Minerals and Energy Update – February 2014

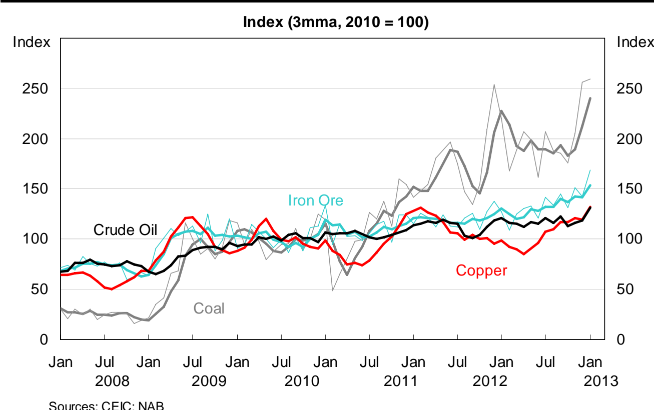
- **Global upturn hampered by severe winter weather conditions in the northern hemisphere. Emerging markets (including China) showing signs of a slowdown, although Chinese trade and credit data have been robust.**
- **Softer economic data has cast some doubt in the market over the timing of QE tapering by the Fed, and has prompted interest rates to fall again – having some impact on commodity markets.**
- **Since mid-January, a number of idiosyncratic US weather and supply factors have caused a sharp rise in West Texas Intermediate (WTI) oil prices relative to Tapis and Brent, largely expected to be temporary. The medium-term outlook of moderate growth in global demand against a North American-led boom in supplies remains largely intact.**
- **Bulk commodities – thermal coal, metallurgical coal and iron ore – were softer this month, as weak seaborne demand and adequate supplies weighed on spot prices. In the short term, steel inputs should benefit from the resumption of steel production post the northern winter.**
- **Prices for the base metals complex have declined since the end of last year on demand concerns, but outcomes have varied across metals. Supply side factors have helped nickel and zinc prices outperform the rest of the complex in recent months.**
- **Gold prices have shifted higher, following the significant declines of last year, in response to higher safe haven demand that has stemmed the investor outflow. Signs of a faltering US economic recovery, emerging market concerns, and geopolitical risks have all been factors.**
- **Overall, our forecasts for commodity prices have been left largely unchanged. We continue to expect only a modest recovery in demand over the forecast horizon, but the recovery is expected to be bumpy, ensuring ongoing volatility in commodity markets.**

Monthly Commodity Prices

Economic data has been less optimistic of late, resulting from a combination of financial market volatility, weather related impacts on major advanced economies (clouding the future path of Fed QE tapering), signs of slowing in China & emerging markets, as well as escalating geopolitical tensions. The impact on commodity markets has naturally been mixed.

In regards to the industrial commodities (namely base metals, bulks and energy), news on China's economy has generally set the tone. China's apparent attempts to restrain credit growth look to be having an impact on the economy, although data are limited (and normally distorted) this time of year due to Lunar New Year effects. The preliminary HSBC flash China Manufacturing PMI for February suggested a softening in China's manufacturing sector, as it hit a seven month low—down to a 48.5 reading in February (from a final reading of 49.5 in January). Business conditions continued to deteriorate, but given the limited data available at this juncture, upcoming data releases should be a better reflection of activity.

China commodity import volumes



Sources: CEIC; NAB

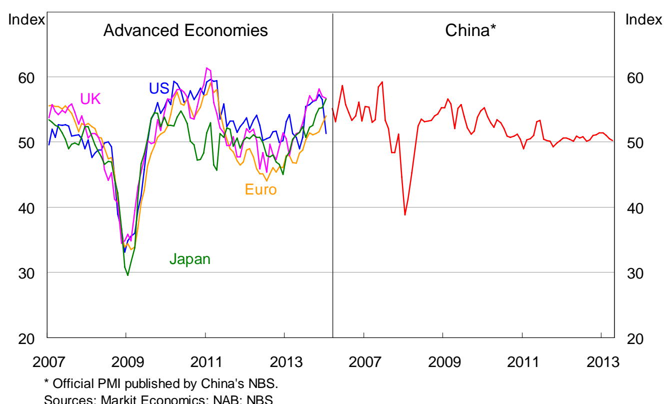
Despite the weaker PMI data, Chinese imports of commodities (crude oil, iron ore and copper) hit record highs in January. The demand for iron ore surged to 86.84 million metric tonnes – a rise of over 18% month on month. There is however, speculation that tight credit conditions in China (following the cash crunch which flowed on from November to December) have fuelled stronger financing demand; iron ore stocks at major Chinese ports now stand at a near record high of 97.25m tonnes, as firms used iron ore as collateral for finance. Some of the surge in commodity imports can also be attributed to restock ahead of the festive holiday. However, prices of commodities like iron ore have not plunged during the post holiday period, which suggests at least an anticipation of a ramping up of end-user demand in China.

On the US, the FOMC continued tapering in January, despite softer economic data recently and signs of distress in emerging markets, reducing its monthly asset purchases to US$65 billion (from US$85bn in December 2013). Much of the weakness in US economic data recently is likely attributed to the harsh weather conditions faced over recent months. The Fed has continued to emphasise the fact that tapering will be 'data dependent', which could suggest we are close to a pause in the tapering program, however, Fed members have emphasised that the barrier to delay tapering is high. While we think the Fed will maintain its current course, markets have responded by pausing USD appreciation, lowering US interest rates and generating renewed support for safe haven assets such as gold.

Surprisingly, the U.S Market flash PMI bounced back sharply, and stronger than expected, after experiencing a three month

low (recording a reading of 53.7 in January), to a reading of 56.7 in February - the fastest improvement since May 2010.

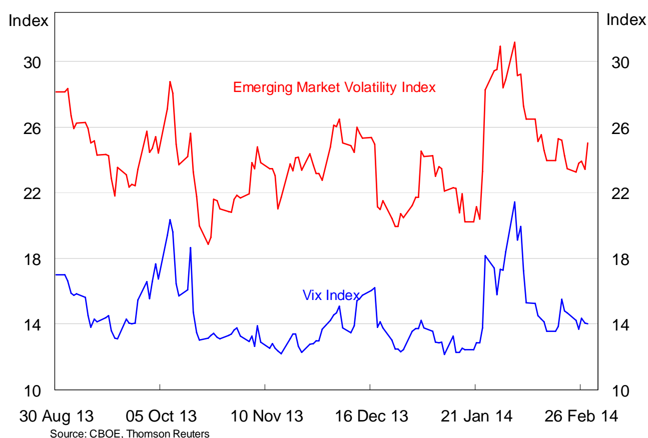
Major global PMIs



* Official PMI published by China's NBS.
Sources: Markit Economics; NAB; NBS

If the Fed tapering does proceed according to our expectations, one risk to commodities stems from the potential withdrawal of global liquidity from other markets as the search for yield diminishes. This raises concerns about the prospects for emerging markets in particular, especially those with high external funding needs. When combined with weaker indicators from China (factor output & PMI), this environment is one which is likely to weigh on industrial commodities, as well as currencies of commodity exporters and emerging markets, while providing tailwinds to the gold price given its status as a safe haven asset. To date, we have already seen a noticeable rise in emerging market volatility, while the Bloomberg index of the top 20 most traded [emerging market] exchange rates falling 3% - the lowest since 2009.

