WESTPAC MARKET OUTLOOK SEPTEMBER 2022.

AUSTRALIA AND
THE GLOBAL ECONOMY

WESTPAC INSTITUTIONAL BANK

CONTENTS

Australia

The world

Summary forecast tables

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Westpac Market Outlook is a monthly publication produced by Westpac Economics

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This issue was finalised on 14 September 2022.

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EXECUTIVE SUMMARY

The last month has been another volatile one for markets which have taken their cues from further aggressive monetary tightening and more determined inflation-fighting rhetoric from major central banks. The tone was set by Fed Chair Powell's Jackson Hole speech in late August where he made the FOMC's singular focus on reducing inflation clear, and its willingness to impose more costs on an already slowing economy if necessary. Indeed, a worse than expected August CPI report, released just as we go to press, has triggered a significant upward revision to our fed funds rate forecasts with a 4.125% rate now expected by year end (see here for more). The ECB has also stiffened its inflation-fighting rhetoric, delivering a 75bp rate hike at its September meeting.

The shift has triggered a material risk-off move, markets also whipped around by a range of other factors including developments in Ukraine and the energy crisis in Europe, and China's challenges with COVID and a weak residential construction sector. Bonds, equities, currencies and commodities have all traded fairly big ranges in recent weeks. Heightened volatility now looks set to continue through to year-end. Accordingly we have lowered our near term AUD profile – a convincing 'risk on' move unlikely to gain traction while inflation fears dominate. We now see the currency holding around USD0.69 and a flatter USD profile, the eventual AUD rally coming through in 2023 in the form of a 5¢ rise over the year. Commodity prices will also retrace although the picture here is more complex, underinvestment also suggesting many prices will be better supported over the medium term.

Aside from some slowing evident in the US, most of the real economy effects of this rapid monetary re-tightening have yet to appear. That will change as we head into year-end with the major developed economies set for an abrupt slowing. However, the current messaging from central banks suggests it will take a significant further rise in rates and clear evidence that inflation is subsiding before growth considerations come more into frame. That should still happen in 2023 but exactly when is uncertain.

Australia: The Australian economy grew by 0.9% in the June quarter, a solid outcome driven by strong household spending on discretionary services, a reopening effect and supported by earlier stimulus. We confirm our downbeat view on prospects for 2023, with output growth forecast to be a well below trend 1%, slowing sharply from an expected 3.4% this year. By 2023, the full impact of the RBA's 325bp increase in interest rates will be felt, along with the adverse effects of ongoing high inflation and with the reopening effect having long since faded. Consumer spending is expected to be a tepid 1.2% in 2023, while home-building activity will likely contract associated with a sharp pull-back in property prices.

Commodities: Fading fears of Ukrainian crisis supply disruptions and rising fears that central banks will raise rates more aggressively to squeeze out inflation have increased the risk of a recession in 2023 driving a correction in commodity prices. However, a rising cost base and increasing uncertainty about energy demand given strengthening global efforts to meet net zero emissions targets, has seen investment lag behind prices.

Global FX markets: Data clearly highlighting the abating of inflationary pressures and little-to-no growth momentum in the US economy has been quickly discounted this month with market participants instead focused on the inflationary-fighting rhetoric of policymakers and the possibility of event risks. We have flattened out our US dollar profile through to year end accordingly. However, we still expect economic fundamentals to reassert in 2023 and beyond.

New Zealand: The Reserve Bank of New Zealand is continuing to hike the cash rate at a rapid pace and economic growth is set to shift down a gear in coming months. We are not forecasting a recession. However, growth is set to remain subdued for some time until the level of demand comes back into line with the economy's productive capacity.

United States: The Inflation Reduction Act of 2022 has the capacity to materially reduce US CO_2 emissions to 2030 and beyond. But to do so will require a household sector that is both able and willing to spend on discretionary purchases. For both the economic and environmental health of the US, it is critical that the FOMC remove the risk of inflation without causing a deep or lengthy recession.

China: China's residential construction sector has been hit hard by both structural reform and cyclical weakness, not to mention confidence effects associated with lockdowns associated with the government's 'COVID-zero' policy approach. However, underlying demand for new construction and housing more broadly remains strong. With authorities now intent on resolving the liquidity and solvency concerns of the sector, growth will return, sustainably so.

Europe: The sudden momentum shift in the Russia-Ukraine conflict and heightened anxiety around Europe's energy security are stark reminders that the balance of risks can swing rapidly in and out of favour. That said, the region's unexpected economic resilience heading into Q3 supports the ECB's unwavering focus on inflation and inflation expectations, necessitating further rate hikes into year-end.

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	0.5
China	6.9	6.8	6.0	2.2	8.1	3.0	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	7.0	7.0
Other East Asia	4.7	4.5	3.8	–2.3	4.1	4.5	4.5
Europe	2.6	1.8	1.6	–6.4	5.3	2.9	0.5
Australia	2.4	2.8	2.0	–2.1	4.9	4.2	1.9
New Zealand	3.1	3.2	2.4	–2.1	5.6	2.2	2.2
World	**3.7**	**3.6**	**2.9**	**–3.1**	**6.1**	**3.0**	**3.3**

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'.

RBA signals 'normalisation' phase over …

RBA hikes 50bps again …

The Reserve Bank Board decided to increase the cash rate by 50bps to 2.35% at its September meeting. The most important change in the Governor's decision statement is the description of the tightening cycle. In previous Statements he referred to the rate increases being "a further step in the normalisation of monetary conditions". In the latest decision statement this 'normalisation' note has been removed. Normalisation can be interpreted as the process of moving policy settings towards neutral. In previous speeches the Governor has estimated 'neutral' as being at least 2.5%.

… but drops reference to 'normalisation'.

In not referring to this move as a step towards 'normalisation' we can, arguably, conclude that, consistent with the 2.5% estimate, the Governor believes policy is now neutral. It is our view that policy should quickly move to neutral and then move more slowly as it traverses through to the 'contractionary zone'. That slower pace would imply a step back to 25bp moves going forward.

Some support for the concept of being a little more cautious with rate moves is provided in the comment: "the full effects of higher interest rates yet to be felt in mortgage payments."

Further tightening required …

The Governor gave further support to a slowdown in the pace of increases in a speech two days after the Board meeting where he noted: "we are conscious that there are lags in the operation of monetary policy and that interest rates have increased very quickly… the case for a slower pace of increase in interest rates becomes stronger as the level of the cash rate rises."

Note that the decision statement also notes: "The Board expects to increase interest rates further over the months ahead".

… but a slower 25bp pace makes sense from here …

Maintaining a 50bp pace when there are lags involved, particularly with respect to the impact of a heavily indebted household sector, would seem to be unnecessarily risky. The best approach, now that neutral has been reached, is to maintain the emphasis on inflation being the central commitment while backing that up by continuing to tighten policy.

… given uncertainty and 'treacherous lags' in a system …

During the Q&A session following the Governor's speech on September 8, I proposed that if a handbook existed for central bankers, it would recommend rapid moves to normalise rates be followed by a slower approach as the central bank considers the impact of moves given 'treacherous lags' in the system that can see pressure build up and release quickly when rates move so quickly. Consideration of lags is particularly important for Australia given the high level of household debt on floating or short term fixed rate terms – the rate rise effect on household cash flows can be much more potent than in the US for example, where mortgages are typically on fixed rates that run for 20–30 years.

… that operates through multiple channels.

And remember that even though only one third of households have a mortgage, rising rates impact through a variety of other channels including: cash-flows for non-mortgage borrowers; the indirect effects on rental payments for tenants as investors respond to higher funding costs; negative wealth effects of falling house prices, which affect outright property owners as well as owners with a mortgage; higher borrowing costs for business; and deeply pessimistic confidence.

Downgraded near term path for AUD …

We have lowered our profile for the Australian dollar against the USD. We now cannot see that lift to USD0.73 over the course of the remainder of 2022. Our end-year target has been lowered to USD0.69. We anticipate significant volatility over the remainder of 2022.

… as a clear signal on inflation and rate risks takes longer to emerge.

Markets will remain risk averse until they can see the prospect of a clear downward trend in inflation and the peak in interest rates for central banks. That is unlikely to emerge over the course of the remainder of 2022.

In contrast, we continue to expect the AUD to be strongly supported against the USD in 2023 with a USD0.75 target. That is because we do expect a steady emergence of that confidence around inflation and rates in 2023.

We still see a strong rally to USD0.75 in 2023 …

As central banks go on hold; inflation eases and markets look to rate cuts in 2024, risk assets, including the AUD, will be better supported. But, for now, the 'safe haven/risk off' attraction of the USD appears set to be sustained for longer than we had expected, while some of the supportive factors for the AUD we had anticipated in 2022 appear to be much more uncertain. For example: markets are pricing in a wider interest rate differential between AUD and USD than we currently expect; China's progress in stabilising its property market has been slow with more setbacks to reopening from latest COVID lockdowns; and uncertainty around energy security in Europe is weighing heavily on the outlook for the Continent.

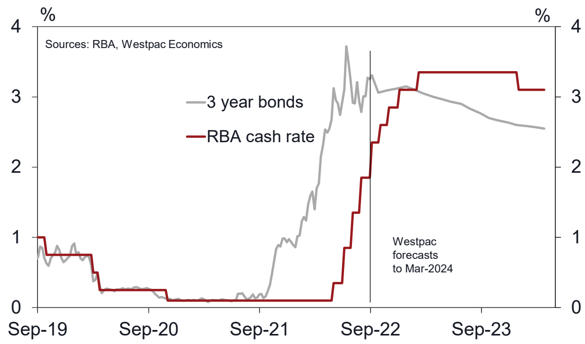
… but volatility will persist until several big issues are clarified.

In 2023 we expect these issues to be clarified but the outlook for 2022, when markets will not be able to take comfort from central bank certainty, is going to be volatile and not supportive of any sustained upswing in the AUD/USD.

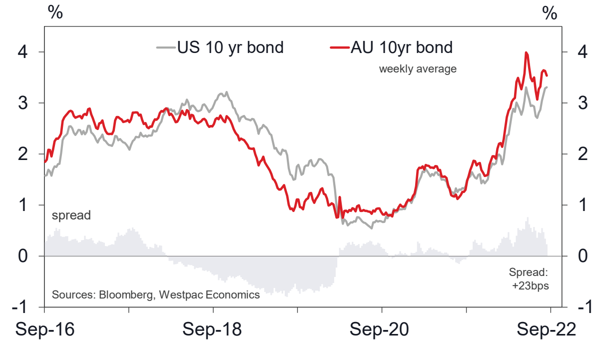
Bill Evans, Chief Economist

… more tightening ahead but at a slower, more cautious pace

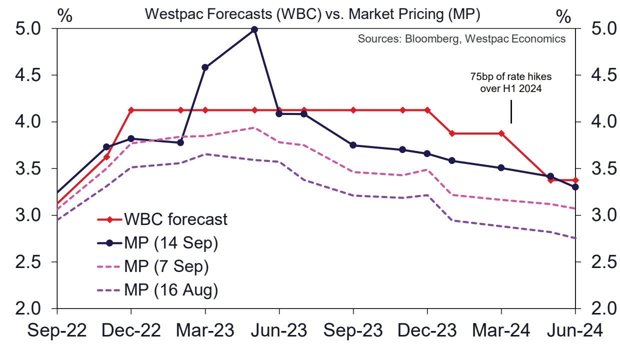
RBA cash rate and 3 year bonds



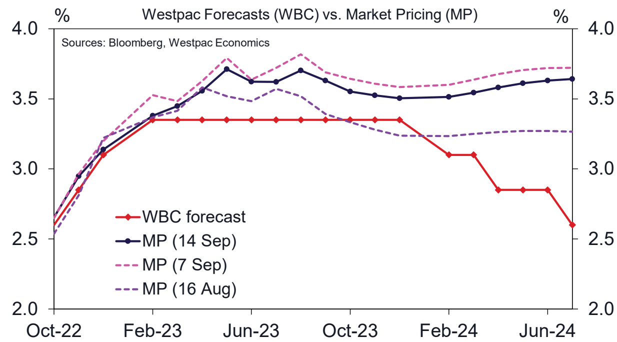
10 year bonds yields: elevated



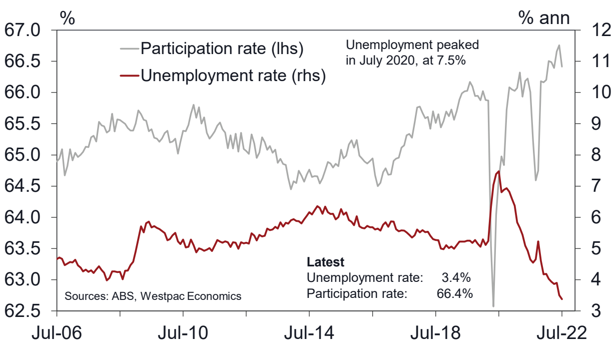
Fed funds forward pricing



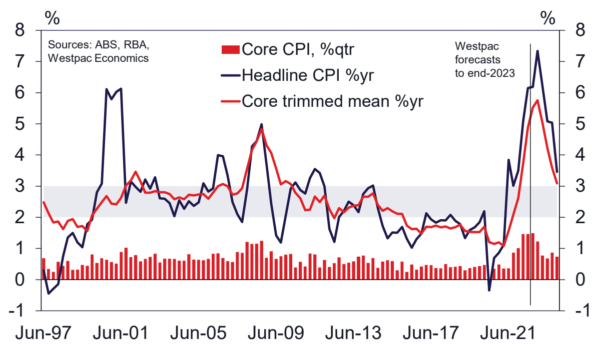
RBA forward pricing



Unemployment at 3.4%, a fresh 48 year low



CPI inflation



Sharp slowdown in growth in 2023 ...

