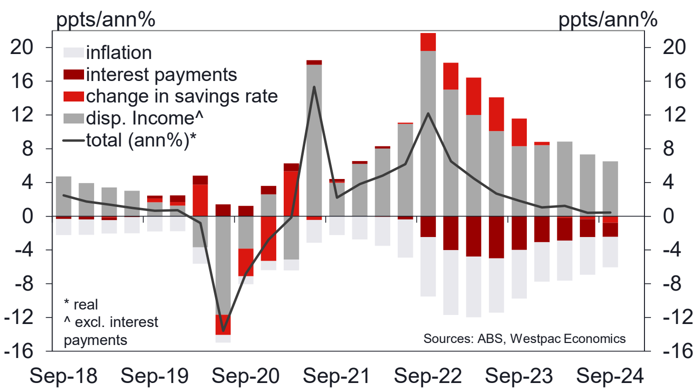
Consumer spending and savings: revisions



Household income flows: change, Q2 to Q3



Consumer spending: drivers and headwinds



behind inflation slightly. Non wage income sources declined slightly in the quarter, weakness centred on gross mixed income (i.e. small business and farm incomes), interest and dividend income. As such, total gross income, including non-wage sources, recorded a milder 0.7%qtr rise, annual growth slowing to 5.8%yr from 7%yr in the previous quarter.

Disposable income was also a little mixed. Tax cuts had a clear impact, with income tax payments $3.2bn lower in the quarter (–3.8%) although remarkably they are still up slightly on a year ago (+0.6%yr). That boost was partially offset by a rise in interest payments, up $1.2bn – this is bigger than could have been expected given credit growth with official interest rates unchanged. It suggests fixed rate roll-offs and other factors (e.g. an end to the recent refi boom) are seeing average mortgage rates push higher.

The net effect saw a 1.5%qtr gain for disposable income in nominal terms, with real, inflation-adjusted disposable income up just 0.8%qtr, 2.3%yr. This still marks a clear improvement, annual growth lifting to a 2½ year high and a touch above the average recorded over the five years prior to COVID. However, it is clearly disappointing given the wider context of tax cuts and stable interest rates.

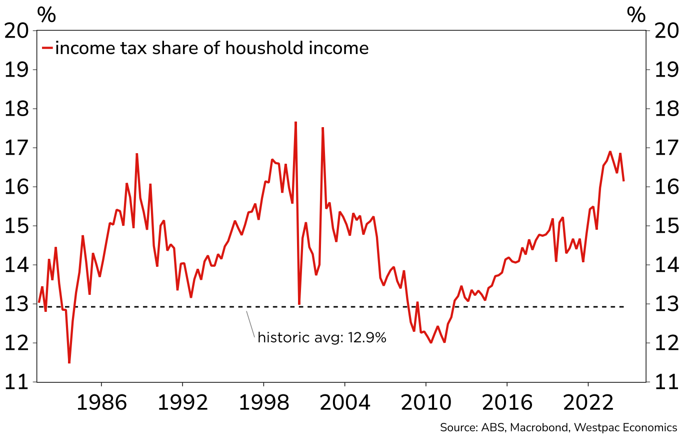
The quarterly data implies all of this real income boost was saved. The aggregate household savings ratio rose to 3.2% in the September quarter, up from 2.5% in the June quarter (revised up significantly from a previously-published 0.6%). The figures confirm the picture from the Westpac Consumer Panel that suggested consumers saved most of the tax cut boost to incomes in the quarter.

Note that savings is still well below the 6.5% level seen as 'par' (given compulsory superannuation contributions and contractually-obliged repayments of mortgage principal). As such, households are still drawing down on the notional pool of extras reserves accumulated during the pandemic period. The revised figures suggest about 40% of this $260bn reserve has now been drawn down, slightly less than previous figures suggesting it was closer to half in June. That implies there is slightly more of a remaining 'buffer' for households to draw on although the initial response to tax cuts suggests many consumers may be looking to rebuild what is left of their buffers rather than draw down further.

