

WESTPAC MARKET OUTLOOK AUGUST 2022.

AUSTRALIA AND
THE GLOBAL ECONOMY

WESTPAC INSTITUTIONAL BANK



Australia

Australian markets: RBA cash rate to peak at 3.35%	4
Australian economy: growth outlook marked lower	6

The world

Commodities: greed has quickly shifted to fear	8
Global FX: recent US dollar decline is just the start	10
New Zealand: additional OCR hikes likely	12
United States: rate hikes a meeting by meeting proposition	14
China: underlying strength to be seen in H2 2022	16
Europe: ECB kicks off with 50bp hike	18

Summary forecast tables

Australia - financial	20
Australia - economic	21
New Zealand	22
Commodities:	23
United States	24
Europe	25
Asia - financial	26
Summary of world output	27



Start receiving your usual Westpac research and strategy reports from **Westpac IQ**.
<https://wibiq.westpac.com.au/Subscribe>

Westpac Market Outlook is a monthly publication produced by Westpac Economics

Internet: www.westpac.com.au
 Email: economics@westpac.com.au

This issue was finalised on 5 August 2022.

Corporate directory

Westpac Economics

Sydney

Level 3, 275 Kent Street
 Sydney NSW 2000
 Australia
 Telephone (61-2) 8254 8372
 Facsimile (61-2) 8254 6907

Bill Evans

Chief Economist
 Global Head of
 Economics & Research

Elliot Clarke, CFA

Senior Economist

Andrew Hanlan

Senior Economist

Matthew Hassan

Senior Economist

Justin Smirk

Senior Economist

Ryan Wells

Economist

New Zealand Economics

Auckland

Takutai on the Square
 Level 8, 16 Takutai Square
 Auckland, New Zealand
 Telephone (64-9) 336 5671
 Facsimile (64-9) 336 5672

Michael Gordon

Acting Chief Economist

Satish Ranchhod

Senior Economist

Paul Clark

Industry Economist

Nathan Penny

Senior Agri Economist

London

Camomile Court,
 23 Camomile St,
 London EC3A 7LL
 United Kingdom

Singapore

12 Marina View
 #27-00,
 Asia Square Tower 2
 Singapore, 018961

New York

39th Floor
 575 Fifth Avenue
 New York, 10017 USA

EXECUTIVE SUMMARY



The RBA, as anticipated, delivered a third consecutive 50bp rate hike in August, which we expect to be followed by a further 50bp move in September. That will have the cash rate at 2.35%, up from 0.1% at the start of May, a level which is nearing neutral, as assessed by the RBA. From there, the pace of rate hikes is likely to moderate, to increments of 25bps. We expect the cash rate to peak at 3.35% in February, upgraded from 2.60% previously - which is well into the contractionary zone. For the RBA, and other central banks, the key priority is to tame inflation, which we now expect to climb to over 7.5% by years' end. Complacency around containing inflationary expectations is a trap that the RBA Board should avoid at all costs.

US FOMC Chair Powell has meanwhile indicated that the FOMC no longer feel behind the curve and that rate hikes are now a meeting-by-meeting proposition. The Committee needs to discern whether the inflation pulse is sustainably decelerating, while mindful that currently inflation is far too high. We anticipate that the fed funds rate will peak at 3.375% at year end, following a 50bp move in late September to 2.875%. News that the US economy contracted for a second consecutive quarter in June has reinforced both market volatility and the pull-back in long bond yields from the highs of June. By contrast, Europe surprised to the high side for the June quarter, with output growth printing at +0.7%. Currency markets have taken note of the relatively unfavourable growth performance and outlook for the US, marking down the US dollar. This brings the market more into line with our view. We continue to expect the Australian dollar to move higher late this year and into next year, lifting to US78¢ by end 2023 (rounded down from 80¢ previously).

Australia: We have marked down our output profile for 2023 and 2024, with growth now forecast to slow to 1% in 2023, downgraded from 2% previously, then recover to 2% in 2024, rounded down from 2.5%. Consumers and housing will lead the slowdown in the face of high inflation and high interest rates. We have also rounded up the 2022 growth forecast, to 4.4%, from 4%, to reflect a likely stronger outcome for the June quarter - with Q2 growth now a forecast 2%, with upside risks. A 1% growth pace for 2023 is well below trend, which we judge to be around 2.5%. Equally, such an outcome still compares favourably with previous significant economic shocks - most recently, the recession over the first half of 2020 at the outset of the pandemic. A number of the positives that are driving strong economic momentum in mid-2022, a particularly strong labour market and a sizeable saving buffer of households, will help to cushion the 2023 downturn.

Commodities: Commodity price volatility has been greater than usual with our broad export price index down 17% from early June with larger declines in iron ore (-22%) and met coal (-53%) partially offset by rising thermal coal. We are still working thought these shifting trends in supply and demand to see if we need to significantly revise our medium term commodity prices forecast track. Till then we have benchmarked most commodities to current prices and hold them there through to the end of the year.

Global FX markets: Having become extremely stretched compared to history, the US dollar has made a hasty retreat over the past month. With key global risks now seen to be as much of a concern for the US as other developed nations, we expect this trend to persist over the coming 18 months, albeit in a volatile manner and with clear event risk emanating from Europe.

New Zealand: We have revised up our forecast for New Zealand's Official Cash Rate and now expect a peak of 4.00% by the end of this year. Inflation has risen to a 32-year high and it is set to remain elevated for some time yet, with strong demand a key factor boosting prices. Mortgage rate fixing has blunted the impact of rate hikes thus far, but higher interest costs will become an increasing drag on household spending over the coming months.

United States: Recent data has forced the FOMC to recognise that their view of the risks to the outlook must shift from a sole focus on inflation to a balanced view of both activity and prices. Without the full effect of policy tightening and real income loss having been felt, the economy entered a technical recession in Q2. We worry that this is the beginning of a long economic stagnation.

China: While Q2 GDP was as weak as the market anticipated, available partial data makes clear the hit from COVID-zero has been restricted to the three months to June and also that the recovery is continuing at pace. Note though that, given the virulence of COVID-19 and the residential construction sector's poor health, near-term risks remain.

Europe: The ECB kicked off their interest rate tightening cycle with a surprisingly hawkish 50bp lift as headline inflation continues to breach historic highs and the inflationary pressures on the wider consumption basket broadens. Although Q2 GDP surprised to the upside, material downside risks to growth remain. We expect the ECB to look through these risks and raise the main refinancing rate to a peak of 1.50% by year end in order to combat the formidable inflation challenge facing the Euro Area.

Summary of world GDP growth (year average*)

Real GDP %ann*	2017	2018	2019	2020	2021	2022f	2023f
United States	2.3	2.9	2.3	-3.4	5.7	1.7	0.6
China	6.9	6.8	6.0	2.2	8.1	3.5	7.0
Japan	1.7	0.6	-0.2	-4.5	1.6	1.7	1.7
India	6.8	6.5	3.7	-6.6	8.9	7.5	6.5
Other East Asia	4.7	4.5	3.8	-2.3	4.1	4.5	4.6
Europe	2.6	1.8	1.6	-6.4	5.3	2.2	1.5
Australia	2.4	2.8	2.0	-2.1	4.8	4.9	2.1
New Zealand	3.1	3.2	2.4	-2.1	5.6	2.1	3.3
World	3.7	3.6	2.9	-3.1	6.1	3.0	3.4

Sources: IMF, Westpac Economics. Aggregates weighted using purchasing power parity exchange rates.
*Year average growth estimates, the profile of which can differ from that of the 'growth pulse'.

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.

RBA delivers another 50bp move ...

RBA delivers a 3rd consecutive 50bp rate hike ...

The Reserve Bank Board decided to raise the cash rate by 50bps to 1.85% at its August meeting.

Of particular interest is the accompanying decision Statement, in which the Governor noted that the Bank has made some significant changes to their forecasts - for both inflation and output growth. Note that the forecasts have been extended from June 2024 to December 2024.

... and we continue to expect a 50bp move in September.

The headline inflation rate is now forecast to reach 7.75% by end 2022, up from 6.0% in the May Statement on Monetary Policy (SOMP); thereafter it is forecast to slow to 4% (up from 3¼%) by end 2023; and 3% by end 2024 (in line with the 3% by mid 2024).

That will lift the cash rate to 2.35% in September ...

The output growth forecasts have been downgraded, with 2022 lowered from 4.25% in the May SOMP to 3.25%; and with the 2023 and 2024 forecasts being lowered from 2% to 1.75%.

The August decision Statement continues to note that “the Board expects to take further steps in the process of normalising monetary conditions over the months ahead, but is not on a pre-set path.” That compares with the July Statement, “The Board expects to take further steps in the process of normalising monetary conditions in Australia over the months ahead.” The “not on a pre-set path” comment has been used in extensive communications by the Governor on other occasions and it does not seem to be significant that it has been added to the Statement - certainly not that another 50bps in September has been ruled out.

... approaching the neutral zone, as assessed by the RBA.

The most important aspect of interpreting the decision Statement is whether there is anything to dissuade us from our view that there will be another 50bp increase in September. Recall that in earlier communications the Governor indicated that he assesses that the neutral policy setting is around 2.5%. After the August move, the cash rate at 1.85% is still well short of that neutral level.

The language in the Statement could have implied that there was some uncertainty about “neutral” by downgrading the momentum of the economy. But the Governor remains upbeat about current economic conditions; “widespread upward pressures from strong demand” compared to “strong demand contributing to the upward pressure on prices” (in July); “the Australian economy is expected to grow strongly this year”; “national income is being boosted by a rise in the terms of trade, which are at a record high”; “consumer spending has been resilient and an upswing in business investment is underway.”

Thereafter, the pace of rate increases is likely to moderate.

Even the downward revision to 2022 GDP growth can be partly attributed to the 0.5% “miss” on the March quarter - which was not known when the May SOMP predicted growth of 4.25% for 2022. However, like the Treasury, there seems to be a very cautious assessment of the likely growth rate in the June quarter (possibly 1.3% compared to Treasury of 0.9% (our estimate) and our own forecast of at least 2%). But that 1.3% is still comfortably more than double trend. The Bank is also predicting a very modest weakening in the labour market in 2023/24 with the unemployment rate only lifting to 4% by end 2024 compared to our forecast of 5%.

So, there does not appear to be grounds for assessing that the Board will slow the pace of tightening at the September meeting - a further 50bp hike is very likely in our view.

We expect the RBA cash rate to peak at 3.35% in February 2023.

But the cash rate will then reach 2.35% - within the “neutral zone” from the RBA’s perspective. It is then that some of the cautious aspects of the August Statement can be used as a signal that the Board’s preference will be to slow the pace of tightening.

We expect that the Board will move back to a 25bp pace in October - followed by moves at the next three meetings, taking the cash rate to a 3.35% peak in February (recall that there is no January meeting). This shift is just as the Chairman of the US Federal Reserve has signalled a likely reassessment of the 75bp pace at the next FOMC meeting - which is scheduled for late September.

Taming inflation is the key goal ...

The two most cautious aspects of the August decision Statement are referring to the challenge of achieving the inflation target while “keeping the economy on an even keel” (a new addition) and lifting the inflation forecast for 2023 from 3¼% to 4% (the RBA expects inflation to return to around 3% in 2024). That implies that the Board feels that it has more time to reach the target given the higher starting point. It may also be with an eye to the Bank’s previous poor record on forecasting inflation, believing that increasing the starting point from 6% to 7.75%, would test the credibility of a 3.25% forecast for 2023.

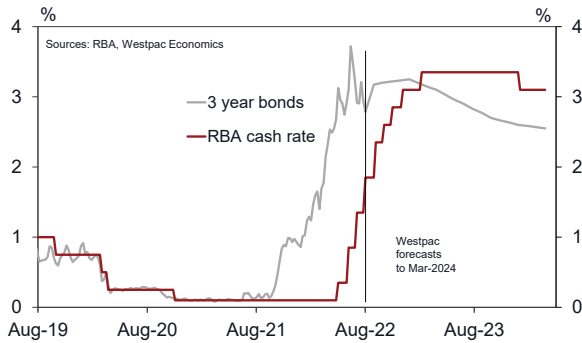
... the greatest concern would be if inflation expectations decouple, and move higher.

A test will be whether medium term inflationary expectations - which the RBA believes are still well anchored - take a lift in the face of a less committed forecast from the RBA. It is critical that complacency around containing inflationary expectations is a trap that the Board should avoid at all costs. It is our view that the Board will have to slow the economy in 2023 to a 1% growth rate in order to maintain a grip on inflationary expectations.

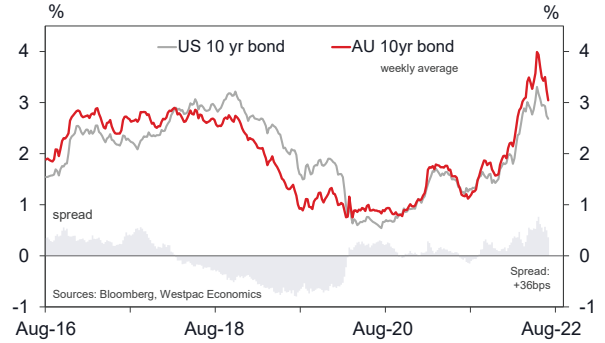
Bill Evans, Chief Economist

... cash rate to peak at 3.35%, in the fight against inflation

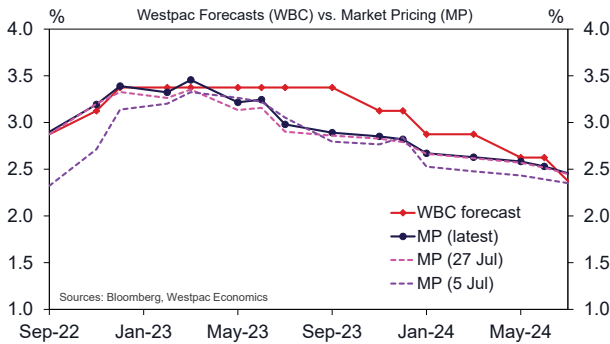
RBA cash rate and 3 year bonds



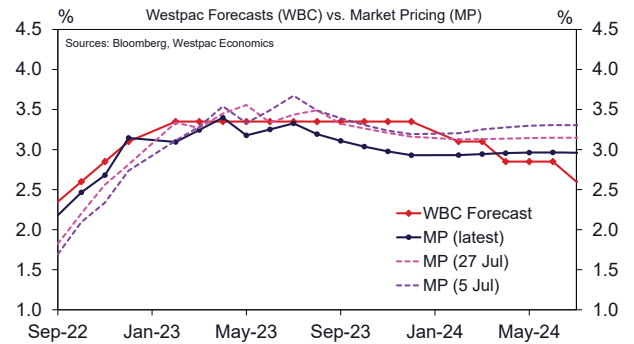
10 year bonds yields: down from June peak



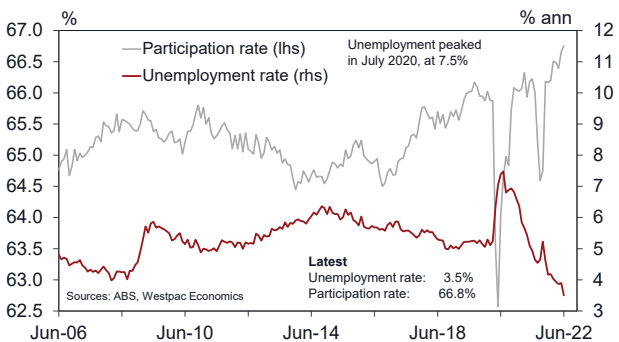
Fed funds forward pricing



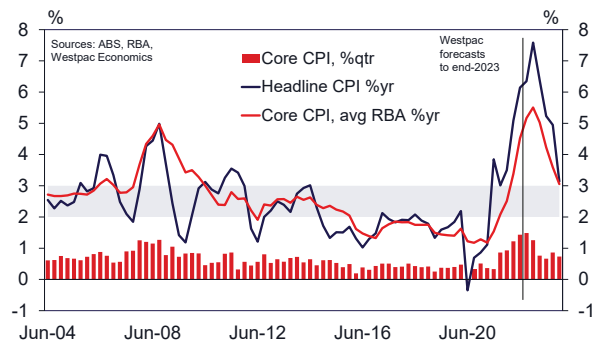
RBA forward pricing



Unemployment at 3.5%, a fresh 48 year low



CPI inflation



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.