Index of Market Volatility (Vix)



Source: CBOE, Thomson Reuters

Civil unrest, political turmoil and the threat of military action in the Ukraine are increasingly significant for financial and commodity markets (albeit still considered a tail risk at this point). Ukraine's public debt is on the brink of default and with the loss of backing from Russia, has prompted calls for a $35 billion IMF bailout to cover funding requirements over the next two years.

Concern over possible military action in the region is fuelling speculation that Gazprom (Russia's gas supplier) will raise the prices it charges to Ukraine. Raising gas prices, restricting imports from Ukraine or reducing the supply will exacerbate conditions, which could potentially spread to further parts of Europe. Nevertheless, these types of risk are difficult to predict or quantify, but the situation is likely to add to financial and commodity market volatility as events unfold.

As mentioned above, the directions of commodity markets over the past month have been mixed, and have generally prevented any clear price signals from emerging. Prices of bulk commodities drifted lower in February, reflecting weak seasonal demand from electricity generators and steel producers, along with adequate supplies and stockpiles. The base metals complex has lacked direction of late, although prices have softened slightly since the start of the year in response demand concerns. However, supply side issues have supported some metals. Emerging market jitters (including geopolitical tensions) and expectations regarding Fed tapering continued to be the major driver of higher gold prices since the start of the year. Movements in oil price indices were also highly divergent, as the extreme winter conditions and the sharp alleviation of crude inventories at Cushing have provided a significant push to WTI more so than Brent. Meanwhile gas prices have also benefited from a surge in heating demand from US winter woes and sustained demand from East Asian buyers.

Summary of Price Developments

Oil

Since mid-January, a number of idiosyncratic factors have caused a sharp rise in West Texas Intermediate (WTI) prices relative to Tapis and Brent, largely expected to be temporary, while the medium-term outlook of moderate growth in global demand against a North American-led boom in supplies remains largely intact.

Oil Prices

	Avg Price (US$/bbl) Feb-14	Monthly % change Feb-14	Feb-13 - Feb-14 % change
Brent	109	0.8	-6.6
WTI	101	6.4	5.7
Tapis	115	0.2	-6.2

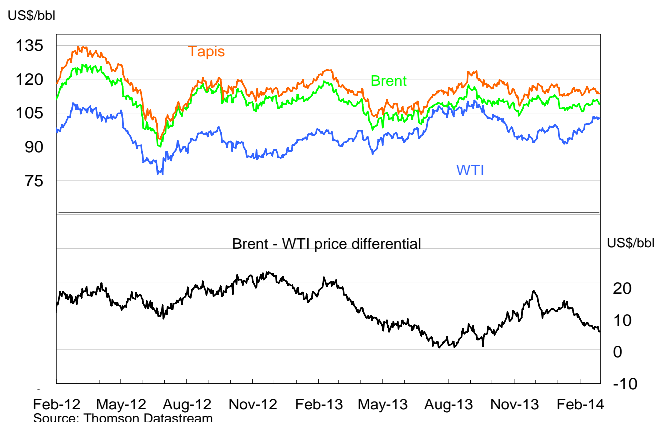
Sources: NAB Economics; Thomson Datastream

By the end of February, WTI has recorded its seventh consecutive weekly rise, the longest rally streak in more than a year. The extreme winter conditions in the US this year bolstered demand for heating fuels and propane, as demonstrated by seven consecutive weekly falls in distillate inventories. In the Northeastern region, which was hit particularly hard by the arctic blasts that broke a series of low temperature records in January, distillate inventories declined by 7.0 million barrels over the month, which is significantly greater than the average stock draw of 2.6 million barrels during the same time in the previous five years. Perhaps a more formidable supportive factor has been the significant fall in crude inventories at Cushing as the southern Keystone XL link began moving oil to the Texas Gulf Coast refineries from the hub in January. The pipeline is currently moving slightly under 300,000 barrels a day but is expected to ramp up over the course of the year toward its 700,000-barrel capacity, according to the executives of Transcanada Corporation, the organisation responsible for the construction of the pipeline.

Meanwhile, an improving US economic outlook has also lent some upward momentum to WTI in general. A rising US equity market as proof of investors' improving confidence that the economy withstand a slowdown of the US Federal Reserve's tapering of stimulus has buoyed general commodities prices to some extent. The latest Short-term

Energy Outlook report by EIA estimated that the US, the world's biggest oil-consuming country, will consume 18.91 million barrels a day of oil this year, marginally higher than 2013.

Daily Oil Prices



Source: Thomson Datastream

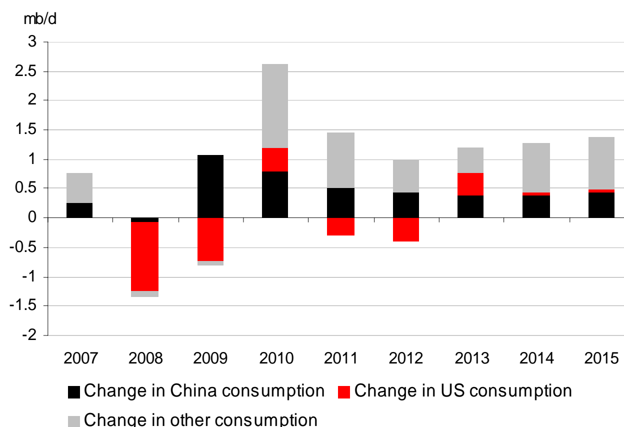
In contrast, Brent and Tapis rose only modestly in the month, benefiting from the US's winter woes as demand for its exports increased on the back of a significant fall in oil inventories in developed countries from the severe cold. However, capping further growth in prices have been more shipments from Iraq and Angola. In recent years, Iraqi oil output has expanded rapidly as it recovered from the lows of the period of US-led invasion and internal conflicts. However, so far Iraq has been exempted from the production quota imposed on other members on the OPEC on the basis that it needed time and space to rebuild its war-torn economy, but the sustained improvements in its production in recent times has led to pressure within the cartel for Baghdad to adopt production discipline as well. Iraq currently produces 3mb/d of crude oil, second only to Saudi Arabia, and is tipped to be one of the largest sources of supply growth in the oil market over the next decade.

Consequently, OPEC produced on average 29.96 mb/d in February from a revised 29.79mb/d in January, according to a survey based on shipping data and information from sources at oil companies, OPEC and consultants.

The relative movements in Brent and WTI have resulted in their differential narrowing to an average of US$8 in February, the lowest level in four months.

According to EIA, total global liquid fuels production was 89.95mb/d in 2013, but is forecast to pick up by 1.7 mb/d and 1.4 mb/d in 2014 and 2015 respectively, with most of it accounted for by non-OPEC countries such as the US, Brazil and Canada. Meanwhile, projected world liquid fuels consumption is expected to grow less rapidly than production (by an average of 1.3 and 1.4 mb/d respectively), largely attributable to growth in emerging economies, especially China. Non-OPEC supply growth is expected to contribute to an increase in global surplus crude oil production capacity from an average of 2.2 mb/d in 2013 to 3.8 mb/d in 2015, overshadowing a period of weak price impetus from underlying fundamentals.

Growth in world fuel consumption (y-oy change)



Source: EIA

However, unplanned supply disruptions, mainly arising from OPEC members, continue to cast considerable uncertainty over the forecast period. In 2013, these disruptions intensified during the third quarter, largely due to prolonged strikes and protests at oil fields and pipelines in Libya which contributed 0.7 mb/d to the average output loss of 1.8mb/d in the year. This level of supply outages was close to double that of the previous year. With the issues underpinning the outages in the most affected countries (Libya, Nigeria, Iraq and Iran) remaining unsettled, the risks to the supply outlook persist. However, given Libya is currently producing less than one third of its normal capacity, there is some upside supply risk to global oil market this year.

