EMBARGOED UNTIL 11.30 AM 13 FEBRUARY 2019

NAB MINERALS AND ENERGY OUTLOOK FEBRUARY 2019

OVERVIEW

- In USD terms, NAB's Non-Rural Commodity Price Index is forecast to increase by 2.7% qoq in Q1 2019 – driven almost entirely by the upturn in iron ore prices.
- That said, the outlook for our index is largely unchanged – with the stronger prices for iron ore (driven by the supply issues in Brazil) essentially offset by a weaker outlook for Liquefied Natural Gas (LNG).
- In annual average terms, the USD index is forecast to rise by just 0.5% in 2019, before declining by 3.1% in 2020 – with a softer profile for iron ore and metallurgical coal the main contributors.
- The changes in AUD terms are somewhat larger – reflecting NAB's forecasts for a stronger Aussie dollar from the second half of 2019 onwards – with the index increasing by 4.2% this year and falling by almost 10% in 2020.

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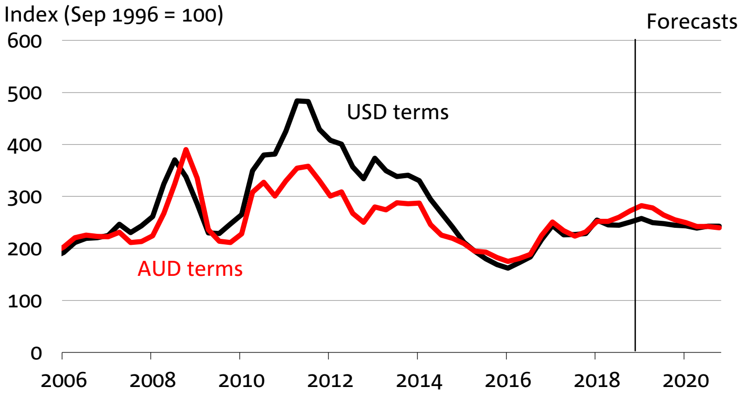
NAB NON-RURAL COMMODITY PRICE INDEX



Sources: ABS, Bloomberg, Refinitiv, NAB Economics

NAB COMMODITY PRICE FORECASTS

	Unit	Spot 7/02/2019	Actual *Dec-18*	Forecasts *Mar-19*	*Jun-19*	*Sep-19*	*Dec-19*	*Mar-20*	*Jun-20*	*Sep-20*	*Dec-20*
WTI oil	US$/bbl	53	66	53	59	59	64	64	69	69	69
Brent oil	US$/bbl	61	76	60	65	65	70	70	75	75	75
Tapis oil	US$/bbl	64	79	61	66	66	71	71	76	76	76
Gold	US$/ounce	1310	1230	1300	1320	1330	1350	1360	1370	1380	1390
Iron ore (spot)	US$/tonne	n.a.	72	84	82	78	76	72	68	71	69
Hard coking coal*	US$/tonne	n.a.	217	200	193	178	170	165	160	155	152
Thermal coal (spot)	US$/tonne	102	105	95	93	98	95	93	90	88	90
Aluminium	US$/tonne	1872	1964	1865	1850	1875	1900	1925	1935	1945	1950
Copper	US$/tonne	6228	6161	6100	6250	6400	6300	6225	6150	6125	6100
Lead	US$/tonne	2061	1966	2050	1950	1900	1850	1825	1800	1750	1725
Nickel	US$/tonne	12910	11485	12000	12250	12500	12750	12600	12500	12400	12500
Zinc	US$/tonne	2723	2627	2625	2575	2500	2470	2450	2475	2450	2425
Aus LNG**	AU$/GJ	n.a.	13.6	14.0	11.3	11.6	11.4	11.9	11.8	12.3	12.2

* Data reflect NAB estimates of US$/ tonne FOB quarterly contract prices. Actual data represent most recent final quarterly contract price.

