ECONOMIC UPDATE

TIME TO GET READY

Prepared by: Senior Economist, Justin Smirk

Westpac Institutional Bank

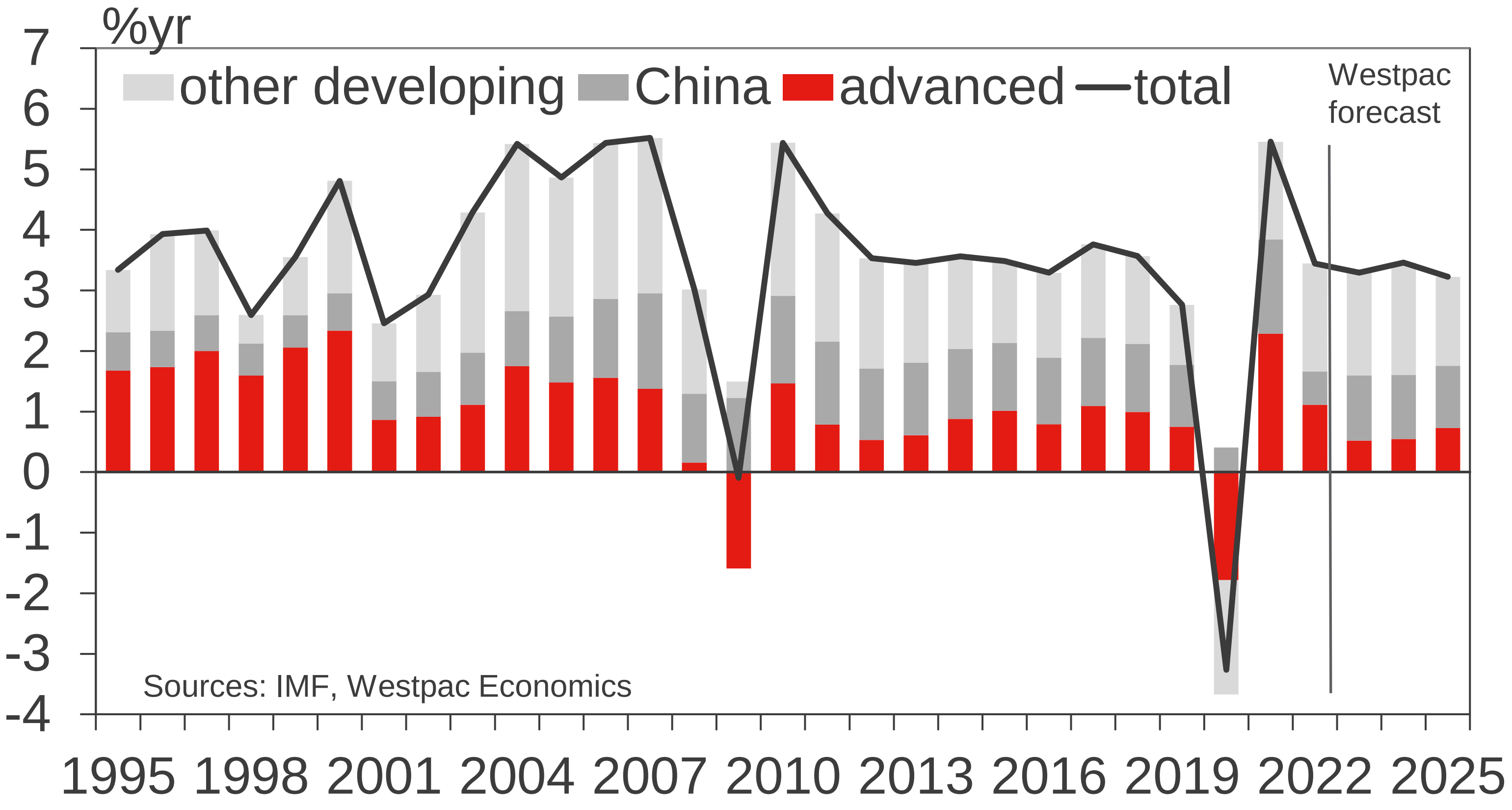
July 2022

Summary of 2022 presentation

- **Seasonal conditions couldn't get much better but agriculture faced global and domestic constraints and challenges. Farmers continue to have to do more with less.**
- Global inflation surge a major test for central banks.
- Fed facing biggest inflation challenge, running the gauntlet of a 'growth recession'.
- Near term energy crisis is likely to be sustained as supply responses is more mute than usual.
- Material and labour shortages at extreme levels – not seen since 70's; should ease by 2024.
- Risks are for "slowflation" rather than stagflation.
- Unemployment to fall to 3.2% in 2022 but start rising later in 2023. Wages growth will lift.
- RBA has an aggressive path – **cash rate to peak at 2.6%.**
- High household debt and interest rate sensitivity will be key to constraining RBA tightening.
- With a tight labour market inflation reduction relies on slowing interest sensitive sectors – housing; consumer spending; construction; house prices.
- Housing stretched – supply; affordability; falling prices in 2023 and 2024.
- AUD to reach USD0.80 in 2023 when global risk abates.

World growth: shaky but still there

Growth bounced out of lockdowns then returns to trend



- We have passed the sweet spot from the post COVID recovery.
- As 2022 matures growth is now coming with much higher inflation
- The pandemic disruptions are manifesting as a productivity shock = higher inflation for given level of output.
- Russia's invasion of Ukraine, and the response from NATO and its allies, roiled markets but most commodity prices are back below pre-Ukraine levels.
- G7 skirting recession in 2023, growth of 1.3% and risk of extended period of stagnation.
- Developing economies better placed to weather the storm.

ABARES thinks 2022-23 was as good as it gets

Ag production down 14% to $79bn in 2023/24

- Downward revision from last year's expectation for a 10% to $81bn in 2023-24.
- Drier climatic conditions brought on by the expectation of El Niño and/or a positive Indian Ocean Dipole.
- Domestic prices received by producers for most commodities are forecast to fall, as global prices ease from recent highs.
- Global prices for most commodities expected to decline in 2023-24 reflecting higher global supply.

Collapse in grain production/values in 2023-24

- Drier conditions & lower yields, crop production forecast is –18% in 2023–24.
- Prices for most crops are expected to fall in 2023–24 largely follow global prices due to rising world supply.
- Value of crop production is expected to fall by 22% to $44bn 2023–24.
- About half of the decrease in value is expected in wheat, falling by $6bn to $9.7bn.

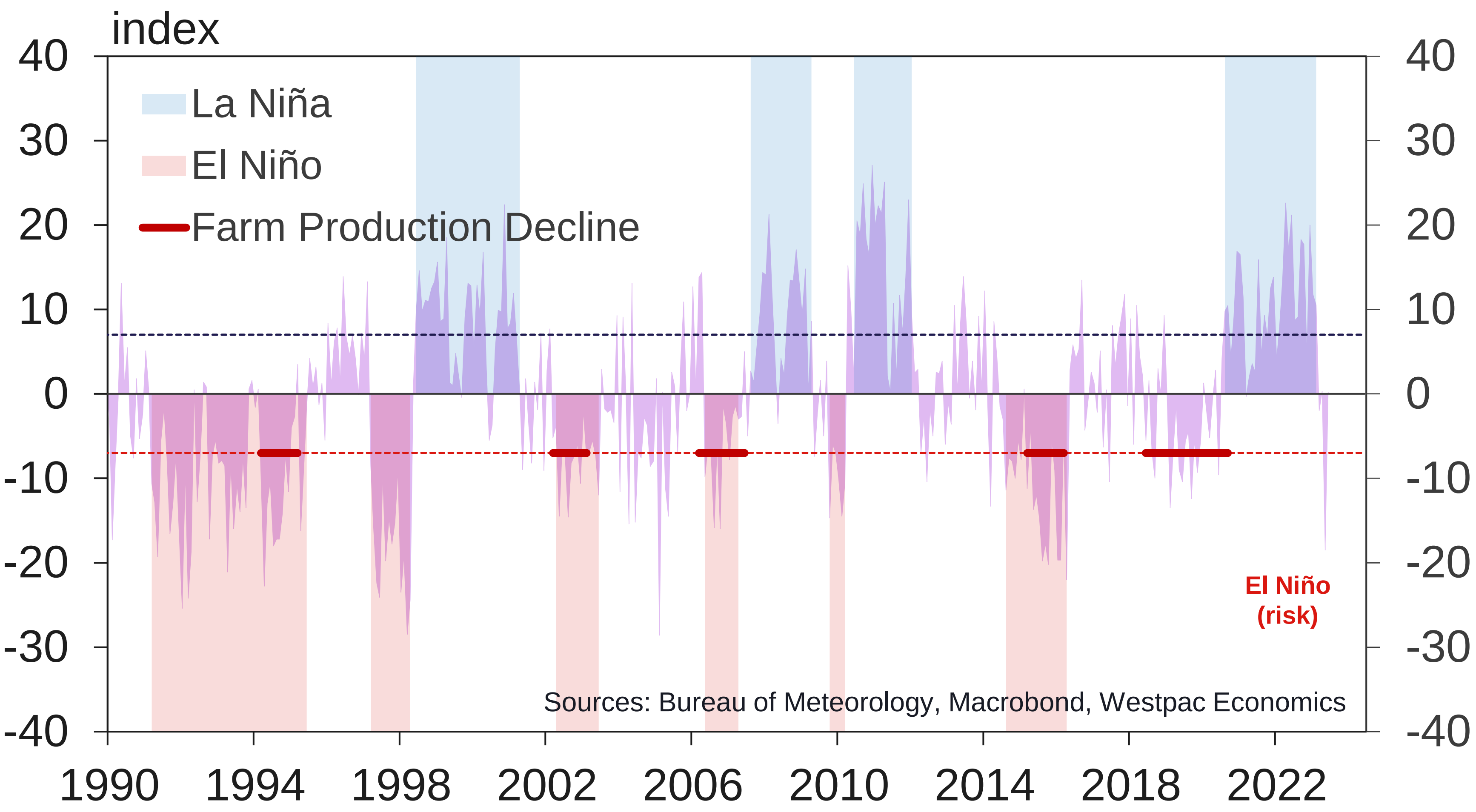
Ag exports hit a record high in 2022–23.

- Australia's ag production benefitted from 3 consecutive years of exceptional climate conditions that supported substantially higher than average crop yields & strong pasture growth.
- The result was the highest value of agricultural production on record, primarily driven by remarkable crop production.
- Though down in 2023-24, expected value of agricultural production is still likely to be the third highest on record.