The states

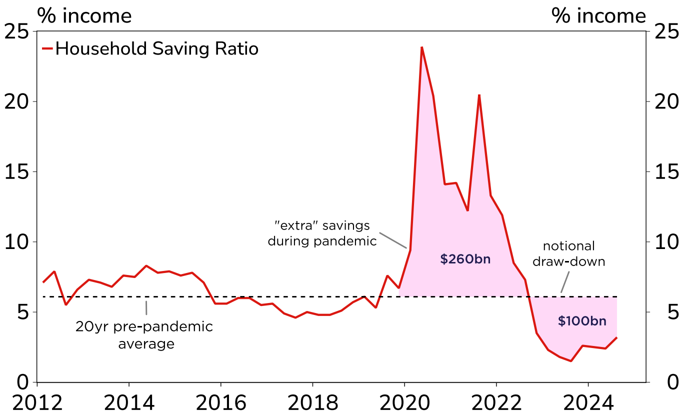
New South Wales posted a solid 0.6%qtr increase in state final demand; however, at 0.4%yr, growth on an annual basis remains exceptionally weak – the lowest across any of the states. While most other states are seeing public demand more than offset the slowdown in private demand, that is not the case in New South Wales. Rather, total public and private demand are running at similarly weak paces, at 0.5%yr and 0.4%yr respectively. The former looks to be largely a consequence of a material pull-back in public investment, a 4.5%qtr gain in Q3 unable to offset three prior quarters of significant declines (–4.3%yr). While the quarterly lift in household spending was certainly a welcome development,

Tax cuts impact, but its share of income still high



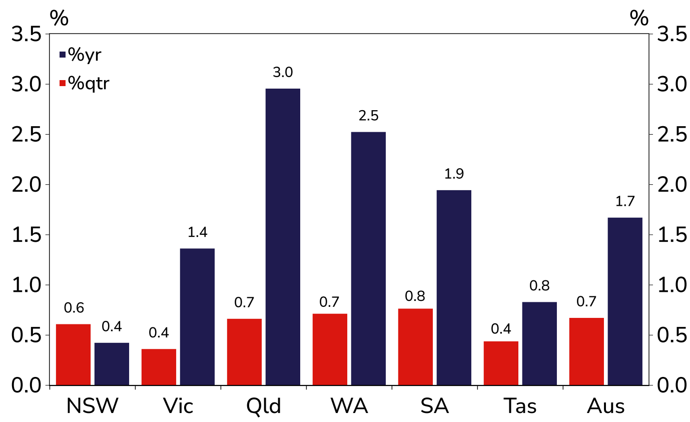
Source: ABS, Macrobond, Westpac Economics

Household savings ratio



Source: ABS, Macrobond, Westpac Economics

State final demand: Q3 2024



Source: ABS, Macrobond, Westpac Economics

a clear pulse is still clearly lacking (0.3%qtr, 0.0%yr). This, together with persistent declines in dwelling construction (–4.3%yr) at a time of rapid population growth and a need for capacity expansion, certainly makes for a challenging outlook for New South Wales.

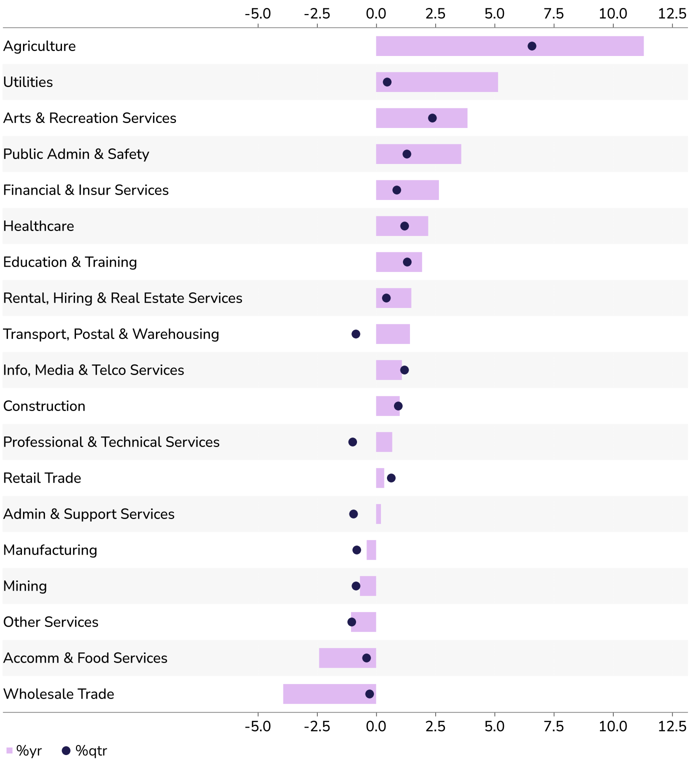
Victoria recorded the weakest result across the states in Q3, state final demand rising just 0.4%qtr, leaving the state's performance marginally softer than the national average over the past year (1.4%yr vs. 1.7%yr). This looks to be largely a consequence of a pull-back in state and local government investment plans, leaving the new public demand impulse at just 2.8%yr. Although new private demand was on a par with also-soft national outcomes, household consumption remains particularly weak, broadly flat over the quarter and the past year. Declines across dwelling construction and new business investment, together with the lack of momentum in public demand, has put the state on more fragile ground into year-end.