A solid growth performance in Q2 ...

The Australian economy expanded by 0.9% in the June quarter for annual growth of 3.6%. For 2023 we expect growth to slow to 1.0%.

That solid growth in the June quarter was driven by strong household spending (around 54% of GDP) as the reopening of the economy saw a further boost to expenditure, particularly on discretionary services. This was accompanied by a substantial fall in the still elevated savings rate. We had anticipated growth in household spending of 2.6%, compared to the actual result of 2.2%. But spending growth in the March quarter was revised up from 1.5% to 2.2%, confirming our positive view of the household sector.

... driven by strong household spending on discretionary services.

The detail around household spending was also in line with our thinking – the savings rate fell from 11.1% to 8.7%, effectively freeing up $7.6bn to finance the additional $10.8bn in spending during the quarter. Discretionary services boomed – transport services up 37%; hotels, cafés and restaurants up 8.8%; and recreation and culture up 3.6%.

But residential construction contracted by 2.9% and non–residential construction (private and public) was down by 1.8%. This unexpected contraction in construction (subtracted 0.3ppt from growth in the quarter) represented around a 0.6ppt turnaround from our prior.

But reopening effects to fade from here ...

Looking forward, we expect to see a slowdown in the growth rate of consumer spending in the September and December quarters. The reopening effect will begin to fade, and the recent interest rate increases will start to impact households. There were two rate hikes in the June quarter (0.25% in May and 0.5% in June). The impact on household finances from those two rate hikes in the June quarter will have been minimal. But by the September and December quarters, which has seen rate 0.5% increases in July; August; and September the impact will be substantial. We expect the cash rate to rise by a further 100bps, to a peak of 3.35% in February 2023.

... as rapid-fire RBA rate hikes start to impact ...

Although around one third of households hold a mortgage; one third are renters; and one third own their properties outright, rate increases impact all groups through a range of channels – the cash flow of borrowers; the indirect impact from investors who pass on higher funding costs to renters, particularly as rental vacancy rates are near record lows in many cities and regions; the wealth effect of falling house prices on those who own their properties outright and borrowers; and the recent collapse in Consumer Confidence. Nationally, house prices have already fallen by 4%, with our forecast of another 12% likely to follow through to the second half of 2023.

... setting the scene for a sharp slowdown in 2023.

The contraction in construction in the June quarter has been attributed to weather delays and supply constraints. We expect to see construction lifting modestly through the second half of 2022 reflecting the build-up in the construction pipeline. A further contraction can be expected in 2023 as rising rates weigh on demand – effectively reducing the pipeline.

Reflecting these changes, we have lowered our growth forecast for 2022 from 4.4% to 3.4%.

We reaffirm our downbeat view for growth to decelerate from a 3.4% pace in 2022 ...

Growth in consumer spending during 2022 is expected to slow from 4.4% in the first half of the year to 1.8% in the second half. But with the expected recovery in the construction cycle we see dwelling construction lifting by 5.4% in the second half of this year, a turnaround from a contraction of 3.4% in the first half of 2022.

Overall, with the expected short term recovery in the construction cycle partially offsetting the slowdown in the pace of consumer spending, we expect growth in the second half of 2022 to hold around the same 3.2% annualised pace as we saw in the first half – albeit conditions in the final quarter of 2022 are likely to more subdued than those during the September quarter.

... to a forecast 1% in 2023 ...

We have not changed our downbeat view for growth in 2023. We expect GDP growth in 2023 to slow to 1.0% with private domestic demand growth slowing to 0.2% (a sharp deceleration from an expected 5.4% expansion in 2022). We cannot rule out a negative quarter of growth in 2023 but do not expect a classic recession.

... that includes consumer spending growth slowing to 1.2% ...

Consumer spending growth is expected to slow from 6.3% in 2022 to 1.2% in 2023; business investment growth will slow from 5.8% to -1.0%; while dwelling construction growth will slow from 2.0% to -4.0%. That slowdown in consumer spending growth will include a very modest further fall in the savings rate from 3.6% by the end of 2022 to 2.3% through 2023 - below the "equilibrium" rate of 6%. This will see the stock of "excess savings" accumulated during the pandemic, currently at $275 billion, wound back to around $200 billion by end 2023.

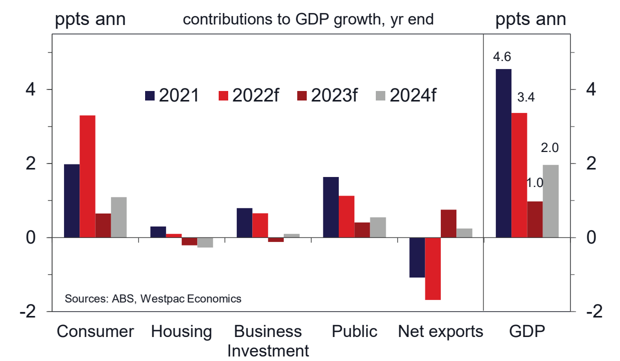
... and a decline in home building activity, as property prices slump.

The economy in 2023 will experience the full accumulated effect of the lift in the cash rate from 0.1% in April 2022 to 3.35% in February 2023. Other negatives for growth in 2023 are: a total fade out of the "reopening" effect; a limited further fall in the savings rate to below equilibrium as households continue to draw down those excess savings albeit at a slower pace than in 2022; a rise in the unemployment rate from 3.0% to 4.2%; and a fall in house prices from peak to trough of around 16%.

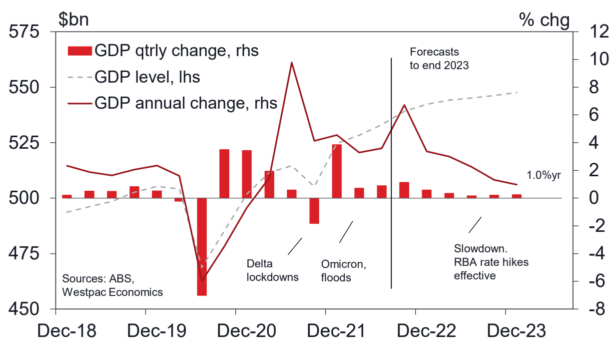
Bill Evans, Chief Economist

… as full impact of 325bps in RBA rate tightening lands

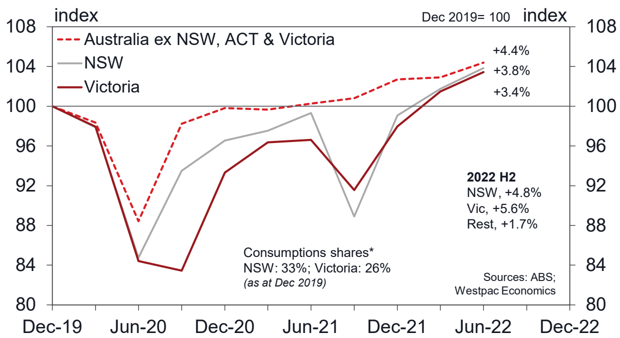
Australia: the growth mix



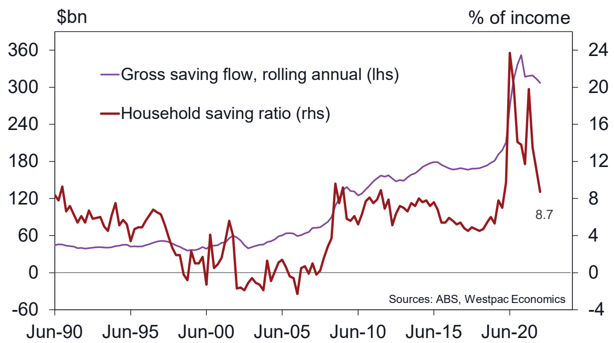
Australia: volatile path navigating covid



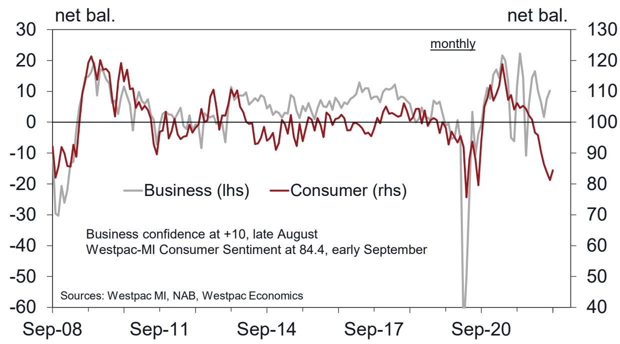
Consumer spending per capita



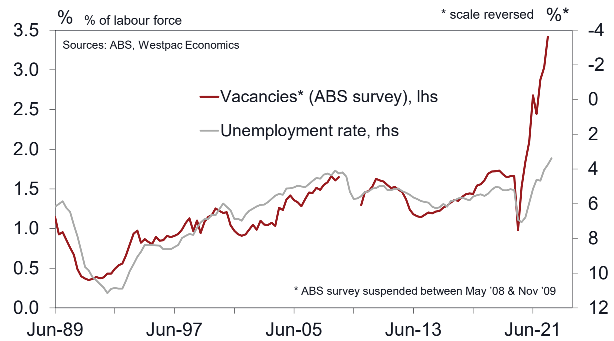
Household saving ratio and gross saving flow



Confidence: consumers and businesses



Job vacancies aplenty



Growth fears hit commodities ...

Fading fears of Ukrainian crisis supply disruptions ...

Commodity prices continue to be very volatile. The broad index is 6.2% higher in the month since the last report but this masks a wide dispersion in outcomes. At the upper extreme is a 44% increase in met coal and a 12.3% lift in thermal coal. At the lower end is a 7.9% fall in iron ore. Crude oil (Brent) has fallen 5.9% in the month and yet LNG is up 11.7%. Our base metals index is down 3.4% but within this is a 6.5% fall in aluminium, a 7.5% fall in zinc and lead, a 1.7% fall in nickel and a 0.4% increase in copper. Gold fell 3.4% in the month while rural commodities rose 2.3%. In the ongoing volatility we have revised our forecasts based on three key principles.

1. Bulks (iron ore and met coal) are set to face an ongoing recovery in supply just as the global steel industry faces restructuring associated with China having hit peak steel.
2. The aggressive tightening of global monetary policy is set to slow US and European growth in 2023 to 0.6% and 1.5% respectively. While Chinese year-average growth is set to lift to 7.0% in 2023, from 3.0% in 2022 – supporting global growth of 3.4% – the moderation in developed world demand will act as a brake on energy and base metal prices until we get a recovery heading into 2024, fuelled by an eventual loosening in monetary policy and a weaker USD.
3. Underinvestment in the resources sector, particularly for carbon-based energy and base metals including 'green metals', continues resulting in a further tightening in supply just as we head into 2024 and experience a recovery in developed world demand.

... and more forceful central bank moves to rein in inflation ...

... have increased the risk of a 2023 recession driving a big correction in commodities.