Horticulture improves, livestock prices falling

- The total fall in crop production value is expected to be partially offset by increases in the value of horticulture and wine grape production.
- Livestock production to increase as livestock turn-off rates increase with reduced pasture availability forecast for later in 2023–24.
- Beef and veal production is forecast to rise by 6% and sheep meat production by 2%. Value of production to fall due to lower prices.

Southern Oscillation Index

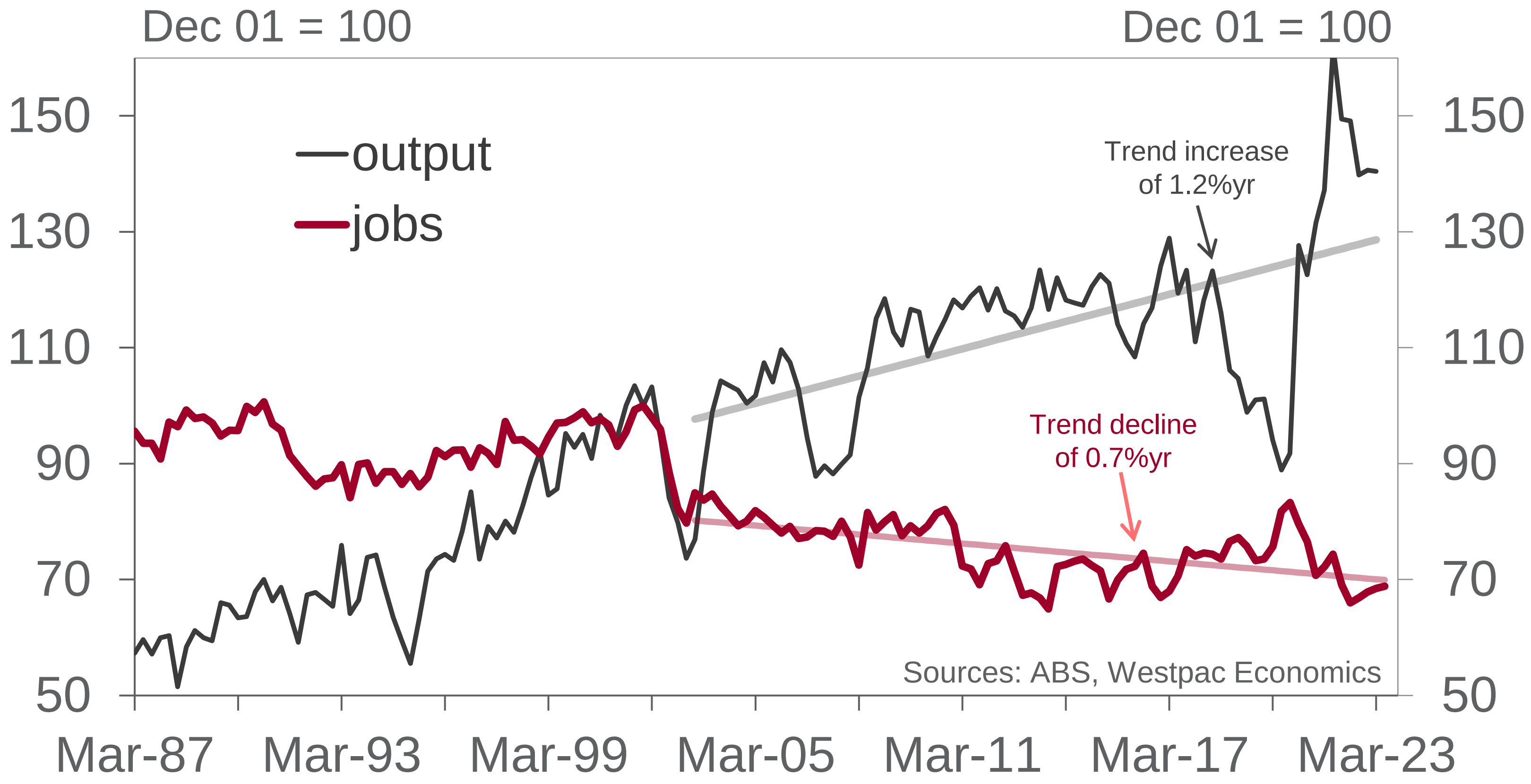


Risk

- Drought tends to be associated with an El Nino event.
- The Bureau did not all an El Nino in 2018 but that period saw a significant drought.
- The risk of an El Nino in 2023/24 is very high.

Agriculture continues to do more with less

Farm employment in a modest downtrend since Millennial Drought



Farm production currently well above trend.

But farm labour didn't:

- The COVID closed borders was a significant hit to temporary farm labour supply,
- While this has been a constraint to growth farmers are learning to do more with less,
- Rising productivity is a long run historical trend,
- The Millennial Drought saw around 20,000 workers leave agriculture; they never returned,
- But the 2018-2020 drought did not have the same impact
- Some regional areas (were) benefiting from sea/tree change but smaller towns reliant on farming continue to shrink.

What does it mean for local agriculture?

The landscape is changing very rapidly

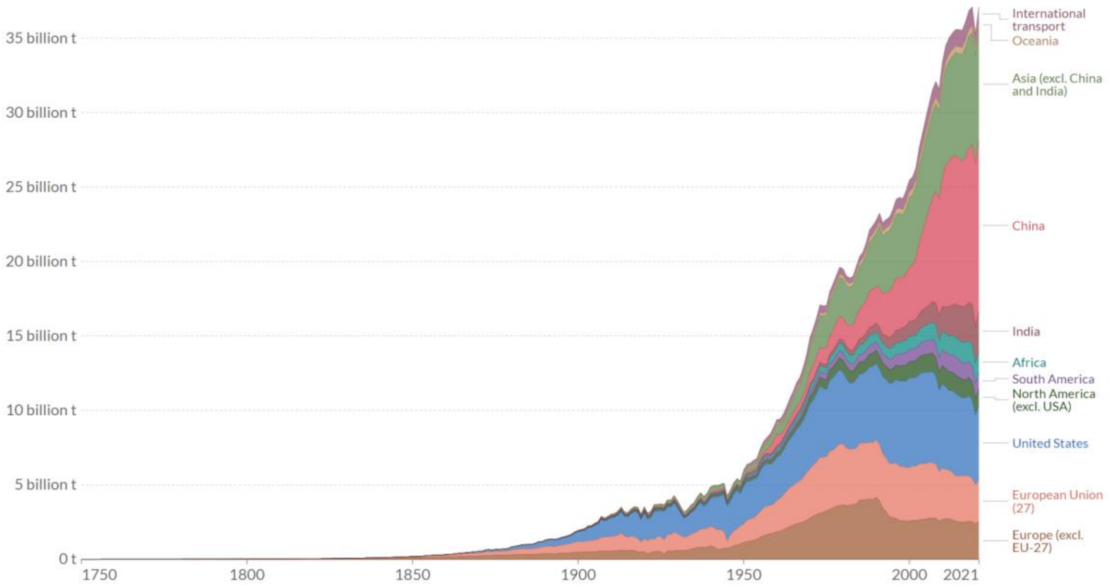
- Investors and consumers, rather than just governments, are an important driving force for change.
- "In five year's time, big corporations will be unable to secure a loan from a bank unless they can provide a credible plan to cut their carbon emissions."
- "Australia will need to fund $600bn investment on de-carbonisation over the next 10 to 15 years."
- And path will need to be set in next 5 years – commitment to 43% reduction in emissions by 2030 and timing of COP cycles mean progress must be clear by COP26 update.
- Agriculture will find itself 'front and centre' of the transformation.
- **If for no other reason than CBAM – the EU's carbon border adjustment.**

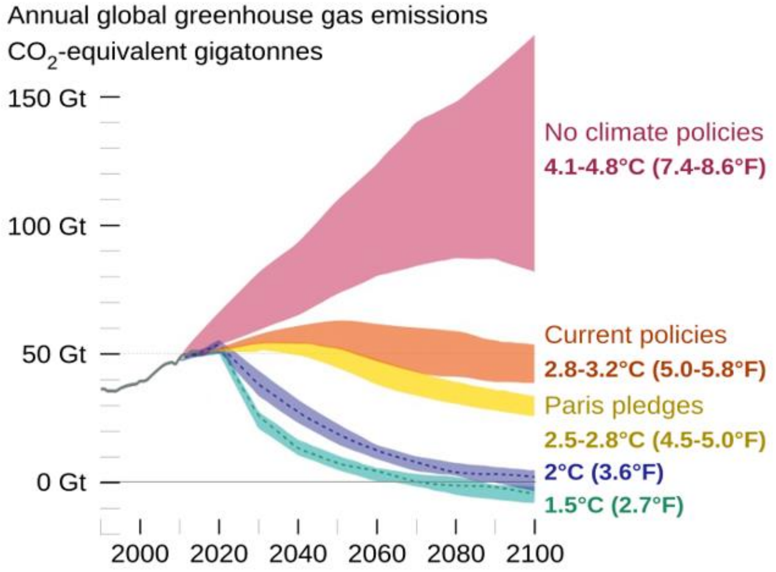
ESG

- It is an absolute focus for all major corporates.
- Major, significant economic, social & political transformation underway.
- ESG will increasing be part of our engagement with consumers

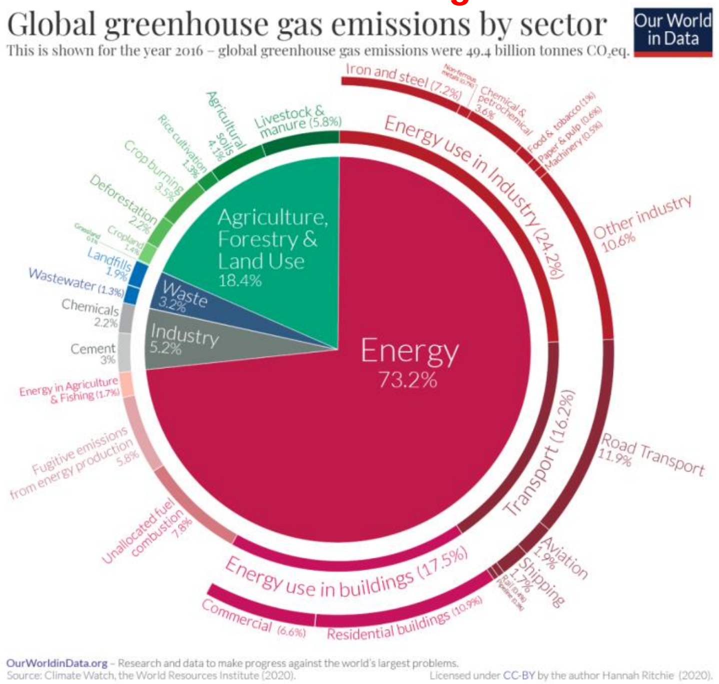
Source of emissions – globally

Where are emissions coming from?