Queensland's state final demand grew by 0.7%qtr (3.0%yr) in Q3, claiming the 'front-runner' title from WA on this measure. The underlying composition of Queensland's growth was heavily skewed by various cost-of-living relief measures and energy rebates, driven by a notable –75% decline in household electricity spending in Q3, with the state government footing the bill. Taking that on board, total spending (across both households and governments) is still up around 2.9%yr, considerably stronger than the national pace of 1.7%yr. That said, the appetite for investment is looking increasingly fragile, marked by two consecutive declines in new business investment and a broader lack of direction in dwelling construction for the past year (0.7%yr).

Western Australia remains a clear outlier across many facets of its economy. While it is no longer leading the nation in state final demand growth, up 0.7%qtr (2.5%yr), that is largely a result of a significant pull-back in mining investment over the past year, –10.3%yr across the nation – the obvious reason why new business investment in Western Australia (–5.1%yr) is operating well below the national average (1.5%yr). Across all other sectors, Western Australia is a beacon of strength; in particular, household consumption (1.9%yr) and new public demand (9.0%yr) is operating at nation-leading paces, highlighting the steady pulse in local spending and the sheer breadth and scale of the state government's support over the past year. State demand's strength has also driven a material increase in imports both interstate and internationally, leaving trade as a significant net drag for Western Australia's GSP.

South Australia continues to steadily move past its nadir, state final demand lifting 0.8%qtr to be up 1.9%yr, slightly above the national average. As has been the case over much of the past year, the public sector remains almost entirely responsible for the state's growth; most notably, new public investment continues to rise at a staggering pace, up 7.7%qtr (17%yr). Despite this support, the private economy still lacks a spark – any growth here is narrowly based around dwelling investment (7.9%yr), while both new business investment and household consumption (excl. electricity) are tracking a negative annual

GDP by industry



Sources: ABS, Macrobond, Westpac Economics

pace (–0.3%yr and –0.2%yr) – highlighting the lasting impact of elevated interest rates and cost-of-living pressures.

Tasmania still has the weakest private economy across the nation, with new private demand now declining at an annual pace of –1.2%, a stark contrast to the national average of 0.7%yr. Underlying this, a fourth consecutive quarterly fall in household consumption (whether including or excluding electricity) alongside persistent and sharp declines in dwelling construction (–9.5%yr) are the main culprits. New public demand is providing a meaningful offset, but not to the extent seen in other states (5.1%yr), leaving Tasmania in a precarious state.

Production

The dichotomy between the public and private sides of the economy was on full display in the production accounts. Combined, the education, healthcare and public administration & safety sectors expanded at an annual pace of around three times that of the aggregate economy. As a result, their slice of the pie has increased significantly and rose to a record 17.4% of the economy in the quarter, two full percentage points higher than the pre-pandemic average.

Outside of these government-dominated sectors, conditions were mixed. 11 of 19 industries expanded in the September quarter. Weakness remained concentrated in consumer-facing industries, but momentum in these sectors has started to turn a corner. Consistent with the pick-up in dwelling investment and ongoing strong public infrastructure activity, the construction industry posted its second consecutive quarterly expansion in activity, a promising sign that capacity constraints are gradually subsiding.

In perhaps a signal that state and federal government energy rebates are prompting an increase in energy usage, the electricity, gas, water and waste services sector expanded at its fastest annual pace in 15 years.

Income

GDP(I) rose 0.4% in the quarter in both nominal and real terms. With some growth in prices, nominal GDP(I) is 3.5% higher in annual terms compared to just 0.9% for real GDP(I).