Growth outlook marked lower ...

We have lowered the forecast path for output growth ...

On July 22, we updated our Australian activity forecasts informed by a revised RBA rate profile. We have marked down our output profile for 2023 and 2024, with growth now forecast to slow to 1% in 2023, downgraded from 2% previously, then recover to 2% in 2024, rounded down from 2.5%. We have also rounded up the 2022 growth forecast, to 4.4%, from 4%, to reflect a likely stronger outcome for the June quarter – with Q2 growth now a forecast 2%, with upside risks.

... informed by a more aggressive RBA tightening cycle ...

The Australian economy has considerable momentum in mid-2022. This reflects earlier and substantial policy stimulus and a reopening recovery from the delta lockdowns over the second half of 2021 – centred in NSW and Victoria. Household balance sheets are generally in good shape. Households have accumulated around \$260bn in ‘excess’ savings over 2020, 2021 and into early 2022. The saving rate remains elevated and as it normalises towards the “equilibrium” 6% level unlocks substantial dollars to fund additional spending in the near term.

... with taming inflation the key policy focus.

The economy is operating at or beyond full capacity – a situation which we last experienced in the mid-1970s. The number of job vacancies are very high – with 1 vacancy for each person that is unemployed. Output in a number of sectors – particularly home building – is constrained by labour and material shortages – such that a sizeable pipeline of work outstanding has emerged. This large pipeline of work will support the level of activity going forward.

The economy has considerable momentum in mid-2022 ...

Some of the forces and dynamics which are driving the strong economic momentum in mid-2022 will cushion the economic downturn in 2023 in the face of higher interest rates.

We assess that trend economic growth for Australia is around 2.5%, associated with population growth of about 1.5% – the pre-covid population pace and a rate that we expect to resume during the forecast period associated with the reopening of the national border. In that context, output growth slowing to a forecast 1% in 2023 is substantially below trend and represents a very subdued pace. Some may describe this as nearing “stalling speed”. Such an outcome compares favourably with earlier periods of severe economic shock, such as: the GFC (output contracted by -0.5% in Q4 2008 and domestic demand contracted by 1% over the two quarters to Q1 2009); the early 1990s recession (output contracted by 1.5% over the first half of 1991); and the 2020 covid recession (output contracted by around 7% over the first half of the year).

... hours worked jumping 4.6% in Q2 on the reopening from delta and omicron.

Our 2023 activity profile envisages that the level of private demand crests in 2023, with annual growth slowing abruptly from around 6% in 2022 to a forecast 0.2%, before improving to 1.4% in 2024 as inflation eases and interest rates are reduced from early 2024. Output growth of 1% in 2023 will be centred on public demand, up 2% and adding 0.5ppts to activity. Net exports add a forecast 0.8ppts to annual activity. Inventories are a drag, subtracting in the order of -0.4ppts.

As high inflation and sharply higher interest rates bite ...

Consumer spending and the housing sector will drive the loss of economic momentum in 2023, reflecting the combined impact of higher inflation and rising interest rates. Consumer spending is forecast to expand by 1.2% in 2023, which is broadly flat in per capita terms. This experience is on a par with that of 2019 (consumption grew by 0.8% that year) – when the economy was soggy at a time of housing sector weakness (including declining prices) and weakness in real wages. Such an outcome for 2023 would compare favourably with periods of economic recession – when consumer spending typically contracts – supported by some of the key dynamics and forces propelling the economy forward in 2022 (a labour market operating at full capacity and a sizeable household saving buffer).

... the economy will slow abruptly in 2023 ...

Home building activity contracts by a forecast 5% in 2023. This represents a material but not a sharp downturn. The sizeable work pipeline helps to hold up the level of activity into 2023, cushioning the impact of higher interest rates. The higher profile for interest rates will also weigh more heavily on the wider housing market. Most capital city markets are already into a price correction phase. The further ‘front-loading’ of rate hikes will see more impact near term with prices now expected to decline 4% in calendar 2022 (6% in the second half of 2022) and a further 10% in calendar 2023 (compared to previous forecasts of -2% and -8% respectively). The ‘peak to trough’ decline within this is around 16%, closer to 18% in the case of Sydney and Melbourne.

... led by the consumer and housing ...

The business investment outlook sours in this environment, but the extent of any 2023 downturn will be tempered by the fact that consumer spending is still expanding – albeit is flat in per capita terms. Total business investment is forecast to edge 0.5% lower in the year. This includes a 4.5% decline in equipment spending and a 4% contraction in building work, largely offset by additional infrastructure work (mining, road projects, renewables) and the uptrend in software spending.

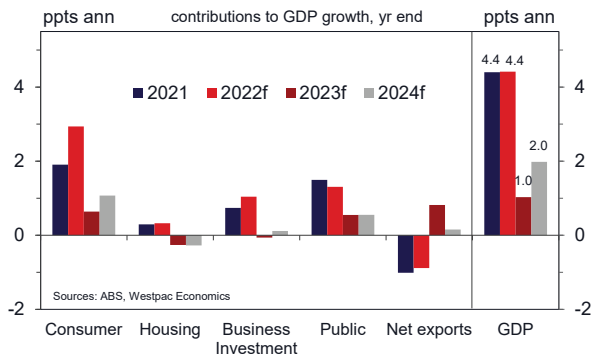
... with GDP growth a forecast 1%, well below trend growth of 2.5%.

Moving through 2024, momentum in the economy strengthens as inflation pressures recede – taking pressure off real incomes – and official interest rates become less contractionary. Another key positive in 2024 is that the Stage 3 tax cuts commence from 1 July. The pace of output growth lifts to around a trend 2.5% rate over the second half of 2024, led by the consumer and an emerging turning point in the housing market. Businesses will be encouraged by the upturn, lifting investment spending modestly over the second half of the year.

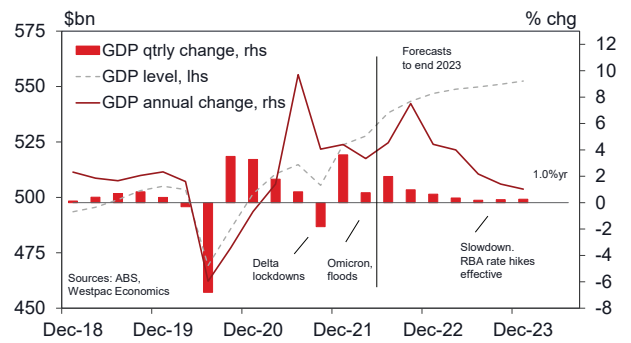
Andrew Hanlan, Senior Economist

... as policy focuses on taming inflation

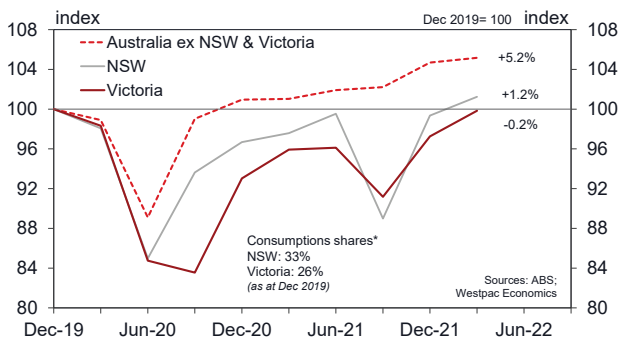
Australia: the growth mix



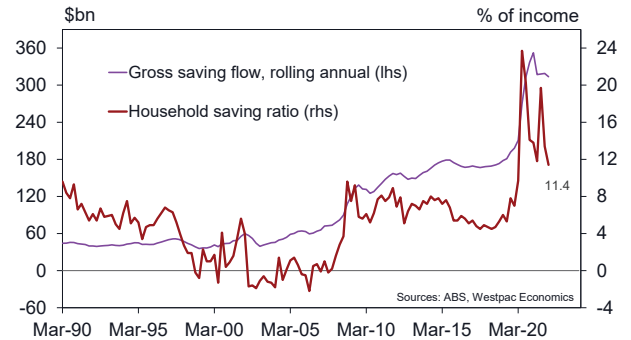
Australia: volatile path navigating covid



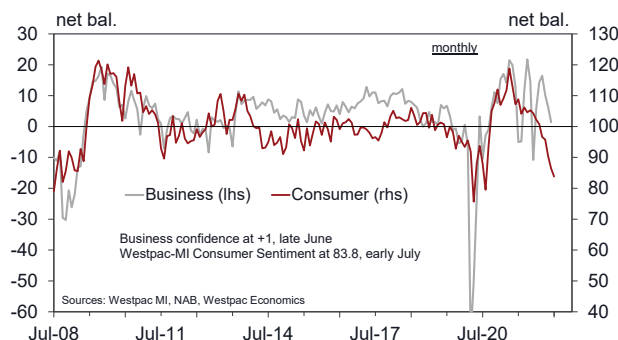
Consumer spending by state: paths diverge



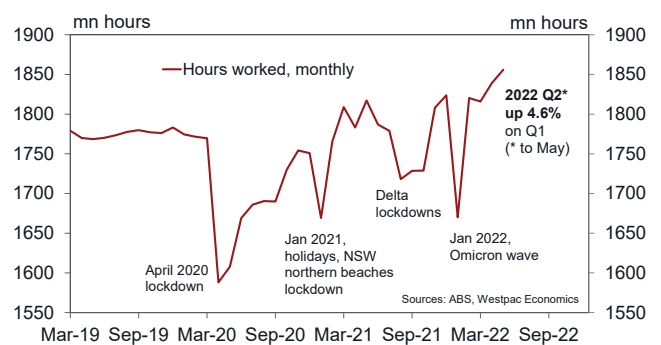
Household saving ratio and gross saving flow



Confidence: consumers and businesses



Hours worked: strength in Q2 2022



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.

Greed has quickly shifted to fear ...

Commodity price volatility has been greater than usual ...

Even given that volatility is the norm in commodity markets, the last few months have been extraordinary. While there has been a broad weakening in commodities as the market focused on rising interest rates, a stronger US dollar and growing risks of a global recession, it has not been equal for all commodities and some have even strengthened. Our broadest index, Westpac Export Price Index, is down 17% from the 10th of June (the date of our last commodities update) which followed on from a solid 22% lift from the 30th of June 2021. For our bulk exports, the focus has mostly been on the downturn in Chinese activity and resulting reduction in steel production; iron ore is down 22% from June building on the 33% decline in the year to June 10, while met coal has fallen 53% correcting much of the 120% gain seen in the year to June. The one stand out is thermal coal which has seen a much greater impact from rising demand out of Europe due to the loss of Russian energy exports (gas, oil and coal) and a very tight seaborne market that has seen further disruptions in Australian supply; thermal coal prices are up 2% since June following on from a stellar 207% gain in the year to June.

... with our broad export price index down 17% from early June ...

This conflicting trend is not just in coal or iron ore but can also be seen in our liquid/gas hydrocarbon exports. Brent crude is down 16% from June 10th following a solid 60% rally in the year to June compared to LNG which built on its 63% rally in the year to June to lift a further 20% since June 10th. This highlights just how different the supply and demand conditions are for the two. LNG is facing a significant unexpected surge in demand with little scope to lift supply, while crude oil demand has eased as growth fears move to the fore.

... with larger declines in iron ore (-22%) & met coal (-53%) offset by rising thermal coal.

Base metals have behaved more as you would expect with an economy that turned quickly from a focus on economic recovery and surging green investment demand to fears of a recession; our base metals index is down 14% following a solid 13% rally in the year to June. And while all base metals have softened since June, the correction has not been equal for all. Copper is down 19% while it had been flat in the year to June (up just 3%) with nickel experiencing a similar decline from June (-20%) which followed a very solid 56% gain in the year. Farm or agricultural commodities have not been immune to this volatility. With the invasion of Ukraine, wheat prices surged 37% in the year to June but since then have eased back 14%, even with heat waves having a negative impact on northern hemisphere crops. Westpac's rural index is down 19% since June 10th.

We have mark to market many commodities ...

We are still working through these shifting trends in supply and demand to see if we need to significantly revise our medium term commodity prices forecast track. Till then we have benchmarked most commodities to current prices and hold them there through to the end of the year. We had expected iron ore to be trading at US\$115/t by end 2022; it is currently \$113/t and we expect to now drift down to US\$105/t by year end. Met coal has seen a significant correction lately; we were looking for it to be trading at US\$371 by year end but it is currently at US\$168. We think this is overstating the current state of the seaborne demand for met coal so we have it trading at US\$212/t at year end, 26% up on current prices but down 43% compared to our June forecast. Thermal coal has outperformed expectations and at US\$425/t, is 31% higher than we thought it would be by end 2022 (\$325/t). We have lifted our year end forecast by 8% to US\$350, an 18% fall from the current price.