The net effect of these factors is a stronger profile for our overall commodities index but there is significant variation both in the magnitude and direction of revisions. Westpac's Export Price Index forecasts for end 2022 and end 2023 have been revised up 9.6% and 9.4% respectively, albeit still in the context of a decline. But the variation between commodities has been significant. At US$100/t at end 2022, iron ore price forecasts have been revised down 4.8% but retain a US$90/t target for end 2023. Contrast that with a 13.4% upward revision for met coal at end 2022 (to US$240/t) and a 21.4% upward revision to thermal coal (to US$425/t). The pressure on met coal is likely to remain due to tight supply conditions, hence the 4.5% upward revision to the end 2023 forecast as well (to US$212/t). Thermal coal is facing a more uncertain time give extended elevated prices, the potential lift in Australian supply to more normal levels and the ongoing significant discounts for South African and Indonesian coal – on balance we have revised down the end 2023 forecast by 14.3% to US$150/t.

However, a rising cost base and increasing uncertainty ...

Crude oil prices have fallen recently as demand fears outweighed continuing tight supply conditions. Our end 2022 Brent forecast has been lowered 8% to US$92/bbl. The new low in crude is US$87bbl in March 2023. From there an economic recovery though 2024, a lower US dollar and a continuing tight supply will see Brent prices back to US$92/bbl, 8.2% higher than we had forecast in our August report.

... about demand in the face of increasing global determination ...

We expect to see a similar pattern in base metals with our forecast for the index at end 2022 revised down 3.6% while the end 2023 forecast has been revised up 2.3%. However, for individual metals the outcomes are far more mixed. Our end 2022 forecast for aluminium is revised down 10% (US$2,500/t), -8.5% for lead (US$2,050/t), -3.6% for nickel and just -1.3% for copper. In 2023 our year end forecasts for nickel are now 6.1% higher (US$21,750/t), 5% higher for zinc (US$3,150) and 4.9% higher for copper (US$8,250) while they were revised down -3.8% for aluminium (US$2,600/t). Our forecast for the rural/softs index for end 2022 has been revised down 3.6% but lifted 8.4% for end 2023.

... to meet net zero emissions targets has seen investment lag behind prices.

Cost inflation (driven by the higher energy, labour, and other consumable prices) will be an ongoing challenge for the resources sector. For Australia, iron ore and coal remain in relatively better positions compared to other commodities as there is some offset from FX and the currently elevated margins on the cost of production. As such, some of this windfall gain will be recycled into repairs and short-term investments to lift production and smooth out some of the disruptions in the supply chain lifting export volumes as we head in 2023.

Demand fears hit crude oil but with no hurricanes in the Gulf so far this year ...

Investment in new oil supply hit a high of US$700bn in 2014 but has been well below that level since. Over on the downstream processing side, global refining capacity declined in 2020 and 2021. For both oil producers and refiners, strengthened commitments to meeting net zero CO_2 emissions targets around the world have increase the uncertainty about future demand. This lack of investment is set hold the crude oil market in a very tight position which leaves the market more prone to react to upside demand surprise than downside surprises.

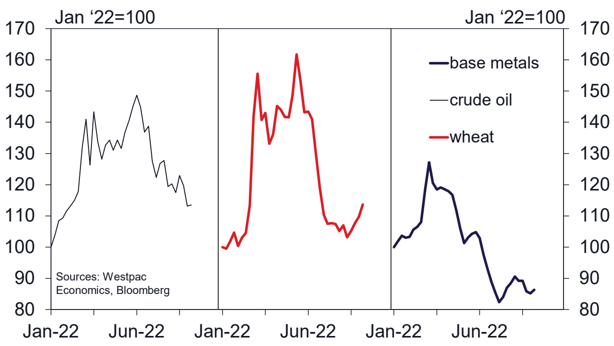
... crude supply has also been more robust than usual.

The recent weakness in crude oil prices has been due in part to the market focusing on the growth risks associate with rising interest rates and the European energy crisis. However, the Atlantic hurricane season is also a factor at the margin. The season is nearing its halfway point and so far no hurricanes have made landfall on the coast of the United States, contributing to the recent downward pressure on oil and fuel prices. The Atlantic season lasts from June 1 to November 30, with half of the storms usually occurring before September 12, US National Oceanic and Atmospheric Administration data showing an average of four hurricanes making landfall on the Atlantic or Gulf Coasts in this period over the last 170.

Justin Smirk, Senior Economist

… but underinvestment is a supply constraint

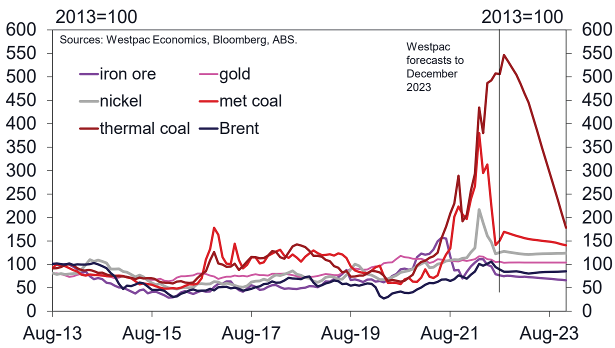
Commodities; Ukraine & rising interest rates



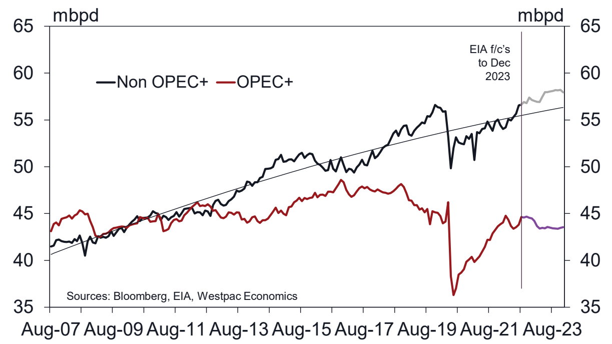
Australian commodities in US$

	Current	% change since	% change June 21 to
	12-Sept-22	10-Jun-22	10-Jun-22
Wheat	853	–22	60
Crude Oil, Brent	90	–4	60
Thermal Coal	459	85	207
Met Coal	253	–37	119
Iron Ore	101	–26	–33
Nickel	22,436	–9	56
Copper	7,848	–21	3
Export Price Index	362	–12	24

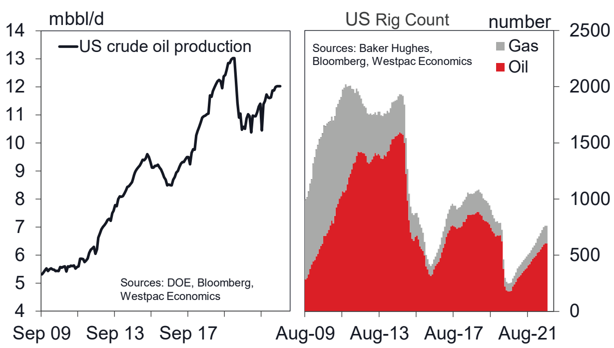
Australian commodities



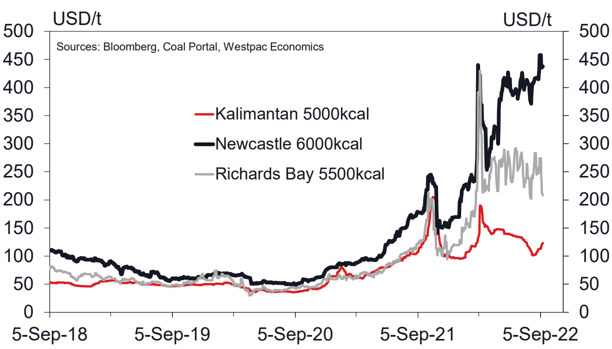
Non-OPEC+ to provide lift in supply



US crude oil production & rig count



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.

FX volatility to persist ...

Markets remain focused on risk.

The past month's trading has been acutely focused on risk. Throughout, evidence for the US and elsewhere of persistent weakness in activity and a nascent downtrend in actual and expected inflation has been quickly discounted, with the market instead focused on the possibility of event risks and the hawkish rhetoric of policy makers.

In light of these developments, we have flattened out our profile for the US dollar into year end when we expect the developed-world hiking cycles to conclude. DXY is now only expected to fall around 2.5% to 107.3 by end-2022. Admittedly though, this revised forecast is 4% lower than the most recent peak for DXY of 110.8 seen a week ago.

End of developed-world tightening should change perspective ...

Looking further out, we continue to expect real economic fundamentals to re-assert. Specifically, US economic weakness on an absolute and relative basis is expected to weigh heavily on the US dollar through 2023 and to mid-2024, DXY falling 10% cumulative to December 2023 and a further 2% in the first half of 2024. A period of stability is seen thereafter with the US likely to be running a consistently large negative output gap in the order of 3-3.5ppts from end-2024, with growth near trend, and the fed funds rate back towards a neutral level. Note, 95 is not an outright weak level for the US dollar, being in line with the average of the past 5 years.

The bilateral movements that underpin this index forecast highlight that, for it to be achieved, risk aversion must abate. This is true with respect to geopolitical concerns as much as it is inflation.

... allowing real-world fundamentals to re-assert.

From USD1.00, EUR/USD is forecast to rise only slightly to USD1.02 by end-2022, but then more sharply to USD1.12 at end-2023 and USD1.15 by mid-2024. While we expect the overnight interest rate differential between Europe and the US to remain significant over the forecast horizon, term interest rate differentials should narrow on both a nominal and real basis as inflation rates normalise and risks recede. With the help now being offered to households in Europe, and rapid moves to diversify away from Russian gas, the real term interest rate differential could provide significant support to Euro through the first half of 2023, as long as we do not see a further material escalation by Russia. A rebound in activity growth from mid-2023 will add support to this trend.

In 2023 and 2024, Euro is likely to outperform Sterling ...

Sterling has generally shown greater momentum than Euro on rebounds against the US dollar over the past year. However, there seems a high chance that Sterling will now underperform through to end-2023. While the support to households to combat high energy prices is substantial, the UK is yet to put forward a concrete plan of action with respect to energy efficiency and supply diversification akin to the Eurpean Commission's RePowerEU intiative.

... with risks to UK growth set to linger.

Uncertainty around activity growth is therefore higher for the UK than Europe once the immediate risk posed by cuts in Russian gas supply are countered. It also seems likely that the UK will face higher interest rates for longer given the breadth of inflation pressures; while the UK's labour market also has less spare capacity to provide additional momentum – or, to put it another way, potentially has further to fall if conditions surprise to the downside. Versus the Euro's 12% appreciation to end-2023, we look for Sterling to rise only 8% to USD1.25. In 2024, a similar pace of appreciation against the US dollar is seen to USD1.27. That said, all going well, Europe could see further outperformance in 2024 and beyond, especially if its efforts to rapidly replace its existing power supply with renewables succeed.

Asia continues to hold great promise ...

Turning to Asia, it is striking that Japan's Yen has depreciated sharply against the US dollar despite a circa 30% fall in price of oil – a material positive for Japan's trade position. It is also notable that this weakness has been seen just as Japan's economy experienced a strong rebound in activity through mid-2022, and with expectations over the outlook favourable on both an absolute and relative basis. Instead, the weakness stems from the Bank of Japan holding policy rates at the lower bound and persisting with open-ended QE, in stark contrast to the West.

... but currency gains will vary due to starting valuations ...

As risk appetite returns and investors look for growth opportunities across the world, it seems inevitable that we will see a material retracement of recent Yen weakness. However, even as major central banks cut policy rates from end-2023, USD/JPY is likely to hold above its pre-pandemic levels with a wide interest rate and inflation differential to persist. From JPY145 currently, we look for USD/JPY to fall to JPY132 end-2023 and JPY128 mid-2024.

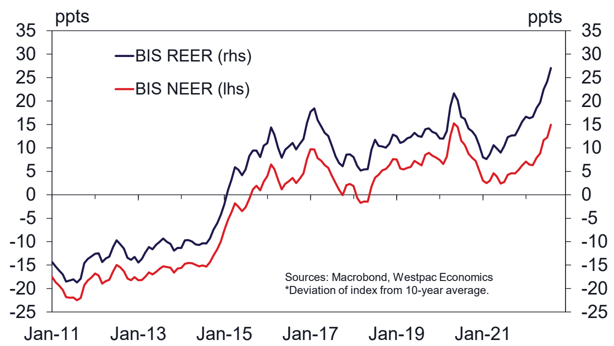
... and individual growth opportunities.

China's Renminbi meanwhile is likely to experience sustained gains versus the US dollar. While this month the market's focus has been on the Renminbi's near 4% bilateral depreciation, the trade-weighted CFETS index has held firm. Moreover, the US dollar weakness we expect to see to mid-2024 will coincide with fruit from China's latest structural reforms and development, giving the Renminbi the potential to outperform to mid-2024 and beyond, with CNY6.00 in sight late-2024.