Growth in compensation of employees (COE) continued to moderate and is now running at 5.4% in annual terms compared to a cycle peak of 10.7% two years ago. This is still a little bit above the pre-pandemic average of 4.7%, but this was a period where inflation averaged just 2.1%. Importantly, growth in COE is being supported by higher hours of work. Non-farm COE per hour is growing at an annual rate of 3.2%, a level which is consistent with achieving the inflation target. However, underlying momentum is pointing to a further slowing in wage growth.

Gross operating surplus (GOS) for private non-financial companies - i.e. corporate profits - fell sharply for a second consecutive quarter, down 3.9% and 5.1% over the year. Softer commodity prices underpinned a weak outcome for the mining sector while the broader private corporate sector was also softer.

Gross mixed income (GMI) – profits from the unincorporated sector, including sole traders and partnerships – fell 1.2% in the quarter, trimming annual growth to 0.8% from 1.7% in the previous quarter.

Inflation

Government cost of living rebates are having a significant impact on the national accounts headline price measures as they not only drive down electricity prices but also shift a large share of power bills from households to the public sector. This had a significant impact on the household consumption deflator compared to the overall GDP deflator.

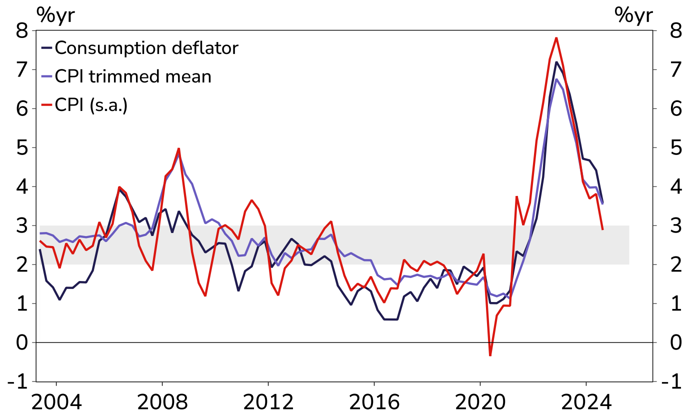
The headline price measure in the National Accounts, the GDP implicit price deflator (IPD), lifted 0.1% in the quarter, on par with a flat print in June and much softer than the 1.1% print in the March quarter.

In the year to September, the IPD is up 2.7%, very close to the 2.8%yr pace reported from the CPI. The annual pace of the IPD has been very volatile hitting 9.0%yr in December 2022 before moderating to a low of 2.1%yr in September 2023 and the rising back to 3.4%yr in June 2024.

Readers will remember that the terms of trade can have a significant impact on the IPD resulting in meaningful variations to the CPI. The terms of trade fell –2.5% in September to be down –4.0% in the year. The terms of trade has been quite volatile over the past two years but nevertheless, it has tracked a trend decline.

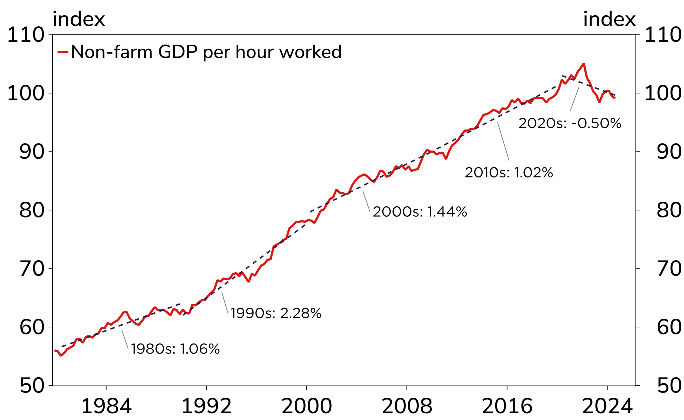
The Domestic Final Demand deflator (DFD), which measures

'Core' consumer inflation slowly reaching target



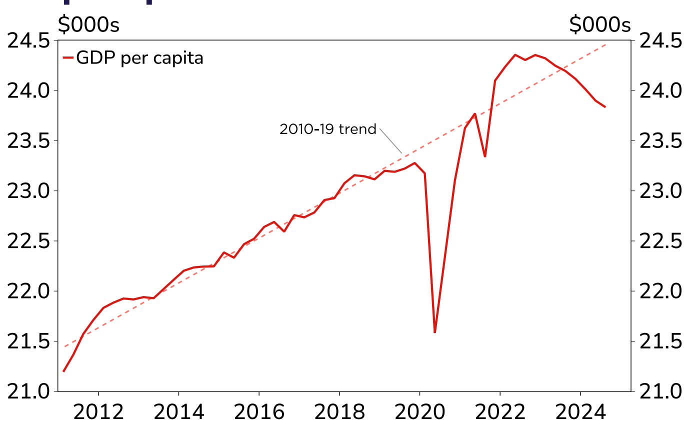
Source: ABS, Macrobond, Westpac Economics