... and expect these levels to hold to year end.

We had expected crude to be at US\$110/bbl at end 2022 but now expect it to hold US\$100/bbl to year end. Other major revisions have been to the downside. Gold is trading at US\$1,776/oz, 6% below our year end forecast of US\$1,900/oz which we have revised to US\$1,800/oz. Copper is currently trading at US\$7,829/t, 19% lower than our year end forecast of US\$9,650 and so we have lowered that forecast to US\$7,900. Overall, the Westpac Export Price Index is currently 8% lower than our year end forecast. As such we have lowered that forecast 18% to 305.

Had it not been for weaker than expected production from the major producers ...

This month we focus on the Chinese steel market and its impact on iron ore and met coal prices. Iron ore prices have weakened this year even though supply has softened, Chinese imports are broadly flat as exporters struggle to lift production, and port inventories are trending down. The correction in construction activity has seen steel prices fall and steel production is down 3% in the year to June while pig iron production is broadly flat, having been down 3% in the year to December 2021. From December last year a significant wedge developed between the trend in Chinese steel price and the price of steel smelting input. This wedge peaked in March and since then, while steel prices have fallen around 20%, there has been a much larger 47% fall in input prices led by a 50% fall in met coal, 33% fall in iron ore and a 26% fall in Chinese scrap steel prices. We would argue that had the major iron ore producers met their 2022 production targets this year then iron ore prices would have been much lower.

... both iron ore and met coal would have seen even larger price falls.

For thermal coal, the lack of Australian supply is just as important as the surge in unexpected demand from Europe with the premium for Newcastle 6000kcal widening compared to Richards Bay 5500kcal (South Africa) and Kalimantan 5000kcal (Indonesia). Unseasonal heavy rainfall in the east coast of Australia has disrupted production and shipping out of the Newcastle port.

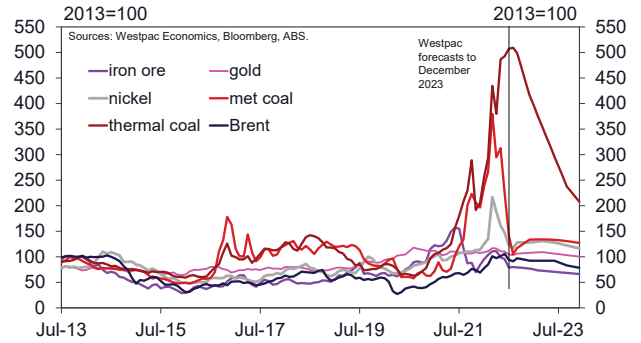
Justin Smirk, Senior Economist

... as China slows & recession fears build

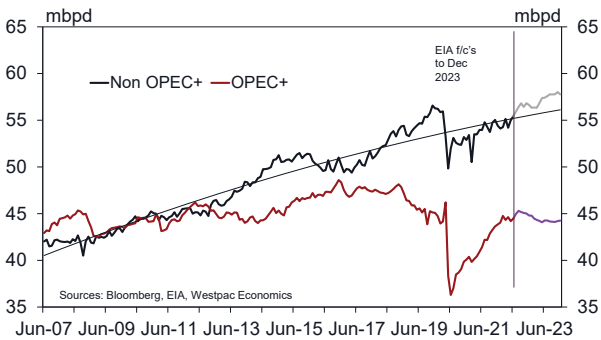
Australian commodities in US\$

	Current	% change since	% change June 21 to
	4-Aug-22	10-Jun-22	10-Jun-22
Wheat	807	-26	60
Crude Oil, Brent	100	6	60
Thermal Coal	425	71	207
Met Coal	168	-58	119
Iron Ore	113	-17	-33
Nickel	22,914	-7	56
Copper	7,829	-21	3
Export Price Index	341	-16	22

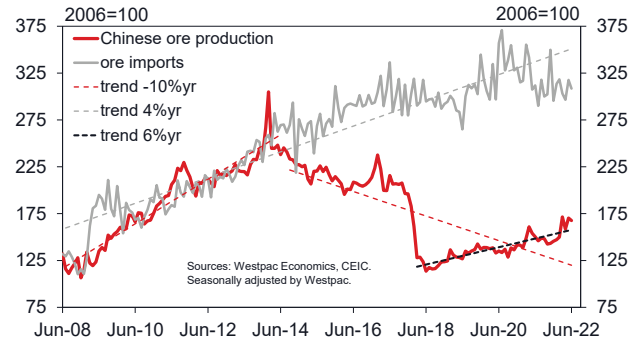
Australian commodities



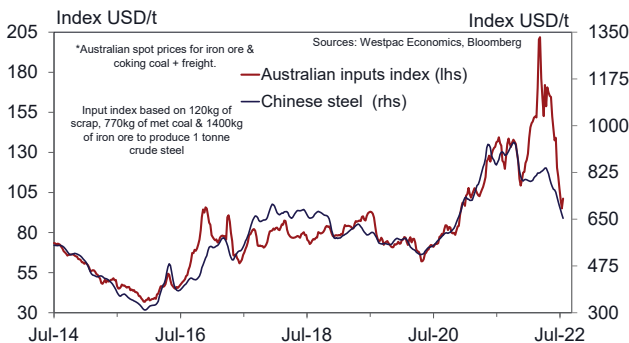
Non-OPEC+ to provide lift in supply



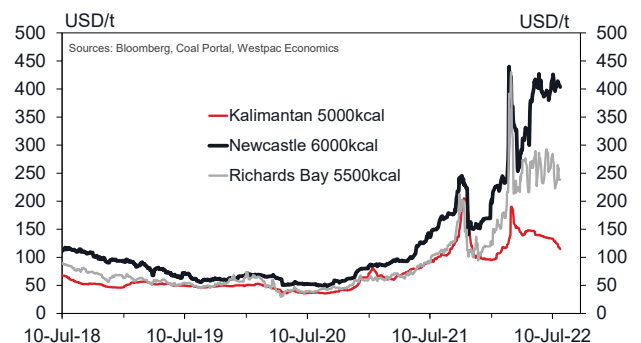
Chinese ore imports peaked in mid 2020



Steel inputs vs. Chinese steel prices



Thermal coal prices



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.

The recent US dollar decline ...

The market has begun to see the poor state of the US economy ...

Last month we highlighted that participants' 'flight to safety' to the US dollar on concerns over global growth and inflation had weak foundations, with these uncertainties at least as much of a concern for the US as other major nations. Since our last report, data made available for the US has emphasised this point, and the US dollar has quickly fallen back from its recent highs.

Most significant have been the Q2 GDP outcomes for the US and Euro Area. Whereas Q2 US GDP surprised market expectations to the downside, a 0.9% annualised decline reported on the back of Q1's 1.6% fall, despite the immense headwinds of confidence and declining real incomes, Euro Area growth printed at +0.7% in Q2 following a +0.5% gain in Q1, equating to an annualised gain circa 2.5% through the first half of 2022.

... as cause for concern for USD, particularly against Euro as the Euro Area ...

Component detail is not provided for Euro Area GDP in the first estimate. But the sectoral breakdown received for the US is troubling. Despite historic strength in the labour market and strong nominal wage growth, consumption growth slowed materially below trend across all three sub-components. Business investment was also weak in the three months to June, while US business surveys continue to signal significant downside risk. The cumulative effect of these trends was a stalling of US domestic demand in Q2.

... shows greater resilience in the face of declining real incomes and weak sentiment.

While weaker domestic demand should improve the US' trade position, benefitting the dollar, at this time confidence in the growth outlook is much more important. On a two-to-three year view, the US is increasingly at risk of stagnation given weak consumption and investment whereas the Euro Area is showing resilience and must undertake a substantial investment program to insulate itself from energy supply issues and to improve the efficiency of its industry. Their long-term domestic and export growth opportunities depend on this taking place.

Over the coming 18 months, we expect this USD downtrend to extend.

So, while the DXY index has swiftly declined from its 2022 high around 109.3 to 105.7, we believe this is only the beginning of the US dollar downtrend for the coming 18 months, with DXY seen around 101 at the turn of the year and near 95 by end-2023.

The key bilateral move driving the decline in the DXY index is of course EUR/USD, with Euro seen appreciating from USD1.02 currently to USD1.09 end-2022 and USD1.15 end-2023. A robust gain is also anticipated for the UK's Sterling, from USD1.22 currently to USD1.26 end-2022 and USD1.34 by end-2023, while modest additional support for the US dollar downtrend should also come from Canada's dollar, with their economy seemingly more resilient to current headwinds than the US. To our forecast move in USD/CAD from CAD1.29 currently to CAD1.25 end-2023, risks are skewed downward given the anticipated broad-based US dollar decline over the period.

For the USD, the high starting point versus history and narrowing rate differentials ...

Given the Bank of Japan continue to hold firm to their ultra-accommodative policy stance, the Yen's strong appreciation this month is surprising. However, the move is well founded on relative growth prospects, with GDP growth in Japan positive through 2022-to-date. Further, given their dependence on imported fuel, the nascent decline in global energy prices is aiding their trade position and the Yen.

While we suspect the recent move in USD/JPY from almost JPY140 to JPY132 could prove unsustainable in the near term, as Japan benefits from Asian growth and the downtrend in energy prices persists, fundamentals will justify the current level of Yen by end-2022. Additional gains are then likely in 2023 as US interest rate expectations reprice, narrowing the differential, and as growth in Japan largely keeps pace with the US. By end-2023, we see USD/JPY at 123.

... will weigh, but into the medium-term, growth differentials will matter most.

Asia ex-Japan remains the region of the world most likely to see sustained growth against the US dollar into the medium term. As we continue to highlight, this is principally as a result of their economic development opportunities; though, that the region has largely sustained growth momentum while keeping a lid on inflationary pressures also sets them apart from the US and other developed markets.

Here, Asia is set to shine.

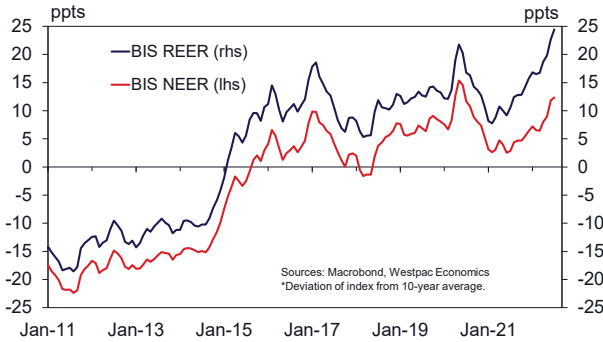
While it continues to be held back by COVID-zero concerns and, more recently, bank liquidity and activity risks related to residential construction, China's economy and hence the Renminbi still hold the greatest long-term promise. We have marked our end-2022 USD/CNY forecast higher to reflect the immediate uncertainty, but continue to see a near 8% gain in Renminbi to USD/CNY6.20 by end-2023 as their quality, income-centric investment agenda bears fruit and the diversity of China's export markets is increasingly recognised.

A similar gain for India's Rupee, to USD/INR72 end-2023, and Indonesia's Rupiah, to IDR14200, is also anticipated as the world re-opens and their respective investment pipelines build.

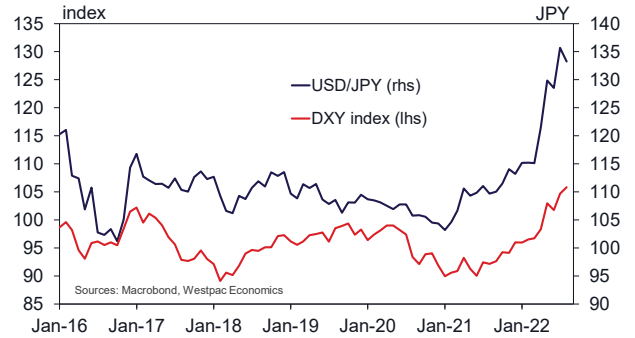
Elliot Clarke, CFA, Senior Economist

... is just the start

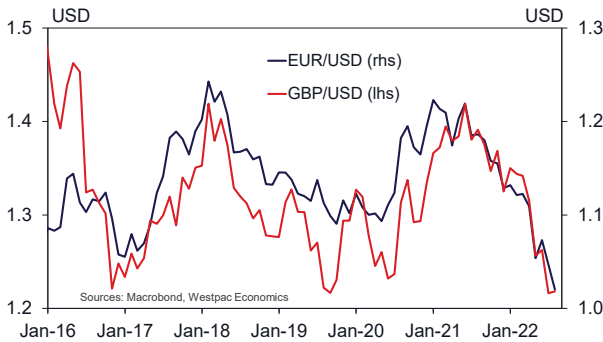
USD still very elevated versus history



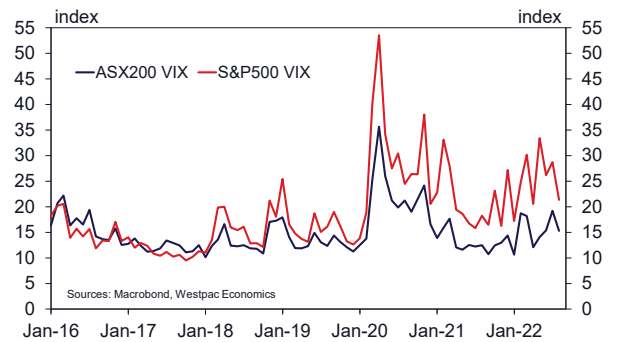
JPY has given DXY material support



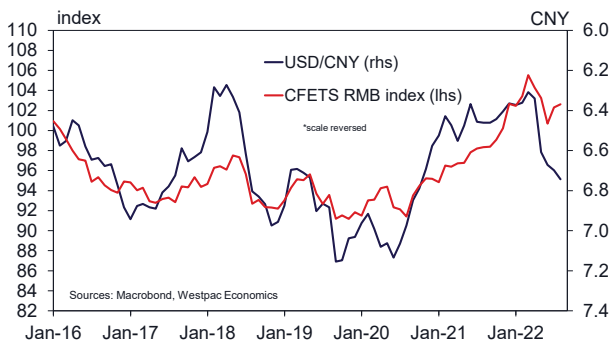
EUR & GBP idiosyncratic factors remain



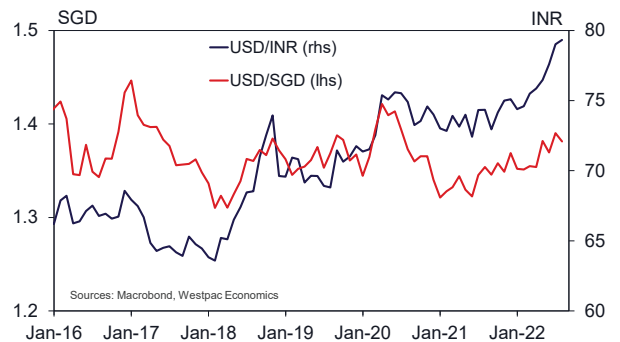
Distance from source of uncertainty a '+ve



Renminbi 'weakness' USD centric



Rest of Asia well positioned for growth



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.