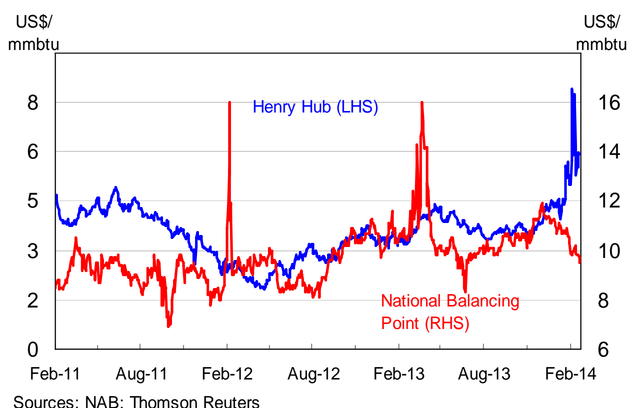
This month we have revised our near-term oil indices forecasts upwards to reflect the stronger than expected performance of WTI due to weather related factors, as well the positive spillover effects these have on Brent and Tapis. Overall, our expectations of the medium-term trends remain broadly unchanged, as we continue to believe that the Brent and WTI will eventually converge to be close to parity as the acceleration in the takeaway capacity by the southern Keystone XL link from Cushing this year is likely to lend further price support to WTI, while the upside risks in OPEC supplies from Iraq and Libya are expected to weigh on Brent disproportionately.

Natural Gas

In the past two months, US natural gas prices have staged some gravity defying movements, fuelled by unusually strong heating demand from the most extreme winter conditions affecting the US in about a quarter of the century. The Henry Hub index breached the US$5/mmBtu mark for the first time in more than three years in the last week of January, before spiking to its highest level since late 2008 in the first week of February as a series of arctic blasts sent temperatures falling to unprecedented levels across the country, with numerous low temperature records broken along the way.

The frigid temperatures in January led to record levels of withdrawals from storage, even after taking into account the seasonally high demand for the month. According to Energy Information Agency (EIA), working natural gas storage withdrawals exceeded 200 billion cubic feet (Bcf) for 3 of the 4 weeks in January, and this pattern persisted in the first fortnight of February to culminate in a record fourth consecutive week of 200-Bcf plus draws.

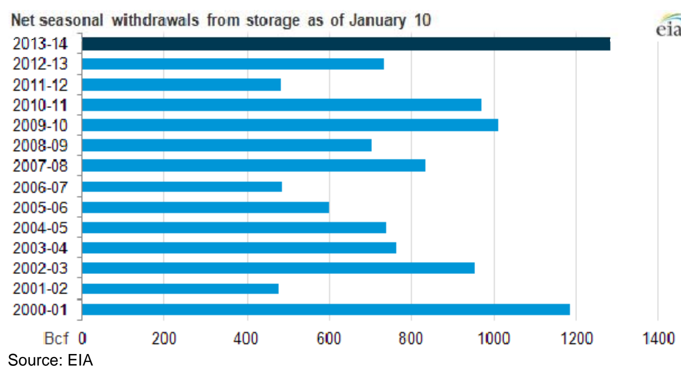
Henry Hub and National Balancing Point Prices



Sources: NAB; Thomson Reuters

As a result, EIA now forecasts that inventories will end this heating season (till the end of March) at a six-year low of 1,331 Bcf. At the time of writing this report (the last week of February), wintry conditions continue to dominate most of the country, with weather forecasters predicting yet another intense cold snap in early March. It is expected that this cold front will span widely from East to West and into the southern states, inflicting the northern region with sub-zero temperatures. In the money market, cumulative bullish bets on the Henry Hub held by speculators, including hedge funds, set records in the third week of February just before prices reached five-year highs, according to data released by US Commodity Futures Trading Commission.

Net US Winter Season Gas Withdrawals from Storage



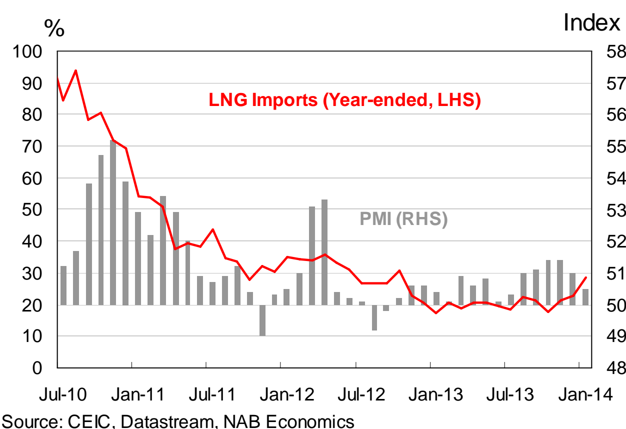
Source: EIA

In contrast to the punishing cold of US winter, the UK and most parts of Western Europe have been experiencing a relatively mild, albeit very wet winter, which reduced demand for heating fuel. In Netherlands, gas prices have fallen to their lowest in two years on supposedly the mildest winter weather conditions since 2008. As such, storage levels at all of the major European hubs except for Austria's Baumgartner were above last year's levels in the order of around 20%. In the UK, Europe's largest gas market, inventory level is around 25% above the same time last year, thereby constraining any upward momentum in the National Balance Point index.

The recent crisis in Ukraine, which resulted in violent clashes between demonstrators and police and the eventual ousting of the then President Victor Yanukovych, has sparked concerns of a widespread natural gas supply disruption in Europe. This could borne out from Russia refusing to supply oil to Ukraine, or a sabotage of the pipeline connecting Russian supplies to the rest of continent by Ukranian sources. To some extent, these concerns are not unwarranted on the basis that it has happened before: in January 2009, prolonged disputes between the two nations caused supply disruptions in many European nations, with eighteen European countries reporting major falls in or complete cut-offs of their gas supplies transported through Ukraine from Russia. However at this stage there is not any indication that Russia might cut off gas supplies, even in the event that it does, the current elevated levels of European gas inventories should act as a cushion against any immediate supply shocks.

In Asia, liquefied natural gas (LNG) prices showed no signs of slowing down as sustained strong demand from Japan and Korea pushed the spot price to its new record high of just above US$20 per million British thermal units in mid-February. The lack of spot cargoes, exacerbated by competition for these cargoes from Argentina and Mediterranean countries, has added to price pressure. On the supply side, the market has been rendered tighter by a LNG plant shutdown at Angola LNG for maintenance and production issues faced by BG group in Egypt.

