WESTPAC MARKET OUTLOOK DECEMBER 2022 & JANUARY 2023.

AUSTRALIA AND
THE GLOBAL ECONOMY

WESTPAC INSTITUTIONAL BANK

CONTENTS

Australia

The world

Summary forecast tables

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EXECUTIVE SUMMARY

Our final report for 2022 takes a look back on what has been a less settled than expected year for markets and the global economy. Going in, the hope was that despite some challenges around supply chains and a lift in inflation, it would be a relatively stable year of 'post-pandemic healing'. Instead, the inflation surge has proven to be much more formidable, aggravated by Russia's invasion of Ukraine and drawing an aggressive monetary tightening response from central banks.

The main game for financial markets has been trying to gauge the extent of the inflation challenge and how far central banks would ultimately need to go. This saw some significant mark-ups along the way, most notably following Fed Chair Powell's Jackson Hole speech which doubled down on the need to bring inflation back under control despite signs the US economy was starting slow.

Heading into year-end, markets are sensing we are nearing the end of the tightening cycle with the focus turning to how quickly inflation pressures may ease; the economic damage; and how soon monetary settings might be relaxed. We suspect they are jumping the gun again. There is still more tightening to come, and even once this is done we expect central banks to signal a strong commitment to lowering inflation permanently. This is likely to see policy remain highly restrictive for longer than markets currently anticipate. A clear risk is if inflation shows 'stickiness' on the way down – the FOMC's task to bring inflation below 3% might prove to be tougher than getting it to come back from 8% to 4%, while the RBA may need to deflate inflation expectations to achieve its own inflation objectives.

Either way, 2023 will be the year that economic impacts of rate tightening really hit home. As such, its already looking like another challenging year. The central hope this time is that the inflation threat will finally be dealt with by this time next year, allowing for some policy easing in 2024 to restore growth to trend in 2025. Even that will come at a cost of widespread economic stagnation next year.

Australia: We continue to forecast a slowdown in the growth profile for the Australian economy, moderating from 2.6% in 2022 to a well below trend 1.0% in 2023 and then lifting to 2.0% in 2024. As we move forward, the reopening effect will fade; property weakness will linger; the household saving ratio will find a floor; and consumer spending growth will continue to slow. In addition, the drag on incomes from rising interest rates will intensify through 2023. The Australian economy is expected to stall over the second half of 2023 under the weight of these headwinds. Household consumption is forecast to slow from around 2% (6 month annualised) in the first half of 2023 to near zero in the second half. A six month period of a stagnant economy and no growth in household spending will alert the RBA to the need to ease policy settings in 2024 – subject to developments on the inflation front.

Commodities: Fortunes have been mixed for prices over the last month but the broad trend is positive with iron ore rallying 34%, base metals up 14% and thermal coal gaining 13% more than offsetting the 22% fall in met coal and 18% fall in crude oil. A recovery in supply is key to the forecast correction in iron ore and coal prices in 2023 while LNG prices will be supported by limited supply and growing demand. The Australian government's recently announced domestic price cap has seen local spot gas prices drop back to the $12/gigajoule target.

Global FX markets: The US dollar is two and a half months into a down-trend we expect to last a number of years. The market's assessment of the risks faced by Europe and the UK has clearly improved, and Asia is beginning to show its structural growth capacity post COVID-19. It will take time for confidence to solidify, but further FX revaluation over 2023 and 2024 is likely to be significant.

New Zealand: Interest rates have been rising for a year now, and further large increases are on the cards. Households have yet to feel the full impact of hikes. However, over the coming year many will face large increases in borrowing costs. That will see the recent strength in economic conditions give way to a period of weak economic activity and rising unemployment.

United States: Nonfarm payrolls and wage growth are yet to slow enough for the FOMC to feel confident that 2.0%yr inflation is achievable in the medium term. While the pace of hikes will slow to 50bps in December and 25bps in February, another 25bps of 'insurance' is expected to be taken out by the Committee in March. This tightening will come at a cost however, with 275bps of cuts over 2024/25 to 2.125% at June 2025 expected to prove necessary to restore GDP growth back to trend once inflation risks have faded.

China: The domestic and export opportunities before China as a result of the global green transition are immense and expected to prove long-lasting. Not only are authorities seeking to preserve and improve their productivity and competitiveness by revolutionising power generation at a rapid rate, but households are being incentivised to switch to electric vehicles, creating a large local market for China's electric vehicle makers to scale into before expanding internationally. There is a threat to this bright future however: geopolitics.

Europe: The Euro Area has managed surprisingly well given the extraordinary headwinds facing the region this year. Growth outcomes in the year to September were robust and headline inflation is starting to cool but the challenges ahead are still immense. The ECB will slow the pace of rate hikes from 75bps to 50bps in December and conclude the tightening cycle at a peak refi rate of 2.75% in early-2023.

Summary of world GDP growth (year average*)

Real GDP %ann*	2018	2019	2020	2021	2022f	2023f	2024f
United States	2.9	2.3	–3.4	5.7	2.0	0.5	1.3
China	6.8	6.0	2.2	8.1	3.5	6.0	5.5
Japan	0.6	–0.4	–4.6	1.7	1.6	1.5	1.0
India	6.5	3.7	–6.6	8.7	7.0	6.5	6.5
Other East Asia	4.5	3.8	–2.3	4.2	4.5	4.3	4.4
Europe	1.8	1.6	–6.1	5.2	3.2	0.4	1.5
Australia	2.8	1.9	–1.8	5.2	3.6	1.8	1.2
New Zealand	3.2	2.4	–2.1	5.5	2.5	1.7	0.1
World	**3.6**	**2.8**	**–3.0**	**6.0**	**3.3**	**2.9**	**3.2**

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'.

Seeing off the inflation threat …

RBA raises another 25bps and maintains guidance.

The Reserve Bank Board lifted the cash rate by 25bps to 3.1% at its final meeting for 2022. Markets were convinced that the Governor would soften his guidance with a weaker tightening bias. In the event the Governor stuck with the guidance he used in the previous two meetings: "The Board expects to increase rates further in the period ahead, but is not on a pre-set course" (the last part new to the decision statement but having been set out in the Governor's other commentary in previous months).

We continue to see a terminal cash rate of 3.85% …

Despite market pricing now only giving about a 50% chance that the cash rate will reach our target of 3.85% by May we reaffirm that forecast. Forces we expect will require that higher rate by May include: evidence of very high inflation prints for both the December and March quarters; clear evidence that wages growth is lifting quickly; reasonable resilience of consumer spending (2% annualised pace in 2023 H1 compared to 4% annualised in 2022H2) and the unemployment rate still holding near 50-year lows through to March, prior to a lift beginning in the June quarter.

… with a pause only coming in mid-2023 …

For that crucial May Board meeting we expect the Board will be confronted with: headline inflation still in the 6–7% range; an unemployment rate in the low 3s; clear evidence of rising wage pressures; and a degree of uncertainty about how long restrictive policy will be required in the US and other major developed markets.

… but with the bank keeping cuts off the table …

The second half of 2023 is expected to see consumer spending stagnate; the unemployment rate edge higher and inflation pressures ease further. That scenario is consistent with the RBA going on hold from mid-year, but making it clear that rates are unlikely to be eased in 2023. Markets have priced in two 25bp moves by mid next year and are currently flirting with around a 50% chance of a further hike in Q3 and a potential rate cut near the end of 2023 – both prospects appear to be extremely remote.

… until the inflation threat has completely subsided in 2024.

As we move into 2024 evidence of a stalling economy and rising unemployment coupled with a slowdown in wage pressures and the inflation rate edging back towards 3% will allow the RBA to begin to cut the cash rate back towards the 'neutral zone' which we believe is 2.5–3.0%. We anticipate around 100bps of cuts in 2024.

A similar profile to the FOMC …

That profile for the RBA will be close to the same approach we expect to be taken by the FOMC: the federal funds rate on hold after the March FOMC meeting and kept on hold for the remainder of 2023 despite a stalled economy – to ensure there is a sustained reduction in inflation into the desired 2.0–2.5% range – with extensive rate cuts in 2024 to respond to the stalled economy once this inflation target has been achieved.

… as both central banks will be more wary of easing prematurely …

Market pricing is more dovish, anticipating FOMC rate cuts in the second half of 2023. We expect some stickiness in reducing the inflation rate and the need to signal a strong commitment to lowering inflation permanently delaying rate relief – the task of bringing inflation below 3% might prove much tougher than moving it from 8% to 4%.

The key theme which we promoted through most of 2022 was that 2023 was going to be the year when bond rates would fall and appetite for the USD would wane. US 10 year Treasuries would fall towards 3.2% from the 4% starting point while the AUD would lift from USD0.65 to USD0.72.

… than markets are currently assessing

We did not sufficiently count on the propensity for markets to be pre-emptive. Once the headline inflation rate in the US passed its peak, markets moved quickly to factor in a lower terminal federal funds rate – a rational response given the expected sustained weakness in the US economy.

Our anticipated falls in bond rates and increased aversion to USD, including support for the AUD, have been partially brought forward to the second half of 2022. We have only made a slight reduction in the end 2023 target rate for US 10 year bonds, from 3.2% to 3.1%. We are now factoring in a much more modest fall in US bond rates in 2023 and see AUD/USD at USD0.68 by end 2022 with an increase to USD0.75 through 2023.

The risks to these scenarios are evenly balanced.

Supply-side drivers of inflation could dissipate more quickly …

The supply-side factors that lifted inflation in 2021-22 are already dissipating in the US, and could overwhelm demand-side drivers – mainly represented by rising wages and bold pricing policies from businesses – to yield a much faster slowdown in inflation than we are currently factoring for both the US and Australia. That would in turn open up the possibility of earlier rate cuts than we currently envisage for both markets.

… but a slower return to inflation targets …

On the other hand, supply-side factors may be slower to dissipate and demand pressures may build. That would raise the unsavoury prospect of an extended round of rate hikes in both economies during those stagnation months in the second half of 2023.

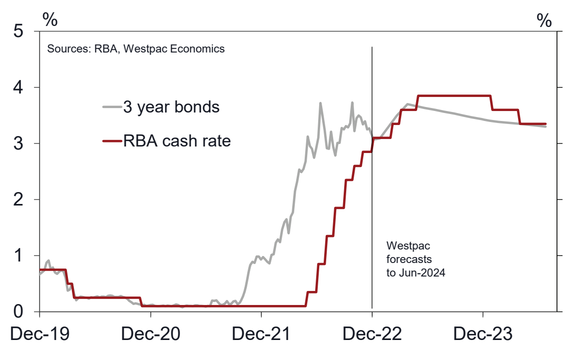
… will be the over-riding fear.

That fear of stagflation should motivate both the FOMC and the RBA to err on the side of higher rates near term and to remain resolute in keeping rates on hold in 2023.

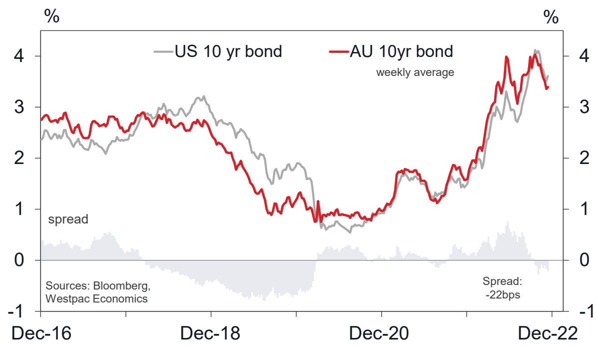
Bill Evans, Chief Economist

… will take longer than markets expect

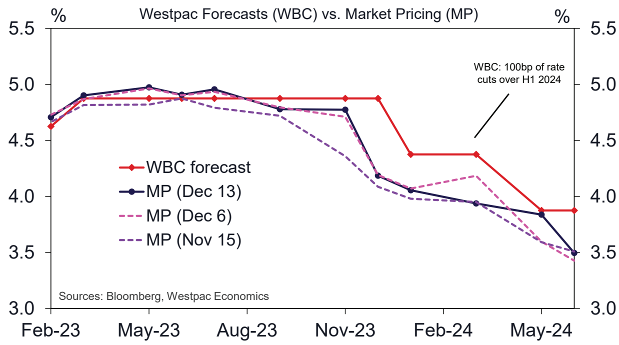
RBA cash rate and 3 year bonds



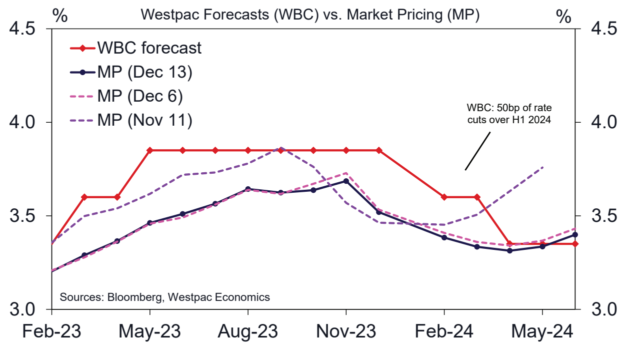
10 year bonds yields: negative spread



Fed funds forward pricing

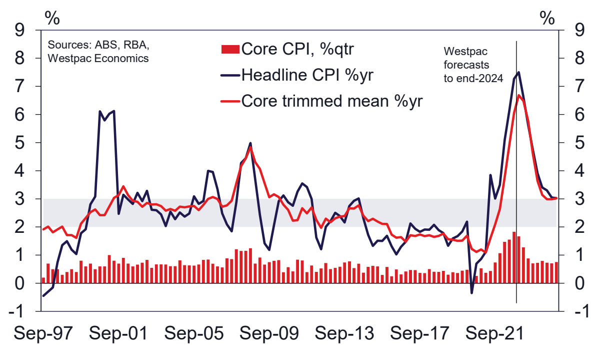


RBA forward pricing



Global PMI & global trade orders

CPI inflation



Australian economy likely to stall …

The recent September quarter National Accounts …

The recent national accounts for the September quarter were largely in line with our expectations and they further emphasised some of the key developments we see in the Australian economy that will lay the foundations for a modest growth outlook in 2023 and 2024. We continue to forecast a slowdown in the growth profile for the Australian economy from 2.6% in 2022 to 1.0% in 2023 and 2.0% in 2024.

… confirm that the Australian economy is losing momentum.

The key to this profile is the consumer. Household consumption is forecast to slow from around 2% (6 month annualised) in the first half of 2023 to near zero in the second half. That would see growth through the year of 1.0%. The first half will benefit from the spill-over of the momentum in the second half of 2022, which is expected to run at around a 4% pace (six month annualised) while the building negative forces of a rising interest rate burden; the fading reopening of the economy; a much more modest fall in the savings rate than we saw in 2021 and 2022; a damaging negative wealth effect from falling house prices and negative real wages growth will weigh heavily on the household sector.