Additional OCR hikes likely ...

We have revised up our forecast for the OCR.

We have revised up our forecast for New Zealand's Official Cash Rate. We now expect 50bp hikes in August, October and November, with the cash rate to reach a peak of 4.00% (previously we expected 25bp moves in October and November).

Inflation has hit a 32 year high.

The key factor underlying the change in our OCR forecast has been the continued strength in inflation. Consumer prices rose by 7.3% in the year to June. That was a larger than expected rise and is the highest annual rate of inflation in 32 years. The past year has seen particularly large increases in the prices of food, petrol and housing costs. However, the high level of inflation isn't just due to a few specific items. In fact, price pressures are boiling over in every corner of the economy.

Much of the rise in prices has been due to increases in input costs.

Much of the strength in inflation has been related to increases in businesses' operating costs. Over the past year there have been large rises in the prices of many imported commodities, including oil. Those increases have been compounded by disruptions to global and local supply chains, which has resulted in shortages of both raw materials and consumer goods.

However, strong demand has also boosted inflation ...

However, what's really lit a fire under consumer prices has been the strength of domestic demand. Indeed, if we look at the areas where businesses are reporting significant cost pressures, they're predominantly in areas like the construction sector where demand has been running hot. The extent of the demand-push inflation pressures rippling through the economy was highlighted in the June quarter labour market reports. Unemployment is just 3.3% and businesses are crying out for workers as they struggle to keep up with consumer demand. Consistent with that, there has been a large shift from part-time to full-time employment and the underutilisation rate has fallen to 9.2% - its lowest level since 2007. Against this backdrop, wage growth has been gathering a head of steam. Average hourly earnings rose by a larger than expected 6.4% over the past year, and the most common reasons cited for wage increases has been to match market rates or retain staff, rather than cost of living increases.

...with low interest rates a key factor underpinning spending appetites.

The strength of domestic demand is a big concern for the RBNZ. If demand continues to run hot, inflation is likely to remain elevated even when the current pressure on operating costs (eventually) eases off. That risk is especially pronounced if the strength in inflation starts to feed into higher wage demands, and the recent uplift in wage growth indicates that this risk may now be materialising. Those developments are particularly concerning for the RBNZ as a key factor underpinning the strength of household demand has been stimulus from low interest rates.

Although inflation appears to have peaked ...

We think that the June quarter will mark the high point in the current inflation cycle. Much of the rise in inflation that we saw over the past year was due to the sharp rise in import prices as the global economy moved out of lockdown. That includes the doubling in international oil prices. Now, while prices remain high, they're not increasing at the same pace that we saw last year. And in the case of petrol prices, they've actually fallen in recent weeks.

...it is set to remain elevated for some time yet.

But while inflation may have peaked, underlying price pressures remain strong. In fact, we aren't forecasting inflation to be back within the RBNZ's target band on a sustained basis until 2024.

Cash rate increases to date have been dampening demand ...

Given those lingering inflation pressures, the RBNZ is on course to continue raising the cash rate over the coming months. The big question is how far and how fast will the OCR need to rise? The determining factor for the RBNZ with regards to this are whether there are signs that cash rate increases to date are gaining traction. On this front, we are seeing signs that demand is starting to cool. For instance, confidence has already fallen sharply in both the household and business sectors. The housing market has also continued to slow, with prices now down 7% from their peak in November and sales dropping to low levels.

...but further hikes will be needed to contain inflation.

But despite those signs that demand is starting to soften, the strong June CPI and wage results certainly would have got alarm bells ringing at the central bank that more action might be needed to dampen inflation. As a result, we have revised our forecast for the cash rate higher and now expect the OCR to peak at 4.00% at the end of this year (previously we expected a peak of 3.50%).

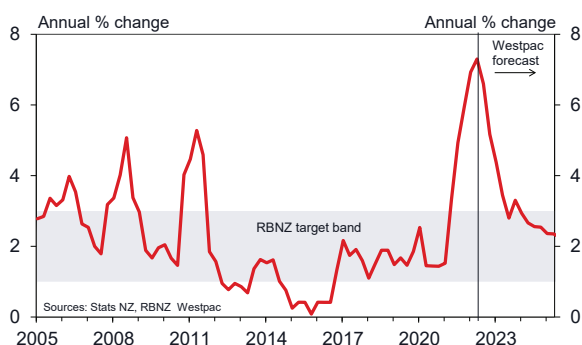
The drag on spending will become increasingly stark in coming months as mortgages refix at much higher rates.

There is a risk that the tightening cycle stretches out into the early part of next year, although we think that by then there will be a substantial body of evidence that the domestic and global economies are slowing. Notably, we expect that the rise in debt servicing costs now in train will become an increasing drag on household demand as we approach year's end. To date, many households have been shielded from the impact of rising interest rates. That's because of the record low fixed mortgage rates that were on offer over the past year or so. However, borrowers across the economy are now rolling off those very low mortgage rates, and in many cases they will face refixing at substantially higher interest rates. For example, borrowers who fixed for two years in 2020, may have secured rates in the two percent range. Those same borrowers are now looking at a two-year rate that's close to double what it was back then.

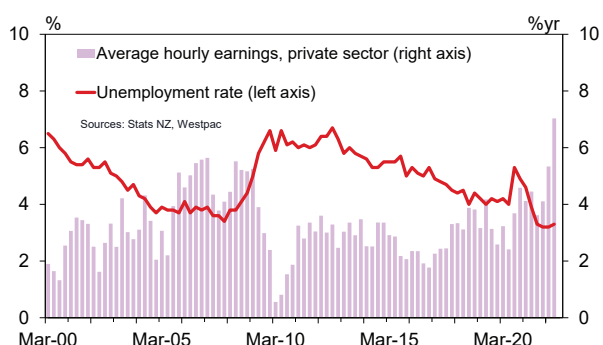
Satish Ranchhod, Senior Economist

... in the face of mounting demand-push inflation pressures

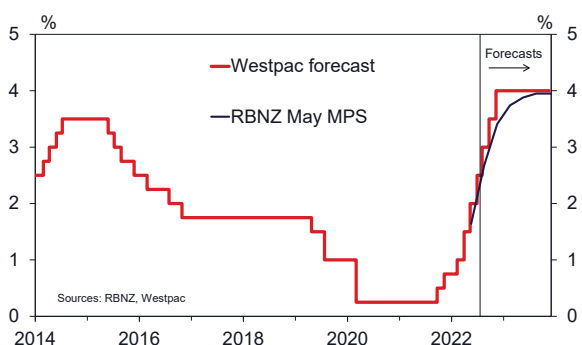
Consumer price inflation



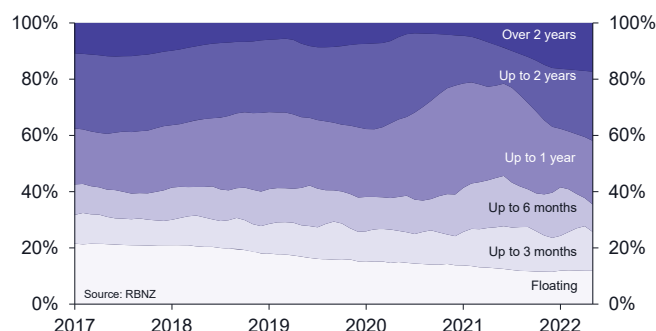
New Zealand's labour market



RBNZ Official Cash Rate



Share of mortgages by time to refixing



Monthly data	2021					2022						
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
REINZ house sales %mth	-14.3	-9.5	19.8	-1.2	-5.6	-7.3	0.7	-2.1	-1.3	-3.5	-12.6	-
Residential building consents %mth	3.4	-1.5	-2.6	0.4	0.6	-10.0	12.1	6.6	-9.1	-0.5	-2.4	-
Electronic card transactions %mth	-21.8	1.5	9.7	9.1	1.9	1.9	-7.5	1.7	7.3	1.4	0.1	-
Private sector credit %yr	7.0	7.3	7.6	7.7	7.5	7.3	7.3	6.9	6.8	6.4	6.0	-
Commodity prices %mth	-1.6	1.5	2.1	2.8	-0.3	1.0	3.9	3.9	-1.9	-4.3	-0.4	-2.2
Trade balance \$m	-1014	-870	-928	-645	-1122	-987	-1152	-1187	-558	-719	-1113	-

Quarterly data	Q3:20	Q4:20	Q1:21	Q2:21	Q3:21	Q4:21	Q1:22	Q2:22
Westpac McDermott Miller Consumer Confidence	95.1	106.0	105.2	107.1	102.7	99.1	92.1	78.7
Quarterly Survey of Business Opinion	0	2	4	22	11	-2	-7	-1
Unemployment rate %	5.3	4.9	4.6	4.0	3.3	3.2	3.2	-
CPI %yr	1.4	1.4	1.5	3.3	4.9	5.9	6.9	7.3
Real GDP %yr	-1.6	-2.1	-1.4	5.2	4.9	5.6	5.1	-
Current account balance % of GDP	-0.7	-0.8	-2.5	-3.3	-4.6	-5.8	-6.5	-

Sources: ANZ, Statistics NZ, REINZ, RBNZ, NZIER, Westpac Economics.

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.

FOMC rate hikes now a meeting ...

The FOMC's approach to assessing the stance of policy...

The July FOMC meeting saw a very important shift in the Committee's communications regarding the future path of policy, Chair Powell highlighting in the press conference that the Committee no longer feel behind the curve and can now assess the appropriateness of policy "meeting by meeting". There was also a significant pivot in the opening sentence of the decision statement, June's "Overall economic activity appears to have picked up after edging down in the first quarter" replaced by "Recent indicators of spending and production have softened" in July.

... is shifting with the balance of risks the economy faces.

This is not to say that the rate-hike cycle is complete or even that a pause is coming, however. Throughout the press conference, Chair Powell talked up the strength of the economy, despite a poor run of activity data, as well as the lingering upside risks for inflation. On interest rates he also made clear the Committee's belief that policy needs to be "moderately restrictive" instead of broadly neutral as it is now at 2.375% - in the FOMC's view.

Rate hikes will continue in coming months, but at a decelerating pace with the ...

To our mind, the most likely course for policy from here remains a 50bp increase at the September meeting - taking the fed funds rate to the upper end of the FOMC's 2-3% neutral range - followed by two 25bp increases to 3.375% at December. But risks to this view look as though they are transitioning from being biased up to skewed down.

... FOMC anticipating that much of the effect of hikes to date are still to be felt ...

It is obvious that inflation is currently far too high and, as yet, unclear whether the pulse is sustainably decelerating. But Chair Powell was crystal clear in the press conference that policy acts with a lag, believing that "significant further tightening" is already in the pipeline.

Further, while the labour market continues to be assessed as strong, the singular reference in the Q&A to the stalling of household survey employment over the past three months makes apparent that the FOMC believe job creation has slowed materially and is at immediate risk.

... and prior tailwinds becoming headwinds.

Regarding the outlook for the consumer, we would add the additional concerns of decelerating hourly earnings growth; a household savings rate already back at pre-pandemic levels; and record-low University of Michigan consumer sentiment which argue for a weak and delayed transmission of future income growth to spending.

Also notable in Chair Powell's remarks is that, now that their stance is broadly neutral, risks related to inflation are no longer the Committee's pre-eminent concern. Instead they are to be balanced with the above building downside risks for activity and employment, leading to a desire to undertake "just the right amount of tightening" to bring about below-trend growth and "not make a mistake" by creating the pre-conditions for recession.

The FOMC very clearly do not want to cause a recession...

For the policy outlook into year-end, it will therefore be as important to fully assess the labour market detail as the components of inflation. On employment, the pace of job creation in the establishment and household surveys; the pipeline of new openings from JOLTS; and any signs of accelerating redundancies via initial claims will all matter.

... creating need for a laser-like focus on the risks ahead across the economy and ...

Meanwhile for inflation, critical will be the degree to which inflation is within the FOMC's influence or an uncontrollable force for policy, with the latter possibility arguably better regarded as a tax on households' real income and economic activity than an inflation risk the FOMC need to act against.

Note though, this more nuanced assessment of inflation risks will still need to be made in the context of developments in inflation expectations which the Committee assess through a number of market and survey measures as well as via wage growth.

... financial markets.

As we have long emphasised, a continuous assessment of financial conditions is also necessary when calibrating policy. Term interest rates, at which economic agents borrow, have been heavy of late. If they track lower still, the FOMC will have scope to raise the fed funds rate further without a cost to the economy through market interest rates or the US dollar, all else equal.

Alternatively, if quantitative tightening and the risks clouding the outlook see credit spreads widen, the FOMC will have less capacity to raise the fed funds rate, with some of the required tightening of financial conditions coming instead from market participants.

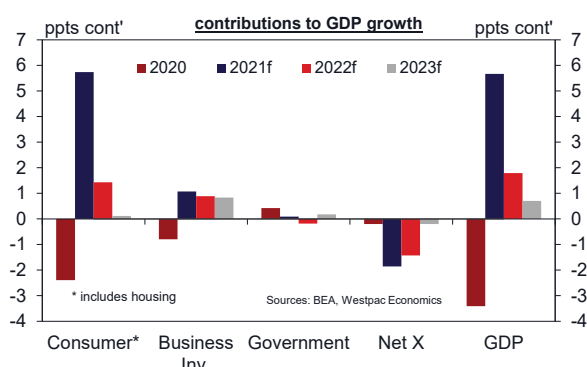
Come late-2023, there will be a clear need to materially lower the fed funds rate.

Regardless, given our inflation and growth forecasts, we believe the policy debate can turn to rate cuts in 2023. While somewhat more cautious than the market with respect to the timing of these cuts, by late-2023 we see the case being made for 125bps of cuts from December quarter 2023 to December quarter 2024, with restoring growth back near trend by the close of 2024 to become the FOMC's key policy objective.