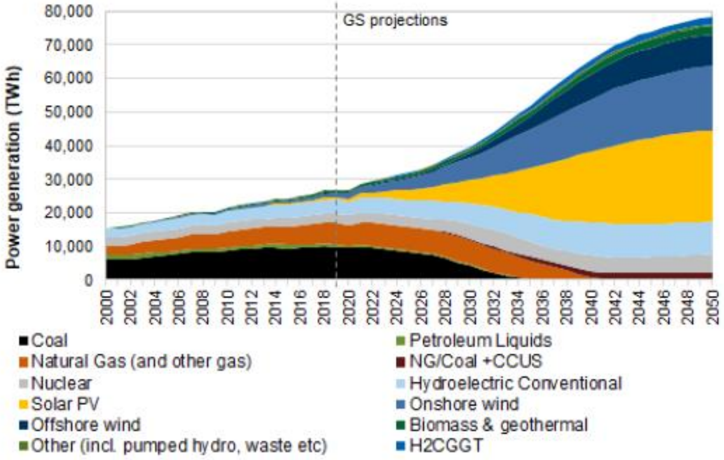




Which sectors are contributing?



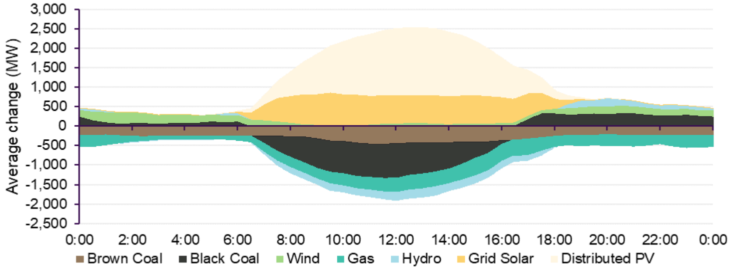
How is energy produced?



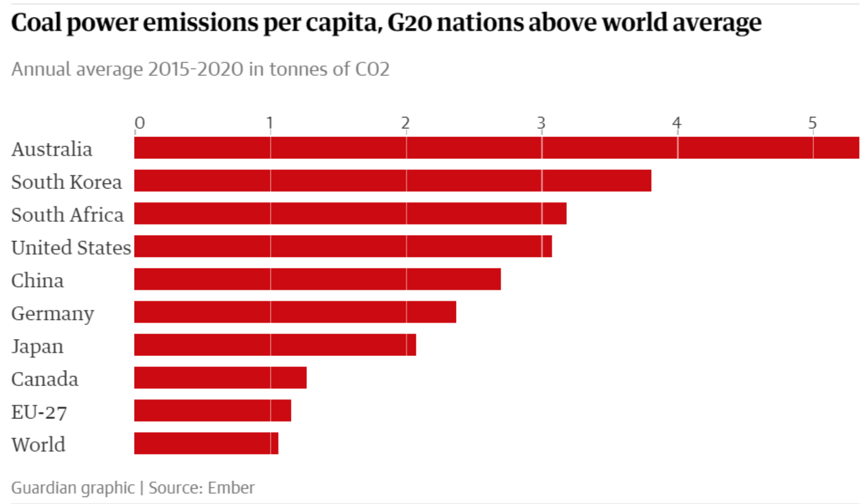
Australia

How are we going to reach the target?

- 82% share of renewable electricity in the grid by 2030 (up from 24%)
- Safeguard Mechanism (cover 28% of emissions)
- Powering Australia
- Rewire the nation ($20b to modernise the grid)
- Clean Energy Finance Corporation

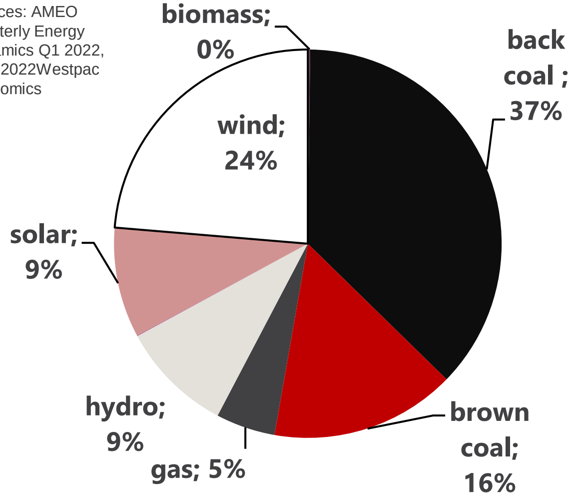


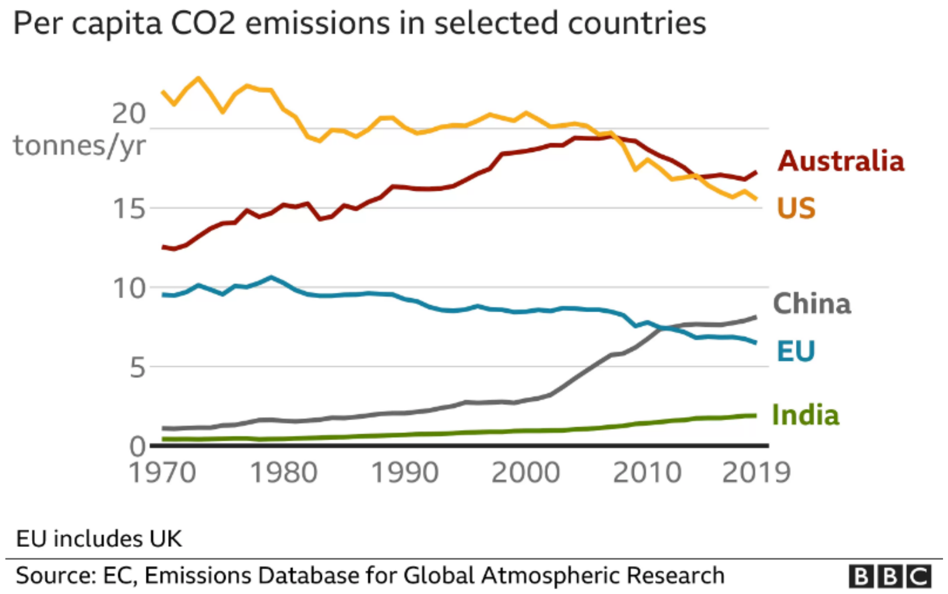
Sources: AMEO Quarterly Energy Dynamics Q1 2023, April 2022; Westpac Economics



Energy mix in the NEM

Sources: AMEO Quarterly Energy Dynamics Q1 2022, April 2022Westpac Economics



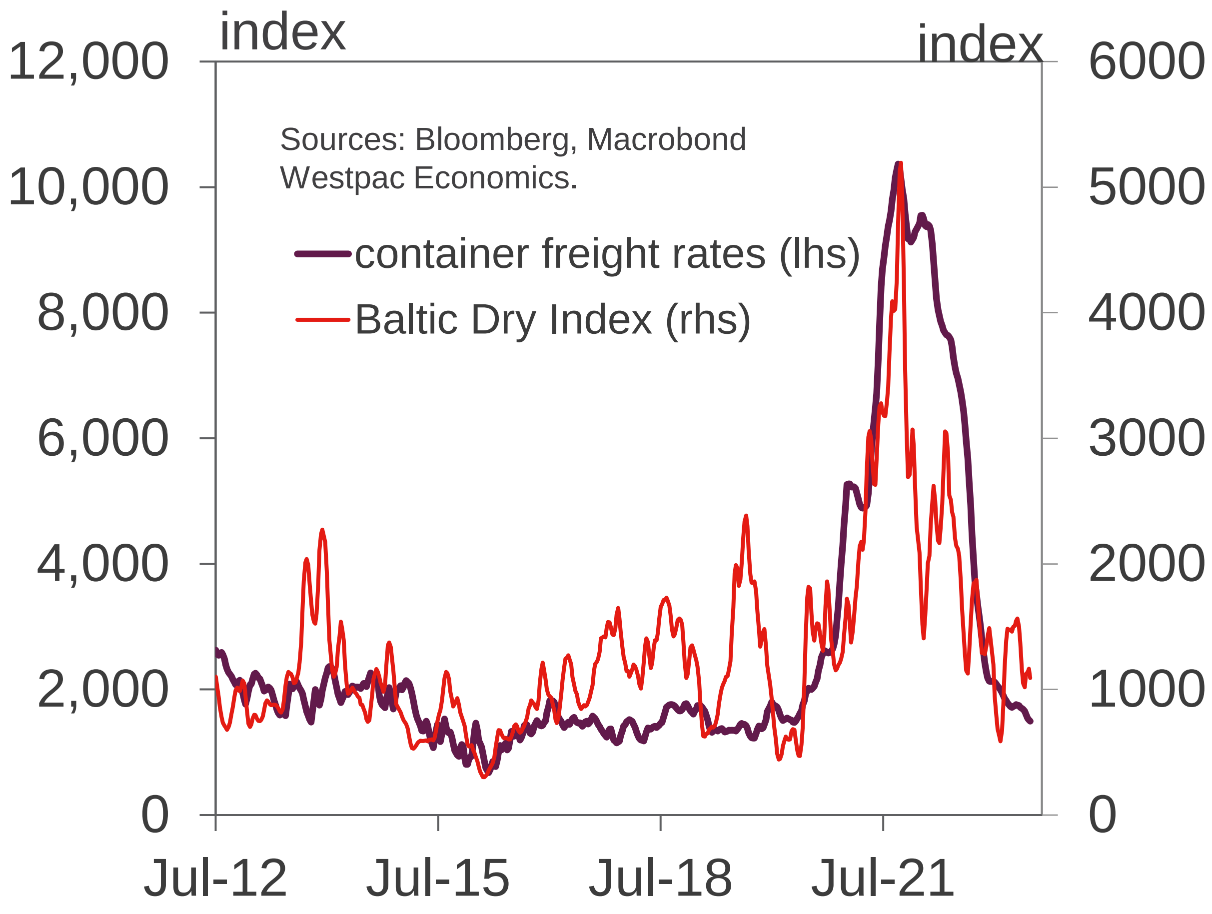


Welcome to transition

- The global economy is in transition:
  - *Carbon based energy to renewable energy,*
  - *Disruption of the white collar workforce – tension between decentalisation vs. rising power of linguistic AI,*
  - *Global trade fragmenting into trading blocks,*
  - *Global supply chain moving to "just in case" rather than "just in time", and*
  - *Evolution of circular vs linear economies.*
- Shift from structural disinflation to structural inflation,
- Higher inflation is more volatile than lower inflation,
- Interest rates, earning & rates of return will adjust to higher, less stable inflation.