Chinese LNG Imports and PMI



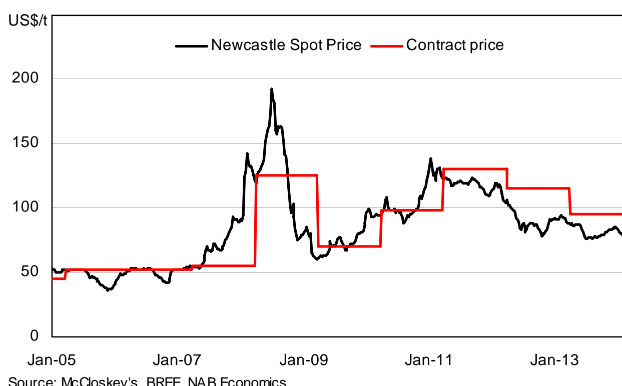
Source: CEIC, Datastream, NAB Economics

In the coming months, natural gas prices in the northern hemisphere are likely to experience a seasonal slowdown from milder spring weather. In the US and UK, underlying supply fundamentals remain sound hence a significant price reversal induced by gentler weather conditions is largely on the cards. However, we are unlikely to see prices unwind to the same degree in Asia, with no clear timeframes for the nuclear reactor restarts in Japan but the fiscal pressure from massive trade deficits is getting too powerful to ignore. There is a chance for some reactors to resume operation this year, but the restarts are expected to be gradual hence any price relief is expected to be moderate as well. Meanwhile, the fear of supply tightness by Asian utility companies as global LNG demand competition heats up ahead of wider-scale US exports capabilities is likely to encourage robust imports of LNG in the short-term.

Thermal Coal

The weaker thermal coal price trends exhibited in January continued into February. Softer seasonal demand and adequate stockpiles at ports and end-consumers have contributed to downward pressure on spot prices. This pressure is likely to flow into weaker contract prices for the upcoming Japanese financial year.

Thermal coal prices softening in early 2014



Source: McCloskey's, BREE, NAB Economics

Spot prices at the port of Newcastle drifted lower in February, down to US$76.35 a tonne in the week ending 21 February. Prices have continued to trend down from a six month high of US$84.60 a tonne in late December.

Domestic prices in China have also softened in recent months, with prices at Qinhuangdao (China's largest thermal coal port) falling to around RMB 566 a tonne FOB (excluding VAT) in mid February, down from almost RMB 600 a tonne in mid January. Chinese demand was subdued by the Chinese New Year holidays.

The supply side is likely to be the key influence on prices in the short term. Substantial investment in rail and port infrastructure globally has resulted in excess capacity to supply seaborne coal markets. Bloomberg Industries estimates new developments will add around 31 million tonnes in 2014 (equivalent to 3.5% of total seaborne trade) – with major projects such as the BHP/Glencore/Anglocoal Cerrejon joint venture in Colombia, Glencore's Ravensworth North mine and Whitehaven's Maules Creek mine in New South Wales.

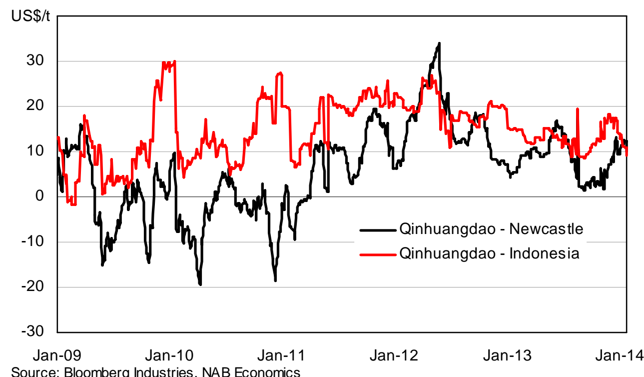
Falling prices have had a significant impact on mine profitability. Based on cash costs estimated by Bank of America Merrill Lynch, over 20% of global thermal coal producers are running below cash costs (given current spot prices). This is likely to limit further downward pressure on prices as well as delay future plans for mine expansions or new developments in addition to production cuts.

Idle production capacity includes cutbacks in Australian projects (such as Yancoal's Duralie and Stratford mines in New South Wales) while US exports fell noticeably in the latter part of 2013 (related in part to the considerable cost disadvantage that US producers face with regard to freight costs to Asia).

In 2013, growth in demand for seaborne thermal coal was largely driven by increased electricity generation in China and (to a lesser extent) South Korea – albeit growth in South Korea largely offset falls in 2012. Japanese thermal generation remains elevated by the total shutdown of the nuclear power sector – however there was little to no growth across 2013, with little likelihood of increases in this year.

Longer term growth in Chinese thermal coal imports could be limited by efforts to improve energy efficiency and address pollution, along with the improved availability of domestic coal in coastal provinces. That said, the arbitrage window remained relatively wide for Australian coal in February. For most of the month, Australian coal (at the port of Newcastle) was around US$10 a tonne cheaper than Chinese coal.

Spread narrows for Indonesia coal, stable for Australian



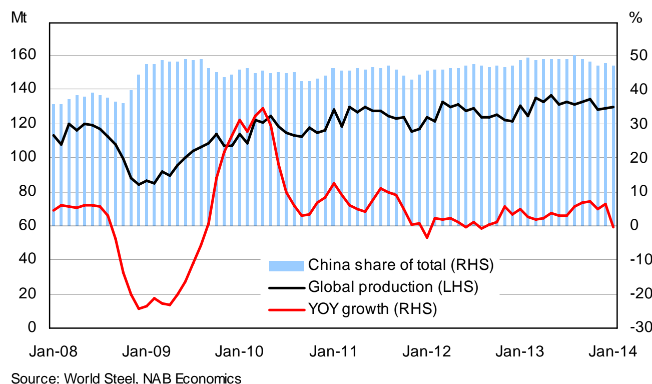
Source: Bloomberg Industries, NAB Economics

With adequate supply and idle production capacity capable of responding to any unexpected increases in seaborne demand, we see little upside for thermal coal prices. The 2014 Japanese financial year contract is forecast at US$86.50 a tonne, down from US$95 a tonne this year.

Steel Production

Global steel production was marginally weaker in January 2014, at 129.8 million tonnes (down -0.3% yoy). The main contributor to this slowdown was weaker production in China – at 61.6 million tonnes, however this was likely impacted by the earlier timing of Chinese New Year in 2014 (when compared with 2013).

World and Chinese steel production softer in January



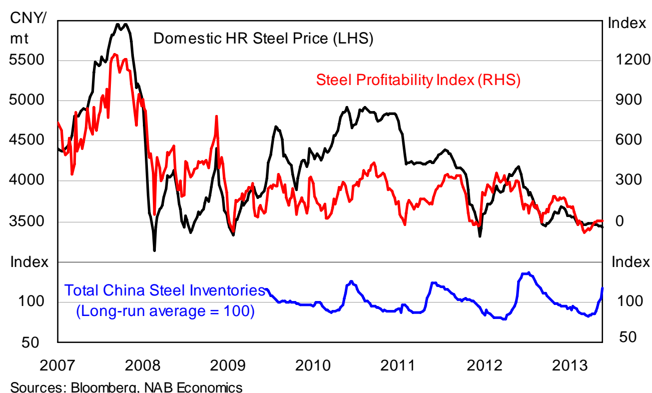
Source: World Steel, NAB Economics

The China Iron and Steel Association forecast steel production to rise to 810 million tonnes in 2014 – an increase of around 4%. The organisation expects steel production to peak between 860 and 880 million tonnes in the next three to five years.

Addressing excess capacity in the steel sector will be a key challenge over the next few years. Bloomberg Industries estimated average excess capacity at 271 million tonnes in 2013 – with capacity utilisation at 74% for the full year – contributing to the relatively weak conditions for domestic steel mills. A program to demolish older and inefficient plants commenced in Hebei (the country's largest steel making province) in late 2013.

Profitability for Chinese steel mills remains tight, albeit slightly improved in mid February – as downward pressure on steel prices appears to have slowed, while weaker raw material prices finally started flowing through.