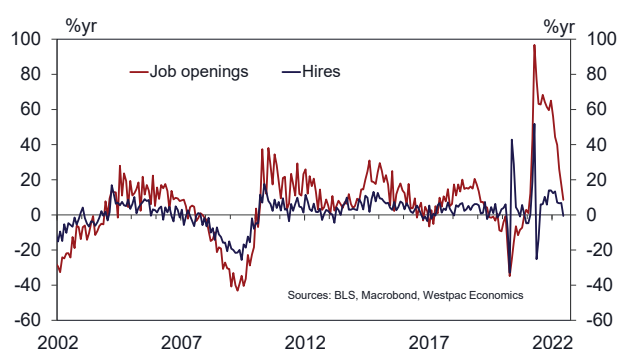
Elliot Clarke, CFA, Senior Economist

... by meeting proposition

US entering economic stagnation



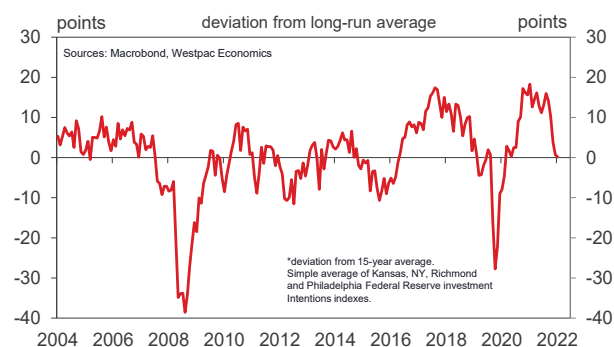
Job openings have lost momentum



Household savings rate back near lows



Fed surveys point to poor investment outlook



Monthly data	2021					2022						
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
PCE deflator %yr	4.2	4.4	5.1	5.6	5.8	6.0	6.3	6.6	6.3	6.3	6.8	-
Unemployment rate %	5.2	4.7	4.6	4.2	3.9	4.0	3.8	3.6	3.6	3.6	3.6	-
Non-farm payrolls chg '000	517	424	677	647	588	504	714	398	368	384	372	-
House prices* %yr	19.7	19.1	18.5	18.3	18.5	19.0	20.3	21.2	21.2	20.5	-	-
Durables orders core 3mth %saar	16.8	6.9	12.0	9.6	11.4	9.3	5.2	9.6	5.1	8.2	6.5	-
ISM manufacturing composite	59.7	60.5	60.8	60.6	58.8	57.6	58.6	57.1	55.4	56.1	53.0	52.8
ISM non-manufacturing composite	62.2	62.6	66.7	68.4	62.3	59.9	56.5	58.3	57.1	55.9	55.3	56.7
Personal spending 3mth %saar	9.7	7.5	13.1	10.4	3.9	5.9	6.1	15.3	9.2	7.9	7.4	-
UoM Consumer Sentiment	70.3	72.8	71.7	67.4	70.6	67.2	62.8	59.4	65.2	58.4	50.0	51.5
Trade balance USDbn	-71.4	-78.3	-68.2	-78.0	-78.9	-88.0	-88.1	-107.7	-86.7	-85.5	-	-

Quarterly data	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22f
Real GDP % saar	6.7	2.3	6.9	-1.6	-0.9	2.3
Current account USDbn	-206.4	-226.4	-224.8	-291.4	-	-

Sources: Government agencies, Bloomberg, *S&P Case-Shiller 20-city measure.

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.

China's underlying strength to be seen...

COVID-zero hit activity hard in Q2 ...

China's real economy was hit hard in Q2 by authorities' COVID-zero restrictions. From 4.8% at March, annual real GDP growth dropped to just 0.4% in June. Of note though, nominal GDP growth held up better, at 6.5% in June year-to-date compared to 2.5% in real terms. This is despite consumer inflation remaining low and producer price inflation halving since late-2021.

... but the May and June data make clear the shock has passed.

Looking at the detail of the GDP report and available partial data, it is also important to recognise that the shock from COVID-zero has been contained within the June quarter. Industrial production rebounded through May and June after April's shock to effectively catch-up by end June. And, despite all the headlines of logistic snarls, the trade balance surged to fresh highs in June. Even household consumption looks to have momentum, annual growth in retail sales bouncing from -11% at April to +3% by June as the services PMI rose back to its highest since mid-2021.

Investment continues to show resilience and credit is supportive for the outlook ...

Witnessing to the geographical dispersion of investment outside tier 1 cities, and hence the more limited impact of COVID-zero policies on the sector, year-to-date growth in fixed asset investment held above 6% throughout the June quarter even as growth in real estate investment fell to a new cycle-low of -5% under the weight of regulatory reform.

... consumption now needs to fire to elicit a strong rebound in GDP in H2 2022.

While authorities' 5.5% GDP growth target now looks to be well and truly out of reach on a year-average basis, it can still be achieved for annual growth to December. To do so, annualised growth circa 14% is necessary through the second half. This might seem impossible, but is actually very close to the gain seen in the six months to December 2020 after the initial near 56% annualised rebound in the three months to June of that year.

Such an expectation seems justified by history, pent-up demand and development.

Not only is there historical precedent for a strong rebound but, as discussed, momentum looks to be with China's economy and further policy support is coming. Year-to-date aggregate financing to the economy is up 18% on 2021, led by funding for local government infrastructure. The policy stance towards private households and businesses is also progressively being eased, and there is talk of the central government bringing forward additional funding for local governments to supercharge the recovery.

There are two risks that warrant close assessment: COVID-zero is the first ...

In terms of the risks to the outlook, there are two worthy of careful scrutiny. First, clearly there is a risk of another temporary shock from authorities' COVID-zero policy; although to be meaningful, a new outbreak would have to be sizeable and in a major city or production region.

Second, the past few weeks has seen reports of purchasers of yet-to-be completed apartments cease payments on their mortgages, raising the risk of a cash squeeze for some developers. As it stands, this situation is limited to projects being completed by builders with questionable financials and so is likely to have only a marginal effect on aggregate activity. But, if it spreads, it could shock already-weak construction lower still, creating additional pressure for stretched local governments whose finances depend on land sales to developers.

... and recent anxiety/distrust in property developers the second.

At this stage, there is no evidence of another economically significant COVID-19 outbreak and authorities have all of the tools they need to stop the spread of distrust in the residential construction sector. While vigilant, we therefore continue to hold a positive view on China's outlook, with through the year growth to December 2022 and 2023 of around 5.5% our base case, leaving year-average growth for the two years at 3.5% and 7.0% respectively. Against a stalled US and Europe and given global uncertainties, these are strong outcomes.

Elliot Clarke, CFA, Senior Economist

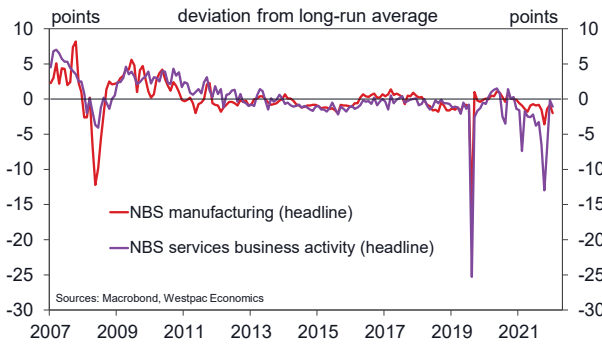
Monthly data %yr	2021					2022						
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Consumer prices - headline	0.8	0.7	1.5	2.3	1.5	0.9	0.9	1.5	2.1	2.1	2.5	-
Money supply M2	8.2	8.3	8.7	8.5	9.0	9.8	9.2	9.7	10.5	11.1	11.4	-
Manufacturing PMI (official)	50.1	49.6	49.2	50.1	50.3	50.1	50.2	49.5	47.4	49.6	50.2	49.0
Fixed asset investment %ytd	8.9	7.3	6.1	5.2	4.9	4.9	12.2	9.3	6.8	6.2	6.1	-
Industrial production (IVA)	5.3	3.1	3.5	3.8	4.3	4.3	7.5	5.0	-2.9	0.7	3.9	-
Exports	25.4	27.9	26.8	21.7	20.8	24.1	6.2	14.5	3.7	16.7	17.9	-
Imports	32.4	16.7	20.0	31.4	19.7	20.6	11.2	0.3	0.0	4.0	1.0	-
Trade balance USDbn	59.2	68.1	84.8	71.7	93.7	83.5	29.0	46.0	50.7	78.4	97.9	-

Quarterly data	Q1:21	Q2:21	Q3:21	Q4:21	Q1:22	Q2:22
Real GDP %yr	18.3	7.9	4.9	4.0	4.8	0.4
Nominal GDP %yr	21.2	13.6	9.8	9.4	8.9	3.9

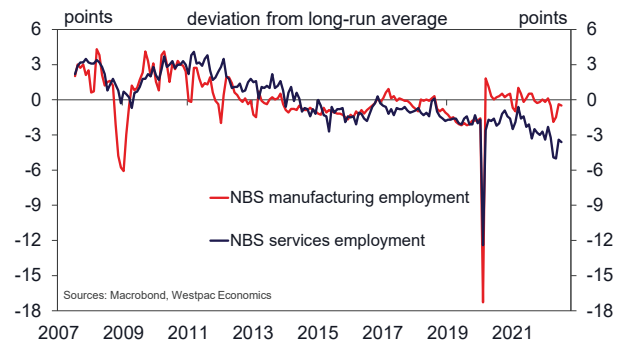
Sources: Government agencies, Bloomberg, Macrobond, Westpac Economics. Some data omitted from certain series due to Lunar New Year distortions. *4qma

... in H2 2022 and 2023

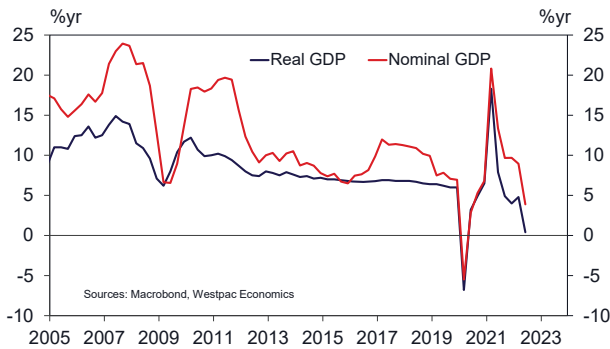
COVID-zero delivered a short sharp shock



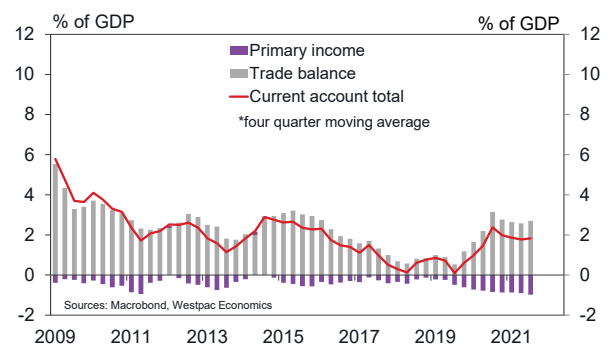
Employment was less affected



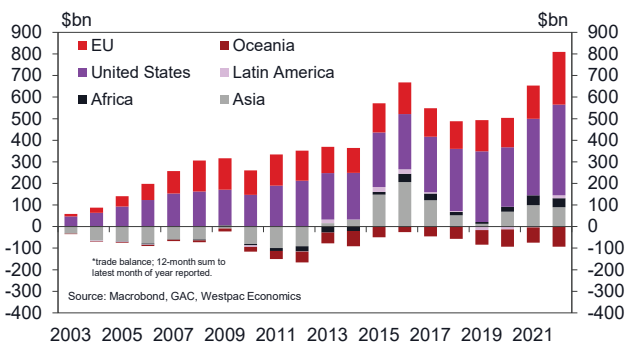
Nominal growth has held up better than real



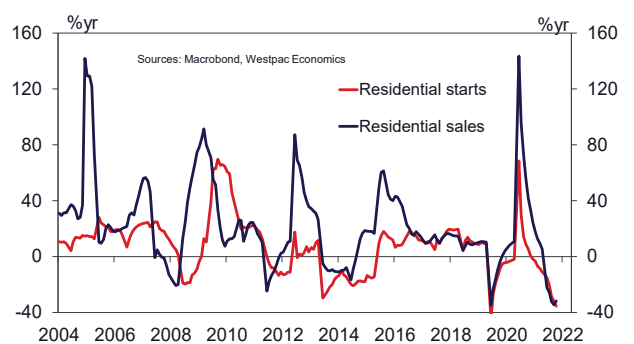
Trade opportunities remain plentiful



China's export markets are diversified



Residential construction sector weak and at risk



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.

ECB kicks off with 50bp hike ...

The ECB have begun their tightening cycle with a surprise 50bp rate hike ...

At the long-awaited July policy meeting, the ECB delivered a hawkish surprise, the Governing Council deciding to lift all of their key policy rates by 50bps after previously telegraphing a 25bp first move. The front-loaded start to this tightening cycle and clear indication of more to come is a clear signal of the ECB's commitment to return inflation back to their medium-term target of 2%.

... and the approval of an anti-fragmentation tool for smooth policy transmission.

To ensure the tightening of financial conditions is transmitted smoothly throughout the Euro Area, the ECB announced the approval of a new policy tool. If activated, the Transmission Protection Instrument (TPI) will provide unrestricted support through the purchase of government debt securities in markets where fragmentation risks are present -- corporate debt can also be bought if necessary. In the interim, the ECB will continue to reinvest proceeds from the Pandemic Emergency Purchase Programme (PEPP) in a flexible manner across Euro Area rate markets.

The intensity and breadth of inflation pressures across the consumption basket ...

Underlying the ECB's decision for an outsized rate hike are concerns around the inflation outlook and inflation expectations. The latter are currently well anchored, but the intensity and breadth of inflation is certainly a formidable challenge.

Highlighting this, the July provisional estimate for annual headline inflation printed a new record high of 8.9%yr, with energy inflation (39.7%yr) and food & non-alcoholic beverages (9.8%yr) the two largest contributors. The detailed breakdown (only available to June) indicates the presence of strong inflationary pressures across each category, but particularly in breads and meats as well as electricity, natural gas, diesel and petrol. All together, energy and food inflation contributed 4.2ppts and 1.6ppts respectively of June's 8.6%yr headline print. Supply issues associated with Russia's invasion of Ukraine remains the chief culprit, holding global commodity prices at historically elevated levels.

... are prime concerns in the ECB's fight against inflation.