Shipping & container have returned to normality

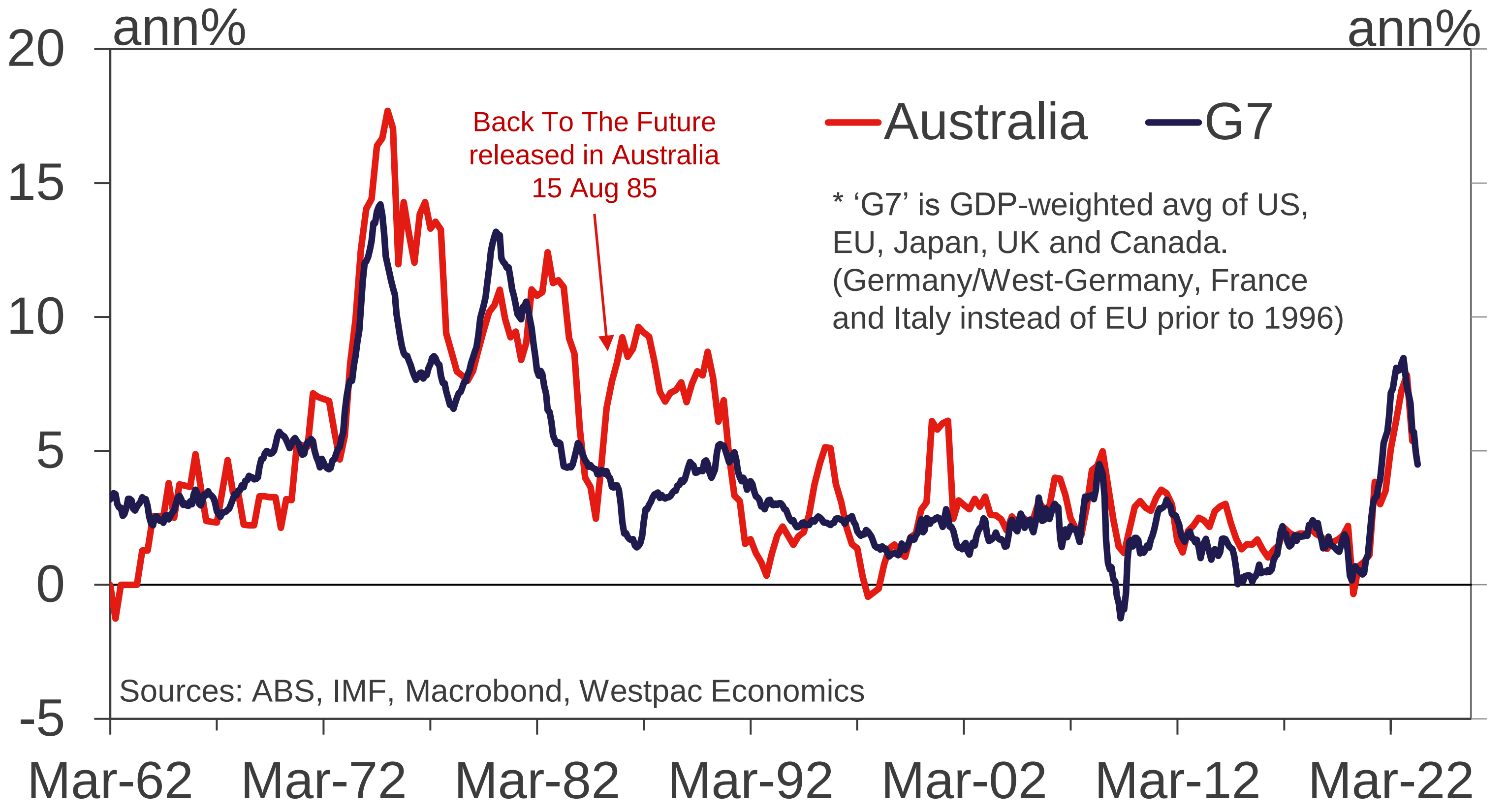
Shipping & container rates ease …



… as global trade slows.

Inflation, 1970's & '80's vs now

Australian inflation tends to move with global inflation



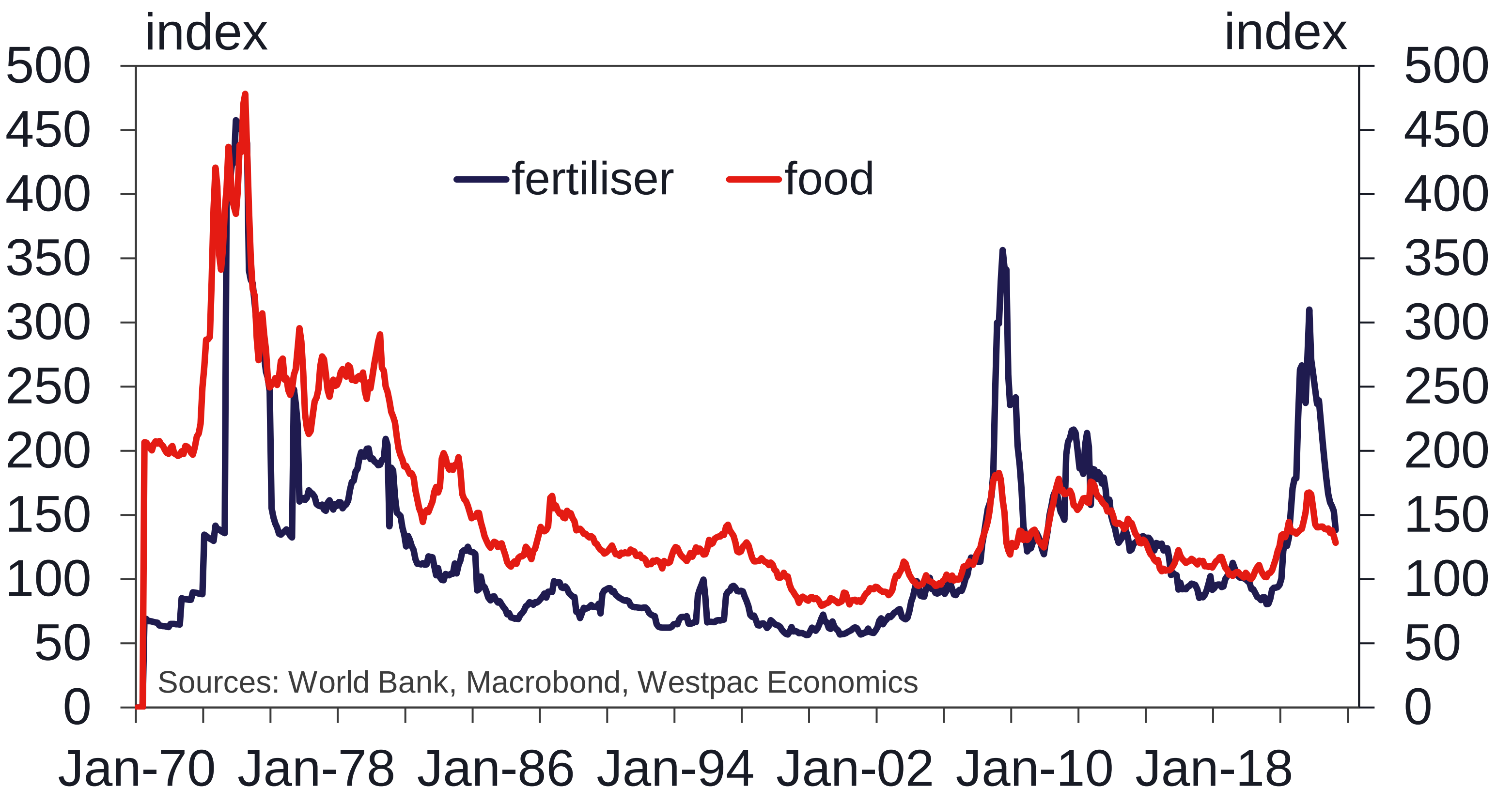
Inflation hitting 40yr high with biggest annual lift in nearly 50yrs.

Key differences this time compared with the 1980s:

- scale and duration of shocks,
- economy's energy dependence,
- Far less structural rigidities (i.e. labour market structure, corporate strategies, globalisation), and
- central bank independence and mandates.