We continue to expect growth of only 1% in 2023 …

Consistent with a depressing outlook for domestic sales and the expiry of the tax allowances in June, business equipment investment is forecast to contract by around 7% in the second half of 2023. This hit to activity will be compounded by a contraction in new residential investment and in home renovation activity.

A six month period of a stagnant economy and no growth in household spending will alert the RBA to the need to ease policy settings in 2024. Overall output growth in 2024 is forecast to improve to 2%, with the bulk of that expansion (1.5%) coming in the second half of the year.

… a well below trend pace …

The sharp economic slowdown in 2023 will be partly engineered by the need for the RBA to continue lifting the cash rate in the first half of 2023 as wages growth and inflation remain uncomfortably high and growth holds at a 'respectable pace' in the opening quarter.

… with activity to stall over the second half of the year.

The themes from the September quarter national accounts – discussed below – are expected to extend through 2023. Risks to the profile are evenly balanced. Inflation and wages may fall much more quickly than we envisage allowing the RBA to bring forward the rate cuts and avoid the last hike (to 3.85%) we are anticipating for May. On the other hand, inflation throughout 2023 may be stickier than we expect. The RBA would be unable to cut rates in 2024, as anticipated, condemning the Australian economy to another very difficult year with weak growth and no prospect of any interest rate relief.

Recent evidence on the evolution of the economy are supportive of our assessment.

The reopening effect is fading …

The Australian economy expanded by 0.6% in the September quarter for annual growth of 5.9%. Household spending growth slowed in the quarter, from 2.1% in the June quarter, to 1.1%, although it did still contribute all of the 0.6ppts of overall growth. Motor vehicles sales and operations (0.4ppts); hotels, cafés and restaurants (0.4ppts); and transport services (0.3ppts) contributed most of the 1.1ppt growth in household consumption. While not as strong as in the June quarter, the opening up effect was once again apparent as a key driver of consumer spending.

… the household saving ratio is back around pre-pandemic levels …

Part of this lift in spending was funded by a further fall in the household savings rate from 8.3%, in June, to 6.9% (which freed up $4.2bn), although the major fall from a peak of 19.4% in September 2021 (associated with the delta lockdowns) has largely worked its way through.

The impacts of high inflation and rising interest rates are becoming increasingly apparent. Households were challenged by a sharp increase (2.0%) in the household consumption deflator up from 1.5% in the June quarter and the fastest quarterly gain since March 1988. Moreover, while nominal household incomes rose by $8.2bn in the quarter, there was a substantial leakage of $5.1bn in higher interest payments (up from $1.4bn last quarter) as rising interest rates bite.

… and higher interest rates and high inflation are eroding consumer spending power.

Prospects for growth in consumer spending are easing as the reopening effect fades and the savings rate settles back at a more normal level. However, given the accumulated $260bn in excess household savings, it is likely that the savings rate will fall below equilibrium (judged to be around 6%) as households draw on these excess balances. We expect that through 2023 that savings rate can drift down to around 3% but our forecasts anticipate that the boost to available spending power will be more than offset by the rising interest cost.

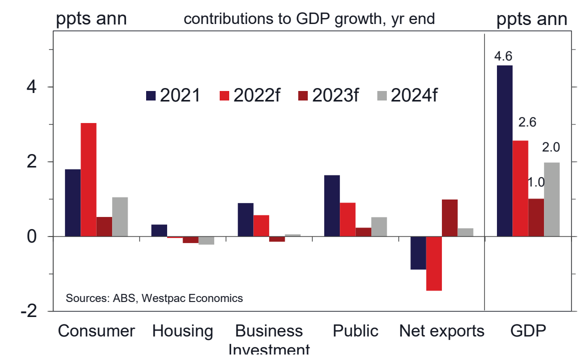
Some specific drag on activity is apparent from the weak real estate market, which subtracted 0.2ppts from growth in the September quarter.

In summary, as we move forward, the reopening effect will fade; property weakness will linger; the savings rate will find a floor; and consumer spending growth will continue to slow. In addition, the drag on incomes from rising interest rates will intensify through 2023.

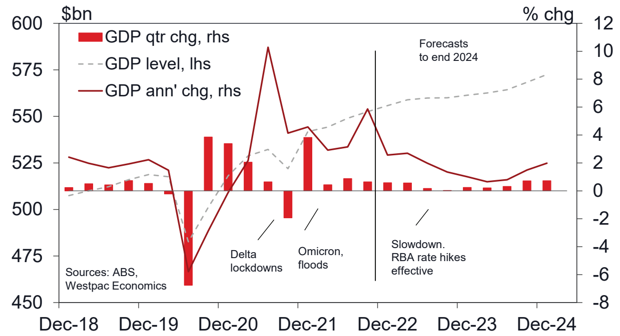
Bill Evans, Chief Economist

... in the second half of 2023

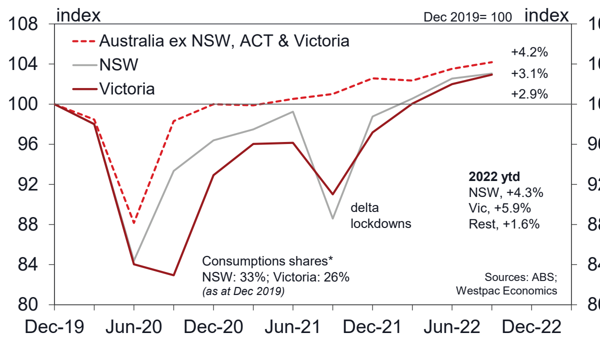
Australia: the growth mix



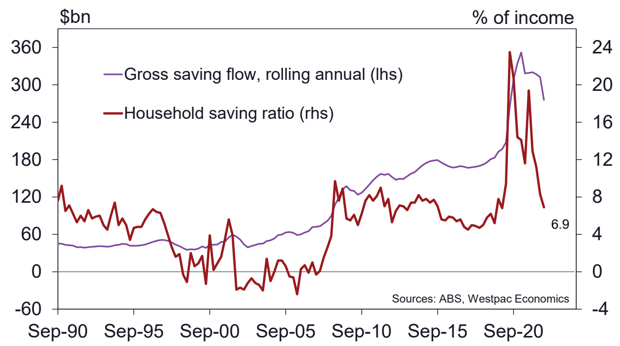
Australian economy: sharp slowdown ahead



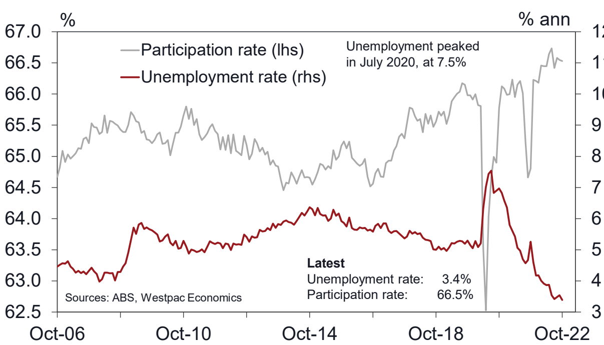
Consumer spending per capita



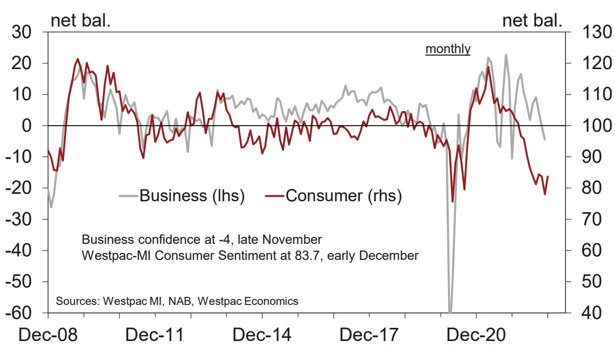
Household saving ratio and gross saving flow



Unemployment at 3.4%, a 48 year low



Confidence: consumers and businesses



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.

Post-pandemic normal not so quiet ...

A reprieve from pandemic mayhem but not quite a return to 'normal'.

Our 20th 'year in review' looks back on a year that promised to provide a reprieve from the coronavirus mayhem of the early 2020s but fell some way short. A nasty flare-up in global inflation and Russia's invasion of Ukraine have instead seen another year of volatility, albeit not to anything like the extent seen during the pandemic years.

Recapping the lead in to this year, the 2010s had been a relatively benign decade, growth fitful at times, weighed down initially by legacies from the GFC and the European debt crisis, and later by a material increase in volatility and political uncertainty, particularly around US-China trade relations. However, momentum was sufficiently well-sustained for the FOMC to embark on a moderate policy tightening in the second half of the decade, a peak coming in 2018-19 as the US economy entered a mild slowdown.

COVID not the wild disruptor it was in 2020 and 2021 ...

The start of the 2020s ushered in a period of almost unprecedented upheaval as the COVID-19 pandemic hit the world hard. The rapidly-spreading virus overwhelmed health systems in several jurisdictions leading most countries to shut borders and institute tough restrictions on internal movement. Remarkably, over half of the world's population were in some form of lockdown by April 2020, mere months after the virus was first detected. Both COVID-19 and lockdown responses exacted a heavy toll through much of 2020, monetary and fiscal authorities moving to provide extraordinary support. The situation started to turn in 2021 as the emergence of effective vaccines and their mass roll-out slowed the virus spread somewhat and, more importantly, reduced the incidence of severe illness and the pressures bearing down on health systems. It was not plain sailing though with several large waves of virus outbreaks still seeing intermittent restrictions, and the surging number of mild cases disrupting workforce availability and day-to-day economic activity.

... but still had a hand in the major development of 2022: a surge in global inflation.

The collision between post-pandemic disruptions and resurgent demand set off a surge in inflation in late-2021 that has gone on to become the dominant economic concern in 2022 – inflamed by the price effects from the other major development, Russia's invasion of Ukraine.

After lifting to 5%yr in 2021, CPI inflation across the G7 touched 8%yr by mid-2022, going on to reach double-digit rates in many countries. The surge triggered a wave of aggressive tightening from central banks, led again by a 375bp increase from the FOMC – a cycle that continued despite a slight 'technical' recession in the US economy in the first half of year and still has some way to run. At times the flare-up has threatened a return to the distant past, namely the dreaded 'stagflation' of the 1970s. While these comparisons still look overblown, the fall-out from this inflation fight is already set to be the dominant economic force in 2023.

Russo-Ukrainian War recasts the political landscape in Europe.

Geopolitically, the year's seismic shift has been from Russia's 'special military operation' that began in late February. While largely expected, the move marked a dramatic break from the largely peaceful relations that had prevailed in Europe since the fall of the Soviet Union. For markets, the biggest impacts have been around global energy supplies and a range of other commodities, the price effects exacerbating an already difficult inflation situation as mentioned. Responses from West have all but 'ex-communicated' Russia from the global financial system – literally in the case of its access to the SWIFT system that underpins global payments. As always, the 'fog of war' makes it hard to speculate how this situation will unfold but with little change ten months on, it looks set to remain a key area to monitor.

Some dramatic shifts for financial markets.

Financial markets have spent most of the year trying to get a fix on how far central bank tightening will need to run to bring inflation back under control. This has seen some dramatic shifts: US 10yr bond yields for example starting at 1.5% and surging quickly through 3% to what now looks to have been a peak just over 4.2% in early November. US dollar strength has dominated the currency space, DXY hitting a multi-decade high in late September. 'Second order' issues have mainly revolved around how differently conditions would evolve in Europe and the UK given the additional geopolitical elements. In the final quarter of the year markets responded to early evidence that US inflation had peaked with bond rates falling back towards 3.5% and the US dollar retreating 6.5%.

Plenty of 'sub-plots' ...

Our 'calendar of events' table expands on this potted summary, highlighting many other notable developments – a change of government in Australia; the end of zero-COVID policy in China; and a very difficult year for cryptocurrencies to name a few. On the environment, the year has seen more weather extremes – a ferocious heatwave in Europe and massive floods in Pakistan the stand-outs – but some progress on climate policy, most notably in the US where the *Inflation Reduction Act* promises to significantly increase investment in low-carbon technology.

... and a 'long shot' ...

Our annual review often throws up the odd 'long shot' as well. For 2022, this may be the recent breakthrough on nuclear fusion, researchers achieving a 'net energy gain' for the first time. While fusion power is rightly ridiculed for always being '50 years away' its nice to think that this might spur faster progress in what could eventually be the holy grail of safe and renewable energy sources.

... but 2023 shaping as another challenging year.

Longer term dreams aside, the reality on the ground will see another challenging year for economies in 2023 as the full impact of this year's rapid policy re-tightening comes through. Ensuring a sustained return to low inflation will remain 'item one' on the agenda for policymakers and markets for some time yet.