The key development of recent months has been the broadening of this inflationary pulse across multiple spending categories. This is captured in July's measure of annual core inflation, which is estimated to have risen to 4.0%yr, double the ECB's medium-term target. Underscoring inflation's breadth, the proportion of expenditure classes running at an annual inflation rate above 2.5%yr reached a staggering 74% in June, a multiple of the 10-20% range seen during the pre-pandemic era. Demand-driven inflationary pressures from the reopening are at play here, with restaurants and hotels; household furniture and furnishings; and recreation and culture all reporting historic annual inflation rates. The combination of supply and demand-side pressures clearly raised alarm bells for the ECB, justifying the 50bp first rate hike.

The labour market is providing some underlying support ...

On the broader outlook though, the ECB seemed quite sanguine given the strength of the labour market and the reopening. Indeed, the region's unemployment rate currently sits firmly below pre-pandemic levels at 6.6%, while the strength of labour demand is establishing a strong foundation for robust wages growth into the medium-term. Additionally, the first estimate for Q2 GDP surprised, a robust 0.7%qtr/4.0%yr lift reported against market expectations of 0.2%qtr/3.4%yr. Across the big four, Spain (1.1%qtr) and Italy (1.0%qtr) reported a healthy recovery in domestic demand. However, weakness in France's household sector and the stalling of growth in Germany present some offsetting concerns.

... but the ECB have to look past material growth risks ...

The ECB know these issues well and clearly acknowledged the considerable uncertainty that clouds the outlook. Most notable are the economic and confidence effects of Russia's invasion as well as the threat of having their supply of Russian gas cut off. The ECB's latest Bank Lending Survey also made clear the financial consequences of uncertainty, with a broad-based tightening of lending standards reported across enterprises, consumer credit, and house purchases.

... and raise the refinancing rate to 1.50% by year-end to quell inflation pressures.

However, for now at least, the inflation challenge remains the ECB's clear focus. Therefore, we expect another 50bp hike in September and 25bp increases in October and December to a year-end peak of 1.50% for the refi rate. The evolution of risks will prove critical for the path of policy, but the ECB may have to accept a degree of weakness in activity in order to triumph over inflation.

The BoE will need to tighten policy to rein in inflation at the cost of a prolonged recession.

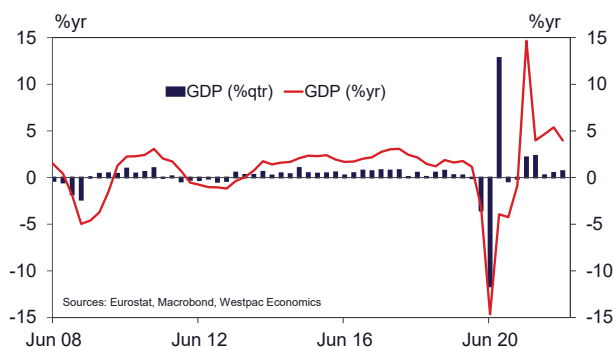
The Bank of England's 50bp rate hike was complemented by a much bleaker economic outlook. Inflation is expected to peak at a higher rate (13.1%yr in Q4) and persist at a more elevated level (9.5%yr in Q3 2023) before declining towards the target of 2.0%yr in Q3 2024. The Committee also anticipate the UK will enter a recession from Q4 2022, with output to decline in each quarter thereafter until the end of 2023, marking annual GDP growth at -1.5% in 2023 and -0.25% in 2024.

Given the intensity of the inflation outlook, we expect the Bank of England to raise the bank rate to 2.75% by year end. As inflation returns to target and weak growth materialises, we see fit that 175bp of rate cuts are employed from Q3 2023 to Q4 2024. Risks remain to the upside for inflation which may require holding the 2.75% through to end-2023/early-2024 at the expense of further weakness in activity.

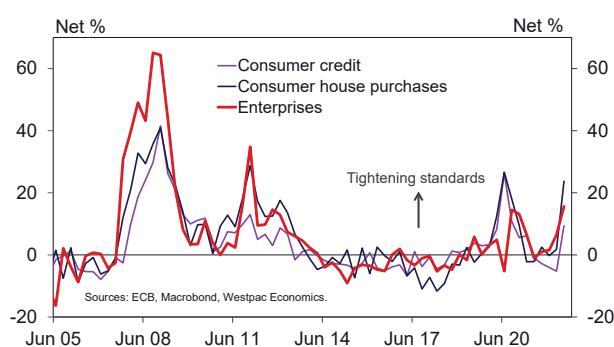
Ryan Wells, Economist

... as inflation pressures broaden

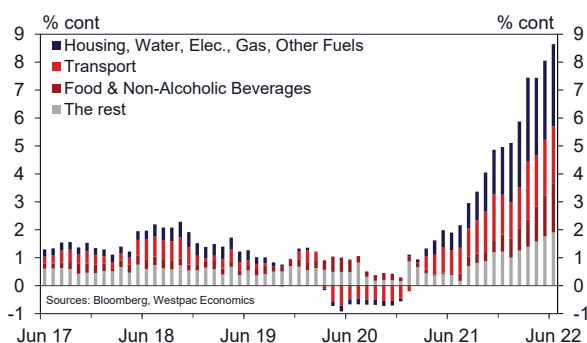
Growth buoyant despite headwinds



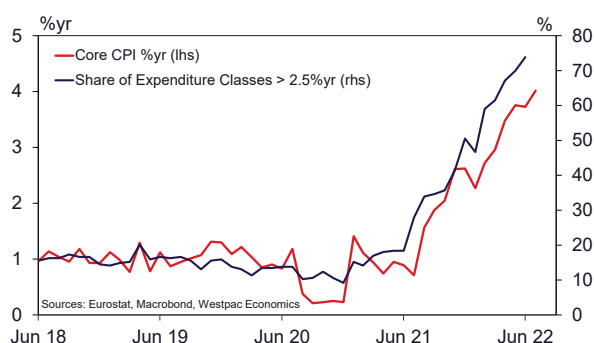
Bank standards tightening amid risks



CPI: energy and food inflation surging



Inflation pressures broadening rapidly



Europe	2021					2022						
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Eur consumer prices %yr	3.0	3.4	4.1	4.9	5.0	5.1	5.9	7.5	7.5	8.1	8.6	8.9
Eur unemployment rate %	7.5	7.3	7.3	7.1	7.0	6.9	6.8	6.7	6.6	6.6	6.6	-
Eur industrial production %yr	5.4	4.0	0.1	-1.3	1.8	-1.3	1.6	-1.1	-2.5	1.6	-	-
Eur retail sales volumes %yr	1.4	2.7	1.7	8.5	2.4	8.5	5.2	1.9	4.0	0.2	-	-
Eur consumer confidence	-5.1	-3.8	-5.2	-8.1	-9.3	-9.6	-9.6	-21.7	-22.1	-21.3	-23.8	-27.0
Eur current account balance €bn	18.0	22.9	6.6	7.3	12.6	16.8	8.7	-3.0	-3.9	-4.5	-	-
United Kingdom												
UK Consumer price index %yr	3.2	3.1	4.2	5.1	5.4	5.5	6.2	7.0	9.0	9.1	9.4	-
UK unemployment rate % (ILO)	4.4	4.3	4.2	4.1	4.0	4.0	3.8	3.7	3.8	3.8	-	-
UK industrial production %yr	3.3	1.9	0.3	0.2	1.0	3.3	2.0	1.1	1.6	1.4	-	-
UK retail sales volumes %yr	0.8	-0.6	-1.2	3.3	1.3	9.6	7.5	1.9	-5.8	-4.7	-5.8	-
UK consumer confidence	-8	-13	-17	-14	-15	-19	-26	-31	-38	-40	-41	-41

Quarterly data	Q4:20	Q1:21	Q2:21	Q3:21	Q4:21	Q1:22	Q2:22
Eur GDP %qtr/%yr	-0.4/-4.3	-0.1/-0.9	2.1/14.6	2.3/3.9	0.4/4.8	0.5/5.4	0.7/4.0
UK GDP %qtr/%yr	1.5/-6.3	-1.2/-5.0	5.6/24.5	0.9/6.9	1.3/6.6	0.8/8.7	-/-
UK current account balance £bn	-26.8	-12.4	-11.3	-28.9	-7.3	-51.7	-/-

Source: Official agencies.

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.

Australia

Interest rate forecasts

	Latest (5 Aug)	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
Cash	1.85	2.35	3.10	3.35	3.35	3.35	3.35	3.10
90 Day BBSW	2.18	3.05	3.55	3.55	3.55	3.55	3.38	3.13
3 Year Swap	3.14	3.30	3.25	3.20	3.10	2.90	2.80	2.75
3 Year Bond	2.79	2.95	3.00	3.00	2.90	2.70	2.60	2.55
10 Year Bond	3.08	3.20	3.40	3.30	3.10	2.90	2.65	2.50
10 Year Spread to US (bps)	39	40	40	40	40	40	35	30

Sources: Bloomberg, Westpac Economics.

Currency forecasts

	Latest (5 Aug)	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
AUD vs								
USD	0.6961	0.71	0.73	0.75	0.76	0.77	0.78	0.78
JPY	92.30	93.7	96.4	97.5	96.5	96.3	95.9	94.4
EUR	0.6793	0.68	0.67	0.68	0.67	0.68	0.68	0.67
NZD	1.1054	1.11	1.11	1.10	1.10	1.10	1.10	1.10
CAD	0.8958	0.90	0.91	0.93	0.94	0.96	0.97	0.98
GBP	0.5725	0.58	0.58	0.59	0.58	0.58	0.58	0.58
CHF	0.6641	0.69	0.70	0.71	0.71	0.72	0.73	0.72
DKK	5.0553	5.03	4.98	5.03	5.00	5.03	5.05	4.98
SEK	7.0360	7.00	6.94	7.00	6.97	7.00	7.03	6.94
NOK	6.7714	6.74	6.68	6.74	6.70	6.73	6.76	6.67
ZAR	11.56	11.7	11.8	12.0	12.1	12.2	12.2	12.2
SGD	0.9574	0.98	0.99	1.01	1.02	1.02	1.03	1.03
HKD	5.4639	5.57	5.73	5.85	5.93	5.97	6.05	6.05
PHP	38.76	37.6	37.2	37.5	37.6	37.7	38.2	38.1
THB	24.94	24.9	24.8	24.8	24.3	23.9	24.2	24.2
MYR	3.1104	3.05	3.07	3.11	3.12	3.12	3.16	3.15
CNY	4.6985	4.76	4.82	4.88	4.86	4.85	4.84	4.80
IDR	10394	10437	10585	10800	10868	10934	11061	11046
TWD	20.88	20.9	21.2	21.4	21.4	21.6	21.8	21.8
KRW	912	895	891	893	882	870	878	875
INR	55.44	54.3	55.1	55.1	55.1	55.4	56.2	55.8

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.

Australia

Activity forecasts*

%qtr / yr avg	2021	2022	2023					Calendar years			
	Q4	Q1	Q2f	Q3f	Q4f	Q1f	Q2f	2020	2021	2022f	2023f
Private consumption	6.4	1.5	2.6	0.9	0.5	0.3	0.2	-5.8	4.9	6.7	2.2
Dwelling investment	-1.9	-1.0	3.5	2.1	1.6	-0.3	-1.0	-5.5	9.7	2.1	0.6
Business investment*	0.7	1.4	4.0	1.8	1.7	0.9	0.0	-4.2	5.9	6.4	3.6
Private demand *	4.5	1.2	2.8	1.0	0.7	0.3	0.0	-5.3	6.0	6.0	2.0
Public demand *	-0.1	2.6	1.2	0.5	0.5	0.5	0.5	6.0	6.0	5.9	2.2
Domestic demand	3.2	1.6	2.3	0.9	0.6	0.3	0.1	-2.4	6.0	6.0	2.2
Stock contribution	1.0	1.0	-0.7	-0.2	-0.1	-0.1	-0.2	0.0	0.5	0.5	-0.7
GNE	4.3	2.6	1.6	0.7	0.5	0.2	-0.1	-2.5	6.6	6.4	1.3
Exports	-0.9	-0.9	3.8	3.0	2.5	2.0	1.9	-9.8	-1.8	3.0	9.3
Imports	0.7	8.1	2.0	1.8	1.7	1.4	0.8	-13.0	6.2	10.6	5.4
Net exports contribution	-0.3	-1.7	0.4	0.3	0.2	0.1	0.2	0.4	-1.6	-1.4	0.9
Real GDP %qtr / yr avg	3.6	0.8	2.0	1.0	0.6	0.4	0.2	-2.1	4.8	4.9	2.1
%yr end	4.4	3.3	4.5	7.5	4.4	4.0	2.2	-0.7	4.4	4.4	1.0
Nominal GDP %qtr	3.5	3.7	4.0	-0.1	0.8	0.1	0.0				
%yr end	10.2	10.2	11.0	11.5	8.6	4.8	0.7	0.9	10.2	8.6	0.3

Other macroeconomic variables

% change	2021	2022	2023					Calendar years			
	Q4	Q1	Q2f	Q3f	Q4f	Q1f	Q2f	2020	2021	2022f	2023f
Employment (2)	0.8	2.0	0.9	1.2	0.7	0.5	0.0	-	-	-	-
%yr	2.4	3.2	3.2	5.1	5.0	3.4	2.5	-1.0	2.4	5.0	0.2
Unemployment rate % (2)	4.7	4.1	3.8	3.3	3.0	3.1	3.4	6.8	4.7	3.0	4.2
Wages (WPI) (2)	0.7	0.7	0.9	1.1	1.2	1.0	1.1	-	-	-	-
%yr	2.3	2.4	2.9	3.3	3.9	4.3	4.5	1.4	2.3	3.9	4.5
CPI Headline (2)	1.3	2.1	1.8	1.0	2.5	1.0	0.7	-	-	-	-
%yr	3.5	5.1	6.1	6.3	7.6	6.4	5.2	0.9	3.5	7.6	3.1
Core inflation trimmed mean	1.0	1.5	1.5	1.5	1.2	0.8	0.7	-	-	-	-
%yr (2)	2.6	3.7	4.9	5.5	5.8	5.0	4.2	1.2	2.6	5.8	3.0
Current account AUDbn	13.2	7.5	19.0	8.0	3.5	-1.0	-4.5	51.1	76.2	38.0	-24.0
% of GDP	2.4	1.3	3.1	1.3	0.6	-0.2	-0.7	2.6	3.5	1.6	-1.0
Terms of trade annual chg (1)	10.1	8.3	5.2	-3.0	-0.8	-10.1	-17.7	-0.3	17.7	2.4	-13.6

Calendar year changes are (1) period average for GDP, terms of trade, unless otherwise stated (2) through the year for inflation, wages and employment. Unemployment is year end.

* GDP & component forecasts are reviewed following the release of quarterly national accounts.