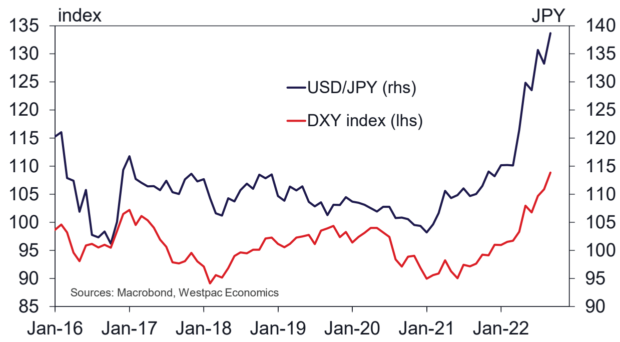
Elliot Clarke, CFA, Senior Economist

... as fundamentals assert in 2023

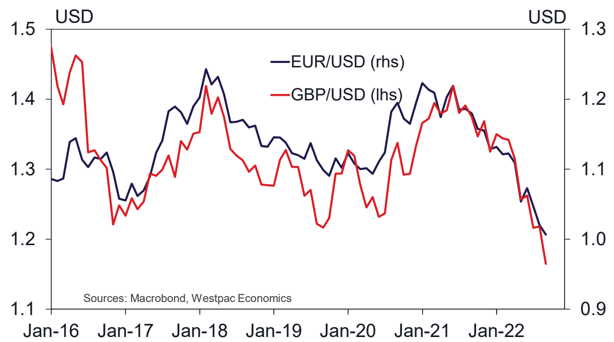
USD very elevated versus history



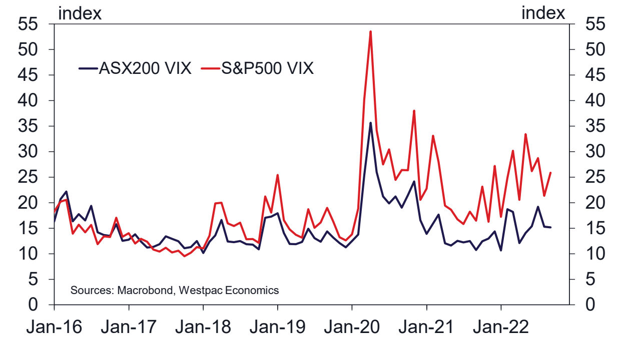
JPY has given DXY material support



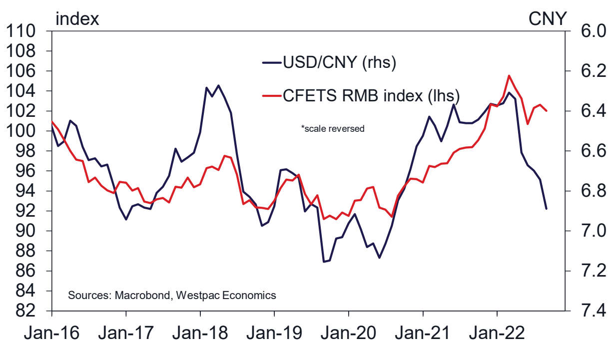
EUR & GBP idiosyncratic –'ves to fade in '23



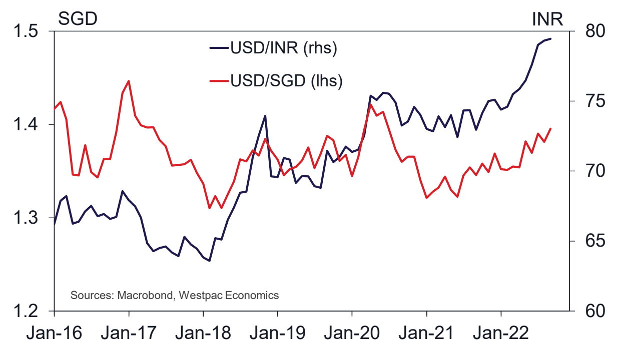
Distance from source of uncertainty a +'ve



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.

Economic growth to shift down a gear ...

RBNZ lifts cash rate to 3% ...

As expected, the Reserve Bank of New Zealand raised the Official Cash Rate by 50bps at its August policy meeting. That was the fourth consecutive 50bp rise and took the cash rate from 2.50% to 3.00%, its highest level in seven years.

... with further rapid rate increases on the cards.

Despite the rapid rate increases over the past year, the New Zealand economy is continuing to run hot, with a drum-tight labour market and sizzling domestic inflation pressures. As a result, we expect the RBNZ will continue with its 'go hard and go early' approach over coming months, and are forecasting the cash rate to reach a peak of 4.00% by the end of this year. This implies further 50bp hikes at both the October and November policy meetings, an outlook very much in line with the RBNZ's own forecasts and recent public comments which have stressed the need to move the cash rate to a 'tight' level quickly.

Front loaded rate increases ...

Reinforcing the case for more large rate moves is the uncertainty about where the 'neutral' level of the cash rate is. The neutral cash rate is the level of the OCR that is neither stimulatory nor restrictive. When the OCR is above neutral, interest rates will tend to be a drag on demand. Conversely, when the OCR is below neutral (as it has been through much of the pandemic) the low level of interest rates will boost spending and activity. Right now, with domestic demand running hot and inflation bubbling over, the RBNZ is desperate to ensure that the cash rate has moved above neutral and into tight territory to cool the economy down.

... to dampen strong domestic demand and inflation pressures.

The neutral level of the cash rate in New Zealand is usually thought to be around 2%. However, even in normal times, there are wide bounds of uncertainty around that estimate. And right now, we are a long way from normal. The RBNZ has flagged the possibility that at the current time that level could be higher than usual (meaning that more policy tightening could be required). Given that uncertainty, the RBNZ are likely to continue with large and rapid rate hikes to ensure that the cash rate is having the intended dampening impact.

Markets pricing in chance of a more protracted tightening cycle.

While we expect the cash rate to peak at 4.00%, the RBNZ has highlighted the possibility that it may need to rise even further. Similarly, financial markets are now pricing in a 4.25% peak in the cash rate, and have flirted with the idea that it may need to rise higher still (though rather than reflecting New Zealand-specific conditions, some of the recent rise in market pricing reflects expectations of more aggressive tightening from central banks globally).

While conditions have started to soften ...

Ultimately, what will determine the extent of rate increases is whether we are seeing a softening in domestic demand and inflation. On this front, signs that the economy is losing steam have been mounting. House sales and prices have continued to drop. We have also seen consumer sentiment fall to the lowest level on record. And importantly, we are now seeing signs that household spending is starting to cool, with nominal retail spending effectively tracking sideways for several months now. That is despite increases in both consumer prices and wages.

... the economy remains stretched.

However, the economic news has not all been in one direction. Notably, the labour market has remained tight, with businesses still struggling to attract and retain staff. And on the inflation front, while gauges of price and cost pressures have not gotten worse, they have yet to show any material signs of easing.

Demand set to soften further in coming months ...

Developments have been mixed but we think a sharper slowdown in domestic demand is now on the cards. While the Official Cash Rate has been on the rise for close to a year now, most households have been shielded from the impact of rate increases to date. Around 90% of New Zealand mortgages are on fixed rates, with many loans still on the record low interest rates that were on offer prior to the tightening. That situation will change dramatically in coming months. Around a quarter of mortgages will come up for re-pricing by the end of this year, and another quarter by mid-2023. In many cases, borrowers will face re-fixing at rates that are 2 to 3 percentage points above what they are currently on.

... as rate rises ripple through the economy ...

As interest rate increases flow through the economy, we are forecasting annual GDP growth to slow to around 2% by the end of next year, down from the 3% to 4% rate we saw prior to the pandemic. That softening in demand is likely to see the RBNZ shift to an 'on hold' stance from the end of this year, with the OCR topping out at 4.00%.

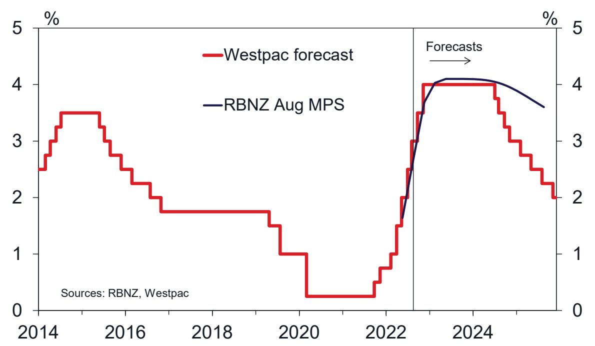
... but we are forecasting a soft landing rather than a crash.

While the New Zealand economy is set to slow, we are not forecasting a 'crash' or a recession. Rather, we expect the economy will experience a soft landing, with a relatively modest rise in unemployment from 3.3% currently to around 4.3%. The economy is entering the slowdown from a strong position. In addition to a strong labour market, prices for our key commodity exports remain firm despite recent falls, our tourism sector is opening up again, and household balance sheets have come through the pandemic in good shape. Those conditions mean that as a nation we are better positioned to deal with the drag from higher interest rates and the softening in demand.

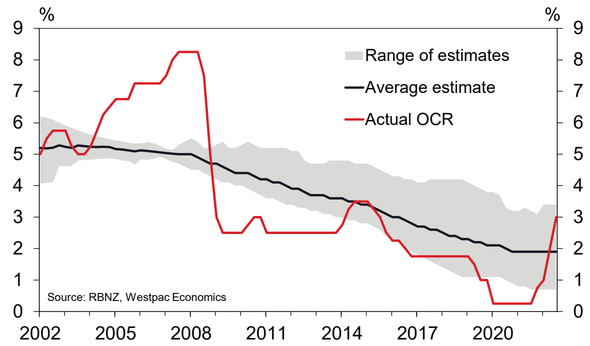
Satish Ranchhod, Senior Economist

... as interest rates continue to push higher

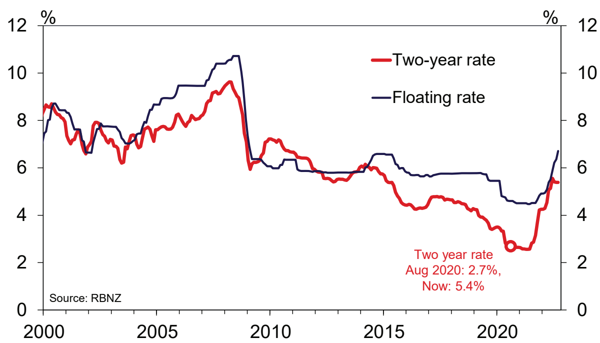
RBNZ Official Cash Rate



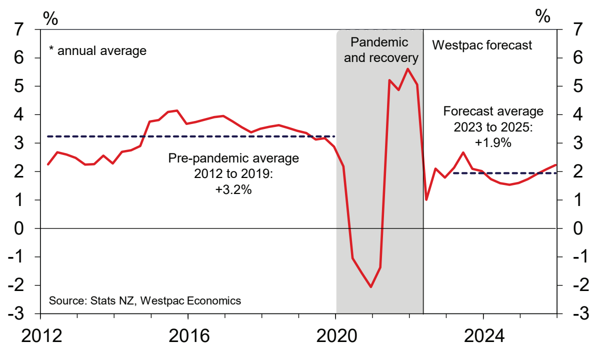
RBNZ estimates of the neutral OCR



Mortgage rates



Economic growth



	2021				2022							
Monthly data	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**
REINZ house sales %mth	-9.7	20.4	-1.3	-5.5	-6.9	0.6	-2.3	-1.6	-3.1	-11.2	-3.1	–
Residential building consents %mth	-1.5	-2.6	0.4	0.6	-10.0	12.1	6.7	-9.1	-0.4	-2.2	5.0	–
Electronic card transactions %mth	1.8	10.0	9.2	2.0	1.9	-7.6	1.8	7.2	1.6	-0.1	-0.3	0.7
Private sector credit %yr	7.3	7.6	7.7	7.5	7.3	7.3	6.9	6.8	6.4	6.0	5.6	–
Commodity prices %mth	1.5	2.1	2.8	-0.3	1.0	3.9	3.9	-1.9	-4.3	-0.4	-2.2	-3.3
Trade balance $m	-870	-928	-645	-1122	-1003	-1171	-1217	-520	-781	-1427	-1452	–

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	3.9	3.3	3.2	3.2	3.3
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.