Australia: labour productivity



Source: ABS, Macrobond, Westpac Economics

GDP per capita



Source: ABS, Macrobond, Westpac Economics

domestic prices, lifted 0.7% in September following a 1.0% lift in June and 0.9% in March to be up 3.6% in the year, a moderation from the 4.2% pace in June. The DFD hit a 7.0% pace back in December 2022 with a steady deceleration to 4.6%yr by December 2023.

The Gross National Expenditure deflator (GNE), which is immune changes in the terms of trade, gained 0.7% in the quarter to be up 3.6%yr; on par with the DFD but quite a bit stronger than the 2.7%yr pace for the IPD. GNE inflation moderated from 6.8%yr in December 2022 to a low of 4.3%yr in December 2023. Following a robust rise through the first half of 2024 the GNE deflator has held an annual pace above that of the CPI.

The Household Final Consumption Expenditure deflator (HFCE) gained 0.7% in the September quarter, compared to a 1.0% lift in June (it was revised up from 0.8%) to be up 3.6%yr. Again, the pace of inflation has moderated since December 2022 (7.2%yr) and is current at the slowest pace since March 2022. Compare that to the seasonally adjusted CPI (the HFCE deflator is also seasonally adjusted) which lifted 0.1% in the September quarter to be up 2.9% in the year. Seasonally adjusted CPI inflation peaked at 7.8%yr in December 2022 before decelerating to 4.0%yr in December 2022.

There are significant differences between the HFCE and the CPI, one of which is that the HFCE has a floating basket of goods and services with the weights set by consumption in that quarter whereas the CPI has fixed basket of goods and services with a fixed set of weights. This quarter the key difference between the two involves electricity. For the CPI, the government energy rebates resulted in -17% fall in electricity prices. For the HSCE, the rebates are public consumption shifting a large share of the household electricity bill to the public sector. As such, in September electricity would have represented a much smaller share of the HFCE and what was left was likely to report rising, rather than falling, electricity prices. In the September CPI electricity prices before rebates gained 0.7%.

Wages, labour costs and productivity

Labour costs in the national accounts are measured by total compensation of employees, i.e. the wages bill. A combination of a step up in wages, and a decline in productivity, resulted in a bump up in unit labour costs in the quarter but it was not enough to turn a trend decline in the annual pace.

Total non-farm compensation of employees gained 1.4% in September, a step up from the 1.2%% gain in June and the 0.9% in March. Nevertheless, due to base effects the annual pace decelerates from 7.1%yr in March to 6.4%yr in June then down to 5.4%yr in September. The recent peak in the annual pace of total employee compensation was 11%yr in September 2022.

As total non-farm compensation of employees is wage bill measure it is not a good indicator for pure wage inflation as it is affected not just by changes in rates of pay but also by changes in the number of employees, hours worked as well as any changes in the composition of the workforce and the nature of employment relationships.

We can, however, narrow this down a bit by looking at compensation per hour worked. Non-farm compensation per hour worked was flat in September, down from 0.7% in June and 0.5% in March, taking the annual pace down to 3.2%yr from 6.5%yr in June.

This compensation per hours worked measure should be more in-line with the WPI. However, as there are compositional differences between the two it can be a more volatile measure of labour costs. It is not unusual for the national accounts measure to temporarily surge well above (or below) the annual pace of the WPI which was running at 4.1%yr pace through the first half of 2024 before dropping back to 3.5%yr in September.

Labour productivity, measured as GDP per hour worked, fell –0.4% in September following a –0.9% decline in March taking the annual pace to –0.7%yr. Given overall weak economic growth, this is not surprising that labour productivity fell again given non-farm hours worked rose 0.8% in September following a robust 1.1% lift in June taking the annual pace to 1.7%yr in September.