** Business investment and government spending adjusted to exclude the effect of private sector purchases of public sector assets.

Macroeconomic variables - recent history

Monthly data	2021				2022							
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
Employment '000 chg	-138	-34	384	70	21	98	24	5	61	88	-	
Unemployment rate %	4.7	5.2	4.6	4.2	4.2	4.0	3.9	3.9	3.9	3.5	-	
Westpac-MI Consumer Sentiment	106.2	104.6	105.3	104.3	102.2	100.8	96.6	95.8	90.4	86.4	83.8	
Retail trade %mth	1.7	4.6	7.1	-4.1	1.6	1.8	1.6	0.9	0.7	0.2	-	
Dwelling approvals %mth	-0.5	-16.0	-1.0	8.3	-24.2	37.9	-14.7	-3.7	11.2	-0.7	-	
Credit, private sector %yr	5.2	5.7	6.6	7.2	7.6	8.0	8.0	8.6	9.1	9.1	-	
Trade balance AUDbn	10.5	10.3	9.3	7.9	12.4	7.3	9.4	12.3	15.0	17.7	-	

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.

New Zealand

Interest rate forecasts

	Latest (5 Aug)	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
Cash	2.50	3.00	4.00	4.00	4.00	4.00	4.00	4.00
90 Day Bill	3.24	3.70	4.10	4.10	4.10	4.10	4.10	4.10
2 Year Swap	3.76	3.80	3.70	3.60	3.50	3.40	3.25	3.10
10 Year Bond	3.36	3.50	3.40	3.30	3.20	3.10	3.05	3.00
10 Year Spread to US	67	70	40	40	50	60	75	80
10 Year Spread to Aust	29	30	0	0	10	20	40	50

Sources: Bloomberg, Westpac Economics.

Currency forecasts

	Latest (5 Aug)	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
NZD vs								
USD	0.6297	0.64	0.66	0.68	0.69	0.70	0.71	0.71
JPY	83.50	84.5	87.1	88.4	87.6	87.5	87.3	85.9
EUR	0.6145	0.61	0.61	0.61	0.61	0.61	0.62	0.61
AUD	0.9047	0.90	0.90	0.91	0.91	0.91	0.91	0.91
CAD	0.8104	0.81	0.83	0.84	0.86	0.88	0.88	0.89
GBP	0.5179	0.52	0.52	0.53	0.53	0.53	0.53	0.53
CNY	4.2503	4.29	4.36	4.42	4.42	4.41	4.40	4.37

^ Approximate market forward price for NZD/USD, not a forecast. Sources: Bloomberg, Westpac Economics.

Activity forecasts*

% change	2021	2022		2023				Calendar years			
	Q4	Q1	Q2f	Q3f	Q4f	Q1f	Q2f	2020	2021	2022f	2023f
Private consumption	6.1	4.4	0.2	2.8	3.3	2.7	2.8	-1.1	6.1	3.3	0.4
Government consumption	10.1	10.4	9.5	8.2	5.5	2.8	1.4	6.8	10.1	5.5	0.6
Residential investment	10.9	7.0	-0.3	3.4	4.9	6.3	6.8	-3.2	10.9	4.9	4.1
Business investment	9.4	10.4	8.1	13.7	11.5	11.5	9.9	-8.8	9.4	11.5	5.4
Stocks (ppt contribution)	1.6	0.8	0.8	-0.6	-0.6	-0.4	-0.9	-0.8	1.6	-0.6	-0.1
GNE	9.5	7.5	4.1	5.0	4.6	4.1	3.1	-1.9	9.5	4.6	1.4
Exports	-3.6	1.9	-3.7	-4.5	-3.2	3.6	10.9	-12.6	-3.6	-3.2	15.3
Imports	15.0	17.3	12.0	6.7	2.6	2.5	2.5	-16.0	15.0	2.6	4.9
GDP (production)	5.6	5.1	1.0	2.2	2.1	2.7	3.6	-2.1	5.6	2.1	3.3
Employment annual %	3.4	2.7	1.6	0.0	0.2	0.4	0.5	0.4	3.4	0.2	0.8
Unemployment rate % s.a.	3.2	3.2	3.3	3.3	3.4	3.5	3.6	4.9	3.2	3.4	3.8
Labour cost index, all sect incl o/t, ann %	2.6	3.0	3.4	3.6	4.1	4.3	4.4	1.6	2.6	4.1	4.3
CPI annual %	5.9	6.9	7.3	6.6	5.2	4.4	3.4	1.4	5.9	5.2	3.3
Current account balance % of GDP	-5.8	-6.5	-7.5	-7.8	-7.5	-6.8	-6.4	-0.8	-5.8	-7.5	-6.1
Terms of trade annual %	2.8	3.3	0.6	-0.5	-1.1	-2.7	-3.4	-1.6	2.8	-1.1	-0.3

Sources: Statistics NZ, Westpac Economics.

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.

Commodity prices

End of period	Latest (5 Aug)***	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
Australian commodities index#	341	340	304	289	278	263	249	230	220	210	201
Bulk commodities index#	595	596	471	442	428	401	374	334	318	302	289
iron ore fines TSI @ 62% US\$/t	112	108	105	99	96	93	90	87	84	81	78
Qld coking coal index (US\$/t)	167	185	212	212	213	208	203	198	193	188	161
Newcastle spot thermal coal (US\$/t)	424	420	350	300	250	200	175	125	115	105	95
crude oil (US\$/bbl) Brent ICE	98	105	100	100	100	90	85	80	75	70	65
LNG in Japan US\$mmbtu	17.31	17.9	16.9	16.0	15.8	15.5	13.7	12.8	11.8	10.9	10.2
gold (US\$/oz)	1,777	1,775	1,800	1,825	1,775	1,725	1,675	1,625	1,600	1,590	1,590
Base metals index#	207	207	207	212	213	210	206	202	196	186	177
copper (US\$/t)	7,802	7,825	7,900	8,000	8,000	8,000	8,100	8,200	8,300	7,885	7,463
aluminium (US\$/t)	2,429	2,450	2,500	2,600	2,700	2,650	2,600	2,500	2,300	2,147	1,993
nickel (US\$/t)	22,687	22,500	22,500	23,000	22,500	21,500	20,500	20,000	19,500	19,000	18,500
zinc (US\$/t)	3,359	3,275	3,100	3,200	3,250	3,150	3,000	2,806	2,639	2,472	2,304
lead (US\$/t)	2,057	2,040	2,050	2,070	2,025	1,950	1,925	1,900	1,850	1,800	1,750
Rural commodities index#	158	161	174	179	176	164	160	151	142	133	125
NZ commodities index ##	379	363	347	359	357	352	355	354	352	349	348
dairy price index ^^	358	333	318	347	344	329	327	323	319	314	310
whole milk powder US\$/t	3,544	3,436	3,705	3,881	3,700	3,675	3,650	3,600	3,550	3,464	3,450
skim milk powder US\$/t	3,524	3,419	3,701	3,879	3,650	3,625	3,600	3,550	3,500	3,414	3,400
lamb leg UKp/lb	635	628	613	601	592	586	583	583	583	583	583
bull beef US\$/lb	268	253	233	232	241	259	277	283	283	283	283
log price index ##	171	166	157	156	157	158	160	161	163	164	166
strong wool US\$/kg	161	177	177	177	177	177	177	177	177	177	177

Annual averages	levels				% change			
	2020	2021	2022(f)	2023(f)	2020	2021	2022(f)	2023(f)
Australian commodities index#	214	306	364	274	-2.0	43.1	18.9	-24.8
Bulk commodities index#	347	510	596	452	0.8	47.0	16.9	-24.1
iron ore fines @ 62% USD/t	108	159	123	96	16.6	46.6	-22.5	-22.4
LNG in Japan \$mmbtu	7.8	10.3	16.6	16	-28.0	31.1	61.3	-6.4
ave coking coal price (US\$/t)	108	143	276	212	-30.9	33.2	92.8	-23.1
ave thermal price (US\$/t)	57	99	297	211	-24.1	74.4	200.4	-29.2
iron ore fines contracts (US\$/t)	138	239	186	158	11.7	72.8	-21.9	-15.2
coal coking contracts (US\$/t)	126	205	387	201	-31.5	62.5	88.6	-48.1
crude oil (US\$/bbl) Brent ICE	44	70	102	95	-31.2	60.2	45.6	-7.1
gold (US\$/oz)	1,779	1,801	1,825	1,760	27.3	1.2	1.3	-3.5
Base metals index#	151	213	228	208	-2.6	41.1	6.9	-8.7
copper (US\$/t)	6,191	9,297	8,731	8,008	2.8	50.2	-6.1	-8.3
aluminium (US\$/t)	1,721	2,477	2,759	2,629	-4.7	44.0	11.4	-4.7
nickel (US\$/t)	13,837	18,452	25,282	22,042	-0.6	33.4	37.0	-12.8
zinc (US\$/t)	2,276	3,006	3,472	3,158	-9.9	32.1	15.5	-9.0
lead (US\$/t)	1,832	2,190	2,144	2,003	-8.6	19.6	-2.1	-6.6
Rural commodities index#	117	150	172	163	-7.8	28.0	14.3	-5.4
NZ commodities index ##	297	359	376	356	-0.7	21.2	4.5	-5.3
dairy price index ##	257	322	353	337	-2.8	25.2	9.4	-4.5
whole milk powder US\$/t	2,975	3,843	3,910	3,746	-4.6	29.2	1.7	-4.2
skim milk powder US\$/t	2,717	3,332	3,902	3,718	5.8	22.6	17.1	-4.7
lamb leg UKp/lb	506	599	626	593	-1.4	18.4	4.6	-5.4
bull beef US\$/lb	234	279	255	248	-3.0	19.0	-8.6	-2.8
log price index ##	156	179	169	157	-5.2	14.8	-5.8	-6.8
strong wool US\$/kg	144	173	174	177	-30.2	20.4	0.1	1.9

Chain weighted index: weights are Australian export shares. * Australian export prices fob - ABS 5432.0 Merchandise Trade Exports. ** WCFI - Westpac commodities futures index. *** Weekly averages except for the Bulks index. ^ AWEX market prices. Sources for all tables: Westpac Economics, Bloomberg ##ANZ NZ commodity price index ^^ GlobalDairyTrade

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.

United States

Interest rate forecasts

	Latest (5 Aug)	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
Fed Funds*	2.375	2.875	3.375	3.375	3.375	3.375	3.125	2.875
10 Year Bond	2.69	2.80	3.00	2.90	2.70	2.50	2.30	2.20

Sources: Bloomberg, Westpac Economics. * +12.5bps from the Fed Funds lower bound (overnight reverse repo rate).

Currency forecasts

	Latest (5 Aug)	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
USD vs								
DXY index	105.69	103.8	100.8	99.0	97.1	96.1	95.0	93.8
JPY	132.59	132	132	130	127	125	123	121
EUR	1.0247	1.05	1.09	1.11	1.13	1.14	1.15	1.16
AUD	0.6961	0.71	0.73	0.75	0.76	0.77	0.78	0.78
NZD	0.6297	0.64	0.66	0.68	0.69	0.70	0.71	0.71
CAD	1.2870	1.27	1.25	1.24	1.24	1.25	1.25	1.25
GBP	1.2159	1.23	1.26	1.28	1.30	1.32	1.34	1.35
CHF	0.9541	0.97	0.96	0.95	0.94	0.94	0.93	0.93
ZAR	16.61	16.4	16.2	16.0	15.9	15.8	15.7	15.7
SGD	1.3755	1.38	1.36	1.35	1.34	1.33	1.32	1.32
HKD	7.8499	7.85	7.85	7.80	7.80	7.75	7.75	7.75
PHP	55.62	53.0	51.0	50.0	49.5	49.0	49.0	48.9
THB	35.82	35.0	34.0	33.0	32.0	31.0	31.0	31.0
MYR	4.4583	4.30	4.20	4.15	4.10	4.05	4.05	4.04
CNY	6.7504	6.70	6.60	6.50	6.40	6.30	6.20	6.15
IDR	14932	14700	14500	14400	14300	14200	14181	14161
TWD	30.01	29.4	29.0	28.5	28.2	28.0	28.0	27.9
KRW	1310	1260	1220	1190	1160	1130	1126	1121
INR	79.47	76.5	75.5	73.5	72.5	72.0	72.0	71.5

Activity forecasts*

% annualised, s/adj	2021		2022		2023			Calendar years			
	Q4	Q1	Q2	Q3f	Q4f	Q1f	Q2f	2020	2021	2022f	2023f
Private consumption	2.5	1.8	1.0	0.6	0.1	-0.8	-0.4	-3.8	7.9	2.2	-0.1
Dwelling investment	2.1	0.5	-14.0	2.4	2.4	2.0	2.0	6.8	9.2	-3.6	1.1
Business investment	2.9	10.0	-0.1	6.0	6.2	4.6	4.6	-5.2	8.0	5.3	5.0
Public demand	-2.6	-2.9	-1.9	1.2	1.2	1.2	0.8	2.5	0.5	-1.4	0.9
Domestic final demand	1.7	2.1	-0.1	1.5	1.2	0.4	0.6	-2.6	6.7	1.8	0.9
Inventories contribution ppt	5.3	-0.1	-2.2	1.2	-0.3	-0.5	0.0	-0.6	0.1	0.9	-0.2
Net exports contribution ppt	-0.7	-3.9	1.4	-0.5	-0.2	-0.1	-0.2	-0.2	-1.9	-1.1	-0.1
GDP	6.9	-1.6	-0.9	2.3	0.8	-0.3	0.4	-3.4	5.7	1.7	0.6
%yr annual chg	5.5	3.5	1.6	1.6	0.1	0.5	0.8	-	-	-	-

Other macroeconomic variables

Non-farm payrolls mth avg	586	573	300	200	200	150	100	-759	514	371	138
Unemployment rate %	4.2	3.8	3.6	3.7	3.9	4.2	4.5	8.1	5.4	3.7	4.1
CPI headline %yr	7.1	8.6	7.9	7.5	5.7	3.5	2.4	1.2	5.1	7.1	2.5
PCE deflator, core %yr	4.9	5.2	4.6	4.5	3.6	3.1	3.1	1.5	3.5	4.4	2.6
Current account %GDP	-2.6	-2.6	-2.6	-2.6	-2.6	-2.5	-2.5	-2.5	-2.4	-2.4	-2.4

Sources: Official agencies, Factset, Westpac Economics

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.