Prices have eased but not fully reversed

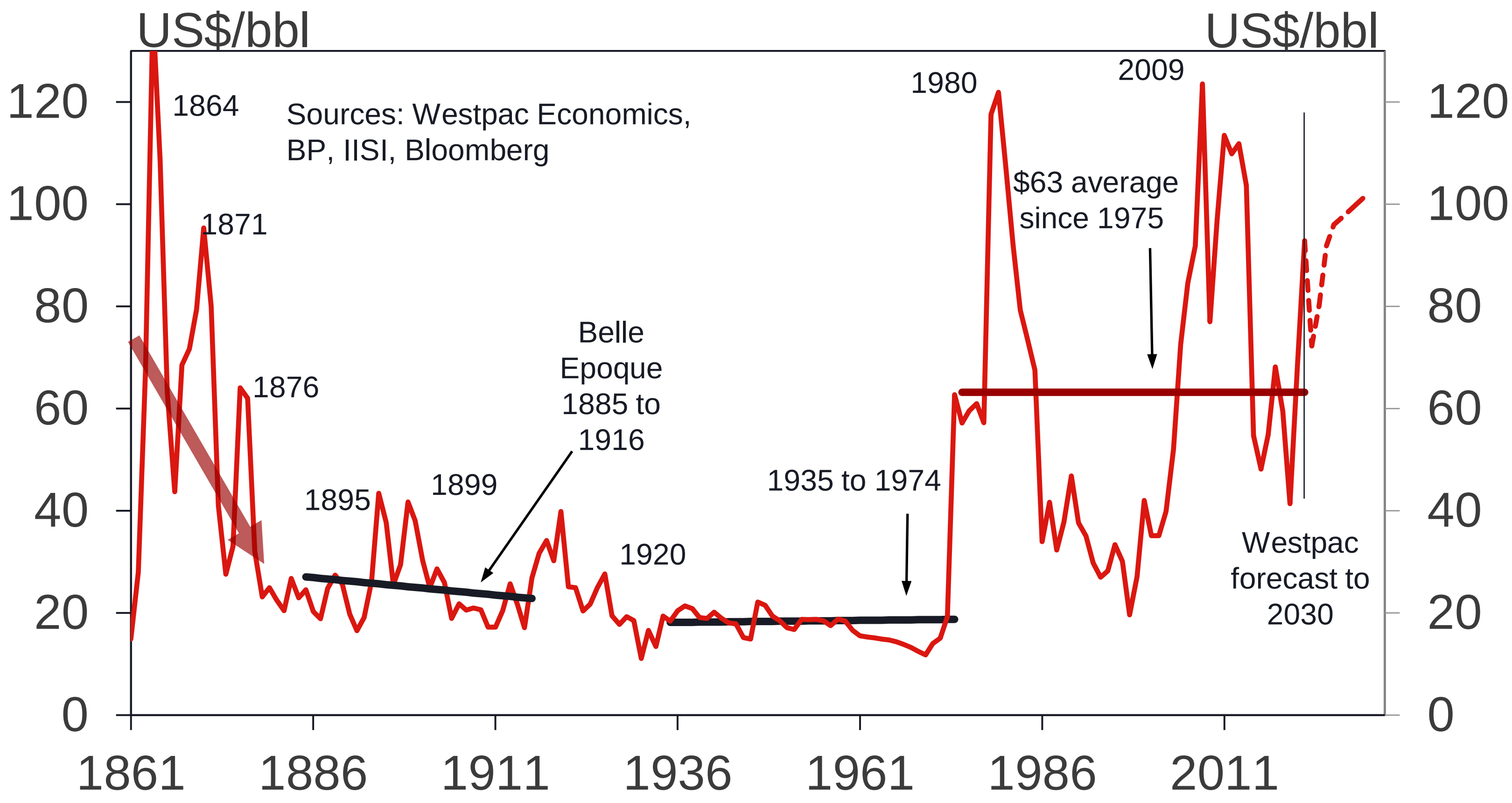
Food & fertiliser in 2023 prices (adjusted for US inflation)



- Food inflation has been rising and is not expected to ease until 2023.The World Bank noted that food prices have been rising for 2 years and by April were 78% above the 2015 to 2019 average.
- The Ukraine crisis added additional pressure with markets already under strain due to successive poor seasons for major producers.
- Energy is another underlying driver of food inflation due to to higher fertiliser prices. Sanctions on Russia are also make both direct impact and an indirect impact through higher energy costs.
- Food price inflation is more widespread than in the 2008 which was limited to grains and oilseeds.
- Continued poor seasonal conditions, & higher input costs, are lowing crop prospects worldwide; the ratio of supply/demand is forecast to fall to its lowest level in 8yrs for the 12 most important agricultural commodities.

Crude at US$80/bbl is far from cheap

Oil prices adjusted for inflation – in 2022 US dollars

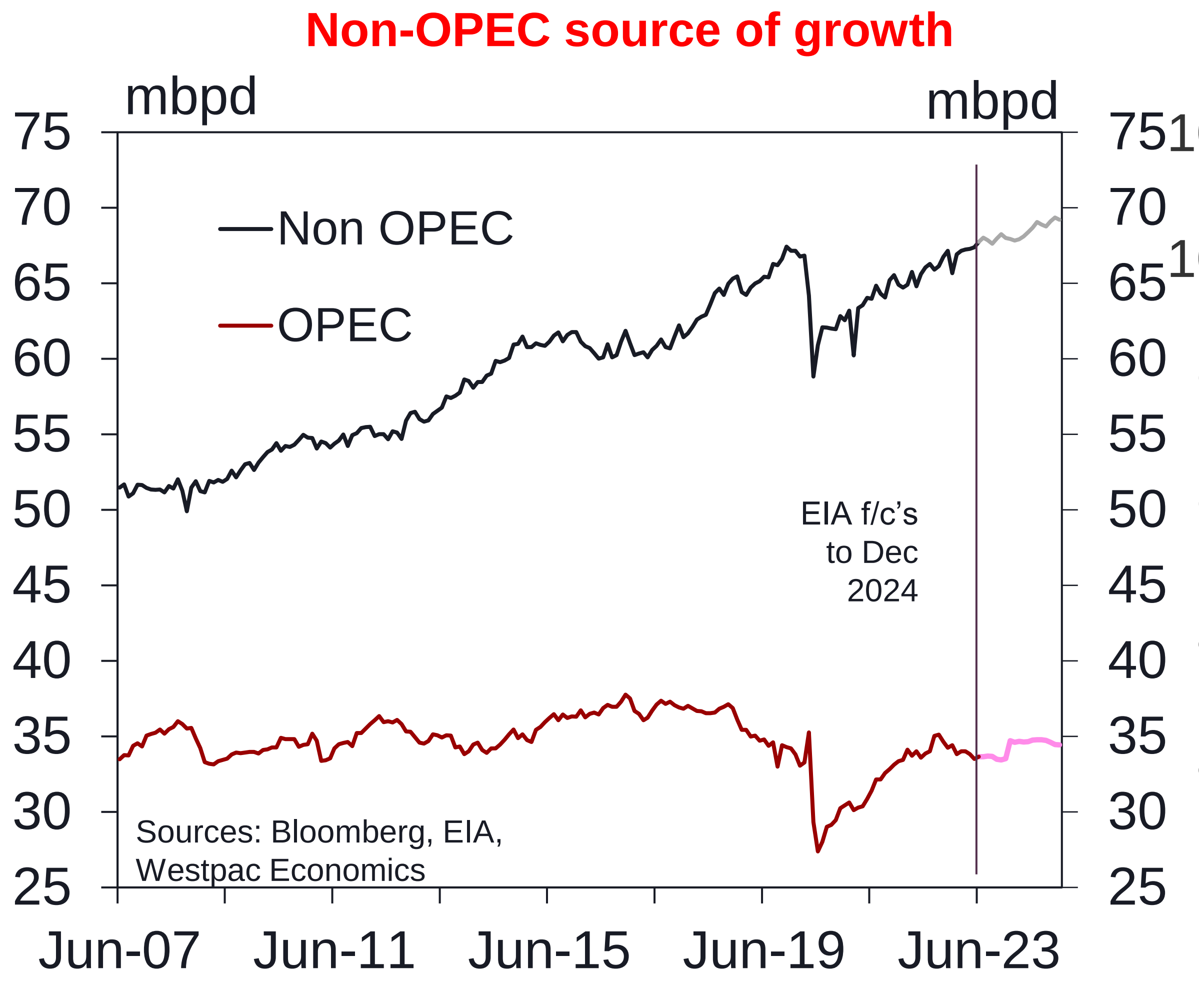


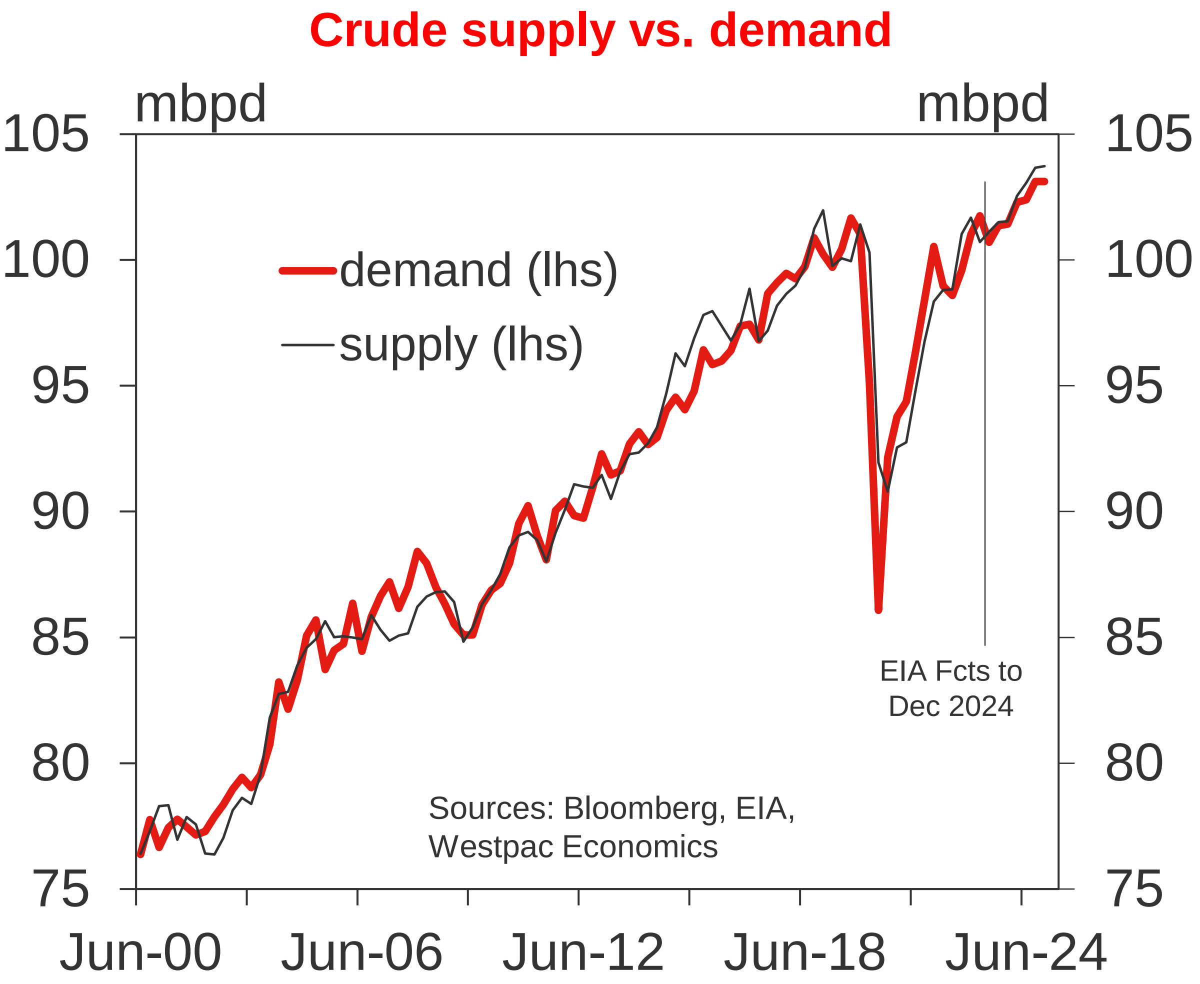
Oil price shocks of 1980 and 2009 peaked at US$120 barrel in year average terms (2022 dollars).