Consumer financial health critical …

The US path to net zero …

The Inflation Reduction Act recently passed by US Congress and signed into law by President Biden has the potential to create a paradigm shift in US emission reduction, with its policies having the capacity to deliver approximately 80% of the circa 50% reduction in CO_2 emissions that the US Government is seeking to achieve by 2030 against 2005 levels. To do so however, requires a consumer that is both willing and able to spend.

… looks set to rely heavily on the financial health …

The reason this is the case is that much of the reduction in emissions under the act comes from consumers adopting new, more emissions-efficient technology in their daily lives. This applies to numerous areas such as improving the energy efficiency of dwellings; expanding the use of rooftop solar; and replacing old appliances.

… and discretionary spending capacity of the consumer.

However, most significant is the intended uptake of low and zero-emission producing vehicles, both by consumers and across the transport fleets that serve them. Indeed, Princeton University's Zero Lab REPEAT project estimates that changes related to transport could bring about a 19% reduction in emissions to 2030 – accounting for close to 30% of the total reduction achieved by the Inflation Reduction Act.

Replacement of the national vehicle fleet is critical …

A key mechanism here is a $7,500 clean car tax credit. This is certainly a material incentive for consumers to transition to a new vehicle, particularly given generous income limits and the ability to claim at the time of sale. The removal of the 200,000 vehicle cap per producer should also incentivise car manufacturers to scale up in anticipation of rapid growth in demand. Yet, the conditions imposed by authorities could still materially crimp demand.

The Act's price limits for all vehicle types are below the current market price for many models, requiring cheaper models to be developed, produced and sold for the credit to be truly effective.

… though authorities look set to get in the way.

Of greater concern though, for consumers to receive the clean car tax credit, the vehicles need to not only be built in the US but have a 40% share of battery minerals sourced domestically or from countries with which the US has a free trade agreement – the required share rising to 80% from 2027. These requirements create the real risk of a consumer/vehicle mismatch, both with respect to price and vehicle specification.

Current financial health of the consumer is also of concern …

For at least the next few years there is also a broader impediment to transition: the poor financial health of the US consumer. While the US labour market has recovered well from the pandemic and is currently historically tight, the Employment Cost Index deflated by PCE inflation implies that real wages have declined by a cumulative 2.5% over the 18 months to June, likely to be 3% by year end. With inflation expected to only return slowly to target, the recovery in US real incomes will be long and slow.

… with pandemic savings already depleted …

US households also look to have already materially reduced their savings from recurring income, limiting the capacity of an average or below-average household to make a large discretionary purchase; all the more so given the dramatic rise in interest rates evident across the yield curve.

While the introduction of a $4,000 used clean car tax credit will help to make the transition to a EV or fuel cell car possible for more financially-constrained households, this will take time as new car supply has to grow before the used car market can develop.

… and real incomes contracting.

The US household sector's financial reality and the need to lower emissions out to 2030 and beyond highlight how important it is that the FOMC quickly reduce the pace and risks related to inflation, and do so without causing a deep recession. The stronger the consumer is as conditions return to normal, the greater their capacity and appetite for new spending will be. Industry's willingness to expand capacity to accommodate is also critical.

Here financial conditions might prove to be an ally of both the FOMC and the private sector. Since Chair Powell's forceful message was delivered at Jackson Hole in late-August, market participants have aggressively repriced term interest rate expectations, the US 10-year rising back from a low around 2.50% at the beginning of August to circa 3.30% today.

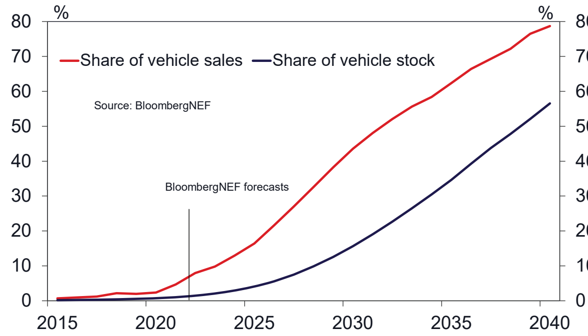
Financial conditions need to do their work to rein in inflation.

All else equal, demand and inflation expectations will come under pressure as a result, aiding policy's effectiveness. If, as we expect, inflation shows signs of coming under control heading into 2023, term interest rates will begin to move lower again and household wealth higher. And this time, policy-makers will be happy for the markets to reprice. The point to make here with respect to both consumer demand and emissions reduction is that such a turn of events will provide consumers not only with lower rates for auto loans but also confidence that real income growth will be sustainably positive and jobs retained, aiding spending.

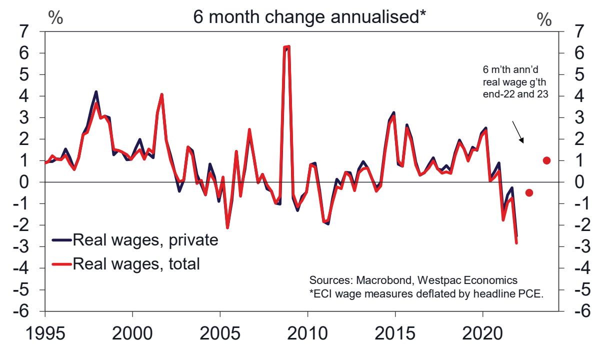
Elliot Clarke, CFA, Senior Economist

… to US emissions reduction

US electric vehicle sales must surge

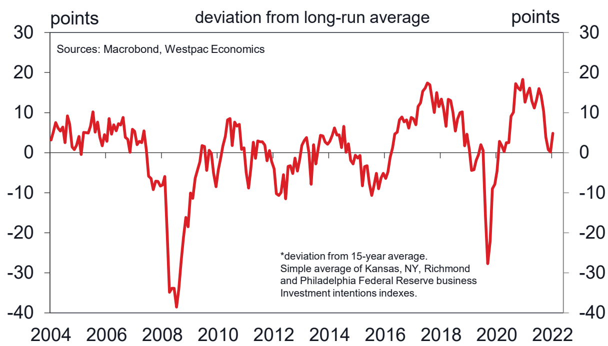


Real wage gains required to aid demand …



… given savings rate back near lows

Strong investment intentions also necessary



	2021				2022							
Monthly data	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**
PCE deflator %yr	4.4	5.1	5.6	5.8	6.0	6.3	6.6	6.3	6.3	6.8	6.3	–
Unemployment rate %	4.7	4.6	4.2	3.9	4.0	3.8	3.6	3.6	3.6	3.6	3.5	3.7
Non-farm payrolls chg '000	424	677	647	588	504	714	398	368	386	293	526	315
House prices* %yr	19.1	18.5	18.3	18.5	19.0	20.3	21.2	21.3	20.5	18.7	–	–
Durables orders core 3mth %saar	6.9	12.0	9.6	11.4	9.3	5.2	9.6	5.1	8.2	7.3	7.6	–
ISM manufacturing composite	60.5	60.8	60.6	58.8	57.6	58.6	57.1	55.4	56.1	53.0	52.8	52.8
ISM non-manufacturing composite	62.6	66.7	68.4	62.3	59.9	56.5	58.3	57.1	55.9	55.3	56.7	56.9
Personal spending 3mth %saar	7.5	13.1	10.4	3.9	5.9	6.1	15.3	9.0	8.8	8.1	6.8	–
UoM Consumer Sentiment	72.8	71.7	67.4	70.6	67.2	62.8	59.4	65.2	58.4	50.0	51.5	58.2
Trade balance USDbn	-78.3	-68.2	-78.0	-78.9	-88.0	-87.8	-106.9	-86.7	-85.9	-80.9	-70.7	–

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	-0.6	1.7
Current account USDbn	-206.4	-226.4	-224.8	-291.4	–	–

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

For housing, confidence and supply ...

Residential construction sector has been hit hard ...

China's residential construction sector has come under significant pressure in recent years, not because of a lack of underlying demand from consumers, but rather due to regulatory reform and the poor financial health of many developers.

... by structural reforms and cyclical weakness ...

The reduction in developer leverage required by 2020's "three red lines" policy – including that created by fully funded pre-sales – has been the primary catalyst. But the flow-on consequences for developers in poor health such as Evergrande has accentuated market concerns, so too the recent protests by off-the-plan purchasers, with their refusal to pay mortgages on unfinished apartments constraining developer liquidity at a particularly inopportune time.

... not to mention COVID uncertainty.

As of July 2022, real estate fixed asset investment was down more than 6% year-to-date against total fixed asset investment's near 6% gain. Meanwhile, sales and starts are respectively 31% and 37% lower year-to-date.

It seems that many participants have essentially written the sector off.

It is unsurprising then that the market consensus is so downbeat on prospects for the sector and, given its historical significance, for the economy more broadly. In our view however, there is good reason to believe residential construction will soon return to being a positive contributor to the economy, and sustainably so.

It is notable that, after all the sectoral developments of the past two years and with employment under pressure from COVID-zero restrictions, the cumulative decline in new home prices since August 2021 has been less than 2% following gains of over 40% since the last period of price declines back in 2014/15. This suggests that the prime concern for construction is supply, not demand.

In our view, supply is the concern not demand.

This assertion is backed up by the stage of construction data. Relative to the surge in starts seen from 2020 to mid-2021, growth in work under construction and completions has been modest. For completions, this follows a prolonged period of underperformance from 2016, limiting the available stock of new habitable dwellings in the economy. Looking ahead, the current weakness in starts and the financial concerns of the sector point to the supply of newly finished apartments remaining constrained for some time.

Available stock of completed dwellings is limited and new starts are very low.

This reality highlights that a successful resolution to the current situation requires authorities to provide capital and liquidity to developers and, where there are solvency concerns, to arrange for another developer to step in. Doing so will provide confidence to both buyers and developers and allow the industry to slowly work through projects under construction while planning and funding the next round of developments.

Liquidity will get construction going again.

While slower than we had hoped, progress towards a resolution is being made. In late-July, detail on a proposed rescue fund for distressed developers was released to the market. More recently, according to Bloomberg, authorities have reportedly also told some developers that state-owned China Bond Insurance Co will provide guarantees for their new bond issuance and that state-owned lenders will purchase the bonds. There have also been anecdotes of some local governments investigating the seizure of undeveloped land from troubled developers, with the proceeds of land sales to be used to fund the completion of current projects. Along with the other initiatives surely in the pipeline, these actions have the capacity to return liquidity and proper functioning to the construction sector and to rebuild confidence.

Authorities are keen to leverage reforms and create a greater array ...

It is also important to recognise that China's property investment outlook is not dependent on speculative investment by the wealthy. A key tenet of the reforms of recent years has been to make housing more affordable by building smaller, utilitarian apartments across the city tiers. An increase in Government constructed and owned rentals has also been proposed. Achieving these ambitions will allow investment in the sector to grow robustly and prices to rise on a comparable basis while affordability and social welfare improve overall.

... of housing to meet the needs of the entire income spectrum, creating demand ...

Looking to the long-term, it is worth mentioning that authorities intend residential investment to grow in line with the nominal economy – on average. However, they aspire to grow national and household incomes at a quicker pace. The net effect will be a structural improvement in housing affordability as well as capacity for consumers to invest in property and/or financial instruments for a return. Assuming developer leverage is constrained, China's financial stability and growth capacity will continue to improve as a result.

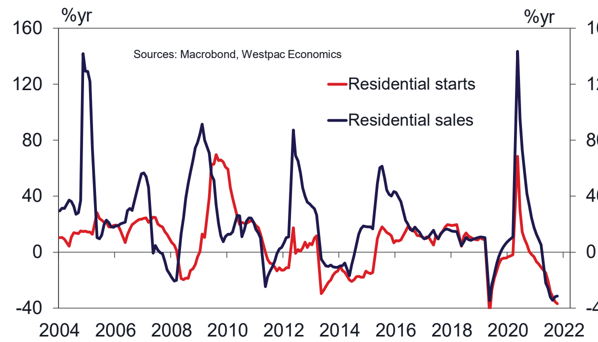
... and value for owner-occupiers, investors and renters alike.

Clearly there are risks for the sector, but our baseline expectation is for residential investment to begin to improve in Q4 2022 and to build momentum through 2023. Given the scale of 2022's weakness and the need for quality new housing across the economy, an above-trend year for investment in 2023 seems likely, after which investment momentum should normalise to a rate in line with nominal GDP growth. In part, this is why we expect a 7.0% year-average gain for real GDP in 2023 after a disappointing 3.0% result in 2022.