Conditions remain tight for Chinese mills

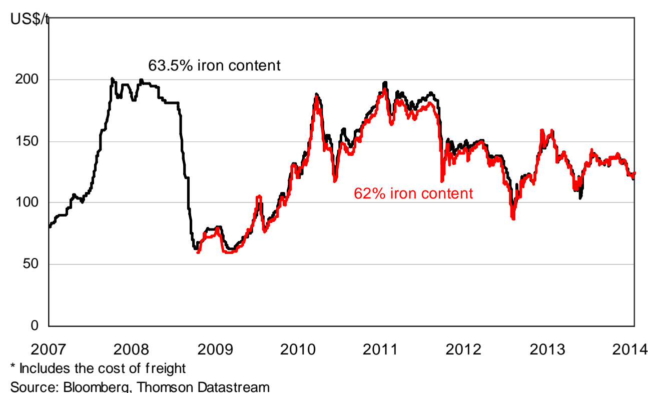


Sources: Bloomberg, NAB Economics

Iron Ore

Iron ore prices trended lower in early February, reflecting in part the weak steel production in China, as well as the end of the restocking phase that inflated seaborne demand across the latter part of 2013.

Chinese Iron Ore Prices*

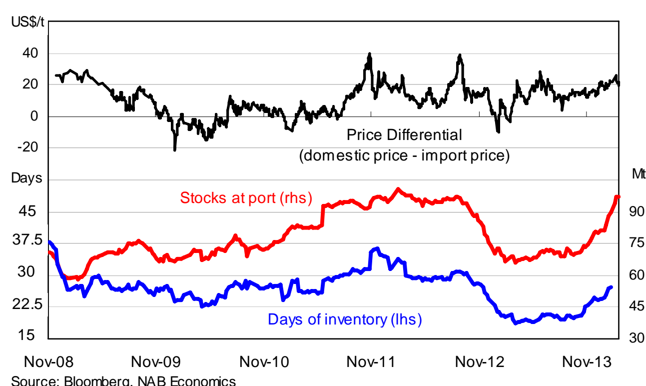


* Includes the cost of freight
Source: Bloomberg, Thomson Datastream

Chinese spot prices at the port of Tianjin drifted down to US$120 a tonne CFR (62% fines) in late February, having declined across January. Prices were relatively range bound during the month – trading within US$5 band.

Despite relatively weak steel production in China over recent months – the typical seasonal trend – iron ore imports have remained strong, in part due to a restocking phase. However, Mysteel Research has reported that around 40% of iron ore stocks at Chinese ports are part of financing deals. With Chinese authorities attempting to rein in credit, Mysteel argue that steel mills and traders are using iron ore as collateral to secure loans (similar to strategies previously observed in copper markets) – which could pose some risks if there is a sharp decline in prices.

Chinese iron ore stocks rising



Source: Bloomberg, NAB Economics

Chinese iron ore imports increased by 32% year-on-year in January (to an all time high of 87 million tonnes), following on from 10% growth in 2013. Since August, the arbitrage window has increasingly favoured imports over domestically produced material – with imports around US$20 a tonne less expensive than domestic ore in mid February.

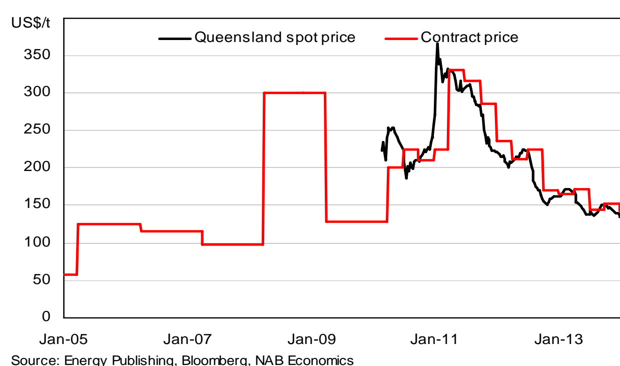
Major investment in production facilities in the Pilbara region of Western Australia will significantly boost iron ore production in 2014. The bulk of supply additions in 2014 and 2015 are expected in Australia and will add downward pressure to traded iron ore prices in the second half of this year.

In the short term, we expect iron ore prices to remain within current ranges, with increased demand from the recovery in steel production likely to offset the current softness in spot prices. However, the strong increase in production across the year is likely to add downward pressure to prices from the second half of 2014, trending down to around US$100 a tonne by the end of the year.

Metallurgical Coal

Metallurgical coal prices continued the recent downward trend in February, with spot prices for Queensland coal down to around US$128 a tonne in mid February (compared with around US$135 a tonne at the start of the year).

Metallurgical coal prices drifting lower in early 2014

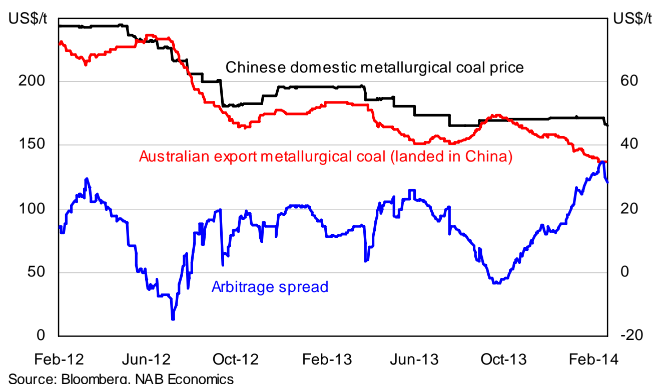


Source: Energy Publishing, Bloomberg, NAB Economics

Weaker spot prices have flowed through into contract prices. Hard coking coal contracts for the first quarter of 2014 have fallen to US$143 a tonne (down from US$152 a tonne in Q4 2013). This level is the lowest in the (short) history of quarterly coal contracts – and the lowest since the 2009 Japanese financial year.

Compared with the pullback in traded prices, declines in Chinese domestic prices for metallurgical coal have been modest. Domestic prices were comparatively stable across the second half of 2013 and into the new year, before easing by around $5 a tonne in late February. As a result, the spread between domestic and imported material has widened since October 2013 – peaking at around $35 a tonne in February. This should encourage consumers to import coal and likely signals some upside to spot prices when steel maker demand picks up post-winter.

Metallurgical coal prices drifting lower in early 2014



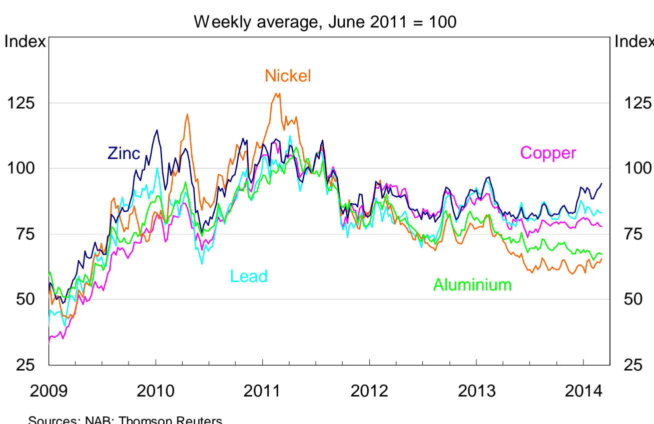
Source: Bloomberg, NAB Economics

The downward trend in prices has in part reflected growth in seaborne supply, with Australian exports providing the bulk of the increase. In 2013, global trade in metallurgical coal expanded by around 30 million tonnes, with 25 million tonnes coming from Australia, as a result of both new developments being brought on line as well as a recovery from previous flood related disruptions. In 2014, the growth is likely to be more modest, at around 13 million tonnes (Bloomberg) with the majority coming from developments in Queensland.