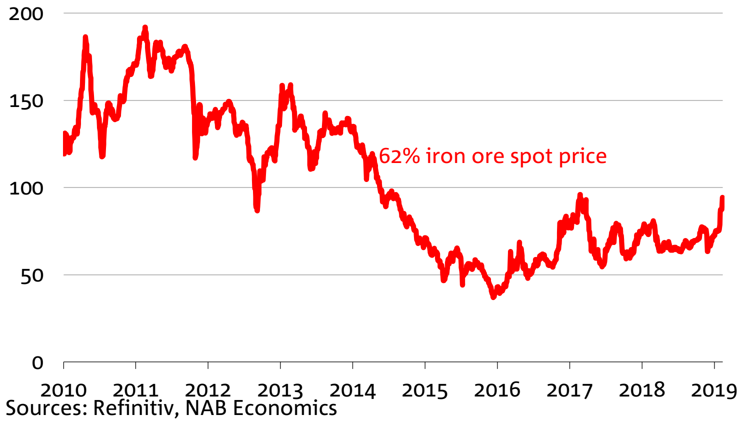
** Implied Australian LNG export prices

IRON ORE

Mine closures in Brazil – in response to safety concerns around unsafe tailing dam infrastructure – are likely to limit the growth of global supply in 2019 (and potentially the next few years as well). Previously the market had been expected to be in surplus this year and while some of the lost supply can be replaced by higher output at other mines (particularly in Brazil), supply is still expected to be tighter. As a result, we have revised our price forecasts higher – to US$80 a tonne in 2019 (from US$62 previously) and US$70 a tonne in 2020 (from US$60) – with a gradual increase in supply and softer growth in Chinese demand leading to the expected decline.

IRON ORE HIGHER ON SUPPLY CONCERNS

US$/t (CIF)



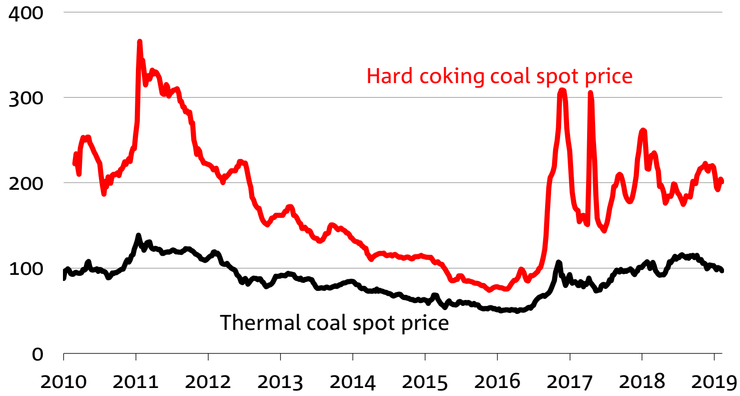
Sources: Refinitiv, NAB Economics

COAL

Constraints on both major importers and exporters present considerable uncertainty to the coal outlook. Queensland metallurgical exports are limited by a regulatory dispute impacting the rail infrastructure operator, while China's imports have been constrained by unofficial quotas aimed at boosting domestic output. Reflecting current strength in prices, our near term forecast for hard coking coal has been raised, leading to a full year price of US$185 a tonne in 2019 (from US$170 previously) and US$158 a tonne in 2020. Our thermal coal forecast is marginally weaker – at US$95 a tonne in 2019 and US$90 a tonne in 2020 (from US$102 and US$100 previously). The weaker demand environment is expected to drive prices lower.

COAL PRICES EASING FROM RECENT PEAKS

US$/t (FOB)



Sources: Bloomberg, NAB Economics

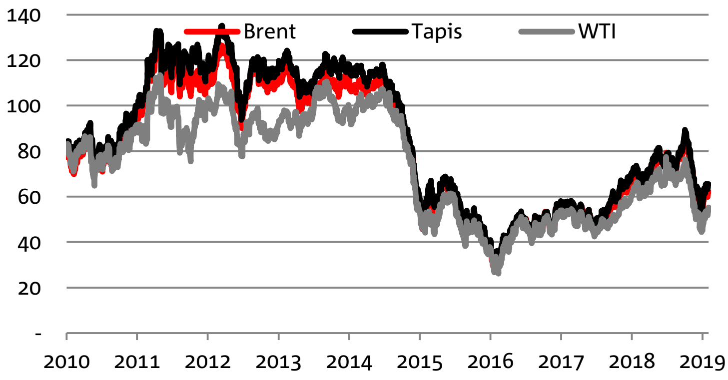
OIL

Oil prices eased considerably late last year, but have come back a little in the new year. Brent has generally traded in the low-US$60s range over the last month, while WTI has been in the low-mid US$50s over the period.

The outlook for the oil market is clouded by a range of geopolitical risks, including US-China trade negotiations, sanctions on Iran and Venezuela and OPEC supply machinations, as well as broader concerns around global growth. On balance, we see a gradual uptrend for oil this year, with Brent forecast to reach US$70/bbl by the end of the year.