Matthew Hassan, Senior Economist, with contributions from the global team

… inflation and Russia's invasion of Ukraine deliver big shocks

January	February	March
Regional Comprehensive Economic Partnership, the largest free trade area in the world, comes into effect. Onslow, WA records hottest day in Australian history, 50.7°C. Hunga Tonga undersea volcano erupts in Tonga, sending plume 20kms into the air. 'Omicron' outbreak sees COVID cases top 300mn globally. Vaccinations pass 10bn. Container freight rates peak, 7x 2019 avg. Australian Open: Barty wins women's singles, Nadal becomes 1st to win 21 men's majors; Djokovic out after visa revoked. NASA's James Webb Space Telescope successfully deployed.	China and Russia pledge closer cooperation. Winter Olympics held in Beijing. Koala put on endangered list due to drought, bushfires, disease and habitat loss. Russia launches invasion of Ukraine. Heavy sanctions imposed on Russia, its banks blocked from using SWIFT, severely restricting access to ~US$630bn in reserves and the wider global financial system. Commodity prices surge led by big spikes in gas, crude oil and fertiliser. Australia reopens international borders to vaccinated tourists. Floods inundate parts of Qld and NSW.	Russian forces repelled from Kyiv but seize strategically important port of Kherson. US and UK ban Russian oil, EU cuts demand for Russian gas by two thirds. Mass boycotts: >1000 companies and organisations break ties with Russia. FOMC hikes 25bps to 0.375%. COVID lock-downs across much of China including Shanghai and Shenzhen. Commodity price peaks: oil US$123/bbl; coking coal US$670/t; nickel US$47k/t; copper US$10k/t and iron ore US$160/t. Will Smith slaps Chris Rock at Oscars. Hubble spots star 28bn light-years away. Human genome sequencing completed.
April	**May**	**June**
Australia-India Economic and Trade Agreements signed. Sri Lanka declares state of emergency amid worsening economic crisis. FAO global food price index hits all time high 68% above pre-COVID levels. French President Macron re-elected. Aus CPI jumps 2.1%qtr, to be up 5.1%yr; avg G7 inflation pushes above 7%yr. Highs for AUD, USD0.762 and ASX, 7592.	FOMC hikes +50bps to 0.875%; RBA hikes 25bps to 0.35%. US 10yr bond yield pushes above 3%. Monkeypox outbreak spreads, going on to be detected in over 75 countries. Stablecoin TerraUSD collapse triggers 50% drop in Bitcoin, sparks runs on other cryptos. Albanese takes over from Morrison as Aus PM after ALP wins Federal election. First image of Sagittarius A*, super-massive black hole at centre of Milky Way. Plants grown on lunar soil for first time.	FOMC hikes +75bps to 1.625%; RBA hikes 50bps to 0.85%. Shares enter bear market. Russia defaults on foreign debt for the first time since 1918. US Supreme Court overturns Roe v Wade. Finland and Sweden join NATO. Scientists discover largest single plant off coast of WA: 200sqkm *Posidonia australis*. Platinum jubilee of Queen Elizabeth II. European Parliament votes to phase out new combustion engine vehicle sales by 2035. China ends COVID lockdown in Shanghai.
July	**August**	**September**
NZ fully reopens its external borders. FOMC hikes +75bps to 2.375%; ECB hikes +50bps to 0.5%; RBA hikes 50bps to 1.35%. First pics from James Webb space telescope. China's BYD Auto overtakes Tesla as worlds largest electric vehicle producer. Boris Johnson steps down as UK PM following wave of ministerial resignations. Former Japanese PM Abe assassinated. Croatia become 20th member of EU. US inflation surges above 9% to 40yr high. Euro falls through parity vs USD. Severe heatwaves across much of Europe, UK records first daily temp over 40°C. US GDP records shallow 'technical recession'.	RBA hikes 50bps to 1.85% US House of Reps speaker Pelosi visits Taiwan. FBI search of Mar-a-Lago uncovers classified US government documents. Deadly floods cover over a third of Pakistan. Salman Rushdie stabbed onstage. Romanian Popovici breaks 13yr-old world record for the 100m freestyle, at 46.86s. Fed Chair Powell's Jackson Hole speech signals singular focus on reducing inflation and willingness to incur more 'costs'. *Inflation Reduction Act* with incentives for investment in low-carbon tech passes in US.	FOMC hikes +75bps to 3.125%; ECB hikes +75bps to 1.25%; RBA hikes 50bps to 2.35%. USD DXY peaks at just over 114. G7 announces price cap on Russian oil. Queen Elizabeth II dies, Charles III proclaimed King. Protests in Iran following death of Mahsa Amini in religious 'morality police' custody. Meloni becomes PM of Italy as centre-right coalition wins majority. Russia annexes Southern and Eastern Ukraine, cuts all gas supplies to Europe. Bank of England intervenes to stabilise bonds after tax cut policy roils markets.
October	**November**	**December**
RBA hikes 25bps to 2.60% US 10yr bond yield pushes above 4%. OPEC+ cuts oil output by up to 2mn bpd. 20th National Congress confirms Xi Jinping's 3rd term as paramount leader of China. UK PM Truss resigns after disastrous 50-day tenure, Sunak takes over as PM. Lula narrowly defeats Bolsonaro in Brazilian. UK inflation hits double-digits, at 40yr highs. Elon Musk acquires Twitter for $44bn. Explosion destroys section of Kerch Strait Bridge connecting Crimea to Russia. Medibank reveals major cyberattack. Global equities hit lows for the year, AUD/USD cross reaches 0.623	FOMC hikes +75bps to 3.875%; ECB hikes +75bps to 2%; RBA hikes 25bps to 2.85%. World population hits 8bn. Anwar Ibrahim becomes PM of Malaysia. Increased restrictions spark protests against zero-COVID policies in China. Aus Parliament censures former PM Morrison for failing to disclose secret self-appointment to multiple ministries. Crypto exchange FTX enters bankruptcy, Bitcoin extends collapse to below US$16k, a two-year low. Russia launches nationwide missile strikes on Ukraine.	G7-EU and Aus set US$60/bbl cap on Russian crude oil. FOMC hikes +50bps to 4.375%; ECB hikes +50bps to 2.5%; RBA hikes 25bps to 3.1%. US nuclear fusion researchers achieve 'ignition' – a net energy gain – for first time. China eases COVID restrictions. Still to come: Argentina, France or Morocco to win FIFA world cup. Year to date: S&P500 –14.6%; ASX –1.9%; gold –3.7%; crude oil +5%; US 10yr +192bps; Aus 10yr +200bps; AUD/USD –6.1%; USD TWI +9%; Bitcoin/USD –63%.

Prices rally despite recession fears …

Fortunes may have been mixed in November but the broad trend is positive …

Through November and into early December commodity price fortunes were again mixed with iron ore, thermal coal and base metals all surging (some more than others), while met coal, crude oil and LNG softened. However, the broad trend was positive with Westpac's commodity index lifting 5% in the month as iron ore surged 34%, base metals lifted 14% (nickel had the largest gain rising 28%), thermal coal bounced 13% and gold lifted 8%. Offsetting some of the gains were a 22% fall in met coal, an 18% fall in crude oil and a 5% fall in LNG. Rural/farm commodities softened 8% in the month.

… with iron ore prices rallying 34%, base metals 14% and thermal coal gaining 13% …

From US$82/t at the November report, iron ore prices lifted to around US$110/t in early December. While the current macroeconomic environment for iron ore continues to improve, the fundamentals of the market remain poor with key signals weak: China's pig iron production contracted 4% in October and remained soft through November; iron ore inventories at ports also grew around 4% through November, albeit to still relatively modest levels and with what appears to be a flattening in early December; and Chinese rebar prices have been on a steady down-trend since mid-April, stabilising as the outlook for Chinese economic activity in 2023 has improved. The recent strength in ore prices is more about tight supply than a meaningful strengthening in demand. Ore shipments year to date are down around 1% with Australian shipments flat, South African shipments down 4% and Brazilian shipments down around 3%. It is the expected recovery in supply that is key to our caution in regards to iron ore fundamentals and why we see prices easing through 2023 as ore shipments lift. We now see iron ore falling to US$90/t by end 2023 and US$80/t by end 2024.

… more than offsetting the 22% fall in met coal prices and 18% fall in crude oil.

November saw a further boost to ore supplies when India restored the 'status quo' of export duties on iron ore and steel. In May 2022, the Indian government introduced a 15% duty on export steel; increased the duty for >58%fe iron ore from 30% to 50%, and lifted the duty for <58%fe iron ore from zero to 45%. Indian iron exports averaged around 30mtpa between 2011 and 2021 and while India may have achieved a record 246mt of iron ore production in 2021, exports fell 30% to 36mt mainly due to weaker Chinese demand. By October this year, India's iron ore exports were close to zero with a total of just 7mt to August. There is a clear opportunity for India's steel and iron ore exports to recover back to pre-May 2022 levels as China reopens in 2023.

Supply increases are key to the forecast correction in iron ore and coal prices in 2023 …

For energy markets the fundamentals are more mixed with European gas inventories falling while coal supply remains disrupted and OPEC+ continues to hold back on lifting production quotas. Total global coal shipments are up 2% year to date with Australian exports down 5%, Colombian exports down 6%, South African exports down 10%, offset by a 14% gain in Indonesian exports and a 3% increase in North American exports. We expect the high quality (high calorific) thermal coal market to remain tight though 2023 due to robust demand and elevated gas prices (see more below). However, coal supply from Australia and South Africa should normalise through the year and this should see the Newcastle benchmark price falling to $275/t by end 2023 and $174/t by end 2023.

… while LNG prices will be supported by limited supply growth and growing demand.

European gas prices eased back from a peak of US$70/mmbtu in August to US$36/mmbtu in November but this is still miles above the 2020 average of US$3/mmbtu. Europe has gone from having the second cheapest gas market (US gas averaged US$2/mmbtu in 2020 while Japanese LNG averaged US$8/mmbtu) to the most expensive (US gas was US$5/mmbtu in November, Japanese LNG was US$22/mmbtu).

Limited investment in LNG for the past few years means no lift in supply till 2025/26.

Significant inflows of LNG and a reduction in gas demand meant the EU was able to hit its gas inventories target about a month ahead of schedule. Inventories are currently enough to cover demand over winter, assuming normal temperatures and steady supply. However, there is only a small buffer for variations: a colder than usual winter will boost demand while risks remain in regards to the continuity of Russian supplies. Any further disruption would require a greater reduction in demand and thus risk energy prices spiking higher. With limited possibilities to increase supply, any supply disruption will require the EU to focus on demand responses. Through 2022 there was a surprisingly large drop in gas demand of around 12%yr in the first 9 months due to fuel switching, energy-saving measures and a moderation in industrial activity. Current gas prices will lead to an expansion in supply, particularly LNG from Qatar and the US, but this is unlikely to come online until 2026 due to limited investment in production expansion over the last few years. As such, we have upgraded our near-term LNG forecasts and do not expect to see a trend reversal in prices until late 2025 or even early 2026.

Australian gas prices fall back to $12/gigajoule on the announcement of a price cap.

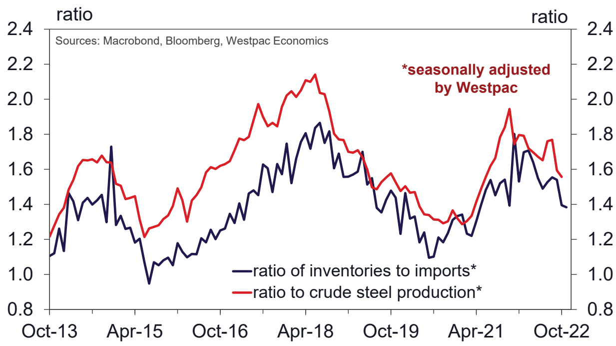
Australian gas prices spiked to a record high of $50/gigajoule in July but then eased to around $20/gigajoule through November and into December. But it is interesting to note that post the December 9 announcement that the Commonwealth Government was going to introduce a cap of $12/gigajoule, both the AEMO and Wallumbilla gas prices immediately fell to $12/gigajoule.

Justin Smirk, Senior Economist

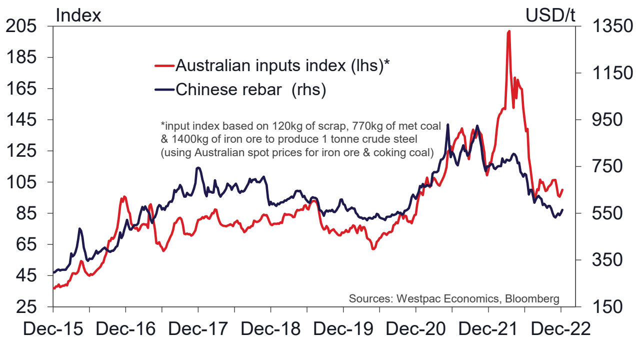
... as tight supply outweighs demand concerns

Chinese steel production below trend

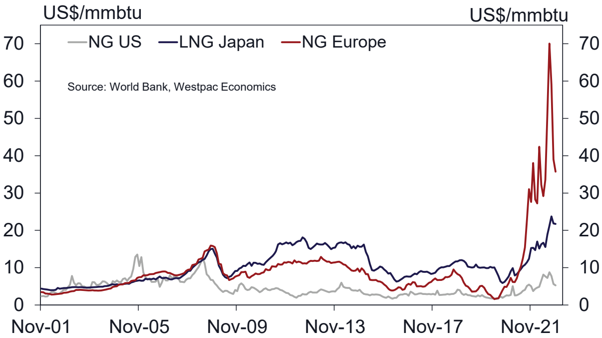
Chinese ore inventories at ports



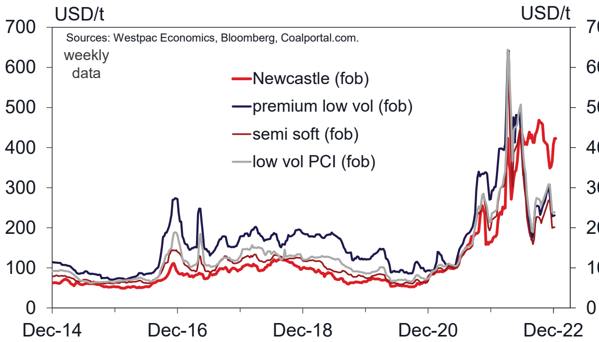
Chinese rebar & input costs



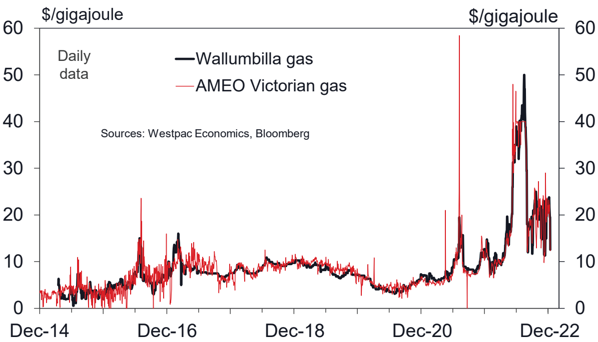
EU in an extreme gas price shock



Thermal coal holds a premium to met coal



Australian gas prices back to $12



USD downtrend to persist …

The US dollar is almost three months into a down-trend we expect to last for years.

The US dollar has now been in a clear down-trend for two and a half months. Having peaked intra-day at 114.8 in late-September and with the DXY index currently at 104.0, the decline to date has been in the order of 9%. By the end of 2023, we expect the cumulative fall to have increased to 13% and, come December 2024, to over 16%. Note though, this will leave the US dollar only marginally below its five year average, at 96.3 versus 96.5, on a DXY basis.

Market participants' risk assessments have clearly shifted …

Critical to both the recent turn in the US dollar and its expected total loss through 2023 and 2024 is Euro and Sterling's recovery. From a low of USD0.95, EUR/USD has already surged 11% to above USD1.06. Sterling's performance has been stronger still, up about 19% from USD1.035 to near USD1.24. These gains have come as a result of a much-improved assessment of the risks these economies face.

… and views on growth will follow, particularly for Europe …

For Europe, this has principally been with respect to energy's availability and cost ahead of winter, with: gas storage now almost filled to capacity; new ongoing supply sources locked in; and the European Commision's REPowerEU policy providing a clear roadmap towards energy security in the second half of this decade via a rapid take-up of renewables and a focus on efficiency. It is also notable that both activity and the labour market have continued to outperform through 2022, most likely meaning that any decline in activity during winter and spring will be both modest and temporary.