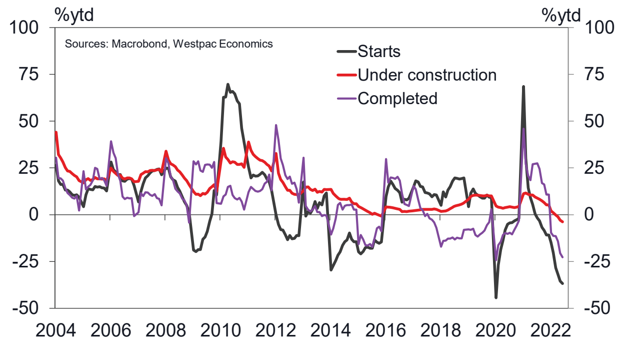
Elliot Clarke, CFA, Senior Economist

... are the concern, not demand

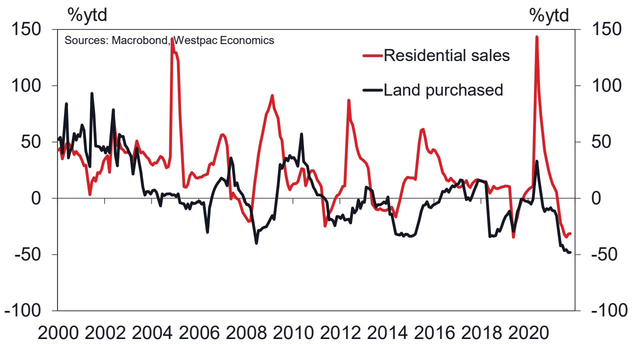
Residential construction sector near low point



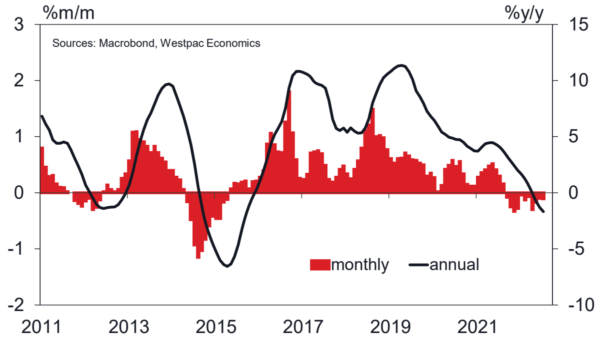
Supply of completed dwellings constrained



Sales need to rally to restart project pipeline



New home prices holding up



	2021				2022							
Monthly data %yr	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**
Consumer prices – headline	0.7	1.5	2.3	1.5	0.9	0.9	1.5	2.1	2.1	2.5	2.7	2.5
Money supply M2	8.3	8.7	8.5	9	9.8	9.2	9.7	10.5	11.1	11.4	12	12.2
Manufacturing PMI (official)	49.6	49.2	50.1	50.3	50.1	50.2	49.5	47.4	49.6	50.2	49.0	49.4
Fixed asset investment %ytd	7.3	6.1	5.2	4.9	4.9	12.2	9.3	6.8	6.2	6.1	5.7	–
Industrial production (IVA)	3.1	3.5	3.8	4.3	4.3	7.5	5.0	-2.9	0.7	3.9	3.8	–
Exports	27.9	26.8	21.7	20.8	24.0	6.0	14.4	3.6	16.4	17.7	18.0	7.1
Imports	16.7	20.0	31.4	19.7	20.9	11.5	0.5	0.1	4.0	1.0	2.3	0.3
Trade balance USDbn	68.1	84.8	71.7	93.7	82.7	28.1	45.3	50.0	77.5	97.4	101.3	79.4

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

Unexpected resilience …

An interesting month …

Over the past month, a variety of economic and geopolitical developments have revealed an unexpected economic resilience within the Euro Area, reminding us that the balance of risks facing the region has a propensity to swing rapidly in and out of favour.

… with a potential turning point in the Russia-Ukraine conflict …

After months of conflict, Ukraine has managed to successfully launch a counter-offensive in the Donbas, liberating much of the Russian-occupied territory in the region and regaining control of key logistical outposts, effectively halting Russia's assault in Ukraine's north-east. If this remarkable momentum is sustained, independent reports claim it could mark a major turning point in the war. But, as we know from prior experiences, developments can be volatile, hence there remains considerable uncertainty over the consequences, and eventual conclusion, of the conflict.

… but a heightened threat around gas supplies.

Energy security remained one of the prime sources of anxiety over the month, particularly after President Putin's suspension of gas exports via the Nord Stream 1 pipeline – Europe's largest source of Russian gas. While it is promising to see current gas storage volumes surpass goals, risks around the potential for severe weather heading into Winter; the scope for further demand-reduction strategies; and Russia's ability to further limit gas exports via other pipelines are understandably concerning.

Households and businesses under pressure.

European households and businesses are under intense pressure, as evinced by historically weak prints from the September ZEW and Sentix confidence surveys. Household spending capacity is being squeezed by broad-based inflation pressures and business investment capacity is hindered by uncertainty and financial tightening.

The economy's unexpected resilience to date …

That said, official statistics continue to show the Euro Area on a firmer-than-expected footing heading into Q3. The final Q2 GDP estimate saw a modest upward revision to 0.8% growth in the quarter, led by a rebound in consumption as European households unleashed their pent-up demand, particularly on services. With record low unemployment (6.6%) and strong labour demand putting further upward pressure on wages, household incomes are relatively well supported. Additionally, the gradual easing of supply bottlenecks allowed manufacturers to work through a backlog of orders, facilitating a marked +3.3% lift in industrial production during Q2.

… has allowed the ECB focus more squarely on inflation …

Turning to the ECB's September policy decision, the 75bp rate hike affirmed that their chief focus is keeping inflation expectations well-anchored and returning inflation to the 2% medium-term target. Indeed, they now see annual headline inflation at 8.1% in 2022, and holding above target to end-2024. Regarding growth, the ECB sees output growth stalling only to March 2023 before a robust rebound takes hold, with 1.9% growth forecast for 2024.

… but with more rate hikes to come, the balance of risks remains delicate.

Consolidating this sanguine baseline view with the delicate balance of risks laid out above, the ECB's "downside scenario" analysis – involving a protracted conflict and compromised energy security – estimates that growth could print 2ppts lower than the baseline projection over the forecast horizon. That inflation is not expected to be materially different in such circumstances supports the ECB's intent to deliver further rate hikes into year-end, the pace and scale of which will depend critically on incoming data and financial conditions.

Ryan Wells, Economist

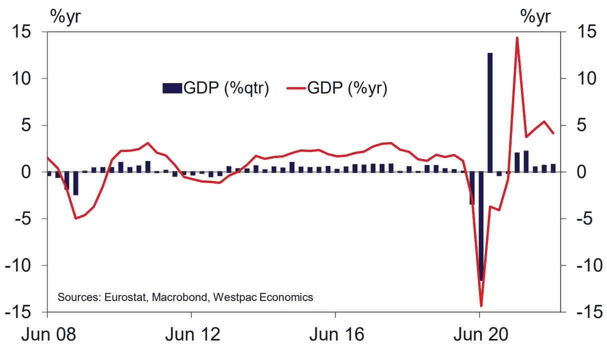
	2021				2022							
Europe	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**
Eur consumer prices %yr	3.4	4.1	4.9	5.0	5.1	5.9	7.5	7.5	8.1	8.6	8.9	9.1
Eur unemployment rate %	7.3	7.3	7.1	7.0	6.9	6.8	6.8	6.7	6.7	6.7	6.6	–
Eur industrial production %yr	4.0	0.2	-1.3	1.9	-1.3	1.7	-1.1	-2.5	1.6	2.4	–	–
Eur retail sales volumes %yr	2.7	1.7	8.4	2.4	8.5	5.1	1.9	4.2	0.6	-3.2	-0.9	–
Eur consumer confidence	-3.5	-5.2	-8.2	-9.3	-9.7	-9.6	-21.7	-22.1	-21.2	-23.7	-27.0	-24.9
Eur current account balance €bn	22.9	6.6	7.3	12.6	16.8	8.7	-3.0	-4.3	-6.9	4.2	–	–
United Kingdom												
UK Consumer price index %yr	3.1	4.2	5.1	5.4	5.5	6.2	7.0	9.0	9.1	9.4	10.1	–
UK unemployment rate % (ILO)	4.3	4.2	4.1	4.0	4.0	3.8	3.7	3.8	3.8	3.8	3.6	–
UK industrial production %yr	1.9	0.3	0.2	1.0	3.3	2.0	1.1	1.6	1.8	2.4	1.1	–
UK retail sales volumes %yr	-0.6	-1.2	3.2	1.2	9.6	7.5	2.0	-5.7	-4.9	-6.1	-3.4	–
UK consumer confidence	-13	-17	-14	-15	-19	-26	-31	-38	-40	-41	-41	-44

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	0.8/4.1
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	-0.1/2.9
UK current account balance £bn	-26.8	-12.4	-11.3	-28.9	-7.3	-51.7	-/-

Source: Official agencies.

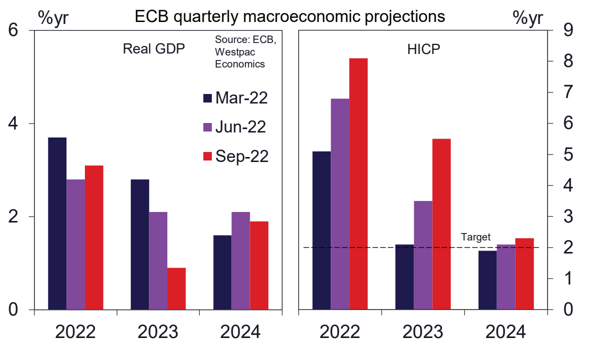
... amid intense uncertainties

Growth buoyant despite headwinds

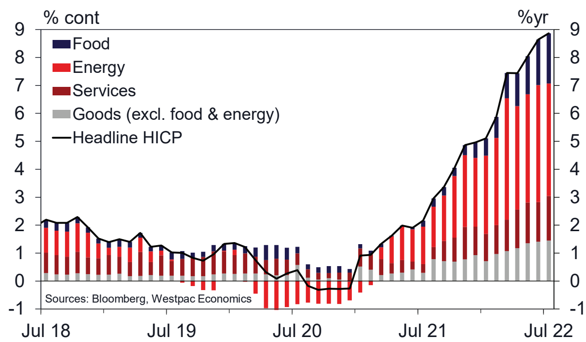


Labour market remains in robust health

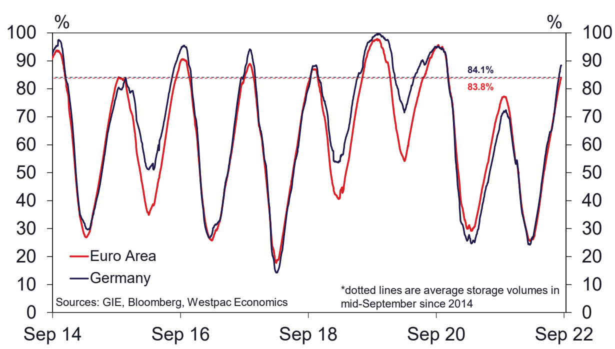
Long-term inflation above target



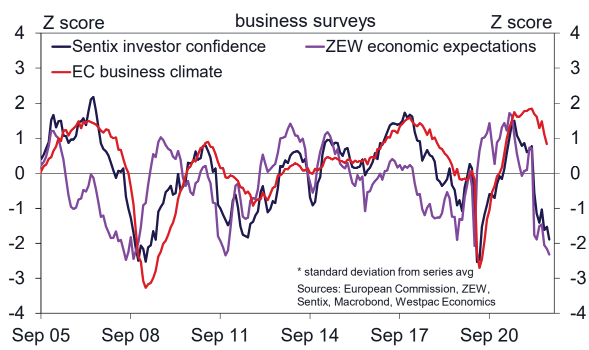
CPI: energy and food inflation surging



Gas storage managing considerable headwinds



Sentiment hit hard by conflict and inflation



FINANCIAL FORECASTS

Australia

Interest rate forecasts

	Latest (14 Sep)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
Cash	2.35	3.10	3.35	3.35	3.35	3.35	3.10	2.85
90 Day BBSW	2.74	3.55	3.55	3.55	3.55	3.38	3.13	2.88
3 Year Swap	3.70	3.50	3.30	3.20	3.00	2.90	2.85	2.85
3 Year Bond	3.29	3.25	3.10	3.00	2.80	2.70	2.65	2.65
10 Year Bond	3.69	3.70	3.50	3.40	3.20	3.00	2.80	2.65
10 Year Spread to US (bps)	24	30	30	30	30	30	30	25

Sources: Bloomberg, Westpac Economics.