As steel production expands over coming months, metallurgical coal prices are expected to recover from the current soft levels. However new supply additions should provide a limit to upside pressure. Hard coking coal prices are forecast to trend up to US$160 a tonne by the end of 2014.

Base Metals

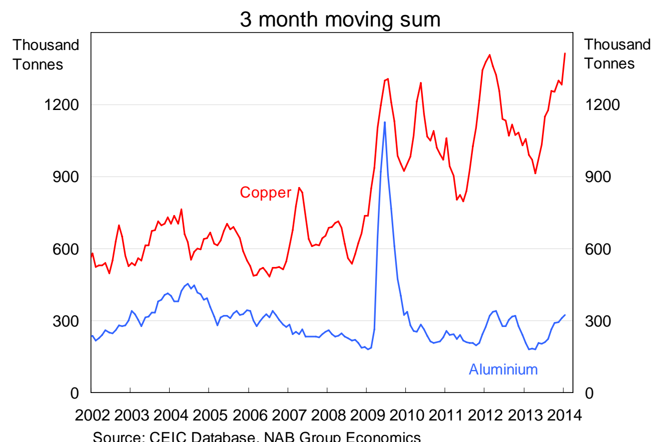
Base Metals Prices



Sources: NAB; Thomson Reuters

Base metal markets have lacked any clear direction since the start of the year, with prices fluctuating in response to mixed economic data and a number of supply side factors. The Chinese economy slowed in the final quarter of 2013, while indicators suggest that the trend may have continued into early Q1 – despite the apparent strength in commodity imports over recent months. The US economy has been another source of headwinds, with a run of soft economic data – particularly for the labour market and industrial sector – casting some doubt over the longevity of the recovery that gained traction last year. Nevertheless, demand concerns have been met by supply side issues that are keeping physical conditions tight for some metals.

Chinese Import Volumes



Source: CEIC Database, NAB Group Economics

Across most of the base metals complex, prices generally fell in late January/early February as the market reacted to signs of an economic slowdown, particularly following softer GDP data from China, which was followed up by disappointing PMI indicators for the industrial sector. On a more positive note, Chinese trade data was quite strong in the lead up to Lunar New Year, including robust growth in commodity imports. Copper imports have been around their highest levels on record, while aluminium imports are at their highest levels in around a year.

Nickel has been one of the stand outs since the start of the year when Indonesia implemented its raw mineral ore export ban and progressive tax on concentrates (from January 12). The ban has been most significant for nickel as Indonesia account for around a fifth of global mined supply, and is a primary source of the mineral for top consumer China. Despite large levels of nickel ore held at Chinese ports at the end of last year (and record levels of refined nickel in LME warehouses), nickel prices have been supported by the export ban and have outperformed the rest of the complex since the start of the year; prices are currently up more than 6% from end-2013. Prices have probably been somewhat contained by the elevated inventories suggesting some significant upside risk to prices later in the year.

Relatively more positive fundamentals have also been somewhat supportive of zinc prices, which are up almost 3 per cent over the same period. This has largely stemmed from the markets view of the supply outlook, although Chinese demand for the metal has also been robust (it is unclear how much of this is in anticipation of a pick up in end-use demand from China). Prices for all other base metals (copper, aluminium and lead) are all down from the end of last year.

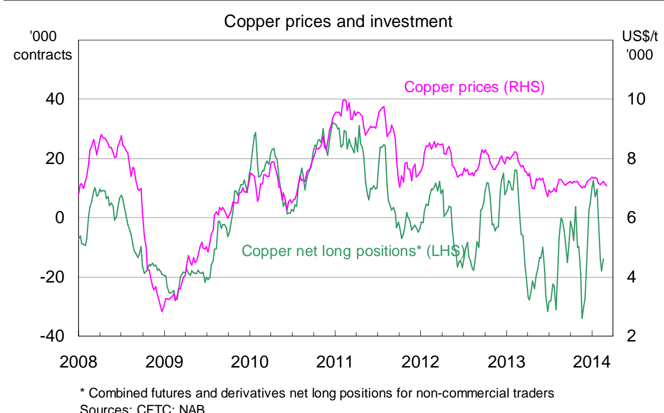
Base Metals Prices*

	Avg Price (US$/tonne) Feb-14	Monthly % change Feb-14	Feb-13 - Feb-14 % change
Aluminium	1695	-1.9	-17
Copper	7149	-2.0	-11
Lead	2108	-1.7	-11
Nickel	14204	0.8	-20
Zinc	2035	-0.2	-4
Base Metals Index		-1.1	-14

* Prices on an LME cash basis.
Sources: LME; NAB

Focussing on the month of February, price declines were recorded for most of the complex, although outcomes varied. Nickel was the only metal to record a modest increase in average prices for the month (up 0.8%), the third consecutive monthly increase. Aluminium and (to a lesser extent) copper continued their soft run, falling by around 2% in the month; this is the fourth consecutive monthly decline in average aluminium prices, although premiums have remained elevated given tight physical supplies. Lead prices fell by more than 1½% in the month, while zinc recorded a much more modest decline. In annual terms, zinc has been by far the best performer, falling by 4% over the year, followed by copper and lead, both of which are down 11%. Despite recent improvements, nickel prices recorded the largest declines (down 20%).

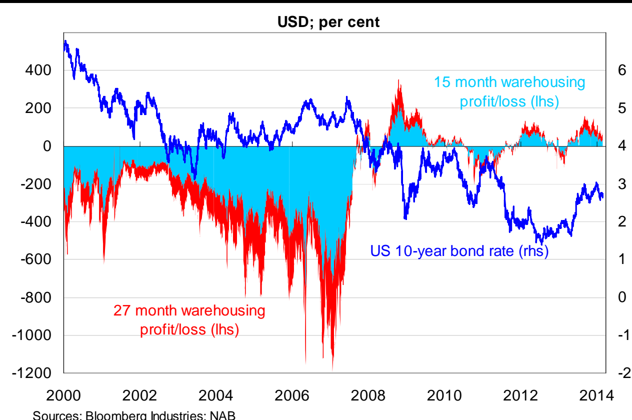
Copper investment flows



* Combined futures and derivatives net long positions for non-commercial traders
Sources: CFTC; NAB

Although physical demand (and supply) factors tend to be the primary driver of industrial metals prices, financial markets can also be an important factor. Some normality returned to the metals market last year following that Fed announcement to commence QE tapering, but market concerns over the US and Chinese economic data appear to have fuelled large swings in speculative positions, driving some of the market volatility. Low interest rates and market contango have kept aluminium financing deals attractive, keeping tonnages locked up in warehouses. The coming change in LME warehousing rules is generally expected to help alleviate some of the pressure this is creating in physical markets, but indications are that financing deals are increasingly happening off-warrant.