'Modest' and 'temporary' are certainly not appropriate adjectives for the loss the UK faces versus potential in 2023. Still, the reversal of the unsettlingly expansionary fiscal policy briefly proposed while Liz Truss was Prime Minister in favour of a restrictive stance under Prime Minister Rishi Sunak (albeit with near-term relief from energy prices) has at least given the market confidence that inflation risks will recede in 2023, in line with the Bank of England's forecast for CPI inflation to be back below target in two years time.

… which stands to benefit not only from its own underlying strength, but also Asia's.

Thinking more broadly about their outlooks, Europe arguably has a greater opportunity to benefit from China's rebound out of COVID-zero as well as Asia's structural development. For now, Europe is also better positioned globally given the still-low starting level of Euro. For these reasons, there are arguably upside risks to our Euro end-2023 and 2024 forecasts of USD1.11 and USD1.15 (4.6% and 8.3% above spot). Meanwhile for Sterling, not only is our baseline expectation contained to USD1.24 and USD1.28 for end-2023 and 2024 (0.2% and 3.5% ahead of spot), so is further upside.

CAD is likely to follow, but Yen will lag.

While we expect Canada's dollar to experience a rebound similar in scale and timing to the Euro, from above CAD1.35 currently to CAD1.28 and CAD1.26 at end-2023 and 2024, Japan's Yen will lag. From a historically-high JPY135, a sharp move lower seems unlikely until the US FOMC readies for rate cuts. We see this being signalled in late-2023 but not delivered on until 2024 and the first half of 2025. Consequently, at end-2023, USD/JPY is only seen down at JPY132 (-2.4%); but, by end-2024, we expect the JPY124 level to be reached (-8.3%, a cumulative move consistent with Euro).

The developing nations of Asia are likely to see a stronger bid than Yen through 2023 and 2024, benefiting not only from a positive change in risk assessment amongst market participants but also as China and the rest of the region's developing economies show their structural growth capacity.

The promise of developing Asia is strong and sustainable, most notably …

Free of COVID-zero and with the reforms targeting key sectors such as housing and technology having largely achieved their aims, 2023 should see China's Renminbi experience a sustained rebound, from around CNY6.95 currently to CNY6.50. In 2024, continued progress in the development of new industry and infrastructure in China while the US remains weak should allow the Renminbi to break through its prior cycle lows of both 2018 and 2022 around CNY6.30 and trend to CNY6.10 (12% below the current spot level of CNY6.95).

… for China where productivity will continue to outpace FX gains.

Importantly for China's growth prospects, only around 5% of this move will be in excess of the US dollar trend, limiting the impact on China's competitiveness. Indeed, the efficiency and productivity China continues to build out across its economy will well and truly trump this FX gain. Being able to consistently improve competitiveness ahead of currency appreciation has been a source of strength for China. This strategy is set to continue delivering large dividends as China focuses on opportunities around the global green transition and Asia's development.

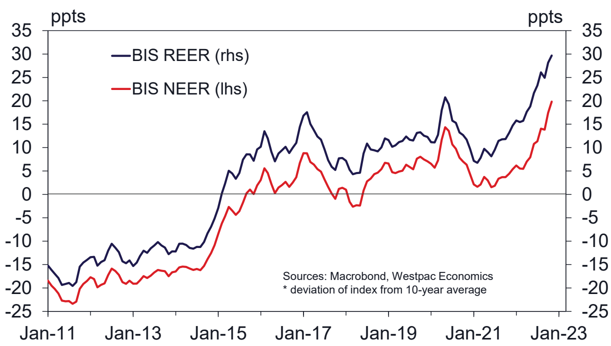
Tourism and commodities provide other ways for Asia to benefit.

Both the ASEAN nations and the developed economies of the region such as Singapore, South Korea and Taiwan also stand to benefit from these structural opportunities. ASEAN also has the promise of global tourism's resurgence and, for some such as Indonesia, commodity endowments provide yet another avenue to profit. For the likes of Indonesia, Thailand and the Philippines, a gain of around 8% is seen to end-2024. Having outperformed as the US dollar rose, Singapore and South Korea's gains are likely to be limited to around 3%. Assuming geopolitical concerns fade, Taiwan can outperform other developed markets from the region, gaining about 5% from spot.

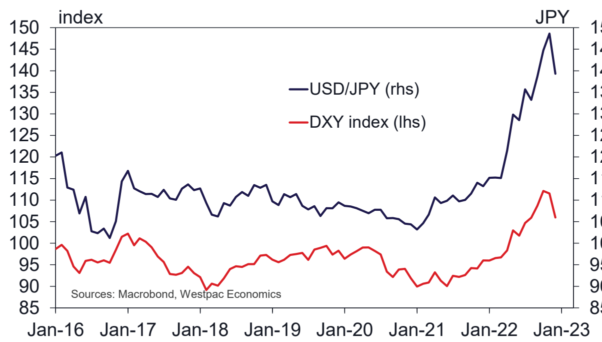
Elliot Clarke, CFA, Senior Economist

... through 2023 and 2024

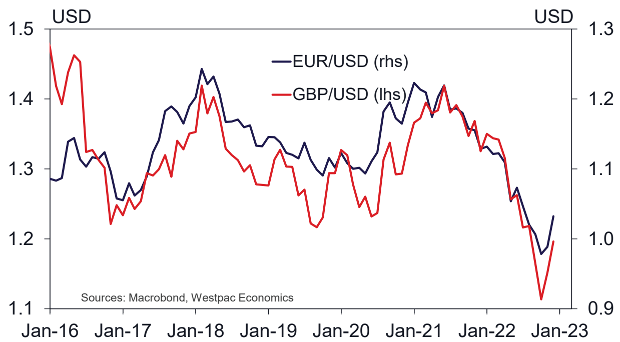
USD elevated versus history on broad basis



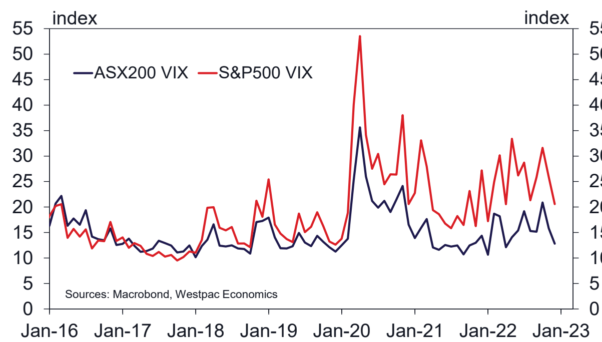
JPY continues to give DXY material support



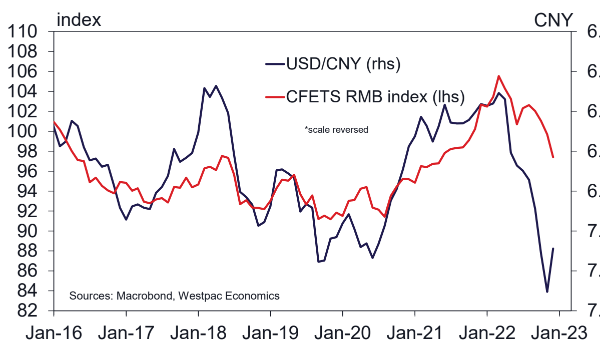
EUR & GBP negatives to fade in '23



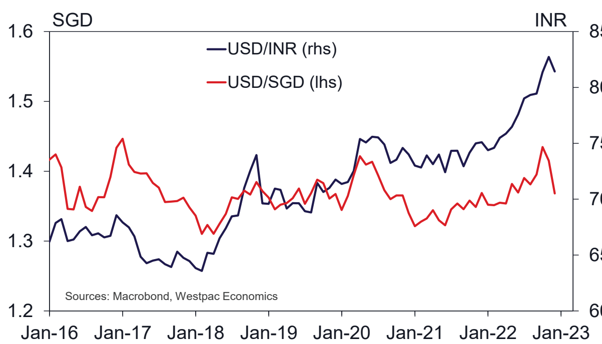
Distance from source of uncertainty a +'ve



Renminbi 'weakness' USD-centric



Rest of Asia well positioned for growth



Economic conditions to weaken ...

With demand continuing to run hot ...

As 2022 draws to a close, the New Zealand economy is continuing to run hot, with household spending holding firm and businesses continuing to take on staff. That strength in domestic demand has been reinforced by the reopening of the borders and return of international tourists to our shores.

... inflation pressures have hit a boiling point ...

However, with resurgent demand and stretched capacity, the economy has become increasingly overheated. Inflation pressures are boiling over in every corner of the country, with consumer prices rising by 7.2% over the past year.

... and the labour market has become stretched tight.

The pressures in the economy have been particularly stark in the labour market, with businesses struggling to attract and retain staff. The resulting competition for workers has pushed unemployment to just 3.3% and has seen wages rising at the fastest pace on record. It's also meant that businesses have increasingly had to take on less experienced staff to keep up with demand.

A downturn in economic conditions is now on the cards ...

A turning point for the economy looms in 2023. The strong economic conditions that we have seen over the past few years are set to give way to a period of weak domestic demand. Driving that slowdown will be the tightening in financial conditions that is already rippling through the economy, and which is set to become an increasing drag on demand over the year ahead. The Reserve Bank of New Zealand (RBNZ) has been hiking the Official Cash Rate at a rapid pace, lifting it by a total of 400bps since October last year. This included a jumbo-sized 75bp increase at the November policy meeting – the largest single increase on record.

... as financial conditions continue to tighten.

The RBNZ has signalled that further large increases in borrowing costs are on the cards in the coming months. We are forecasting the RBNZ to deliver another 75bp hike in February, followed by a 50bp rise in April. These increases will take the cash rate to 5.50%, its highest level since 2008.

The impact of interest rate increases has already been seen in the housing market.

Large increases in the OCR have seen carded borrowing rates rise sharply. That in turn has flowed through to a marked downturn in the housing market. Nationwide house prices have now fallen by an average of 12% from their peak in 2021, and house sales are at their lowest levels since 2010 (barring the lockdown period in 2020). With New Zealanders holding a large amount of their wealth in owner occupied or investor housing, the fall in prices has taken a sizeable bite out of the net worth of many households.

Household spending has been resilient to date ...

But despite that, overall household spending has shown no signs of slowing down a year after the interest rate tightening cycle began. Nor have we seen any signs that domestic inflation pressures are cooling. In fact, measures of core inflation (which smooth through the quarter-to-quarter volatility in price and track the underlying trend in inflation) have continued to push higher.

... but is expected to slow sharply over 2023 ...

A key reason for that resilience in demand is that around 90% of New Zealand mortgages are on fixed rates. Many borrowers locked in very low interest rates in the early stages of the pandemic. This has shielded them – and their spending power – from interest rate increases to date. In fact, the large number of borrowers still on very low fixed rates means the overall share of household incomes going towards debt servicing is still sitting close to multi-decade lows.

... as increasing numbers of borrowers roll on to higher fixed rates.

But the picture for borrowers is set to become a lot tougher over the coming year. Borrowing rates have risen sharply over the past year, and they have taken a further large step higher in the wake of the RBNZ's November policy meeting. Around half of all mortgages will come up for repricing over the coming year, and borrowers who go to re-fix their mortgage now could see the interest rate on their loan rising by upwards of 3.5ppts. That signals an even larger drag on demand than we had previously anticipated. We are now forecasting outright falls in per-capita spending over 2023, with total spending expected to fall by around 1% compared to 2022. As a comparison, household spending rose by an average of 4%yr in the years leading up to the pandemic.

We are forecasting a brief recession and an extended period of weak demand.

Household spending accounts for around 60% of total economic activity, and the expected fall in demand will drive a broader downturn in economic growth. Consequently, we now expect that economic growth will drop to stall speed over the coming year, with the economy briefly slipping into a recession in late 2023/early 2024 as the full brunt of interest rate hikes ripple through the economy. The projected recession is not expected to be deep – we are 'only' forecasting a decline of 0.3%. More importantly, however, we expect a protracted period of weak demand over the next 18 months, with economic growth falling well below trend. That weakness will result in unemployment rising from 3.3% currently to around 4.8% over the coming years.

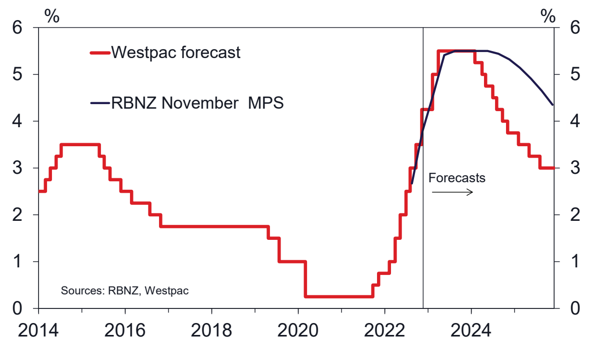
Inflation is expected to cool, but only gradually.

This slowdown in domestic demand and the labour market is required – and what the RBNZ has been trying to engineer – to dampen the inflation pressures that have been boiling over in every corner of the economy. Even so, we do not expect inflation to be back inside the RBNZ's target band until mid-2024.