Currency forecasts

	Latest (14 Sep)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
AUD vs								
USD	0.6736	0.69	0.70	0.71	0.73	0.75	0.77	0.78
JPY	97.49	96.6	96.6	96.6	97.8	99.0	100.1	99.8
EUR	0.6753	0.68	0.67	0.66	0.66	0.67	0.68	0.68
NZD	1.1232	1.11	1.11	1.11	1.11	1.11	1.11	1.11
CAD	0.8873	0.88	0.88	0.89	0.91	0.93	0.96	0.98
GBP	0.5862	0.59	0.59	0.59	0.59	0.60	0.61	0.61
CHF	0.6476	0.66	0.66	0.67	0.68	0.71	0.71	0.72
DKK	5.0219	5.03	5.01	4.94	4.94	4.98	5.02	5.05
SEK	7.2074	7.22	7.18	7.08	7.08	7.15	7.21	7.24
NOK	6.8190	6.83	6.80	6.70	6.70	6.76	6.82	6.85
ZAR	11.76	11.9	12.0	12.1	12.2	12.4	12.6	12.7
SGD	0.9472	0.96	0.97	0.97	0.99	1.00	1.01	1.03
HKD	5.2873	5.42	5.46	5.54	5.66	5.81	5.97	6.05
PHP	38.54	38.0	37.8	37.6	38.0	38.3	39.2	39.8
THB	24.71	24.5	24.2	23.8	23.7	23.6	24.2	24.6
MYR	3.0465	3.04	3.01	2.98	2.99	3.04	3.11	3.16
CNY	4.6975	4.69	4.69	4.62	4.67	4.73	4.77	4.80
IDR	10005	10143	10220	10295	10512	10725	10966	11144
TWD	20.98	21.1	21.2	21.3	21.7	22.1	22.6	23.0
KRW	938	938	931	923	927	930	944	960
INR	54.64	54.2	54.3	54.3	55.1	55.9	56.6	56.9

Australia

Activity forecasts*

	2021	2022				2023		Calendar years			
%qtr / yr avg	**Q4**	**Q1**	**Q2**	**Q3f**	**Q4f**	**Q1f**	**Q2f**	**2020**	**2021**	**2022f**	**2023f**
Private consumption	6.5	2.2	2.2	1.3	0.5	0.3	0.2	–5.8	4.9	7.4	2.3
Dwelling investment	–2.0	–0.5	–2.9	2.7	2.7	0.9	–0.5	–5.5	9.8	–1.6	1.4
Business investment*	0.8	1.0	0.6	2.1	2.0	1.2	0.4	–4.2	6.2	3.8	3.2
Private demand *	4.7	1.7	1.4	1.4	0.8	0.4	0.1	–5.3	6.1	5.8	2.0
Public demand *	0.3	2.5	0.0	0.8	0.8	0.4	0.3	6.0	6.1	5.5	1.9
Domestic demand	3.5	1.9	1.0	1.2	0.8	0.4	0.2	–2.4	6.1	5.7	2.3
Stock contribution	1.0	1.0	–1.2	0.3	–0.2	–0.1	–0.3	0.0	0.6	0.3	–0.6
GNE	4.4	2.9	–0.2	1.5	0.5	0.3	–0.1	–2.5	6.8	6.0	1.4
Exports	–1.1	–0.8	5.5	1.6	2.5	2.1	2.1	–9.8	–1.8	3.5	9.5
Imports	0.6	11.3	0.7	3.6	2.3	1.7	1.0	–13.0	6.3	14.0	7.0
Net exports contribution	–0.4	–2.3	1.0	–0.4	0.0	0.1	0.2	0.4	–1.6	–2.0	0.5
Real GDP %qtr / yr avg	**3.9**	**0.7**	**0.9**	**1.1**	**0.6**	**0.3**	**0.2**	–2.1	4.9	4.2	1.9
%yr end	**4.5**	**3.3**	**3.6**	**6.7**	**3.4**	**3.0**	**2.2**	**–0.7**	**4.5**	**3.4**	**1.0**
Nominal GDP %qtr	3.6	4.1	4.3	1.1	1.0	0.3	0.3				
%yr end	10.4	10.5	12.1	13.7	10.8	6.8	2.8	0.9	10.4	10.8	1.0

Other macroeconomic variables

	2021	2022				2023		Calendar years			
% change	**Q4**	**Q1**	**Q2**	**Q3f**	**Q4f**	**Q1f**	**Q2f**	**2020**	**2021**	**2022f**	**2023f**
Employment (2)	0.8	2.0	0.9	0.9	1.0	0.5	0.0	–	–	–	–
%yr	2.4	3.2	3.2	4.8	5.0	3.4	2.5	–1.0	2.4	5.0	0.2
Unemployment rate % (2)	4.7	4.1	3.8	3.4	3.1	3.1	3.4	6.8	4.7	3.1	4.2
Wages (WPI) (2)	0.7	0.7	0.7	1.1	1.2	1.1	1.0	–	–	–	–
%yr	2.3	2.4	2.6	3.1	3.7	4.2	4.4	1.4	2.3	3.7	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	9.7	2.8	18.3	4.0	2.0	-3.0	-5.0	47.0	68.4	27.0	-26.0
% of GDP	1.7	0.5	3.0	0.7	0.3	–0.5	–0.8	2.4	3.2	1.1	–1.0
Terms of trade annual chg (1)	10.0	9.8	7.5	–0.5	2.0	–8.8	–15.0	–0.2	17.6	4.6	–12.0

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

	2021		2022								
Monthly data	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Employment '000 chg	384	70	21	98	24	5	61	88	–41	–	–
Unemployment rate %	4.6	4.2	4.2	4.0	3.9	3.9	3.9	3.5	3.4	–	–
Westpac–MI Consumer Sentiment	105.3	104.3	102.2	100.8	96.6	95.8	90.4	86.4	83.8	81.2	84.4
Retail trade %mth	7.1	–4.1	1.6	1.8	1.6	0.9	0.7	0.2	1.3	–	–
Dwelling approvals %mth	–1.0	8.4	–24.4	37.9	–15.0	–1.4	8.6	–0.6	–17.2	–	–
Credit, private sector %yr	6.6	7.2	7.6	8.0	8.0	8.6	9.1	9.1	9.1	–	–
Trade balance AUDbn	9.4	7.9	12.1	7.1	9.0	11.8	14.6	17.1	8.7	–	–

New Zealand

Interest rate forecasts

	Latest (14 Sep)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
Cash	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
90 Day Bill	3.62	4.10	4.10	4.10	4.10	4.10	4.10	3.80
2 Year Swap	4.31	4.10	4.00	3.80	3.60	3.40	3.20	2.95
10 Year Bond	4.03	4.00	3.80	3.70	3.60	3.45	3.30	3.20
10 Year Spread to Aust	34	30	30	30	40	45	50	55
10 Year Spread to US	58	60	60	60	70	75	80	80

Sources: Bloomberg, Westpac Economics.

Currency forecasts

	Latest (14 Sep)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
NZD vs								
USD	0.5998	0.62	0.63	0.64	0.66	0.68	0.70	0.70
JPY	86.80	86.8	86.9	87.0	88.4	89.5	90.4	89.6
EUR	0.6012	0.61	0.61	0.60	0.60	0.61	0.61	0.61
AUD	0.8905	0.90	0.90	0.90	0.90	0.90	0.90	0.90
CAD	0.7900	0.79	0.79	0.80	0.83	0.84	0.87	0.88
GBP	0.5219	0.53	0.53	0.53	0.54	0.54	0.55	0.55
CNY	4.1822	4.22	4.22	4.16	4.22	4.27	4.31	4.31

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

Activity forecasts*

	2021	2022				2023		Calendar years			
% qtr / yr change	**Q4**	**Q1**	**Q2f**	**Q3f**	**Q4f**	**Q1f**	**Q2f**	**2020**	**2021**	**2022f**	**2023f**
Private consumption	5.5	4.6	-2.9	0.1	-0.1	0.0	0.1	-1.1	6.1	2.3	-0.3
Government consumption	4.1	1.9	2.0	-0.7	-0.7	-0.7	-0.7	6.8	10.1	7.6	-2.4
Residential investment	6.8	0.8	0.0	0.8	0.6	0.2	0.2	-3.2	10.9	2.8	0.7
Business investment	14.3	1.2	-1.9	0.8	1.7	1.3	0.7	-8.8	9.4	7.5	3.2
Stocks (ppt contribution)	-2.8	0.2	0.0	-0.4	0.1	0.0	0.0	-0.8	1.6	-0.8	0.0
GNE	4.4	2.6	-1.6	-0.2	0.3	0.1	0.1	-1.9	9.5	3.4	0.0
Exports	-2.0	-14.3	15.6	5.7	4.0	3.1	2.6	-12.6	-3.6	0.0	16.0
Imports	3.2	-2.8	-0.4	2.0	2.0	1.0	0.9	-16.0	15.0	3.0	5.0
GDP (production)	**3.0**	**-0.2**	**1.6**	**0.4**	**0.6**	**0.6**	**0.5**	**-2.1**	**5.6**	**2.2**	**2.2**
Employment annual %	-0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.6	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	3.5	3.9	4.2	4.3	1.6	2.6	3.9	4.3
CPI annual %	**5.9**	**6.9**	**7.3**	**6.6**	**5.3**	**4.6**	**3.6**	**1.4**	**5.9**	**5.3**	**3.6**
Current account balance % of GDP	-5.8	-6.5	-7.6	-7.8	-7.4	-6.4	-5.6	-0.8	-5.8	-7.4	-4.6
Terms of trade annual %	2.8	3.3	-3.7	0.2	1.1	1.3	5.8	-1.6	2.8	1.1	2.3

Sources: Statistics NZ, Westpac Economics.

Commodity prices

End of period	Latest (14 Sep)***	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
Australian commodities index#	364	364	333	321	305	289	**273**	**268**	**266**	**264**	**268**
Bulk commodities index#	**583**	**580**	**515**	**489**	**469**	**432**	**387**	**370**	**352**	**329**	**326**
iron ore finesTSI @ 62% US$/t	103	105	100	99	96	93	90	87	84	81	80
Qld coking coal index (US$/t)	253	250	240	231	226	222	212	202	193	183	183
Newcastle spot thermal coal (US$/t)	460	450	425	375	300	225	150	140	130	115	105
crude oil (US$/bbl) Brent ICE	91	90	92	87	90	91	92	97	105	110	115
LNG in Japan US$mmbtu	20.36	20.3	16.4	16.6	15.4	15.8	15.7	15.6	16.2	17.3	17.9
gold (US$/oz)	1,725	1,720	1,740	1,735	1,735	1,735	1,735	1,735	1,735	1,735	1,745
Base metals index#	**205**	**204**	**200**	**197**	**200**	**205**	**211**	**215**	**219**	**227**	**238**
copper (US$/t)	7,935	7,800	7,800	7,700	7,800	8,000	8,500	8,600	8,700	9,176	9,656
aluminium (US$/t)	2,287	2,260	2,250	2,200	2,250	2,400	2,500	2,600	2,700	2,777	2,853
nickel (US$/t)	23,552	22,000	21,700	21,250	21,550	21,650	21,750	22,250	22,500	23,700	24,907
zinc (US$/t)	3,207	3,190	3,190	3,190	3,180	3,160	3,150	3,125	3,110	3,105	3,246
lead (US$/t)	1,930	1,900	1,875	1,850	1,850	1,900	1,900	1,950	1,975	2,083	2,200
Rural commodities index#	**162**	**162**	**168**	**175**	**178**	**175**	**173**	**172**	**188**	**198**	**207**
NZ commodities index ##	**366**	**376**	**384**	**397**	**386**	**372**	**375**	**375**	**374**	**373**	**372**
dairy price index ^^	329	342	348	378	362	331	328	324	320	315	311
whole milk powder US$/t	3,610	3,610	3,895	4,081	3,700	3,675	3,650	3,600	3,550	3,464	3,450
skim milk powder US$/t	3,575	3,575	3,869	4,056	3,650	3,625	3,600	3,550	3,500	3,414	3,400
lamb leg UKp/lb	635	610	597	588	583	583	583	583	583	583	583
bull beef US¢/lb	269	267	247	239	241	259	277	283	283	283	283
log price index ##	172	170	163	160	158	159	161	162	164	165	167
strong wool US¢/kg	177	176	176	176	176	176	176	176	176	176	176