Europe & the United Kingdom

Interest rate forecasts

	Latest (5 Aug)	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
Euro area								
ECB Refi rate	0.50	1.00	1.50	1.50	1.50	1.50	1.50	1.25
10 Year Bund	0.80	1.00	1.20	1.20	1.20	1.10	1.00	1.00
10 Year Spread to US	-189	-180	-180	-170	-150	-140	-130	-120
United Kingdom								
BoE Bank Rate	1.75	2.25	2.75	2.75	2.75	2.50	2.25	2.00
10 Year Gilt	1.89	2.00	2.30	2.30	2.15	2.00	1.80	1.70
10 Year Spread to US	-80	-80	-70	-60	-55	-50	-50	-50

Sources: Bloomberg, Westpac Economics.

Currency forecasts

	Latest (5 Aug)	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
euro vs								
USD	1.0247	1.05	1.09	1.11	1.13	1.14	1.15	1.16
JPY	135.88	139	144	144	144	143	141	141
GBP	0.8428	0.85	0.87	0.87	0.87	0.86	0.86	0.86
CHF	0.9777	1.02	1.04	1.05	1.06	1.07	1.07	1.08
DKK	7.4425	7.44	7.44	7.44	7.44	7.44	7.44	7.44
SEK	10.3597	10.4	10.4	10.4	10.4	10.4	10.4	10.4
NOK	9.9694	10.0	10.0	10.0	10.0	10.0	10.0	10.0
sterling vs								
USD	1.2159	1.23	1.26	1.28	1.30	1.32	1.34	1.35
JPY	161.22	162	166	166	165	165	165	163
CHF	1.1601	1.19	1.20	1.21	1.22	1.23	1.25	1.25
AUD	0.5725	0.58	0.58	0.59	0.58	0.58	0.58	0.58

Source: Bloomberg, Westpac Economics.

Activity forecasts*

Annual average % chg	2018	2019	2020	2021	2022f	2023f
Eurozone GDP	1.8	1.6	-6.4	5.3	2.2	1.5
private consumption	1.5	1.3	-8.0	3.5	2.3	1.8
fixed investment	3.2	5.7	-8.4	3.6	2.8	3.0
government consumption	1.2	1.8	1.4	3.8	1.0	1.2
net exports contribution ppt	0.4	-0.5	-0.7	1.0	0.3	0.2
Germany GDP	1.6	0.6	-5.5	2.9	1.5	1.2
France GDP	1.8	1.5	-8.5	7.0	2.2	1.5
Italy GDP	0.8	0.3	-9.0	6.6	2.5	1.0
Spain GDP	2.4	2.0	-11.0	5.1	4.0	3.0
Netherlands GDP	2.4	1.7	-4.5	5.1	2.7	1.6
<i>memo: United Kingdom GDP</i>	1.7	1.7	-9.3	7.4	3.3	-1.0

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.

Asia

China

Calendar years	2017	2018	2019	2020	2021	2022f	2023f
Real GDP	6.9	6.7	6.0	2.3	8.1	3.5	7.0
Consumer prices	1.8	1.9	4.5	0.2	1.5	2.2	2.4
Producer prices	4.9	0.9	-0.5	-0.4	10.3	5.5	1.5
Industrial production (IVA)	6.6	6.2	5.7	2.8	9.6	5.0	5.5
Retail sales	10.2	9.0	8.0	-3.9	12.5	4.5	8.0
Money supply M2	8.2	8.1	8.7	10.1	9.0	11.0	9.0
Fixed asset investment	7.2	5.9	5.4	2.9	4.9	6.5	5.5
Exports	12.7	-4.4	6.3	13.5	28.7	7.5	6.0
Imports	8.7	-7.6	11.8	2.4	30.7	6.0	5.0
Trade balance USDbn	420	351	421	524	945	760	834

Source: Macrobond.

Chinese interest rates & monetary policy

	Latest (5 Aug)	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
Required reserve ratio %*	11.25	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Loan Prime Rate, 1-year	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70

* For major banks.

Currency forecasts

	Latest (5 Aug)	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
JPY	132.59	132	132	130	127	125	123	121
SGD	1.3755	1.38	1.36	1.35	1.34	1.33	1.32	1.32
HKD	7.8499	7.85	7.85	7.80	7.80	7.75	7.75	7.75
PHP	55.62	53.0	51.0	50.0	49.5	49.0	49.0	48.9
THB	35.82	35.0	34.0	33.0	32.0	31.0	31.0	31.0
MYR	4.4583	4.30	4.20	4.15	4.10	4.05	4.05	4.04
CNY	6.7504	6.70	6.60	6.50	6.40	6.30	6.20	6.15
IDR	14932	14700	14500	14400	14300	14200	14181	14161
TWD	30.01	29.4	29.0	28.5	28.2	28.0	28.0	27.9
KRW	1310	1260	1220	1190	1160	1130	1126	1121
INR	79.47	76.5	75.5	73.5	72.5	72.0	72.0	71.5

Source: Bloomberg, Westpac Economics.

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.

Economic growth forecasts (year average)

Real GDP %ann	2017	2018	2019	2020	2021	2022f	2023f
World	3.7	3.6	2.9	-3.1	6.1	3.0	3.4
United States	2.3	2.9	2.3	-3.4	5.7	1.7	0.6
Japan	1.7	0.6	-0.2	-4.5	1.6	1.7	1.7
Euro zone	2.6	1.8	1.6	-6.4	5.3	2.2	1.5
Group of 3	2.3	2.2	1.7	-4.7	5.1	1.9	1.1
United Kingdom	2.1	1.7	1.7	-9.3	7.4	3.3	-1.0
Canada	3.0	2.8	1.9	-5.2	4.6	3.5	2.0
Australia	2.4	2.8	2.0	-2.1	4.8	4.9	2.1
New Zealand	3.1	3.2	2.4	-2.1	5.6	2.1	3.3
OECD total	2.4	2.3	-0.7	-0.6	4.4	2.0	1.2
China	6.9	6.8	6.0	2.2	8.1	3.5	7.0
Korea	3.2	2.9	2.2	-0.9	4.0	2.6	2.7
Taiwan	3.3	2.8	3.1	3.4	6.3	3.5	3.2
Hong Kong	3.8	2.8	-1.7	-6.5	6.4	1.0	3.0
Singapore	4.7	3.7	1.1	-4.1	7.6	4.0	3.5
Indonesia	5.1	5.2	5.0	-2.1	3.7	5.3	5.4
Thailand	4.2	4.2	2.2	-6.2	1.6	3.5	4.5
Malaysia	5.8	4.8	4.4	-5.6	3.1	6.0	5.0
Philippines	6.9	6.3	6.1	-9.6	5.6	7.0	6.5
Vietnam	6.9	7.2	7.2	2.9	2.6	7.0	6.8
East Asia	6.1	5.9	5.2	0.7	6.8	3.8	6.2
East Asia ex China	4.7	4.5	3.8	-2.3	4.1	4.5	4.6
NIEs*	3.5	3.0	1.9	-0.6	5.3	2.9	3.0
India	6.8	6.5	3.7	-6.6	8.9	7.5	6.5
Russia	1.8	2.8	2.2	-2.7	4.7	-11.0	-3.0
Brazil	1.3	1.8	1.2	-3.9	4.6	1.5	1.0
South Africa	1.2	1.5	0.1	-6.4	4.9	1.9	1.4
Mexico	2.1	2.2	-0.2	-8.2	4.8	2.0	2.5
Argentina	2.8	-2.6	-2.0	-9.9	10.2	4.0	3.0
Chile	1.3	4.0	0.8	-6.1	11.7	1.5	0.5
CIS^	2.4	1.6	-2.3	1.9	29.4	10.5	3.4
Middle East	1.8	1.4	1.3	3.2	2.8	2.8	2.8
C & E Europe	0.3	-0.2	-2.1	-5.0	9.6	3.8	3.3
Africa	3.0	3.3	3.1	-1.7	4.5	3.8	4.0
Emerging ex-East Asia	3.0	2.8	1.6	-2.7	7.3	3.3	3.2
Other countries	6.5	6.7	6.3	-4.1	-0.5	3.5	5.0
World	3.7	3.6	2.9	-3.1	6.1	3.0	3.4

#Regional and global groupings are weighted using PPP exchange rates updated to reflect ICP 2011 benchmark revisions.* "NIEs" signifies "Newly Industrialised Economies" as defined by the IMF, viz; Republic of Korea, Hong Kong SAR, Taiwan Province of China, and Singapore. ^ CIS is the Commonwealth of Independent States, including Mongolia. Sources: IMF, Westpac Economics.

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.

© Copyright 2022 Westpac Banking Corporation

Things you should know.

Westpac Institutional Bank is a division of Westpac Banking Corporation ABN 33 007 457 141 ('Westpac').

Disclaimer

This material contains general commentary only and is not intended to constitute or be relied upon as personal financial advice. To the extent that this material contains any general advice, it has been prepared without taking into account your objectives, financial situation or needs, and because of this, you should, before acting on it, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs, and, the disclosure documents (including any product disclosure statement) of any financial product you may consider. 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 material 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 the information is free from error, none of Westpac or its related entities warrants the accuracy, adequacy or completeness of the information, or otherwise endorses it in any way. Except where contrary to law, Westpac and its related entities intend by this notice to exclude liability for the information. The information is subject to change without notice and none of Westpac or its related entities is under any obligation to update the information or correct any inaccuracy which may become apparent at a later date. The information contained in this material 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 a legally binding contract. Past performance is not a reliable indicator of future performance. 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 ultimate outcomes may differ substantially from these forecasts.

Country disclosures

Australia: Westpac holds an Australian Financial Services Licence (No. 233714). This material is provided to you solely for your own use and in your capacity as a client of Westpac.

For XYLO Foreign Exchange clients: This information is provided to you solely for your own use and is not to be distributed to any third parties. XYLO Foreign Exchange is a division of Westpac Banking Corporation ABN 33 007 457 141 and Australian credit licence 233714. Information is current as at date shown on the publication. This information has been prepared without taking account of your objectives, financial situation or needs. Because of this you should, before acting on this information, consider its appropriateness, having regard to your objectives, financial situation or needs. XYLO Foreign Exchange's combined Financial Services Guide and Product Disclosure Statement can be obtained by calling XYLO Foreign Exchange on 1300 995 639, or by emailing customer@XYLO.com.au.

New Zealand: In New Zealand, Westpac Institutional Bank refers to the brand under which products and services are provided by either Westpac or Westpac New Zealand Limited ("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. The current disclosure statements for the New Zealand branch of Westpac and WNZL can be obtained at the internet address www.westpac.co.nz. For further information please refer to the Product Disclosure Statement (available from your Relationship Manager) for any product for which a Product Disclosure Statement is required, or applicable customer agreement. Download the Westpac NZ QFE Group Financial Advisers Act 2008 Disclosure Statement at www.westpac.co.nz.

China, Hong Kong, Singapore and India: 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 in Singapore of this material 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 licence and is subject to supervision by the Monetary Authority of Singapore. Westpac Hong Kong Branch holds a banking licence and is subject to supervision by the Hong Kong Monetary Authority. Westpac Hong Kong branch also holds a license issued by the Hong Kong Securities and Futures Commission (SFC) for Type 1 and Type 4 regulated activities. This material is intended only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance. Westpac Shanghai and Beijing Branches hold banking licenses and are subject to supervision by the China Banking and Insurance Regulatory Commission (CBIRC). Westpac Mumbai Branch holds a banking license from Reserve Bank of India (RBI) and subject to regulation and supervision by the RBI.

UK: The contents of this communication, which have been prepared by and are the sole responsibility of Westpac Banking Corporation London and Westpac Europe Limited. Westpac (a) has its principal place of business in the United Kingdom at Camomile Court, 23 Camomile Street, London EC3A 7LL, and is registered at Cardiff in the UK (as Branch No. BR00106), and (b) authorised and regulated by the Australian Prudential Regulation Authority in Australia. Westpac is authorised in the United Kingdom by the Prudential Regulation Authority. Westpac is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from us on request. Westpac Europe Limited is a company registered in England (number 05660023) and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

This communication is being made only to and is directed at (a) persons who have professional experience in matters relating to investments who fall within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (b) high net worth entities, and other persons to whom it may otherwise lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (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.

Disclaimer continued overleaf

Disclaimer continued

The investments to which this communication relates are only available to and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such investments will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely upon 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”. With this in mind, Westpac expressly prohibits you from passing on the information in this communication to any third party. In particular this communication and, in each case, any copies thereof may not be taken, transmitted or distributed, directly or indirectly into any restricted jurisdiction. This communication is made in compliance with the Market Abuse Regulation (Regulation(EU) 596/2014).

Investment Recommendations Disclosure

The material may contain investment recommendations, including information recommending an investment strategy. Reasonable steps have been taken to ensure that the material is presented in a clear, accurate and objective manner. Investment Recommendations for Financial Instruments covered by MAR are made in compliance with Article 20 MAR. Westpac does not apply MAR Investment Recommendation requirements to Spot Foreign Exchange which is out of scope for MAR.

Unless otherwise indicated, there are no planned updates to this Investment Recommendation at the time of publication. Westpac has no obligation to update, modify or amend this Investment Recommendation or to notify the recipients of this Investment Recommendation should any information, including opinion, forecast or estimate set out in this Investment Recommendation change or subsequently become inaccurate.

Westpac will from time to time dispose of and acquire financial instruments of companies covered in this Investment Recommendation as principal and act as a market maker or liquidity provider in such financial instruments.

Westpac does not have any proprietary positions in equity shares of issuers that are the subject of an investment recommendation.

Westpac may have provided investment banking services to the issuer in the course of the past 12 months.

Westpac does not permit any issuer to see or comment on any investment recommendation prior to its completion and distribution.

Individuals who produce investment recommendations are not permitted to undertake any transactions in any financial instruments or derivatives in relation to the issuers covered by the investment recommendations they produce.

Westpac has implemented policies and procedures, which are designed to ensure conflicts of interests are managed consistently and appropriately, and to treat clients fairly.

The following arrangements have been adopted for the avoidance and prevention of conflicts in interests associated with the provision of investment recommendations.

- I. Chinese Wall/Cell arrangements;
- II. physical separation of various Business/Support Units;
- III. Strict and well defined wall/cell crossing procedures;
- IV. a “need to know” policy;
- V. documented and well defined procedures for dealing with conflicts of interest;
- VI. reasonable steps by Compliance to ensure that the Chinese Wall/Cell arrangements remain effective and that such arrangements are adequately monitored.

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. 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. 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. All disclaimers set out with respect to Westpac apply equally to WCM.

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 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.