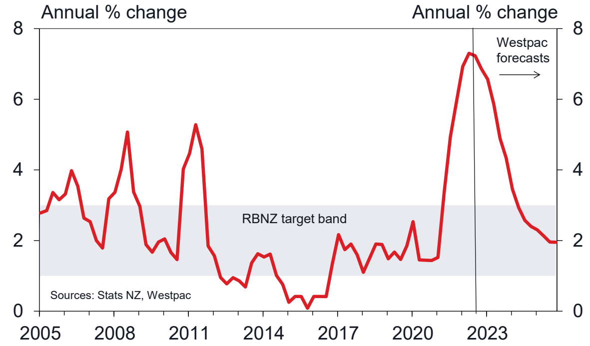
Satish Ranchhod, Senior Economist

... as higher borrowing costs ripple through the economy

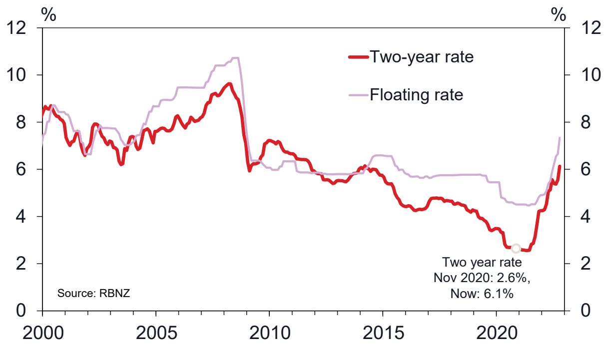
RBNZ Official Cash Rate



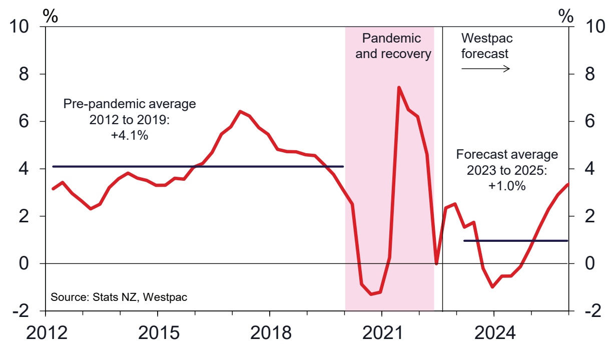
Consumer price inflation



Mortgage rates



Household spending growth (annual average)



	2021	2022									
Monthly data	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**
REINZ house sales %mth	–5.8	–7.2	0.4	–2.0	–1.5	–2.6	–10.7	–0.6	2.9	–3.5	–6.4	–
Residential building consents %mth	0.6	–8.9	11.3	5.8	–8.6	–0.7	–2.3	4.7	–1.8	3.5	–10.7	–
Electronic card transactions %mth	2.3	2.0	–7.6	2.0	7.3	1.6	0.0	–0.1	0.9	2.0	0.9	–0.4
Private sector credit %yr	7.5	7.3	7.3	6.9	6.8	6.4	6.1	5.6	5.7	5.6	5.1	–
Commodity prices %mth	–0.3	1.0	3.9	3.9	–1.9	–4.3	–0.4	–2.2	–3.4	–0.6	–3.4	–3.9
Trade balance $m	–1151	–1013	–1203	–1229	–529	–792	–1440	–1619	–1040	–163	–1541	–

Quarterly data	**Q4:20**	**Q1:21**	**Q2:21**	**Q3:21**	**Q4:21**	**Q1:22**	**Q2:22**	**Q3:22**
Westpac McDermott Miller Consumer Confidence	106.0	105.2	107.1	102.7	99.1	92.1	78.7	87.6
Quarterly Survey of Business Opinion	2	4	24	10	–2	–7	0	3
Unemployment rate %	4.9	4.6	3.9	3.3	3.2	3.2	3.3	3.3
CPI %yr	1.4	1.5	3.3	4.9	5.9	6.9	7.3	7.3
Real GDP %yr	–2.1	–1.4	5.1	4.8	5.5	4.9	1.0	–
Current account balance % of GDP	–0.8	–2.6	–3.4	–4.8	–6.0	–6.8	–7.7	–

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

Market to look past fed funds peak risks ...

Nonfarm payoll growth continue to run ahead of the FOMC's desired pace ...

US nonfarm payrolls again surprised to the upside in November with a 263k gain, 240k net of revisions to the prior two months. While the average of the past three months is materially below that of the first eight months of 2022 (272k versus 437k), momentum heading into 2023 is still significantly stronger than the 100k viewed by the FOMC as balancing marginal labour demand and population-growth-driven supply.

... for containing inflation ...

... 'ditto' for wages growth.

Average hourly earnings also came in hot at 0.6% in November, and October was revised up to 0.5%. Annual hourly earnings growth now stands at 5.1%, approximately 1.6ppts above the pace the FOMC believes is required to be confident that inflation will return to target over the medium-term, according to recent comments by FOMC Chair Powell.

Still, a reduction in the pace of hiking from 75bps to 50bps will be seen in Dec.

These results are not enough to stop the FOMC from reducing the pace of rate hikes in December from 75bps to 50bps (to be confirmed just after we go to press for this edition of Market Outlook). But, given this momentum, the FOMC is likely to err on the side of caution and continue tightening into mid-2023, by at least 25bps in February and March and possibly another 25bps in May. Respectively that would see the fed funds rate peak at either 4.875% on our baseline view, or 5.125% if upside risks for nonfarm payrolls continue to materialise.

Thereafter, only two more 25bp hikes are expected.

Looking at the detail however, two points stand out: 1) despite continued robust momentum in nonfarm payrolls, a broader assessment of employment growth points to a rapid loss of momentum; and 2) increasingly it seems that the weakness in real household income and spending is becoming entrenched. That will require a quick about-face from the FOMC, in their tone from late-2023 and then a run of rate cuts through 2024 and into the first half of 2025.

Other employment indicators point to a rapid deceleration.

On the first point, the household employment survey is most significant. It showed a loss of 138k jobs in November, in stark contrast to the 263k gain in nonfarm payrolls. This is not a one-off either. Over the three months to November, the discrepancy is almost as large, nonfarm payrolls increasing 272k per month as household employment fell 87k.

If we instead look to the business surveys: the ISM manufacturing survey reported no or negative job growth during the three months to November, while the ISM services employment series has oscillated around the 50 expansion/contraction level. Moreover, as at October, the JOLTS survey was showing evidence of a sustained decline in new job vacancies and decelerating hiring, with anecdotes also pointing to a rising rate of separations, albeit from a historically-low level. It therefore seems only a matter of time before nonfarm payrolls drops to, or through, the 100k per month pace required to re-balance marginal demand with supply.

And there is no evidence of increased capacity through participation or hours.

Regarding point two, while the decline in real incomes is coming to an end, with US ECI total compensation at 5.0%yr at September and the PCE deflator at 6.0%yr at October, meaningful positive growth seems distant. Indeed, in the last ECI release, the annualised pace of private total compensation growth decelerated from 6.0% in Q2 to 4.5% in Q3, albeit with considerable variation across professions. Also, that the employed share of the population at November is no higher than in February 2022, and still 1.3ppts below its pre-pandemic level, speaks to only very limited momentum in additional hours worked across the economy, with downside risks forming.

As a result, we anticipate that both employment and real wage growth will remain absent through 2023, keeping the economy stagnant and the risk of recession acute.

Quick about-face to cuts of 50bps a quarter in 2024, and 75bps in H1 2025.

After raising into mid-2023, the FOMC will then be required to cut by 50bps per quarter from 4.875% at December 2023 to 2.875% come December 2024. A further 75bps of rate cuts are then forecast over the first half of 2025, to 2.125% at June 2025.

Having already fallen materially below current and peak fed funds, the US 10-year is unlikely to decline sharply from here absent a dramatic deterioration in the US economy. Instead, a slow grind lower is expected through 2023 and 2024 as remaining excess inflation pressures abate. At the end of 2023 before rate cuts begin, we expect the US 10-year to trade around 3.10%. Then, at the end of 2024, a 'new normal' of 2.50% is expected to be reached and sustained through 2025.

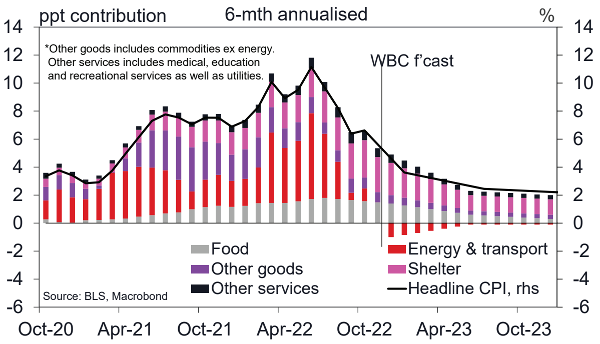
Tight capacity may create additional pressures in 2025 and beyond.

In terms of the risks, remaining extraordinary inflation pressures are forecast to abate through 2023. However, persistent weakness in investment over 2023-25 and global uncertainties could create additional impetus for inflation further out. At this stage, we believe these supply-side issues are likely to be neutralised by sub-par income and demand growth. But it will be important to monitor both trends in the out years.

Elliot Clarke, CFA, Senior Economist

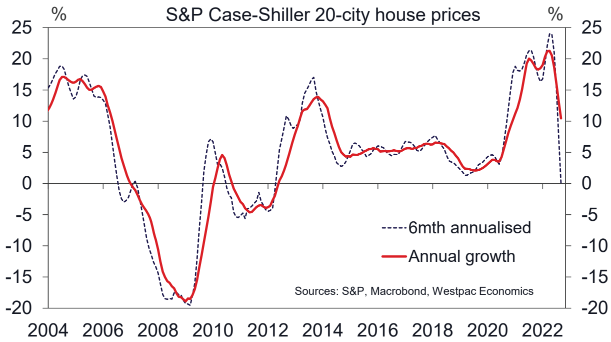
… as consequences for activity felt

US inflation downtrend established

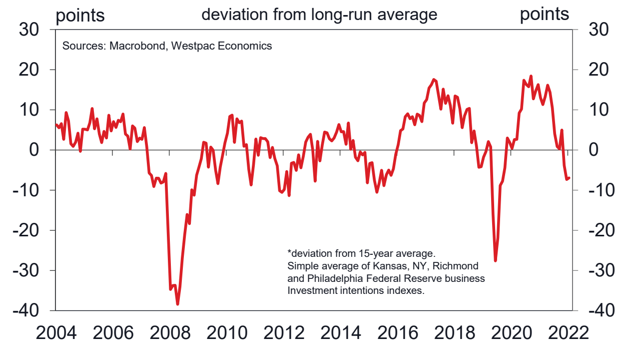


Job openings & hiring have lost momentum

Main street wealth a risk for spending



Investment at risk of sustained weakness



	2022											
Monthly data	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
PCE deflator %yr	6.1	6.4	6.8	6.4	6.5	7.0	6.4	6.2	6.3	6.0	–	–
Unemployment rate %	4.0	3.8	3.6	3.6	3.6	3.6	3.5	3.7	3.5	3.7	3.7	–
Non-farm payrolls chg '000	504	714	398	368	386	293	537	292	269	284	263	–
House prices* %yr	19.0	20.3	21.2	21.3	20.5	18.6	16.0	13.1	10.5	–	–	–
Durables orders core 3mth %saar	9.3	5.2	9.6	5.1	8.2	7.5	9.0	10.8	3.4	3.1	–	–
ISM manufacturing composite	57.6	58.6	57.1	55.4	56.1	53.0	52.8	52.8	50.9	50.2	49.0	–
ISM non-manufacturing composite	59.9	56.5	58.3	57.1	55.9	55.3	56.7	56.9	56.7	54.4	56.5	–
Personal spending 3mth %saar	6.3	7.1	13.5	9.7	9.5	9.3	6.9	6.8	4.5	8.8	–	–
UoM Consumer Sentiment	67.2	62.8	59.4	65.2	58.4	50.0	51.5	58.2	58.6	59.9	56.8	59.1
Trade balance USDbn	-88.0	-87.8	-106.9	-87.2	-85.7	-80.7	-70.7	-65.8	-74.1	-78.2	–	–

Quarterly data	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22f
Real GDP % saar	2.7	7.0	-1.6	-0.6	2.6	2.3
Current account USDbn	-226.4	-224.8	-282.5	-251.1	–	–

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

China at the forefront of the global …

Given its scale and industrial capacity …

With a population of more than 1.4 billion and placed at the centre of global production and logistics, China's thirst for energy is immense. According to Bloomberg, between 2010 and 2021, China's power generation more than doubled, taking its share of global generation from 19% to 30% at the expense of Europe and North America whose shares fell around 5% to 19%. If this growth had been fuelled by high-emissions generation, it would have created a major problem for China's environment. Also, given what we now know about supply-constraints and the likely price of coal, oil and gas over the coming decade, relying solely on these fuels may have restricted power capacity, or made it prohibitively expensive for some sectors. For China, the green transition is as much an economic necessity as it is an environmental one.

… China is set to lead the global green transition.

While China has continued to add to its coal-fired capacity, power generation by this sub-sector has only grown at the margin in recent years, with Bloomberg estimates pointing to the beginning of a decline over the second half of this decade. In stark contrast, China's solar power generation has grown more than six-fold and wind power generation almost three-fold since 2015.

The economy's electrification of transport is occurring at a rapid pace …

In addition to providing efficient, stable and low-cost power generation for industry and households, China also intends to use its rapidly-growing green energy capacity to replace gas and oil fired heating amongst households and business and, most significantly, to power the adoption of electric vehicles (EVs). Helped by government incentives and Chinese makers being at the cutting edge of the industry, Chinese consumers are quickly transitioning to EVs, with their rate of take-up very similar to that of wealthy European nations such as Germany and the UK, and a long way ahead of the US and other rapidly-growing developing countries such as India. Bloomberg data points to EVs making up 85% of new vehicle sales in China by 2040, with 77% of the fleet electrified by that point. Compare that to the US where 79% of new sales are expected to be electric by 2040, but only 57% of the nation's vehicle stock.

… and the export opportunities the transition presents are immense.

When we assess the implications of these developments for Chinese GDP, we must also factor in the export opportunities the low emissions transition will bring to China. Being at the forefront of the development and production of goods related to electrification such as batteries, it is not only domestic demand that Chinese firms will profit from, but also the globe's appetite.

This is true across Asia and the developed world …

With strong logistic chains already in place, the opportunities for China related to electrification by households and business and the broader green transition are vast and long lasting. On Bloomberg's projections, from 2025, growth in Asia ex China EV electricity demand is expected to rise from the equivalent of 6% of China's demand in 2021 to 10% in 2032 and 23% by 2040. An increase in EV energy demand one and a half times Asia ex China's is also expected across the rest of the world excluding North America where the projected increase is twice Asia ex China.

… as long as politics do not restrict access.

This last observation highlights a theme we will focus on more in the new year: the geopolitics of ESG. In a free trade environment, China has an immense opportunity to invest and benefit from the global transition. However its total addressable market may become a lot smaller if impeded by trade or industry restrictions.

The consequences for the West of such a course though is potentially inferior and/or more expensive products for the consumer, or simply a lack of supply, impeding its own transition and productivity. Clearly, for China and the globe it is not just the capacity and intent to invest that matters but also the evolution of political relations.