Looking at the market sector, which should be far more important to the domestic price formation, it reported a 0.5% rise in hours worked but a –0.5% decline GDP per hour worked. GDP per hour worked has drop from 2.1% in the year to June to 0.7% in the year to September. While the overall productivity outcome in the quarter disappointed, our assessment is that this is explained by the shift to non-market industries and the decline in mining output, and that reasonable trend growth in supply capacity is being achieved.

Westpac is looking for productivity growth to improve as we move though into 2025 as employment and hours worked growth slows just as we see an improvement in economic activity.

Bringing this all together is nominal unit labour costs (NULC), which measures the labour cost to produce one unit of GDP, and NULC gained 0.6% in the quarter a bit softer than the 1.5% gain in June but a bit stronger than the 0.4% print in March. We have seen the annual pace ease from 6.7% in December, to 5.4% in March, 5.1% in June and now 3.9%yr in September. As such, the inflationary pressure from wages is moderating.

Westpac is expecting hours worked to soften from here which, along with an improvement in output and softer wages growth, should see unit labour cost inflation continue to soften. However, we also note that the six-month annualised pace of NULC has been between 4.0% and 4.4% since March 2024 suggesting we have to be cautious about our more positive outlook. Even with our expectation for NULC to be less than 3%yr by mid-2025 the RBA is likely to remain focused on the current pace and we expect that they would like to see it back below 4% before they relax their stance on monetary policy.

Authors

Westpac Economics / Australia

Sydney
Level 19, 275 Kent Street
Sydney NSW 2000
Australia

E: economics@westpac.com.au

Luci Ellis
Chief Economist Westpac Group
E: luci.ellis@westpac.com.au

Matthew Hassan
Head of Australian Macro-Forecasting
E: mhassan@westpac.com.au

Elliot Clarke
Head of International Economics
E: eclarke@westpac.com.au

Justin Smirk
Senior Economist
E: jsmirk@westpac.com.au

Pat Bustamante
Senior Economist
E: pat.bustamante@westpac.com.au

Mantas Vanagas
Senior Economist
E: mantas.vanagas@westpac.com.au

Ryan Wells
Economist
E: ryan.wells@westpac.com.au

Illiana Jain
Economist
E: illiana.jain@westpac.com.au

Jameson Coombs
Economist
E: jameson.coombs@westpac.com.au

Neha Sharma
Economist
E: neha.sharma1@westpac.com.au

Westpac Economics / New Zealand

Auckland
Takutai on the Square
Level 8, 16 Takutai Square
Auckland, New Zealand

E: economics@westpac.co.nz

Kelly Eckhold
Chief Economist NZ
E: kelly.eckhold@westpac.co.nz

Michael Gordon
Senior Economist
E: michael.gordon@westpac.co.nz

Darren Gibbs
Senior Economist
E: darren.gibbs@westpac.co.nz

Satish Ranchhod
Senior Economist
E: satish.ranchhod@westpac.co.nz

Paul Clark
Industry Economist
E: paul.clarke@westpac.co.nz

Westpac Economics / Fiji

Suva
1 Thomson Street
Suva, Fiji

Shamal Chand
Senior Economist
E: shamal.chand@westpac.com.au

Things you should know

We respect your privacy: You can view our privacy statement at Westpac.com.au. Each time someone visits our site, data is captured so that we can accurately evaluate the quality of our content and make improvements for you. We may at times use technology to capture data about you to help us to better understand you and your needs, including potentially for the purposes of assessing your individual reading habits and interests to allow us to provide suggestions regarding other reading material which may be suitable for you.

Disclaimer

This information has been prepared by Westpac and is intended for information purposes only. It is not intended to reflect any recommendation or financial advice and investment decisions should not be based on it. This information does not constitute an offer, a solicitation of an offer, or an inducement to subscribe for, purchase or sell any financial instrument or to enter into a legally binding contract. To the extent that this information contains any general advice, it has been prepared without taking into account your objectives, financial situation or needs and before acting on it you should consider the appropriateness of the advice. Certain types of transactions, including those involving futures, options and high yield securities give rise to substantial risk and are not suitable for all investors. We recommend that you seek your own independent legal or financial advice before proceeding with any investment decision. This information may contain material provided by third parties. While such material is published with the necessary permission none of Westpac or its related entities accepts any responsibility for the accuracy or completeness of any such material. Although we have made every effort to ensure this information is free from error, none of Westpac or its related entities warrants the accuracy, adequacy or completeness of this information, or otherwise endorses it in any way. Except where contrary to law, Westpac Group intend by this notice to exclude liability for this information. This information is subject to change without notice and none of Westpac or its related entities is under any obligation to update this information or correct any inaccuracy which may become apparent at a later date. This information may contain or incorporate by reference forward-looking statements. The words "believe", "anticipate", "expect", "intend", "plan", "predict", "continue", "assume", "positioned", "may", "will", "should", "shall", "risk" and other similar expressions that are predictions of or indicate future events and future trends identify forward-looking statements. These forward-looking statements include all matters that are not historical facts. Past performance is not a reliable indicator of future performance, nor are forecasts of future performance. Whilst every effort has been taken to ensure that the assumptions on which any forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The ultimate outcomes may differ substantially from any forecasts.