	levels				% change			
Annual averages	**2021**	**2022(e)**	**2023(f)**	**2024(f)**	**2021**	**2022(e)**	**2023(f)**	**2024(f)**
Australian commodities index#	**306**	**376**	**302**	**267**	**43.1**	**22.6**	**-19.5**	**-11.6**
Bulk commodities index#	**510**	**592**	**496**	**379**	**47.0**	**16.1**	**-16.2**	**-23.7**
iron ore fines @ 62% USD/t	159	121	95	84	46.6	-23.8	-21.3	-12.2
LNG in Japan $mmbtu	10.3	17.1	16	17	31.1	66.8	-7.1	4.2
ave coking coal price (US$/t)	143	258	228	195	33.2	79.8	-11.4	-14.6
ave thermal price (US$/t)	99	314	244	110	74.4	216.8	-22.2	-54.8
iron ore fines contracts (US¢ dltu)	239	184	157	147	72.8	-22.9	-14.9	-6.5
coal coking contracts (US$/t)	205	365	231	196	62.5	77.8	-36.8	-15.0
crude oil (US$/bbl) Brent ICE	70	98	90	105	60.2	40.2	-8.5	16.5
gold (US$/oz)	1,801	1,809	1,735	1,737	1.2	0.4	-4.0	0.1
Base metals index#	**213**	**227**	**200**	**220**	**41.1**	**6.8**	**-12.2**	**10.3**
copper (US$/t)	9,297	8,790	7,942	8,937	50.2	-5.5	-9.6	12.5
aluminium (US$/t)	2,477	2,696	2,317	2,703	44.0	8.9	-14.1	16.7
nickel (US$/t)	18,452	25,432	21,546	23,076	33.4	37.8	-15.3	7.1
zinc (US$/t)	3,006	3,531	3,173	3,139	32.1	17.4	-10.1	-1.1
lead (US$/t)	2,190	2,106	1,873	2,027	19.6	-3.8	-11.1	8.2
Rural commodities index#	**150**	**172**	**167**	**178**	**28.0**	**14.4**	**-2.8**	**6.5**
NZ commodities index ##	**359**	**388**	**382**	**373**	**21.2**	**8.0**	**-1.5**	**-2.3**
dairy price index ##	322	362	350	318	25.2	12.4	-3.4	-9.3
whole milk powder US$/t	3,843	3,966	3,836	3,535	29.2	3.2	-3.3	-7.8
skim milk powder US$/t	3,332	3,956	3,798	3,485	22.6	18.8	-4.0	-8.2
lamb leg UKp/lb	599	617	585	583	18.4	3.0	-5.2	-0.4
bull beef US¢/lb	279	264	251	282	19.0	-5.3	-5.0	12.5
log price index ##	179	172	159	164	14.8	-4.2	-7.1	3.1
strong wool US¢/kg	173	173	176	176	20.4	0.0	1.6	0.0

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 (14 Sep)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
Fed Funds*	2.375	4.125	4.125	4.125	4.125	4.125	3.875	3.375
10 Year Bond	3.44	3.40	3.20	3.10	2.90	2.70	2.50	2.40

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

Currency forecasts

	Latest (14 Sep)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
USD vs								
DXY index	109.88	107.3	105.3	102.8	100.3	98.5	96.8	95.9
JPY	144.72	140	138	136	134	132	130	128
EUR	0.9975	1.02	1.04	1.07	1.10	1.12	1.14	1.15
AUD	0.6736	0.69	0.70	0.71	0.73	0.75	0.77	0.78
NZD	0.5998	0.62	0.63	0.64	0.66	0.68	0.70	0.70
CAD	1.3172	1.28	1.26	1.25	1.25	1.25	1.25	1.26
GBP	1.1492	1.17	1.19	1.21	1.23	1.25	1.26	1.27
CHF	0.9614	0.96	0.95	0.95	0.94	0.94	0.93	0.93
ZAR	17.46	17.3	17.1	17.0	16.8	16.6	16.3	16.2
SGD	1.4063	1.39	1.38	1.37	1.35	1.33	1.32	1.32
HKD	7.8493	7.85	7.80	7.80	7.75	7.75	7.75	7.75
PHP	57.22	55.0	54.0	53.0	52.0	51.0	50.9	51.0
THB	36.69	35.5	34.5	33.5	32.5	31.5	31.5	31.6
MYR	4.5228	4.40	4.30	4.20	4.10	4.05	4.04	4.05
CNY	6.9730	6.80	6.70	6.50	6.40	6.30	6.20	6.15
IDR	14853	14700	14600	14500	14400	14300	14242	14287
TWD	31.14	30.6	30.3	30.0	29.7	29.5	29.4	29.5
KRW	1393	1360	1330	1300	1270	1240	1226	1231
INR	79.15	78.5	77.5	76.5	75.5	74.5	73.5	73.0

Activity forecasts*

	2021	2022				2023		Calendar years			
% annualised, s/adj	**Q4**	**Q1**	**Q2**	**Q3f**	**Q4f**	**Q1f**	**Q2f**	**2020**	**2021**	**2022f**	**2023f**
Private consumption	2.5	1.8	1.5	0.3	0.1	-0.8	-0.4	-3.8	7.9	2.2	-0.1
Dwelling investment	2.1	0.5	-16.2	2.4	2.4	2.0	2.0	6.8	9.2	-4.0	0.9
Business investment	2.9	10.0	0.0	5.1	5.1	4.6	4.6	-5.2	8.0	5.1	4.6
Public demand	-2.6	-2.9	-1.8	0.8	0.8	0.8	0.8	2.5	0.5	-1.4	0.6
Domestic final demand	1.7	2.1	0.1	1.1	1.0	0.3	0.6	-2.6	6.7	1.8	0.7
Inventories contribution ppt	5.3	-0.1	-2.1	0.9	-0.2	-0.4	0.0	-0.6	0.1	0.8	-0.1
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	-0.6	1.7	0.6	-0.2	0.4	-3.4	5.7	1.7	0.5
%yr annual chg	5.5	3.5	1.7	1.6	0.0	0.4	0.6	–	–	–	–

Other macroeconomic variables

Non-farm payrolls mth avg	586	573	409	360	200	150	100	-759	514	386	110
Unemployment rate %	4.2	3.8	3.6	3.6	3.8	4.1	4.4	8.1	5.4	3.7	4.4
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	2.6	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 (14 Sep)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
Euro area								
ECB Refi rate	1.25	2.50	2.75	2.75	2.75	2.75	2.75	2.50
10 Year Bund	1.73	1.80	1.70	1.70	1.60	1.50	1.40	1.40
10 Year Spread to US	-171	-160	-150	-140	-130	-120	-110	-100
United Kingdom								
BoE Bank Rate	1.75	3.00	3.25	3.25	3.25	3.25	3.00	2.75
10 Year Gilt	3.17	3.10	2.90	2.80	2.60	2.40	2.20	2.10
10 Year Spread to US	-27	-30	-30	-30	-30	-30	-30	-30

Sources: Bloomberg, Westpac Economics.

Currency forecasts

	Latest (14 Sep)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
euro vs								
USD	0.9975	1.02	1.04	1.07	1.10	1.12	1.14	1.15
JPY	144.36	143	144	146	147	148	148	147
GBP	0.8680	0.87	0.87	0.88	0.89	0.90	0.90	0.91
CHF	0.9590	0.97	0.98	1.02	1.03	1.05	1.05	1.06
DKK	7.4366	7.44	7.44	7.44	7.44	7.44	7.44	7.44
SEK	10.6733	10.7	10.7	10.7	10.7	10.7	10.7	10.7
NOK	10.0966	10.1	10.1	10.1	10.1	10.1	10.1	10.1
sterling vs								
USD	1.1492	1.17	1.19	1.21	1.23	1.25	1.26	1.27
JPY	166.31	164	164	165	165	165	164	163
CHF	1.1048	1.12	1.12	1.15	1.15	1.18	1.17	1.17
AUD	0.5862	0.59	0.59	0.59	0.59	0.60	0.61	0.61

Source: Bloomberg, Westpac Economics.

Activity forecasts*

Annual average % chg	2018	2019	2020	2021	2022f	2023f
Eurozone GDP	1.8	1.6	-6.1	5.2	2.9	0.5
private consumption	1.5	1.3	-8.0	3.5	3.0	0.8
fixed investment	3.2	5.7	-8.4	3.6	2.8	2.0
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	1.0	1.1	-3.7	2.6	1.5	0.5
France GDP	1.9	1.8	-7.8	6.8	2.3	0.7
Italy GDP	0.9	0.5	-9.0	6.6	3.1	0.5
Spain GDP	2.3	2.1	-10.8	5.1	4.5	2.0
Netherlands GDP	2.4	2.0	-3.9	4.9	3.8	1.0
memo: United Kingdom GDP	1.7	1.7	-9.3	7.4	3.4	-0.5

Asia

China

Calendar years	2017	2018	2019	2020	2021	2022f	2023f
Real GDP	6.9	6.7	6.0	2.2	8.1	3.0	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	4.5	5.5
Retail sales	10.2	9.0	8.0	–3.9	12.5	3.0	8.5
Money supply M2	8.2	8.1	8.7	10.1	9.0	11.5	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	7.8	5.0
Imports	8.7	–7.6	11.8	2.4	30.7	5.5	6.0
Trade balance USDbn	420	351	421	535	670	784	795

Source: Macrobond.

Chinese interest rates & monetary policy

	Latest (14 Sep)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-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	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65

* For major banks.

Currency forecasts

	Latest (14 Sep)	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24
JPY	144.72	140	138	136	134	132	130	128
SGD	1.4063	1.39	1.38	1.37	1.35	1.33	1.32	1.32
HKD	7.8493	7.85	7.80	7.80	7.75	7.75	7.75	7.75
PHP	57.22	55.0	54.0	53.0	52.0	51.0	50.9	51.0
THB	36.69	35.5	34.5	33.5	32.5	31.5	31.5	31.6
MYR	4.5228	4.40	4.30	4.20	4.10	4.05	4.04	4.05
CNY	6.9730	6.80	6.70	6.50	6.40	6.30	6.20	6.15
IDR	14853	14700	14600	14500	14400	14300	14242	14287
TWD	31.14	30.6	30.3	30.0	29.7	29.5	29.4	29.5
KRW	1393	1360	1330	1300	1270	1240	1226	1231
INR	79.15	78.5	77.5	76.5	75.5	74.5	73.5	73.0

Source: Bloomberg, Westpac Economics.

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**	**3.3**
United States	2.3	2.9	2.3	-3.4	5.7	1.7	0.5
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	2.9	0.5
Group of 3	**2.3**	**2.2**	**1.7**	**-4.7**	**5.1**	**2.2**	**0.7**
United Kingdom	2.1	1.7	1.7	-9.3	7.4	3.4	-0.5
Canada	3.0	2.8	1.9	-5.2	4.6	3.5	1.8
Australia	2.4	2.8	2.0	-2.1	4.9	4.2	1.9
New Zealand	3.1	3.2	2.4	-2.1	5.6	2.2	2.2
OECD total	**2.4**	**2.3**	**-0.7**	**-0.6**	**4.4**	**1.9**	**0.7**
China	6.9	6.8	6.0	2.2	8.1	3.0	7.0
Korea	3.2	2.9	2.2	-0.9	4.0	2.6	2.5
Taiwan	3.3	2.8	3.1	3.4	6.3	3.5	3.0
Hong Kong	3.8	2.8	-1.7	-6.5	6.4	0.0	3.0
Singapore	4.7	3.7	1.1	-4.1	7.6	3.5	3.3
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	4.1
Malaysia	5.8	4.8	4.4	-5.6	3.1	6.4	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	7.2	7.0
East Asia	**6.1**	**5.9**	**5.2**	**0.7**	**6.8**	**3.5**	**6.2**
East Asia ex China	4.7	4.5	3.8	-2.3	4.1	4.5	4.5
NIEs*	**3.5**	**3.0**	**1.9**	**-0.6**	**5.3**	**2.7**	**2.8**
India	6.8	6.5	3.7	-6.6	8.9	7.0	7.0
Russia	1.8	2.8	2.2	-2.7	4.7	-10.0	-2.0
Brazil	1.3	1.8	1.2	-3.9	4.6	1.7	1.2
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**	**3.2**	**3.5**
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**	**3.3**

#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.

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