Average real price since 1975 is US$63/bbl.

- From 1935 to 1974 crude oil prices average around US$20/bbl with prices down to around US$10/bbl through the 60's and into the 70's,
- The two early oil price shocks, 1975 & 1980, were a significant shift in the market with massive economic, social & political implications.
- The 2008/2009 shock was due to surging developing world demand and was resolved by US fracking.
- The US is no longer the world's marginal producer of crude.

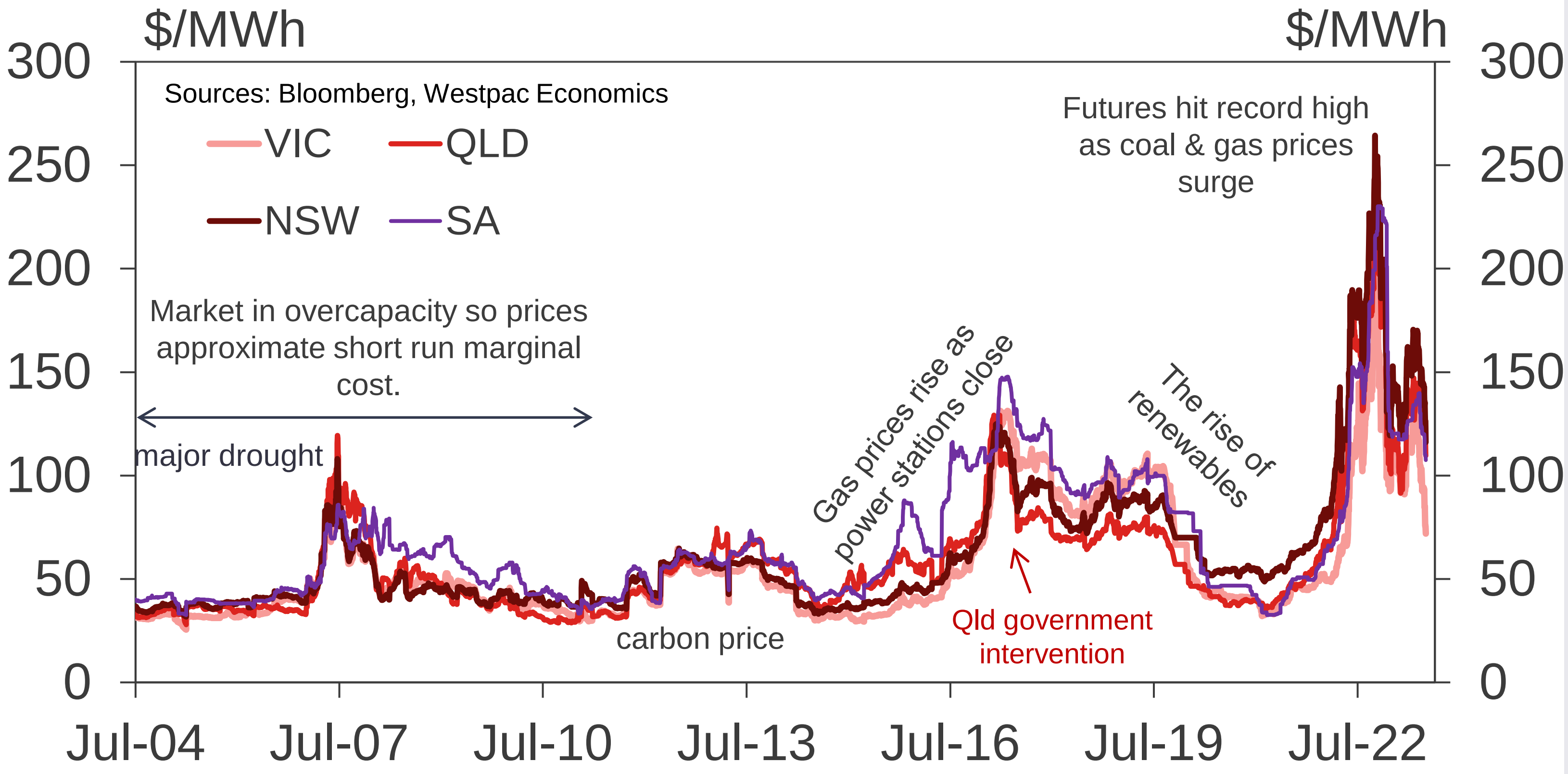
For the EIA forecast to be realized, non-OPEC has to grow





History of electricity futures prices

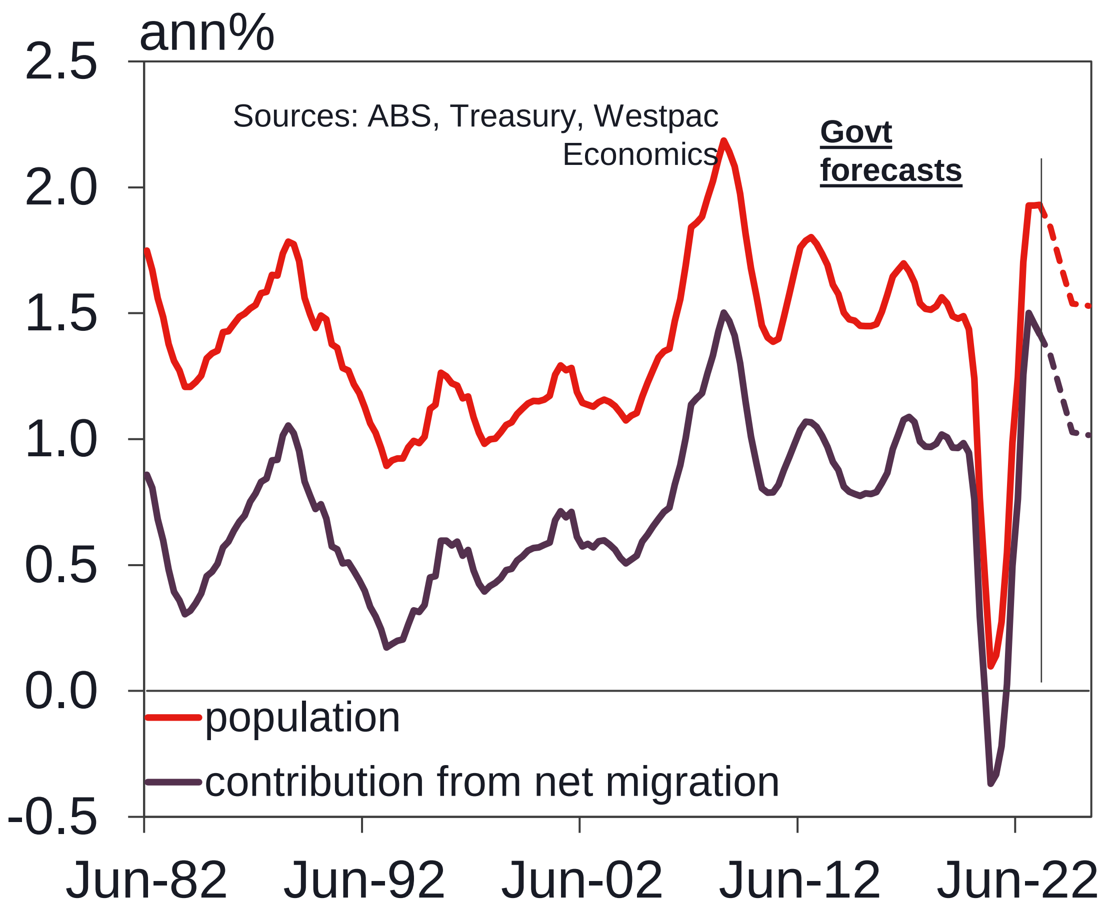
Electricity futures are volatile but 2022 is extreme