Conflicts of Interest: In the normal course of offering banking products and services to its clients, the Westpac Group may act in several capacities (including issuer, market maker, underwriter, distributor, swap counterparty and calculation agent) simultaneously with respect to a financial instrument, giving rise to potential conflicts of interest which may impact the performance of a financial instrument. The Westpac Group may at any time transact or hold a position (including hedging and trading positions) for its own account or the account of a client in any financial instrument which may impact the performance of that financial instrument.

Author(s) disclaimer and declaration: The author(s) confirms that no part of his/her compensation was, is, or will be, directly or indirectly, related to any views or (if applicable) recommendations expressed in this material. The author(s) also confirms that this material accurately reflects his/her personal views about the financial products, companies or issuers (if applicable) and is based on sources reasonably believed to be reliable and accurate.

Further important information regarding sustainability-related content: This material may contain statements relating to environmental, social and governance (ESG) topics. These are subject to known and unknown risks, and there are significant uncertainties, limitations, risks and assumptions in the metrics, modelling, data, scenarios, reporting and analysis on which the statements rely. In particular, these areas are rapidly evolving and maturing, and there are variations in approaches and common standards and practice, as well as uncertainty around future related policy and legislation. Some material may include information derived from publicly available sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information. There is a risk that the analysis, estimates, judgements, assumptions, views, models, scenarios or projections used may turn out to be incorrect. These risks may cause actual outcomes to differ materially from those expressed or implied. The ESG-related statements in this material do not constitute advice, nor are they guarantees or predictions of future performance, and Westpac gives no representation, warranty or assurance (including as to the quality, accuracy or completeness of the statements). You should seek your own independent advice.

Additional country disclosures:

Australia: Westpac holds an Australian Financial Services Licence (No. 233714). You can access Westpac's Financial Services Guide here or request a copy from your Westpac point of contact. To the extent that this information contains any general advice, it has been prepared without taking into account your objectives, financial situation or needs and before acting on it you should consider the appropriateness of the advice.

New Zealand: In New Zealand, products and services are provided by either Westpac (NZ division) or Westpac New Zealand Limited (company number 1763882), the New Zealand incorporated subsidiary of Westpac ("WNZL"). Any product or service made available by WNZL does not represent an offer from Westpac or any of its subsidiaries (other than WNZL). Neither Westpac nor its other subsidiaries guarantee or otherwise support the performance of WNZL in respect of any such product. WNZL is not an authorised deposit-taking institution for the purposes of Australian prudential standards. The current disclosure statements for the New Zealand branch of Westpac and WNZL can be obtained at the internet address www.westpac.co.nz.

Singapore: This material has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (as defined in the applicable Singapore laws and regulations) only. Recipients of this material in Singapore should contact Westpac Singapore Branch in respect of any matters arising from, or in connection with, this material. Westpac Singapore Branch holds a wholesale banking

Disclaimer continues overleaf ▶

Past performance is not a reliable indicator of future performance. The forecasts given above are predictive in character. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The results ultimately achieved may differ substantially from these forecasts.

licence and is subject to supervision by the Monetary Authority of Singapore.