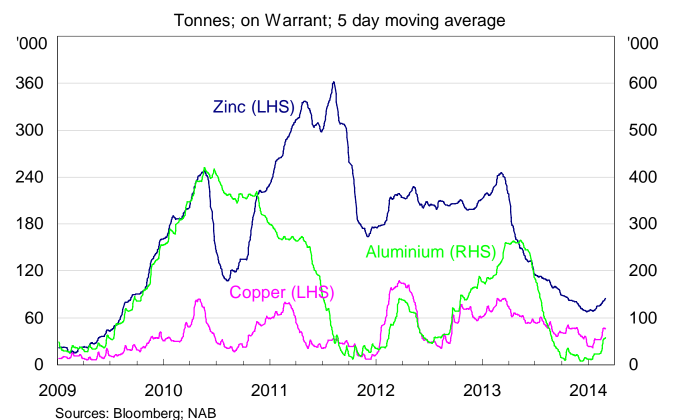
Aluminium financing deal incentives



Sources: Bloomberg Industries; NAB

Similarly, strong copper import volumes to China may be partly attributable to an apparent rise in the use of the metal in financing deals – corresponding to tight credit conditions and a drawdown of LME stocks. Given the softening signals from China's manufacturing PMI, it is not clear to what extent rising imports have been driven by end-user demand, particularly given the seasonal impacts around this time of year. Stocks stored in SHFE warehouses have started to pick up from the lows of last year's when premiums became very elevated. Again, changes to warehousing rules may be masking the true level of inventories as metal is shifted into off-exchange stocks, which are not shown in official stats.

SHFE stocks picking up, but still at low levels



Sources: Bloomberg; NAB

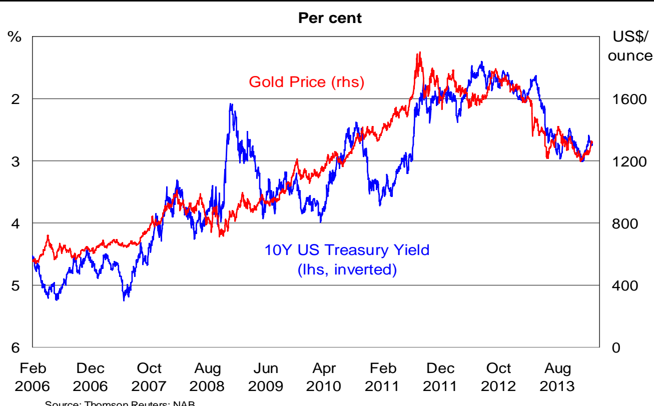
The performance of metals prices over the year has been consistent with expectations for softening market balances. Nevertheless, some physical markets have remained tight on supply concerns and the impact from regulatory and legislative changes. In aggregate, base metals prices on the London Metal Exchange (LME) have fallen by around ½% in the year to date, following an 11½% decline over 2013. Supply and demand fundamentals vary across the base metals, but gradual improvements in demand will be largely matched by rising supplies (zinc and nickel being the main exceptions), suggesting limited upside to prices in the near term. However, lower prices could see a consolidation of expansion plans, while production cut backs are expected for nickel and aluminium given the position of prices to marginal cost.

Finally, monetary policies in major economies, changes to warehousing rules and a doubt over the terms and duration of the Indonesian exports ban all mean a significant degree of uncertainty continues to cloud the outlook for metals markets.

History also suggests that we should not discount the risk of supply disruptions, which could see a much lower surplus (particularly in the copper market) than is currently expected.

Gold

US 10-Year Treasury Yield

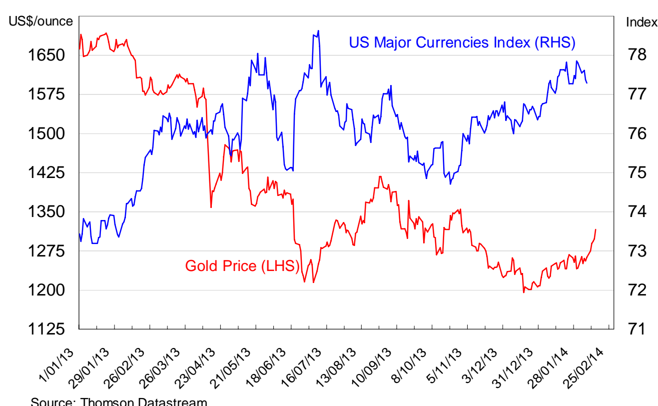


Source: Thomson Reuters; NAB

Last year brought about the long anticipated bear market for gold as an improving US economy allowed the Fed to commence tapering their asset purchase program – monthly asset purchases were scaled back from US$85 billion a month last year to US$65 billion more recently. Rising interest rates, a higher USD and a rally in equity markets all weighed on the attractiveness of the shiny metal to investors, driving down prices by almost a third over the course of the year. More recently however, market concerns over the US economic recovery (pushing interest rates back down), along with anxieties over emerging markets (including geopolitical tensions in the Ukraine), have contributed to some volatility in financial markets. This has contributed to safe haven demand for gold, supporting prices.

Since the end of December, the price of gold has ebbed steadily higher. The average price of gold rose by around 1½% in January and by a further 4½% during February – currently trading over US$1,340 per ounce. This is the first back-to-back increase in month average prices since October 2012. Nevertheless, in year ended terms, the price of gold in February was more than 20% below levels recorded in the same month of the previous year.

Gold Price and the US Dollar (Daily)



Source: Thomson Datastream

Gold's inverse relationship with the US dollar appeared to break-down at the start of the year, with the US dollar appreciating against major currencies as the gold price turned up. However, this could have reflected a temporary boost to physical demand from Asia in the lead up to Lunar New Year, negating the negative impact from a higher USD. More recently, the traditional inverse relationship has strengthened somewhat. The USD is generally lower compared to major trading partner currencies over February, while the gold price remained on an upward trend. However, if geopolitical tensions start to escalate, it is possible that safe haven demand could push both the USD and gold price higher.

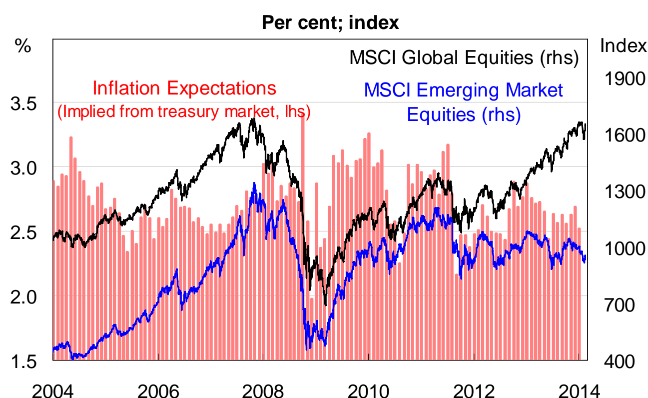
Exchange Traded Funds*

* A sample of funds from the US

Sources: ishares.com; exchangetradedgold.com; NAB

Data from a selection of US exchange traded gold funds (ETFs) have highlighted the sharp decline in gold holdings since the beginning of 2013, with investors losing faith in gold as a store of value. This has similarly been reflected in a reduction of net long open positions in futures and derivatives, which dipped to their lowest post-GFC levels last year. However, gold investment activity, while still soft relative to history, has picked up a little over recent weeks – US net long open positions have lifted from recent lows, and ETF gold sales appear to have stalled in response to the factors already mentioned above.