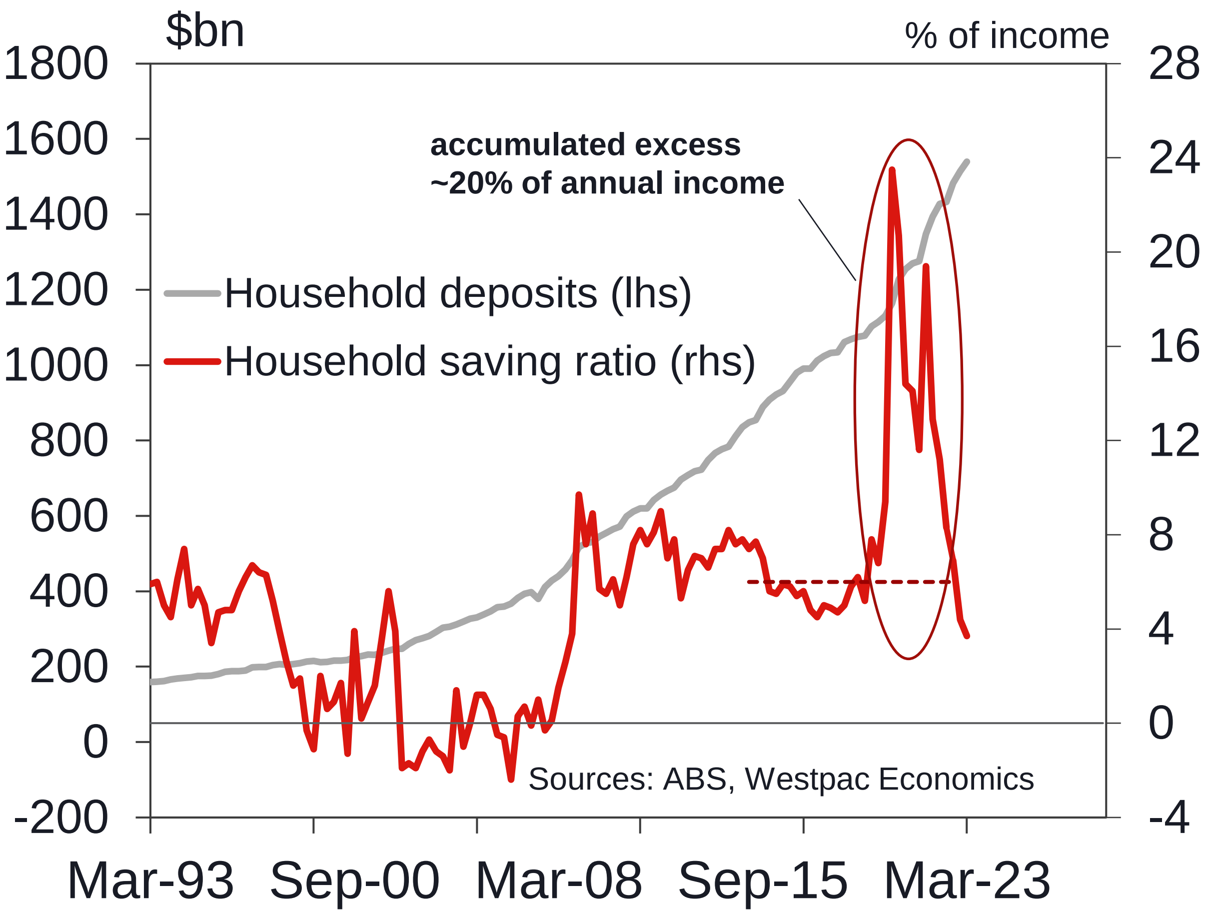
- Up to 2016, & outside of the carbon tax, the electricity market was in over capacity with electricity prices approximated short run marginal cost of generation by coal fired power plants.
- In 2016/2017 a number of older, marginal coal fired power plants were retired sooner than expected. Renewable power generation could not fill the gap with the shortages filled by gas fired generators. As such gas set the marginal price.
- Australian gas exports rapidly expanded drawing supplies from the local market forcing domestic prices into alignment with global prices. Global demand for LNG was very solid pushing prices higher.
- Qld was the first state to react forcing lift output (reducing prices) and was followed by a lift in generation from other states just as global gas price eased.
- From 2019 the rise of renewable energy with marginal cost of zero renewables are able to supply power even when prices falls below the cost of production for coal/gas generators. Combined with falling gas prices electricity fell back to the short-run marginal cost. This new equilibrium lasted till the energy shock of 2022.