U.S.: Westpac operates in the United States of America as a federally licensed branch, regulated by the Office of the Comptroller of the Currency. Westpac is also registered with the US Commodity Futures Trading Commission ("CFTC") as a Swap Dealer, but is neither registered as, or affiliated with, a Futures Commission Merchant registered with the US CFTC. The services and products referenced above are not insured by the Federal Deposit Insurance Corporation ("FDIC"). Westpac Capital Markets, LLC ('WCM'), a wholly-owned subsidiary of Westpac, is a broker-dealer registered under the U.S. Securities Exchange Act of 1934 ('the Exchange Act') and member of the Financial Industry Regulatory Authority ('FINRA'). This communication is provided for distribution to U.S. institutional investors in reliance on the exemption from registration provided by Rule 15a-6 under the Exchange Act and is not subject to all of the independence and disclosure standards applicable to debt research reports prepared for retail investors in the United States. WCM is the U.S. distributor of this communication and accepts responsibility for the contents of this communication. Transactions by U.S. customers of any securities referenced herein should be effected through WCM. All disclaimers set out with respect to Westpac apply equally to WCM. If you would like to speak to someone regarding any security mentioned herein, please contact WCM on +1 212 389 1269. Investing in any non-U.S. securities or related financial instruments mentioned in this communication may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the SEC in the United States. Information on such non-U.S. securities or related financial instruments may be limited. Non-U.S. companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in effect in the United States. The value of any investment or income from any securities or related derivative instruments denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related derivative instruments.
The author of this communication is employed by Westpac and is not registered or qualified as a research analyst, representative, or associated person of WCM or any other U.S. broker-dealer under the rules of FINRA, any other U.S. self-regulatory organisation, or the laws, rules or regulations of any State. Unless otherwise specifically stated, the views expressed herein are solely those of the author and may differ from the information, views or analysis expressed by Westpac and/or its affiliates.

UK and EU: The London branch of Westpac is authorised in the United Kingdom by the Prudential Regulation Authority (PRA) and is subject to regulation by the Financial Conduct Authority (FCA) and limited regulation by the PRA (Financial Services Register number: 124586). The London branch of Westpac is registered at Companies House as a branch established in the United Kingdom (Branch No. BR000106). Details about the extent of the regulation of Westpac's London branch by the PRA are available from us on request.

Westpac Europe GmbH ("WEG") is authorised in Germany by the Federal Financial Supervision Authority ('BaFin') and subject to its regulation. WEG's supervisory authorities are BaFin and the German Federal Bank ('Deutsche Bundesbank'). WEG is registered with the commercial register ('Handelsregister') of the local court of Frankfurt am Main under registration number HRB 118483. In accordance with APRA's Prudential Standard 222 'Association with Related Entities', Westpac does not stand behind WEG other than as provided for in certain legal agreements (a risk transfer, sub-participation and collateral agreement) between Westpac and WEG and obligations of WEG do not represent liabilities of Westpac.

This communication is not intended for distribution to, or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation. This communication is not being made to or distributed to, and must not be passed on to, the general public in the United Kingdom. Rather, this communication is being made only to and is directed at (a) those persons falling within the definition of Investment Professionals (set out in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order")); (b) those persons falling within the definition of high net worth companies, unincorporated associations etc. (set out in Article 49(2)of the Order; (c) other persons to whom it may lawfully be communicated in accordance with the Order or (d) any persons to whom it may otherwise lawfully be made (all such persons together being referred to as "relevant persons"). Any person who is not a relevant person should not act or rely on this communication or any of its contents. In the same way, the information contained in this communication is intended for "eligible counterparties" and "professional clients" as defined by the rules of the Financial Conduct Authority and is not intended for "retail clients". Westpac expressly prohibits you from passing on the information in this communication to any third party.

This communication contains general commentary, research, and market colour. The communication does not constitute investment advice. The material may contain an 'investment recommendation' and/or 'information recommending or suggesting an investment', both as defined in Regulation (EU) No 596/2014 (including as applicable in the United Kingdom) ("MAR"). In accordance with the relevant provisions of MAR, reasonable care has been taken to ensure that the material has been objectively presented and that interests or conflicts of interest of the sender concerning the financial instruments to which that information relates have been disclosed.

Investment recommendations must be read alongside the specific disclosure which accompanies them and the general disclosure which can be found here. Such disclosure fulfils certain additional information requirements of MAR and associated delegated legislation and by accepting this communication you acknowledge that you are aware of the existence of such additional disclosure and its contents.

To the extent this communication comprises an investment recommendation it is classified as non-independent research. It has not been prepared in accordance with legal requirements designed to promote the independence of investment research and therefore constitutes a marketing communication. Further, this communication is not subject to any prohibition on dealing ahead of the dissemination of investment research.