Elliot Clarke, CFA, Senior Economist

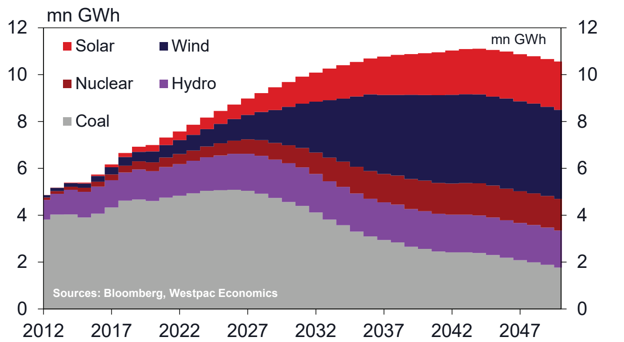
	2021	2022										
Monthly data %yr	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**
Consumer prices – headline	1.50	0.90	0.90	1.50	2.10	2.10	2.50	2.70	2.50	2.80	2.10	1.60
Money supply M2	9.0	9.8	9.2	9.7	10.5	11.1	11.4	12.0	12.2	12.1	11.8	–
Manufacturing PMI (official)	50.3	50.1	50.2	49.5	47.4	49.6	50.2	49.0	49.4	50.1	49.2	48.0
Fixed asset investment %ytd	4.9	4.9	12.2	9.3	6.8	6.2	6.1	5.7	5.8	5.9	5.8	–
Industrial production (IVA)	4.3	4.3	7.5	5.0	–2.9	0.7	3.9	3.8	4.2	6.3	5.0	–
Exports	20.6	24.0	6.1	14.4	3.5	16.3	17.1	18.0	7.2	5.9	–0.3	–8.7
Imports	19.7	21.0	11.7	0.7	0.2	3.7	0.4	2.0	0.2	0.3	–0.7	-10.6
Trade balance USDbn	93.2	82.2	27.6	44.6	49.4	77.5	96.3	100.9	79.2	84.8	85.2	69.8

Quarterly data	**Q2:21**	**Q3:21**	**Q4:21**	**Q1:22**	**Q2:22**	**Q3:22**
Real GDP %yr	7.9	4.9	4.0	4.8	0.4	3.9
Nominal GDP %yr	13.6	9.8	9.4	8.9	3.9	6.1

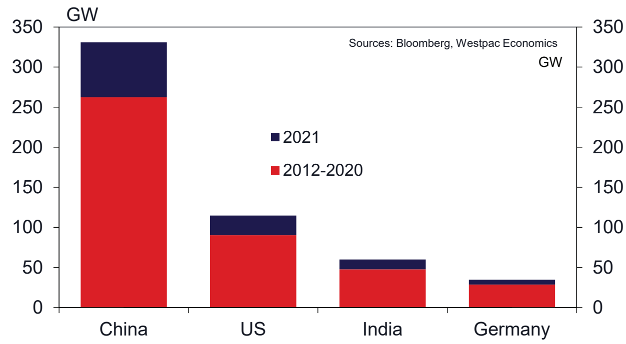
Sources: Government agencies, Bloomberg, Macrobond, Westpac Economics. Some data omitted from certain series due to Lunar New Year distortions. *4qma

… green transition

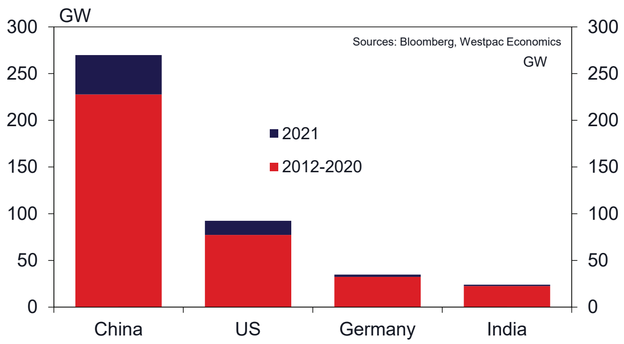
Chinese power generation by technology to 2050



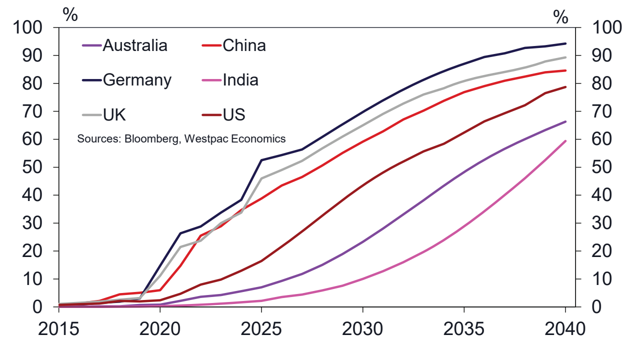
Chinese solar power capacity additions



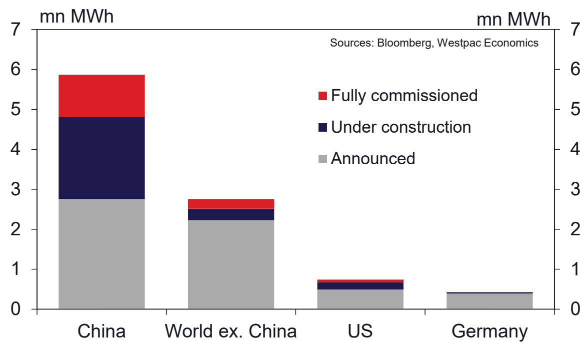
Chinese wind power capacity additions



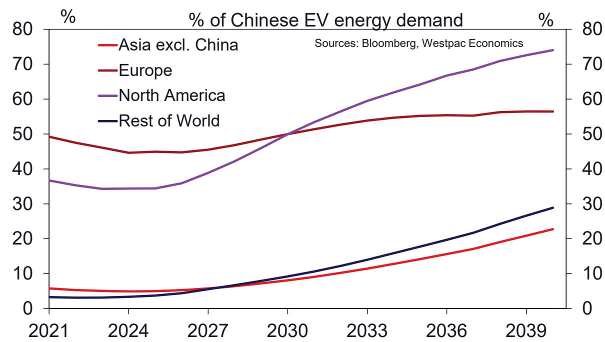
Electric vehicles: share of new vehicle sales



Global lithium-ion battery manufacturing capacity



Global electric vehicle energy demand



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.

A constructive end ...

Europe faced extraordinary circumstances this year.

This past year has been an unbelievable period for Europe. After achieving a robust 4.8% expansion in 2021, the Euro Area was well placed to forge ahead with its recovery from the pandemic. However, Russia's invasion of Ukraine presented an existential challenge to the region's geopolitical and economic security, shifting the focus from a robust recovery to avoiding deep recession.

The Russia-Ukraine conflict incited deep concerns over energy security ...

The economic nexus of the conflict is the key relationship between energy security and inflation. Immediately following the initial invasion on February 24, the EU implemented sweeping sanctions across finance; industry; technology; and energy, including banning the importation of Russian coal, crude oil and refined petroleum. Simultaneously, Russia attempted to strong-arm Europe by halting natural gas flows via the Nord Stream pipeline and reducing flows via other key transportation links.

... and triggered a commodity price spike that exacerbated the surge in consumer prices.

Given the importance of energy trade between Russia and Europe, in addition to the influence of Russia, and to some extent Ukraine, in global commodity markets, the conflict produced a significant inflationary pulse across key commodities such as coal, natural gas, crude oil and wheat. At a time of recovering global demand and lingering supply issues, the global commodity price spike fed through to most developed economies and resulted in record levels of consumer inflation.

Europe's LNG operations and green transition plans are a stand-out positive ...

It should be noted that in the last few months, Europe has been successful in securing ample storage volumes of natural gas ahead of winter, drawing on LNG imports to fill in the gap created by Russia. Additionally, the REPowerEU initiative places the EU in a favourable position for the longer-term. The investment-driven approach (€210bn over five years) will allow Europe to reduce its reliance on Russia through the green energy transition, with the goal of reaching 45% renewable energy generation by 2030, alongside wide-ranging efficiency measures.

... alongside the robust growth outcomes despite significant headwinds.

Growth in the Euro Area has also been relatively resilient despite the extreme circumstances. The final estimate of Q3 GDP saw a minor upward revision to 0.3%, leaving annual growth at a robust 2.3%. Net exports represented a major drag in the quarter (-1.1ppts), but this was more than offset by continued support from household consumption (+0.5ppts) and strength in new business investment (+0.8ppts). Moving through year-end to 2023, the backdrop of elevated inflation and rising interest rates will begin to weigh more heavily on growth outcomes. The extent of this weakness will depend crucially on the health of household real disposable income and the response of consumption.

Headline inflation is also beginning to cool but the core CPI remains elevated.

It is positive to see some of the conflict's initial impacts on inflation beginning to unwind. November's flash CPI saw consumer prices fall 0.1% in the month, lowering the annual pace of headline inflation from 10.6% to 10.0%. Available partials point to a solid 1.9% decline in energy prices being the key driver. Risks around the conflict and harsh weather will remain as key uncertainties with regards to the near-term path for energy prices, but the cycling out of prior price spikes should, in time, continue to lower annual headline inflation. More importantly for policy is the structure and momentum of core inflation. Indeed, that annual core inflation held at 5.0% in November — two-and-a-half times the ECB's medium-term target — and is broadly-based across the consumption basket highlights the inflation challenge is not yet over.

The ECB is set to slow the pace of tightening from 75bp to 50bp in December.

Regarding the upcoming policy decision, two points must be made. Firstly, substantial progress in the tightening cycle has already been achieved, with the ECB having delivered 200bps of rate hikes in just three meetings. Secondly, as of the staff's September projections, economic growth is expected to slow to a near-stall speed of 0.9% in 2023, with clear downside risks. In addition to the limited but positive updates on inflation, it is clear that the ECB is well position to slow the pace of rate hikes in December from 75bps to 50bps and continue to recognise the risks at hand. Of particular interest in the December meeting will be the ECB's updated economic projections, and whether these will incorporate a significant shift in the inflation and/or growth profile. At this stage, given the recent data updates and current forecasts, we expect the ECB to conclude its tightening cycle with a 25bp rate hike in early-2023, leaving the refi rate at 2.75%.

The Bank of England is also facing a challenging outlook.

The UK have also experienced its fair share of volatility in recent months, and the challenges facing the Bank of England are just as formidable. Experiencing a higher peak in inflation (11.1%yr in October) and facing into a much deeper economic slowdown (GDP on its estimates -1.9% in 2023, -0.1% in 2024), the Committee has not had the luxury of balancing inflation risks finely against that of growth. Indeed, with the forthcoming recession expected to last through to H1 2024, the economic outlook is undeniably bleak and the path for policy difficult.

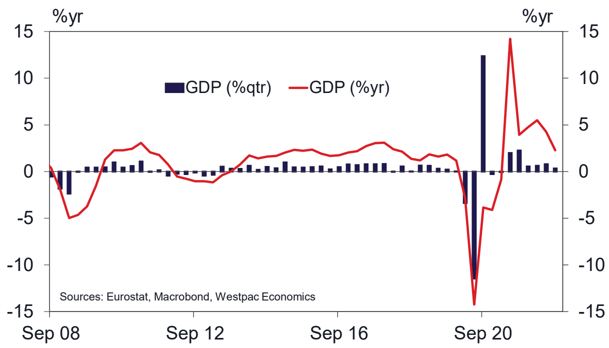
Bank rate is expected to peak at 4.0% by March 2023.

In accordance with Governor Bailey's clear rhetoric around avoiding an unnecessarily high peak in the bank rate, market pricing has since pulled back from the 5.25% peak measured in the Bank of England's central projections to a touch over 4.5% currently. We believe that a terminal rate of 4.0%, to be reached by March 2023 and held throughout the entirety of next year, will be enough to ensure that inflation risks subside without collapsing below target and that weakness in growth, albeit material and lasting, can be contained before a recovery ensues in 2024.

Ryan Wells, Economist

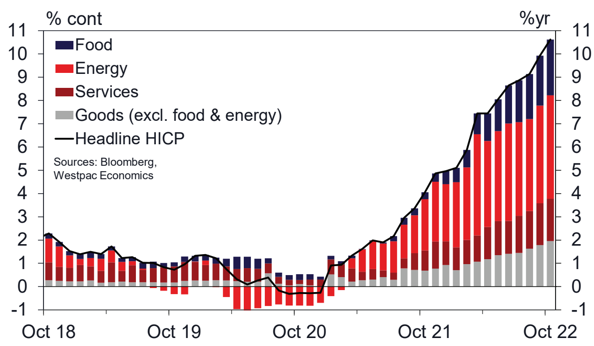
... to a challenging year

Growth resilient despite headwinds

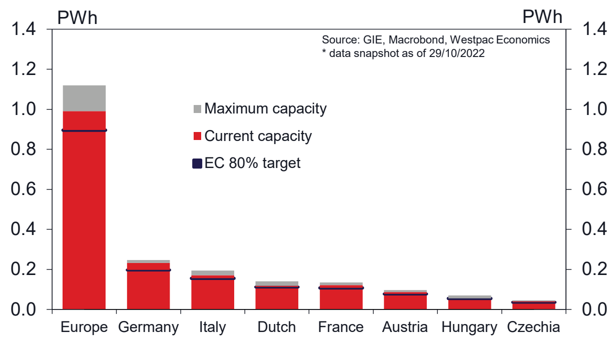


Labour market health has to be sustained

Energy has fed straight into CPI



Gas storage volumes still well above target



	2021	2022										
Europe	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**
Eur consumer prices %yr	5.0	5.1	5.9	7.4	7.4	8.1	8.6	8.9	9.1	9.9	10.6	10.0
Eur unemployment rate %	7.0	6.9	6.8	6.8	6.7	6.7	6.7	6.6	6.7	6.6	6.5	–
Eur industrial production %yr	1.9	–1.3	1.6	–1.0	–2.5	1.6	2.1	–2.5	2.8	4.9	–	–
Eur retail sales volumes %yr	2.5	9.7	6.2	2.3	5.1	1.1	–2.9	–0.8	–1.4	0.0	–2.7	–
Eur consumer confidence	–9.4	–9.7	–9.7	–21.7	–22.1	–21.2	–23.7	–27.0	–24.9	–28.7	–27.5	–23.9
Eur current account balance €bn	10.3	11.3	4.1	–3.2	–13.5	–16.1	–10.0	–20.8	–26.9	–8.1	–	–
United Kingdom												
UK consumer price index %yr	5.4	5.5	6.2	7.0	9.0	9.1	9.4	10.1	9.9	10.1	11.1	–
UK unemployment rate % (ILO)	4.0	4.0	3.8	3.7	3.8	3.8	3.8	3.6	3.5	3.6	3.7	–
UK industrial production %yr	–2.2	–1.0	–1.6	–2.5	–2.2	–3.5	–1.8	–2.7	–4.3	–3.1	–2.4	–
UK retail sales volumes %yr	1.0	9.4	7.5	2.1	–6.1	–5.0	–6.0	–3.3	–5.4	–6.8	–6.1	–
UK consumer confidence	–15	–19	–26	–31	–38	–40	–41	–41	–44	–49	–47	–44

Quarterly data	**Q1:21**	**Q2:21**	**Q3:21**	**Q4:21**	**Q1:22**	**Q2:22**	**Q3:22**
Eur GDP %qtr/%yr	–0.1/–0.8	2.0/14.2	2.3/3.9	0.5/4.8	0.6/5.5	0.8/4.2	0.3/2.3
UK GDP %qtr/%yr	–1.2/–7.8	6.5/24.3	1.8/8.5	1.6/8.9	0.7/10.9	0.2/4.4	–0.2/2.4
UK current account balance £bn	–12.3	–6.9	–23.1	–3.2	–43.9	–33.8	–

Source: Official agencies.