OIL WELL BELOW 6 MONTH AGO LEVELS

USD/bbl, daily



Sources: Refinitiv, NAB Economics

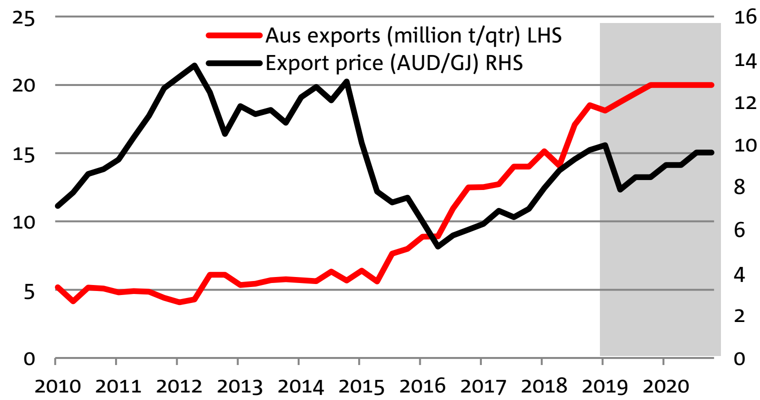
GAS

These relatively low oil prices have had a knock-on effect for Australian LNG export prices, many of which are tied to global oil prices through long term contracts. This means that LNG prices are likely lower this year – around AUD11-12/GJ from Q2.

Volumes are performing strongly, and the remaining two projects should be up to full capacity this year. Exports should level off at a high level this year. That said, natural gas prices for domestic users in eastern Australia will likely remain high by historic standards.

AUSTRALIAN LNG EXPORTS PERFORMING WELL

Export volume (LHS) export price (RHS)



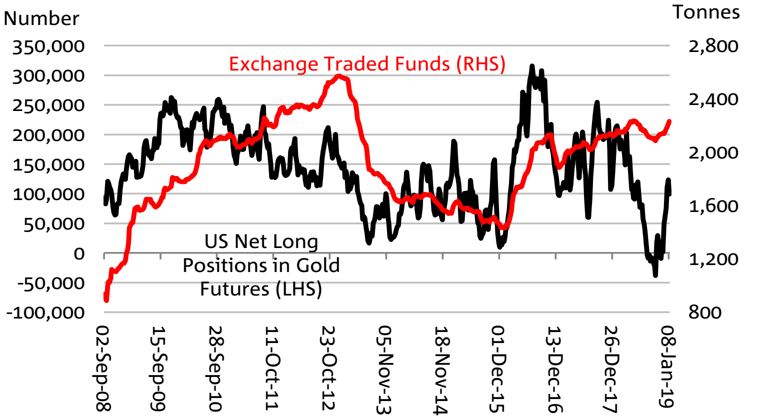
Sources: ABS, Poten & Partners, Bloomberg, NAB Economics

GOLD

After reaching a low of around US$ 1170/oz in August, 2018, gold has recovered smartly. It was last trading around US$1314/oz. There has also been a rise in investor interest, as evidenced by higher gold holding by Exchange Traded Funds (ETFs), and a positive net long position in gold .

A subdued outlook for growth, a more dovish outlook for US monetary policy and heightened risk aversion should support gold prices. We are forecasting gold to hover around US$1350/oz in 2019, rising to US$ 1390/oz in 2020, with risks evenly balanced.

GOLD – RISING INVESTOR DEMAND

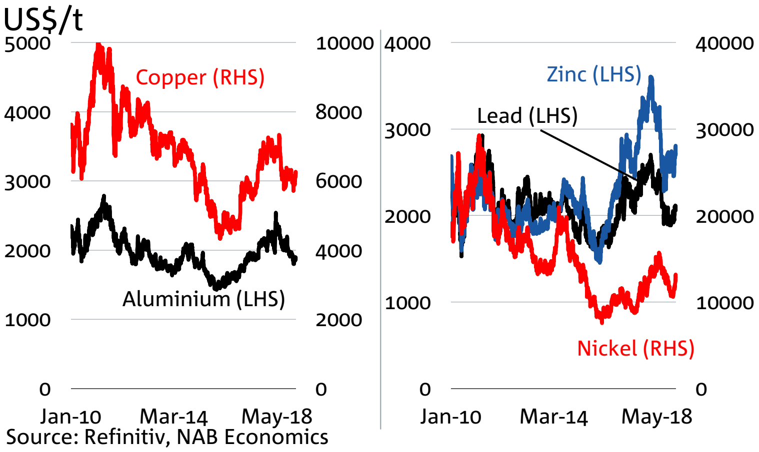


Sources: Bloomberg

BASE METALS

Weaker economic growth in China – the leading consumer of base metals – and in particular difficult conditions in manufacturing (due to the impact of slowing growth and weaker export prospects) present a negative environment for base metal prices in the short term. Metals markets will continue to be impacted by short term supply shocks – such as labour disputes at individual mines – however the price outlook is generally weaker in the short term, particularly for aluminium, where we have revised our near term forecasts lower.

METALS LOWER ON WEAKER CHINESE DEMAND



Source: Refinitiv, NAB Economics

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