Two key factors post Covid, population & savings

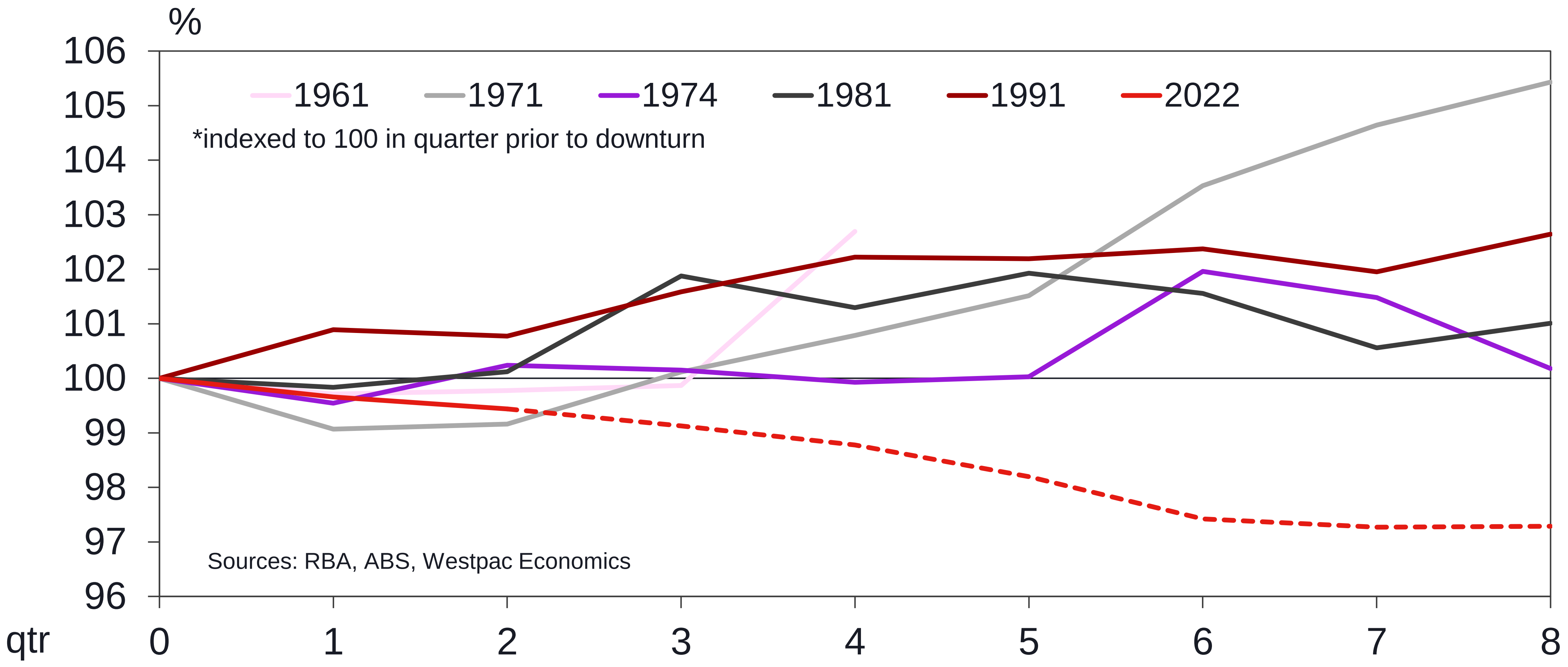
Population growth recovers



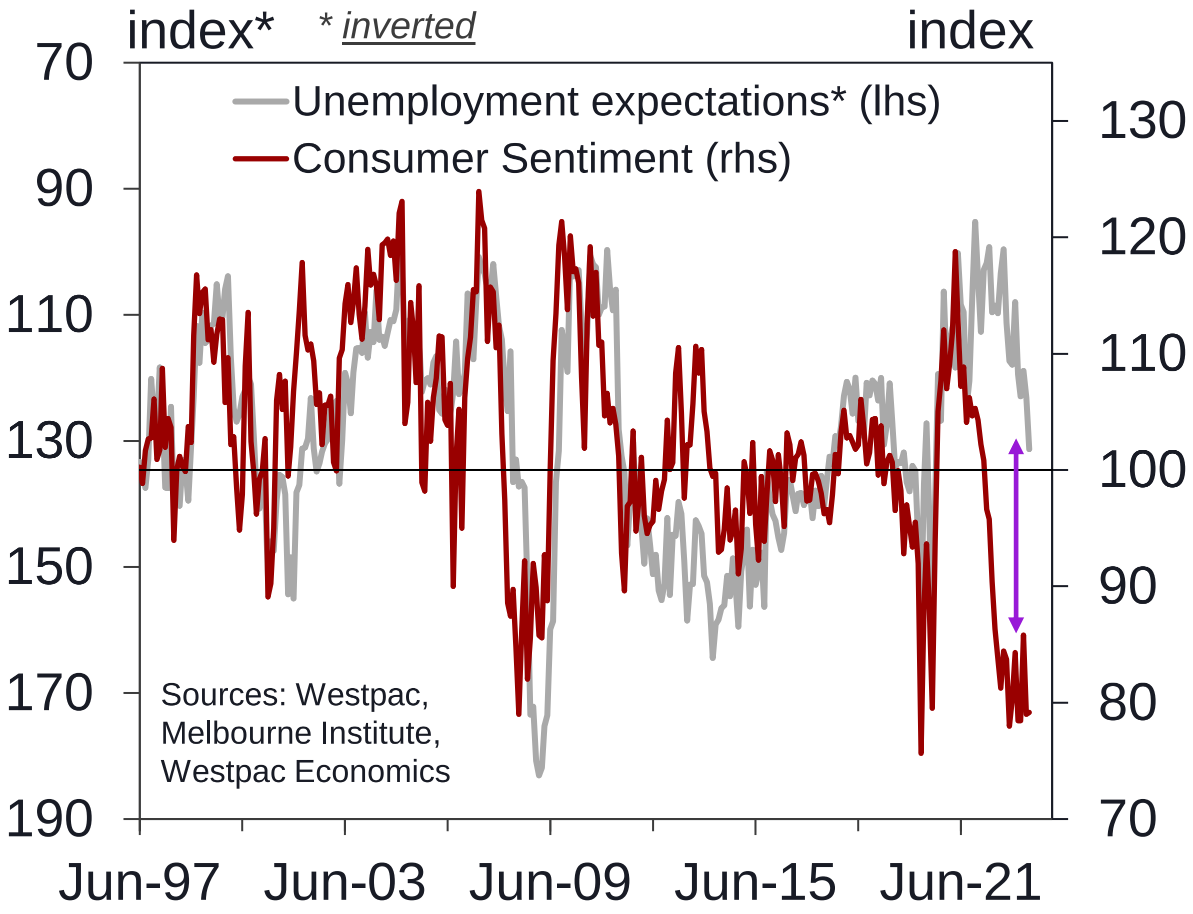
Households savings – big reserve

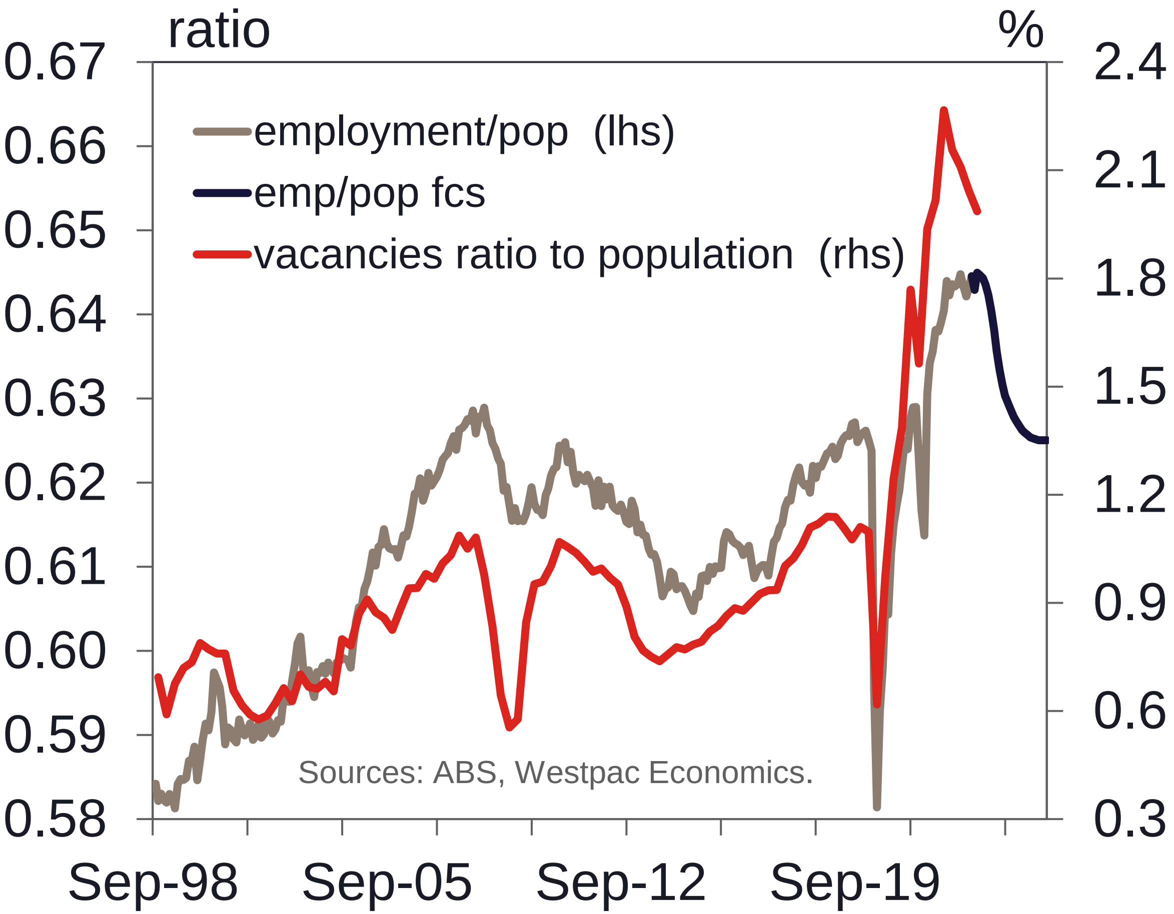


Consumption per capita: major downturns



Consumers sentiment low despite robust labour market





Housing consumer sentiment: diversion

Time to buy may have found a base but yet to correct.

- Time to buy is closely linked to affordability as it is seen as a response is this a good time to buy a house to live in.
- History points to stronger house price expectations driving lower time to buy a dwelling.
- House price expectations have bounced without an improvement in time to buy.
- It is increasingly an investors' market, buying for capital gain, rather than an owner occupiers' market.

Financial and Economic Forecasts

	End-2022	2023	2024
GDP (%pa)	2.7	0.6	1.0
Unemployment (%)	3.5	4.2	5.5
Inflation (%pa)	7.8	4.2	3.2
Dwelling prices (%pa)	-7.1	0.0	5.0
Wages growth (%pa)	3.3	4.1	3.3
Cash rate (%)	3.10	4.60	3.85

	Latest	Dec-23	Jun-24	Dec-24	Dec-25
RBA Cash	4.10	4.60	4.35	3.85	2.85
3yr swap rate	4.54	4.15	3.80	3.50	3.20
AU10yr bond	4.22	3.70	3.30	3.10	2.75
Fed Funds	5.125	5.38	4.38	3.38	2.63
US 10yr bond	4.03	3.50	3.10	2.90	2.65
AUD/USD	0.6630	0.69	0.72	0.74	0.75

Sources: Bloomberg, ABS, Westpac Economics

Pivot

- Recent gains are not based on particularly sound fundamentls....
- …and are susceptible to stalling again on further rate hikes and/or increasing market suppy.

Dwelling price forecasts

	2019	2020	2021	2022	2023	2024
Sydney	5	3	25	-12	1	5
Melbourne	5	-1	15	-8	-1	5
Brisbane	0	4	27	-1	-1	6
Perth	-3	7	13	4	0	8
Adelaide	0	6	23	10	-1	4
Australia	**3**	**2**	**21**	**-7**	**0**	**5**

Conclusion – global factors

- Global inflation surge has been major test for central banks – all have tightened aggressively.
- The inflation story is turning but central bank wary of calling an early victory.
- Material and labour shortages at extreme levels – not seen since 70's; labour should ease through 2024; demand and supply shock slowdown key to easing in inflation.
- Fed is running the gauntlet of a 'growth recession' so will pause as inflation moderates.
- Fed rate cuts possible in early 2024 contingent on inflation easing sufficiently.
- 2023 will mark the weakest consumer spending growth in US since GFC.
- Bond rates volatile but near peak; but progress towards much lower yields will be bumpy.
- China's prospects uncertain: property market vs. stimulatory policy & easing restrictions on property & technology. Recent political unrest has increased near term risks.
- AUD to benefit from easing of "risk aversion" as inflation falls.

Conclusion – domestic factors

- Households are being squeezed by interest payments and real wages lagging.
- Signed that wages growth has not lifted as fast as expected, to date, but signs the expected lift is occurring.
- Weak productivity means even modest wage gains can be inflationary.
- The RBA is committed to containing inflation and have said further rate hikes are likely. Two more hikes to come, pause in September then cuts from May next year.
- Labour market and inflation are key policy variables from here.
- There are some factors supporting demand – excess savings (20% of disposable income – highest in developed world); rapid recovery in immigration to 400,000 in 2022, something similar in 2023, compared to pre COVID pace of 235,000; and high terms of trade.
- Growth is expected to flatten in the second half of 2023 and into 2024.
- Housing upturn driven by tightening of supply, relative to demand, and is susceptible to a loss of momentum in the near term.

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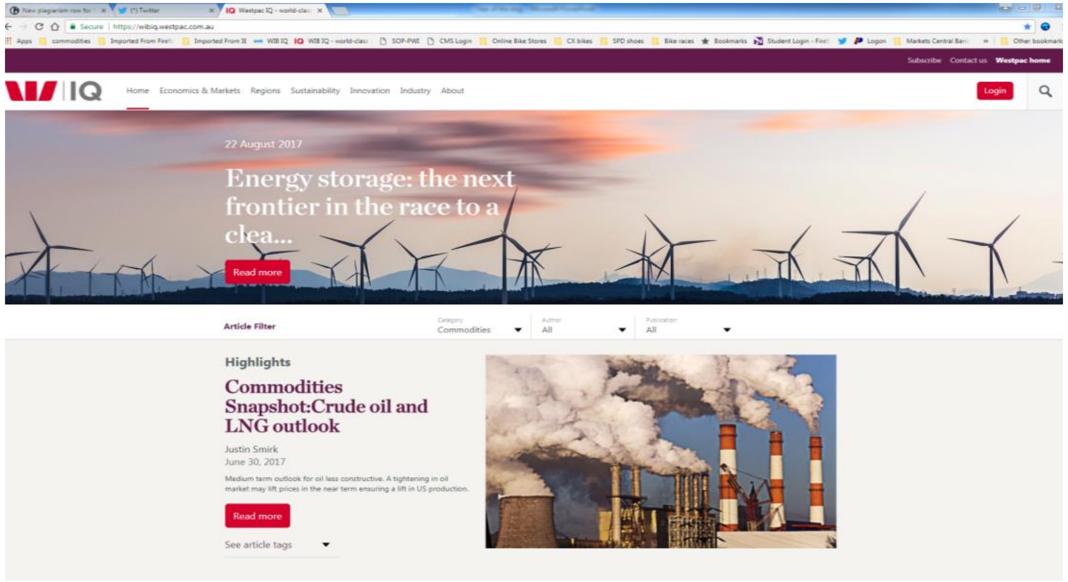

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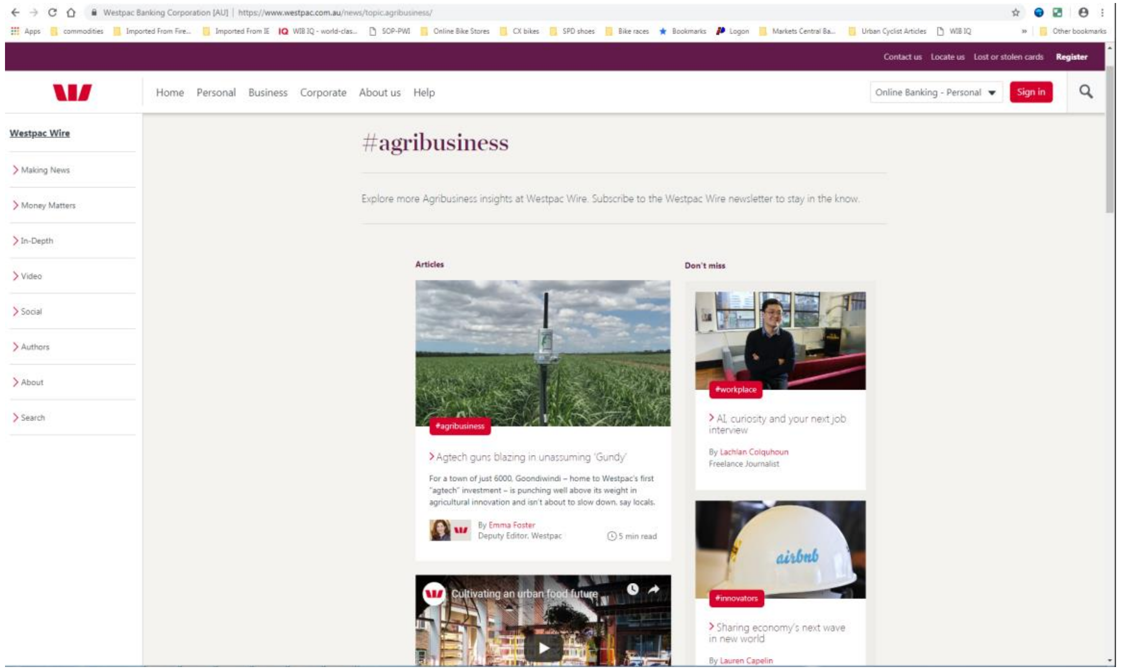

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CONTACT

Justin Smirk, Director/Senior Economist

+61 459 844 788

jsmirk@westpac.com.au