Australia

Interest rate forecasts

	Latest (14 Dec)	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
Cash	3.10	3.60	3.85	3.85	3.85	3.60	3.35	3.10	2.85
90 Day BBSW	3.14	3.97	4.05	4.05	3.97	3.72	3.47	3.22	2.97
3 Year Swap	3.58	3.80	3.75	3.70	3.60	3.55	3.50	3.45	3.40
3 Year Bond	3.07	3.35	3.35	3.35	3.30	3.30	3.30	3.25	3.20
10 Year Bond	3.39	3.20	3.10	3.00	2.90	2.80	2.70	2.60	2.50
10 Year Spread to US (bps)	–11	–20	–20	–20	–20	–10	0	0	0

Sources: Bloomberg, Westpac Economics.

Currency forecasts

	Latest (14 Dec)	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
AUD vs									
USD	0.6857	0.69	0.70	0.72	0.74	0.75	0.76	0.76	0.77
JPY	92.93	93.8	94.5	96.5	97.7	97.5	97.3	95.8	95.5
EUR	0.6449	0.65	0.65	0.66	0.67	0.67	0.68	0.67	0.67
NZD	1.0614	1.08	1.08	1.09	1.10	1.11	1.13	1.13	1.13
CAD	0.9288	0.91	0.91	0.93	0.95	0.95	0.97	0.96	0.97
GBP	0.5543	0.57	0.57	0.59	0.60	0.60	0.60	0.60	0.60
CHF	0.6367	0.64	0.65	0.66	0.67	0.68	0.68	0.68	0.69
DKK	4.7970	4.84	4.87	4.92	4.96	4.98	5.03	4.96	4.98
SEK	7.0133	7.08	7.11	7.18	7.25	7.28	7.34	7.25	7.28
NOK	6.6697	6.73	6.77	6.83	6.90	6.93	6.99	6.90	6.93
ZAR	11.84	11.9	12.0	12.1	12.3	12.4	12.5	12.5	12.5
SGD	0.9226	0.93	0.95	0.96	0.98	0.99	1.00	1.00	1.01
HKD	5.3338	5.35	5.43	5.58	5.74	5.81	5.89	5.89	5.97
PHP	37.88	38.6	38.5	38.9	39.2	38.3	38.8	38.7	39.2
THB	23.71	23.8	24.2	24.5	24.4	24.0	24.3	24.3	24.6
MYR	2.9964	3.11	3.08	3.10	3.11	3.08	3.12	3.12	3.16
CNY	4.7769	4.76	4.76	4.75	4.81	4.80	4.79	4.71	4.70
IDR	10736	10730	10710	10800	10878	10800	10979	10949	11093
TWD	20.75	21.1	21.3	21.7	22.1	22.1	22.4	22.3	22.6
KRW	894	904	910	929	947	953	969	962	974
INR	56.01	55.2	54.6	54.4	55.1	55.1	55.5	55.1	55.4

Australia

Activity forecasts*

	2022			2023				Calendar years			
%qtr / yr avg	Q2	Q3	Q4f	Q1f	Q2f	Q3f	Q4f	2021	2022f	2023f	2024f
Private consumption	2.1	1.1	0.9	0.5	0.3	0.1	0.1	5.0	6.7	2.6	1.2
Dwelling investment	-3.1	1.0	1.8	1.3	-0.4	-2.2	-2.2	9.9	-2.5	0.5	-7.5
Business investment*	1.5	0.7	2.0	1.1	0.4	-1.4	-1.3	8.2	3.6	2.6	-2.0
Private demand *	1.5	0.7	0.9	0.5	0.2	-0.4	-0.3	6.5	5.1	1.9	0.1
Public demand *	-0.1	0.2	0.5	0.2	0.2	0.2	0.2	5.8	5.3	1.0	1.4
Domestic demand	1.0	0.6	0.8	0.5	0.2	-0.2	-0.2	6.3	5.1	2.6	1.2
Stock contribution	-1.0	0.2	-0.3	-0.1	-0.3	0.0	0.1	0.4	0.3	-0.6	0.2
GNE	0.0	0.8	0.5	0.4	-0.1	-0.3	0.0	6.9	5.4	1.0	0.6
Exports	5.3	2.7	2.7	2.1	2.0	2.0	2.0	-2.0	4.0	10.0	5.8
Imports	1.4	3.9	2.5	1.4	1.1	0.9	0.9	5.4	15.0	7.2	3.5
Net exports contribution	0.8	-0.2	0.1	0.2	0.2	0.3	0.3	-1.4	-1.7	0.8	0.6
Real GDP %qtr / yr avg	**0.9**	**0.6**	**0.6**	**0.6**	**0.2**	**0.0**	**0.2**	5.2	3.6	1.8	1.2
%yr end	**3.2**	**5.9**	**2.6**	**2.7**	**2.0**	**1.4**	**1.0**	**4.6**	**2.6**	**1.0**	**2.0**
Nominal GDP %qtr	4.1	0.8	2.5	0.9	0.2	0.1	0.6				
%yr end	11.8	13.1	12.0	8.5	4.5	3.7	1.8	10.3	12.0	1.8	3.6

Other macroeconomic variables

	2022			2023				Calendar years			
% change	Q2	Q3	Q4f	Q1f	Q2f	Q3f	Q4f	2021	2022f	2023f	2024f
Employment (2)	0.9	0.3	0.5	0.4	0.0	-0.1	0.0	–	–	–	–
%yr	3.3	4.2	3.9	2.2	1.3	0.9	0.3	2.4	3.9	0.3	0.4
Unemployment rate % (2)	3.8	3.5	3.3	3.3	3.9	4.5	4.6	4.7	3.3	4.6	5.1
Wages (WPI) (2)	0.8	1.0	1.1	1.1	1.1	1.1	1.1	–	–	–	–
%yr	2.6	3.1	3.6	4.1	4.4	4.5	4.5	2.3	3.6	4.5	3.5
CPI Headline (2)	1.8	1.8	1.6	1.3	0.8	1.0	0.7	–	–	–	–
%yr	6.1	7.3	7.5	6.6	5.6	4.8	3.9	3.5	7.5	3.9	3.0
Core inflation trimmed mean	1.6	1.8	1.7	1.3	0.9	0.7	0.7	–	–	–	–
%yr (2)	4.9	6.1	6.7	6.5	5.8	4.6	3.6	2.6	6.7	3.6	3.0
Current account AUDbn	14.7	-2.3	-1.0	-4.0	-5.0	-8.0	-8.0	68.1	13.0	-25.0	-40.0
% of GDP	2.4	-0.4	-0.2	-0.6	-0.8	-1.2	-1.2	3.1	0.5	-1.0	-1.5
Terms of trade annual chg (1)	7.5	-0.3	8.0	-3.4	-11.2	-8.4	-11.9	17.2	6.0	-8.8	-8.0

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

	2022										
Monthly data	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Employment '000 chg	105	36	10	39	68	-36	36	-4	32	–	–
Unemployment rate %	4.0	3.9	3.9	3.9	3.5	3.4	3.5	3.5	3.4	–	–
Westpac–MI Consumer Sentiment	100.8	96.6	95.8	90.4	86.4	83.8	81.2	84.4	83.7	78.0	80.3
Retail trade %mth	1.8	1.6	0.9	0.7	0.2	1.3	0.6	0.6	-0.2	–	–
Dwelling approvals %mth	37.2	-15.4	0.0	8.3	0.1	-15.1	26.0	-8.1	-6.0	–	–
Credit, private sector %yr	8.0	8.0	8.7	9.1	9.1	9.1	9.3	9.4	9.5	–	–
Trade balance AUDbn	7.2	9.2	12.3	13.9	17.5	8.9	8.7	12.4	12.2	–	–

New Zealand

Interest rate forecasts

	Latest (14 Dec)	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
Cash	4.25	5.00	5.50	5.50	5.50	5.25	4.75	4.25	3.75
90 Day Bill	4.52	5.50	5.60	5.60	5.50	5.05	4.55	4.05	3.75
2 Year Swap	5.19	5.00	4.90	4.70	4.50	4.20	3.90	3.70	3.50
10 Year Bond	4.14	4.00	3.95	3.90	3.80	3.70	3.60	3.50	3.50
10 Year Spread to US	64	60	65	70	70	80	90	90	100
10 Year Spread to Aust	75	80	85	90	90	90	90	90	100

Sources: Bloomberg, Westpac Economics.

Currency forecasts

	Latest (14 Dec)	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
NZD vs									
USD	0.6460	0.64	0.65	0.66	0.67	0.68	0.68	0.68	0.68
JPY	87.55	87.0	87.8	88.4	88.4	87.8	86.4	85.1	84.3
EUR	0.6077	0.60	0.61	0.61	0.60	0.60	0.60	0.59	0.59
AUD	0.9421	0.93	0.93	0.92	0.91	0.90	0.89	0.89	0.88
CAD	0.8750	0.84	0.85	0.85	0.86	0.86	0.86	0.85	0.86
GBP	0.5223	0.52	0.53	0.54	0.54	0.54	0.54	0.53	0.53
CNY	4.4912	4.42	4.42	4.36	4.36	4.32	4.25	4.19	4.15

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

Activity forecasts*

	2022			2023				Calendar years			
% qtr / yr change	**Q2**	**Q3f**	**Q4f**	**Q1f**	**Q2f**	**Q3f**	**Q4f**	**2021**	**2022f**	**2023f**	**2024f**
Private consumption	-3.1	0.4	0.2	-0.2	-0.2	-0.3	-0.2	6.2	2.5	-1.0	0.6
Government consumption	0.6	-0.5	-0.5	-0.5	-0.5	-1.0	-0.6	9.9	6.6	-1.8	-1.1
Residential investment	1.0	3.1	0.5	0.0	-1.0	-1.5	-2.0	7.8	2.5	0.0	-7.3
Business investment	-4.0	0.9	1.4	1.2	0.6	0.0	-0.9	9.7	4.1	1.9	-2.9
Stocks (ppt contribution)	-0.2	-0.8	0.8	0.1	0.0	0.0	0.0	1.5	-1.0	0.3	0.1
GNE	-1.0	-0.3	1.0	0.1	-0.1	-0.4	-0.5	9.2	2.6	-0.4	-0.7
Exports	20.5	5.5	-1.3	2.1	1.9	2.1	2.1	-3.6	0.5	11.8	7.1
Imports	-1.4	1.9	0.7	0.5	0.7	0.5	0.6	14.9	1.9	2.7	2.9
GDP (production)	**1.7**	**0.9**	**0.5**	**0.4**	**0.1**	**-0.1**	**-0.1**	**5.5**	**2.5**	**1.7**	**0.1**
Employment annual %	1.4	1.2	1.3	1.4	1.5	0.3	0.1	3.3	1.3	0.1	0.0
Unemployment rate % s.a.	3.3	3.3	3.3	3.4	3.5	3.7	3.9	3.2	3.3	3.9	4.8
Labour cost index, all sect incl o/t, ann %	3.4	3.7	4.2	4.3	4.4	4.2	4.1	2.6	4.2	4.1	3.4
CPI annual %	**7.3**	**7.2**	**6.9**	**6.6**	**5.9**	**4.9**	**4.3**	**5.9**	**6.9**	**4.3**	**2.4**
Current account balance % of GDP	-7.7	-8.0	-7.4	-6.2	-5.6	-5.0	-4.6	-6.0	-7.4	-4.6	-3.6
Terms of trade annual %	-2.2	-5.9	1.8	0.9	3.0	6.4	-1.0	2.8	1.8	-1.0	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 (14 Dec)***	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25
Australian commodities index#	365	341	330	317	313	304	**298**	**297**	**300**	**301**	**291**
Bulk commodities index#	**556**	**534**	**508**	**479**	**451**	**425**	**400**	**374**	**361**	**369**	**356**
iron ore finesTSI @ 62% US$/t	111	99	96	93	90	87	84	81	80	85	85
Qld coking coal index (US$/t)	230	225	221	216	207	197	188	178	179	179	179
Newcastle spot thermal coal (US$/t)	422	375	350	300	275	250	225	200	175	150	125
crude oil (US$/bbl) Brent ICE	77	80	80	85	87	90	95	105	110	115	110
LNG in Japan US$mmbtu	21.52	19.1	18.4	18.4	19.6	19.1	19.6	20.4	22.1	22.0	21.9
gold (US$/oz)	1,806	1,775	1,775	1,760	1,750	1,735	1,735	1,735	1,745	1,755	1,760
Base metals index#	**227**	**218**	**212**	**208**	**216**	**220**	**223**	**242**	**255**	**266**	**258**
copper (US$/t)	8,513	8,350	8,200	8,200	8,300	8,600	8,700	9,753	10,287	10,825	10,496
aluminium (US$/t)	2,468	2,300	2,200	2,200	2,500	2,600	2,700	2,871	2,953	3,033	2,901
nickel (US$/t)	29,764	28,000	27,500	25,000	25,000	25,000	25,000	27,947	29,438	30,937	30,533
zinc (US$/t)	3,245	3,100	3,000	3,000	3,150	3,125	3,110	3,105	3,253	3,401	3,260
lead (US$/t)	2,200	2,150	2,100	2,000	1,875	1,850	1,850	1,875	1,969	2,063	1,955
Rural commodities index#	**145**	**147**	**151**	**153**	**157**	**161**	**171**	**190**	**200**	**210**	**201**
NZ commodities index ##	**337**	**323**	**322**	**326**	**335**	**342**	**346**	**349**	**352**	**355**	**356**
dairy price index ^^	308	309	314	318	321	324	327	329	331	333	336
whole milk powder US$/t	3,400	3,454	3,500	3,550	3,600	3,625	3,650	3,675	3,700	3,728	3,756
skim milk powder US$/t	3,102	3,301	3,400	3,450	3,500	3,550	3,600	3,625	3,650	3,677	3,705
lamb leg UKp/lb	504	476	472	477	492	507	522	537	552	561	562
bull beef US¢/lb	236	208	205	208	223	232	234	234	235	236	236
log price index ##	160	148	145	150	158	162	162	163	164	164	164
strong wool US¢/kg	157	157	157	157	157	157	157	157	157	157	157

	levels				% change			
Annual averages	2021	2022(e)	2023(f)	2024(f)	2021	2022(e)	2023(f)	2024(f)
Australian commodities index#	**306**	**379**	**329**	**301**	**43.1**	**23.8**	**-13.3**	**-8.6**
Bulk commodities index#	**510**	**565**	**501**	**396**	**47.0**	**10.9**	**-11.2**	**-21.1**
iron ore fines @ 62% USD/t	159	120	95	84	46.6	-24.4	-20.6	-12.2
LNG in Japan $mmbtu	10.3	18.5	19	20	31.1	79.6	3.2	5.4
ave coking coal price (US$/t)	143	247	231	193	33.2	72.7	-6.8	-16.3
ave thermal price (US$/t)	99	281	302	197	74.8	183.7	7.4	-34.7
iron ore fines contracts (US¢ dltu)	239	187	166	152	72.8	-21.7	-11.4	-8.1
coal coking contracts (US$/t)	205	372	239	196	62.5	81.2	-35.7	-18.0
crude oil (US$/bbl) Brent ICE	70	97	82	98	60.2	38.0	-15.1	19.2
gold (US$/oz)	1,801	1,809	1,770	1,738	1.2	0.4	-2.2	-1.8
Base metals index#	**213**	**230**	**214**	**228**	**41.1**	**8.1**	**-7.0**	**6.5**
copper (US$/t)	9,297	8,836	8,279	9,169	50.2	-5.0	-6.3	10.8
aluminium (US$/t)	2,477	2,716	2,298	2,743	44.0	9.7	-15.4	19.4
nickel (US$/t)	18,452	26,245	26,730	26,476	33.4	42.2	1.8	-0.9
zinc (US$/t)	3,006	3,481	3,069	3,140	32.1	15.8	-11.8	2.3
lead (US$/t)	2,190	2,152	2,058	1,878	19.6	-1.7	-4.4	-8.8
Rural commodities index#	**150**	**171**	**150**	**176**	**28.0**	**13.7**	**-12.2**	**17.2**
NZ commodities index ##	**359**	**375**	**326**	**347**	**21.2**	**4.4**	**-13.0**	**6.4**
dairy price index ##	322	352	316	328	25.2	9.4	-10.5	3.9
whole milk powder US$/t	3,843	3,896	3,506	3,652	29.2	1.4	-10.0	4.2
skim milk powder US$/t	3,332	3,826	3,378	3,590	22.6	14.8	-11.7	6.3
lamb leg UKp/lb	599	544	479	524	18.4	-9.2	-12.0	9.6
bull beef US¢/lb	279	245	211	233	19.0	-12.3	-13.9	10.7
log price index ##	179	171	150	163	14.8	-4.6	-12.3	8.5
strong wool US¢/kg	173	160	157	157	20.4	-7.8	-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

United States

Interest rate forecasts

	Latest (14 Dec)	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
Fed Funds*	3.875	4.875	4.875	4.875	4.875	4.375	3.875	3.375	2.875
10 Year Bond	3.50	3.40	3.30	3.20	3.10	2.90	2.70	2.60	2.50

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

Currency forecasts

	Latest (14 Dec)	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
USD vs									
DXY index	104.00	104.2	103.4	101.8	100.2	99.2	98.6	97.3	96.4
JPY	135.52	136	135	134	132	130	128	126	124
EUR	1.0633	1.06	1.07	1.09	1.11	1.12	1.13	1.14	1.15
AUD	0.6857	0.69	0.70	0.72	0.74	0.75	0.76	0.76	0.77
NZD	0.6460	0.64	0.65	0.66	0.67	0.68	0.68	0.68	0.68
CAD	1.3545	1.32	1.30	1.29	1.28	1.27	1.27	1.26	1.26
GBP	1.2371	1.22	1.22	1.23	1.24	1.25	1.26	1.27	1.28
CHF	0.9285	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.89
ZAR	17.26	17.2	17.1	16.8	16.6	16.5	16.4	16.4	16.3
SGD	1.3457	1.35	1.35	1.34	1.33	1.32	1.32	1.31	1.31
HKD	7.7779	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75
PHP	55.92	56.0	55.0	54.0	53.0	51.0	51.1	51.0	51.0
THB	34.60	34.5	34.5	34.0	33.0	32.0	32.0	32.0	32.0
MYR	4.4287	4.50	4.40	4.30	4.20	4.10	4.11	4.10	4.10
CNY	6.9527	6.90	6.80	6.60	6.50	6.40	6.30	6.20	6.10
IDR	15657	15550	15300	15000	14700	14400	14446	14407	14407
TWD	30.68	30.6	30.4	30.2	29.8	29.4	29.5	29.4	29.4
KRW	1303	1310	1300	1290	1280	1270	1275	1265	1265
INR	82.81	80.0	78.0	75.5	74.5	73.5	73.0	72.5	72.0

Activity forecasts*

	2022				2023			Calendar years			
% annualised, s/adj	**Q1**	**Q2**	**Q3**	**Q4f**	**Q1f**	**Q2f**	**Q3f**	**2021**	**2022f**	**2023f**	**2024f**
Private consumption	1.3	2.0	1.4	1.2	-0.3	-0.8	-0.5	8.3	2.6	0.3	1.0
Dwelling investment	-3.1	-17.8	-26.4	-11.5	-3.9	-3.9	-3.9	10.7	-9.6	-9.3	1.8
Business investment	7.9	0.1	3.7	6.8	3.2	3.1	3.5	6.9	4.3	4.0	4.7
Public demand	-2.3	-1.6	2.4	1.6	0.4	-0.4	-0.4	0.6	-0.9	0.4	-0.4
Domestic final demand	1.5	0.5	0.9	1.6	0.2	-0.3	0.0	6.8	1.9	0.5	1.4
Inventories contribution ppt	0.3	-2.1	-1.0	0.6	-0.4	-0.2	0.0	0.2	0.7	-0.3	0.0
Net exports contribution ppt	-3.8	1.2	3.1	0.0	-0.1	-0.2	-0.3	-1.7	-0.7	0.4	-0.1
GDP	-1.6	-0.6	2.6	2.3	-0.3	-0.7	-0.2	5.9	2.0	0.5	1.3
%yr annual chg	3.7	1.8	1.8	0.7	1.0	1.0	0.3				

Other macroeconomic variables

Non-farm payrolls mth avg	573	409	386	200	125	75	50	514	406	100	75
Unemployment rate %	3.8	3.6	3.6	3.8	4.2	4.6	5.0	5.4	3.7	4.8	5.5
CPI headline %yr	8.6	7.9	7.5	5.7	3.5	2.4	2.2	5.1	7.4	2.3	2.1
PCE deflator, core %yr	5.4	4.8	4.6	3.8	3.1	2.6	2.4	3.5	4.5	2.3	2.1
Current account %GDP	-2.6	-2.6	-2.6	-2.6	-2.6	-2.5	-2.5	-2.4	-2.4	-2.4	-2.4

Sources: Official agencies, Factset, Westpac Economics

Europe & the United Kingdom

Interest rate forecasts

	Latest (14 Dec)	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
Euro area									
ECB Refi rate	2.00	2.75	2.75	2.75	2.75	2.75	2.50	2.25	2.00
10 Year Bund	1.93	1.85	1.80	1.75	1.75	1.65	1.65	1.60	1.50
10 Year Spread to US	–157	–155	–150	–145	–135	–125	–105	–100	–100
United Kingdom									
BoE Bank Rate	3.00	4.00	4.00	4.00	4.00	3.75	3.50	3.25	3.00
10 Year Gilt	3.30	3.25	3.15	3.05	2.95	2.80	2.60	2.50	2.40
10 Year Spread to US	–20	–15	–15	–15	–15	–10	–10	–10	–10

Sources: Bloomberg, Westpac Economics.

Currency forecasts

	Latest (14 Dec)	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
euro vs									
USD	1.0633	1.06	1.07	1.09	1.11	1.12	1.13	1.14	1.15
JPY	144.09	144	144	146	147	146	144	144	143
GBP	0.8596	0.87	0.88	0.89	0.90	0.90	0.89	0.90	0.90
CHF	0.9873	0.99	1.00	1.00	1.01	1.01	1.01	1.01	1.02
DKK	7.4386	7.44	7.44	7.44	7.44	7.44	7.44	7.44	7.44
SEK	10.8730	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
NOK	10.3417	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
sterling vs									
USD	1.2371	1.22	1.22	1.23	1.24	1.25	1.26	1.27	1.28
JPY	167.64	166	165	165	164	163	161	160	159
CHF	1.1486	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.14
AUD	0.5544	0.57	0.57	0.59	0.60	0.60	0.60	0.60	0.60

Source: Bloomberg, Westpac Economics.

Activity forecasts*

Annual average % chg	2019	2020	2021	2022f	2023f	2024f
Eurozone GDP	1.6	–6.1	5.2	3.2	0.4	1.5
private consumption	1.3	–8.0	3.5	3.2	0.8	1.5
fixed investment	5.7	–8.4	3.6	2.9	1.8	4.5
government consumption	1.8	1.4	3.8	1.0	1.1	2.0
net exports contribution ppt	–0.5	–0.7	1.0	0.3	0.2	-0.2
Germany GDP	1.1	–3.7	2.6	1.8	0.2	1.2
France GDP	1.8	–7.9	6.8	2.4	0.3	1.2
Italy GDP	0.5	–9.0	6.7	3.5	0.2	1.0
Spain GDP	2.1	-10.8	5.1	4.5	1.2	2.2
Netherlands GDP	2.0	–3.9	4.9	4.2	0.9	1.5
memo: United Kingdom GDP	1.7	–9.3	7.4	4.0	–0.7	1.5

Asia

China

Calendar years	2018	2019	2020	2021	2022f	2023f	2024f
Real GDP	6.7	6.0	2.2	8.1	3.5	6.0	5.5
Consumer prices	1.9	4.5	0.2	1.5	2.2	2.4	2.3
Producer prices	0.9	–0.5	–0.4	10.3	4.5	1.0	1.2
Industrial production (IVA)	6.2	5.7	2.8	9.6	4.3	5.5	5.0
Retail sales	9.0	8.0	–3.9	12.5	1.5	8.0	7.5
Money supply M2	8.1	8.7	10.1	9.0	11.5	10.5	9.0
Fixed asset investment	5.9	5.4	2.9	4.9	6.2	6.0	5.5
Exports	–4.4	6.3	13.5	28.7	9.0	2.5	3.5
Imports	–7.6	11.8	2.4	30.7	3.5	4.5	4.0
Trade balance USDbn	351	421	535	670	878	844	859

Source: Macrobond.

Chinese interest rates & monetary policy

	Latest (14 Dec)	Mar–23	Jun–23	Sep–23	Dec–23	Mar–24	Jun–24	Sep–24	Dec–24
Required reserve ratio %*	11.00	11.00	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	3.65

* For major banks.

Currency forecasts

	Latest (14 Dec)	Mar–23	Jun–23	Sep–23	Dec–23	Mar–24	Jun–24	Sep–24	Dec–24
JPY	135.52	136	135	134	132	130	128	126	124
SGD	1.3457	1.35	1.35	1.34	1.33	1.32	1.32	1.31	1.31
HKD	7.7779	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75
PHP	55.92	56.0	55.0	54.0	53.0	51.0	51.1	51.0	51.0
THB	34.60	34.5	34.5	34.0	33.0	32.0	32.0	32.0	32.0
MYR	4.4287	4.50	4.40	4.30	4.20	4.10	4.11	4.10	4.10
CNY	6.9527	6.90	6.80	6.60	6.50	6.40	6.30	6.20	6.10
IDR	15657	15550	15300	15000	14700	14400	14446	14407	14407
TWD	30.68	30.6	30.4	30.2	29.8	29.4	29.5	29.4	29.4
KRW	1303	1310	1300	1290	1280	1270	1275	1265	1265
INR	82.81	80.0	78.0	75.5	74.5	73.5	73.0	72.5	72.0

Source: Bloomberg, Westpac Economics.

Economic growth forecasts (year average)

Real GDP %ann	2018	2019	2020	2021	2022f	2023f	2024f
World	**3.6**	**2.8**	**-3.0**	**6.0**	**3.3**	**2.9**	**3.2**
United States	2.9	2.3	-3.4	5.7	2.0	0.5	1.3
Japan	0.6	-0.4	-4.6	1.7	1.6	1.5	1.0
Euro zone	1.8	1.6	-6.1	5.2	3.2	0.4	1.5
Group of 3	**2.2**	**1.7**	**-4.6**	**5.0**	**2.4**	**0.6**	**1.3**
United Kingdom	1.7	1.7	-9.3	7.4	4.0	-0.7	1.5
Canada	2.8	1.9	-5.2	4.5	3.0	1.0	2.0
Australia	2.8	1.9	-1.8	5.2	3.6	1.8	1.2
New Zealand	3.2	2.4	-2.1	5.5	2.5	1.7	0.1
OECD total	**2.3**	**-0.8**	**-0.6**	**4.8**	**2.1**	**0.6**	**1.4**
China	6.8	6.0	2.2	8.1	3.5	6.0	5.5
Korea	2.9	2.2	-0.7	4.1	2.6	2.2	2.2
Taiwan	2.8	3.1	3.4	6.6	3.1	3.0	2.8
Hong Kong	2.8	-1.7	-6.5	6.3	-2.5	3.0	2.3
Singapore	3.7	1.1	-4.1	7.6	3.5	3.0	3.2
Indonesia	5.2	5.0	-2.1	3.7	5.3	5.4	5.5
Thailand	4.2	2.2	-6.2	1.5	3.5	4.1	4.2
Malaysia	4.8	4.4	-5.5	3.1	8.0	4.5	5.0
Philippines	6.3	6.1	-9.5	5.7	7.0	6.0	6.0
Vietnam	7.2	7.2	2.9	2.6	7.2	6.5	6.5
East Asia	**5.9**	**5.2**	**0.7**	**6.8**	**3.8**	**5.4**	**5.1**
East Asia ex China	4.5	3.8	-2.3	4.2	4.5	4.3	4.4
NIEs*	**3.0**	**1.9**	**-0.5**	**5.5**	**2.4**	**2.6**	**2.5**
India	6.5	3.7	-6.6	8.7	7.0	6.5	6.5
Russia	2.8	2.2	-2.7	4.7	-5.0	-2.5	1.0
Brazil	1.8	1.2	-3.9	4.6	2.5	1.5	2.0
South Africa	1.5	0.3	-6.3	4.9	2.1	1.1	1.2
Mexico	2.2	-0.2	-8.1	4.8	2.1	1.2	1.1
Argentina	-2.6	-2.0	-9.9	10.4	4.0	2.0	1.9
Chile	3.9	0.9	-6.1	11.7	2.0	-1.0	-0.9
CIS^	1.5	-2.1	1.9	15.3	10.1	3.3	3.2
Middle East	1.4	1.3	3.2	2.8	2.8	2.8	2.7
C & E Europe	0.3	-2.2	-5.0	9.5	5.2	2.8	2.0
Africa	3.3	3.2	-1.6	4.7	3.6	3.7	3.7
Emerging ex-East Asia	**2.9**	**1.6**	**-2.7**	**6.4**	**3.7**	**3.1**	**3.5**
Other countries	5.7	7.2	-3.9	4.4	4.3	5.1	4.0
World	**3.6**	**2.8**	**-3.0**	**6.0**	**3.3**	**2.9**	**3.2**

#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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