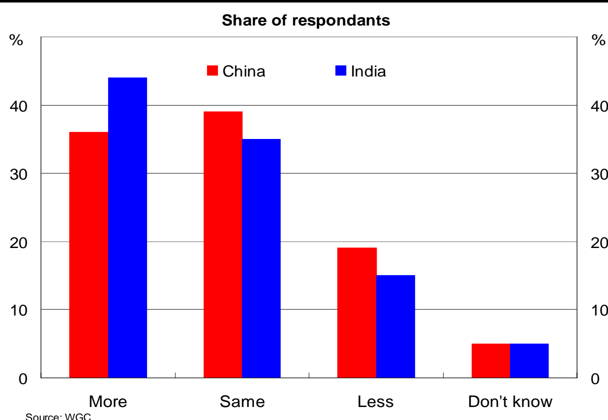
Inflation expectations & global equity prices



We suspect the recent improvement in attitudes towards gold is likely to be temporary – setting aside the unpredictable nature of the geopolitical tail risks. In particular, equity markets continue to perform relatively well, at least outside of emerging markets, while demand for gold as an inflation hedge is likely to be limited as inflation expectations have remained anchored. But most importantly, our current forecasts for the US continue to have US interest rates rising from current levels over the coming quarters. Consequently,

our expectation is that the medium term trend in gold prices – looking through near-term volatilities – will be a gradual move lower from current levels (approaching US$1,050 per ounce by the end of 2015).

India and China consumer gold spend intentions



A major upside risk to our demand outlook for gold is the potential for stronger than expected physical demand from Asia, which has remained strong despite the Indian import restrictions imposed last year and significant depreciation of some EM currencies, as consumers responded to lower prices. The World Gold Council's most recent report of gold demand trends showed that China's gold demand lifted 32% over the year to the December quarter (to 1,066t in 2013), meaning that it has surpassed India as the world's largest consumer of gold. Nevertheless, India's gold demand still managed to lift 13% over the year, despite a drop in official imports and a rise in domestic gold premiums. Unofficial gold import channels have been used to satisfy India's healthy gold demand, with the WGC estimating unofficial volumes at between 150-200t (although they suggest that imports in 2013 were probably closer to the top end of this range). The timing of any removal or reduction in India's import restrictions is uncertain, although our expectation is for late in the year, at the earliest (WGC suggest any time after Q1 2014). Any surprise removal (or relaxation) of the import restrictions is another upside risk to the outlook, particularly given the robust gold purchase intentions evident in the WGC survey (chart).

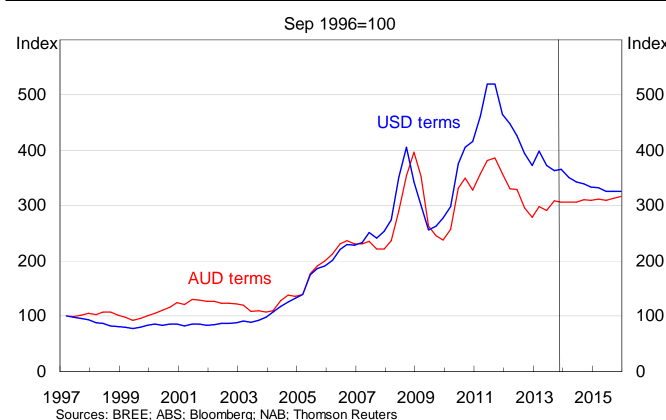
Outlook

Overall, some gloss has come off recent economic data after a positive run in the last quarter of 2013. Weighing on the commodities market in particular has been signs of slowing in China and some other emerging economies, as the reversal of capital flows into developed economies from an improved economic outlook takes its toll.

China's economy appears to have entered a phase of gentle decline largely due to the government's credit tightening attempts, with indicators of industrial output and business conditions weaker than expected in recent times. However, the first couple of months of Chinese data are notoriously unreliable for gauging underlying trends due to the seasonal effects of Chinese New Year celebrations, so upcoming data should be a better reflection of activity. Meanwhile, an extreme winter season in the US has been blamed for some of the weakness shown in recent US data, which may also prove to be transitory.

On the supply side, production of bulk commodities and some metals is expected to outpace the improvement in demand even as the global economy recovers, given that there are signs of plateauing in Chinese demand which has been predominantly responsible for the manifestation of a series of commodity supercycles in the last two decades. Record pace in crude and natural gas production in North America will also ensure a comfortable supply side which will cap upward potential in prices. Given all these factors, the improvement in overall global economic growth remains consistent with our expectation for commodity prices to ease, but remain at historically elevated levels.

NAB Non-Rural Commodities Price Index



In US dollar terms, the NAB non-rural commodity price index fell by around 1¾% over 2013. We are expecting a larger decline of around 8¾% in 2014, before easing by a further 2¼% over 2015 (see Graph). Given our forecast for the AUD/USD to depreciate further over the remainder of the forecast horizon, AUD prices are expected to rise by ¾% over the year to December 2014, before a larger increase of 2½% over 2015. In aggregating the index, iron ore, thermal coal and metallurgical coal have a combined weight of around 55%.

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Commodity update release dates*

March 2014: Overview, Oil & Base Metals – 31/3/2014
April 2014: Overview & Bulks– 5/5/2014
* Reports to be released by these dates.

Quarterly Price Profile

Oil Price Forecasts – Quarterly Average

	Actual	Forecasts							
	Dec-13	*Mar 14*	*Jun 14*	*Sep 14*	*Dec 14*	*Mar 15*	*Jun 15*	*Sep 15*	*Dec 15*
Brent US$/bbl	110	108	106	105	103	103	103	103	103
WTI US$/bbl	97	98	96	98	100	100	100	100	100
Tapis US$/bbl	115	114	112	111	109	109	109	109	109
Petrol AUc/L	150	147	150	150	152	151	152	153	155

Sources: NAB Economics; RACQ; Thomson Datastream

Natural Gas Price Forecasts – Quarterly Average

	Actual	Forecasts							
US$/mmbtu	Dec-13	*Mar 14*	*Jun 14*	*Sep 14*	*Dec 14*	*Mar 15*	*Jun 15*	*Sep 15*	*Dec 15*
Henry Hub	3.85	5.00	4.20	3.70	3.90	3.60	3.80	3.60	3.90
Japan LNG	15.28	16.50	16.00	15.50	15.50	15.30	15.00	14.50	14.35
Brent Oil	108	109	105	103	103	100	100	100	100

Source: Datastream, CEIC, NAB Economics

Bulk Commodities and Coal Quarterly Contract Price Profile ($US/T)

	Actual	Forecasts							
	Dec-13	*Mar-14*	*Jun-14*	*Sep-14*	*Dec-14*	*Mar-15*	*Jun-15*	*Sep-15*	*Dec-15*
Iron Ore*	125	114	108	105	100	100	95	95	95
Hard Coking Coal	152	143	150	155	160	160	160	160	160
Semi-soft Coking Coal	106	104	107	110	114	114	114	114	114
Thermal Coal	95	95	87	87	87	87	87	87	87

Source: NAB

* Calculated using weighted average of quarterly lag formulation and spot prices. Weights reflect industry information on ongoing composition changes to the contract porfolios of major Australian miners.

Base Metals Price Forecasts – Quarterly Average

Base Metal Forecasts - Quarterly Average Terms

	Spot	Actual	Forecasts							
US$/MT	Current	Dec-13	*Mar-14*	*Jun-14*	*Sep-14*	*Dec-14*	*Mar-15*	*Jun-15*	*Sep-15*	*Dec-15*
Aluminium	1711	1767	1710	1770	1810	1860	1890	1910	1920	1920
Copper	7080	7165	7170	7060	7020	7020	7020	7020	7020	7020
Lead	2115	2117	2120	2140	2160	2180	2200	2220	2240	2250
Nickel	14692	13914	14300	14550	14710	14880	15140	15400	15670	15940
Zinc	2111	1912	2060	2000	2020	2040	2060	2080	2110	2130
Base Metals Index	n.a.	269	270	270	270	280	280	280	280	280

Sources: Thomson Reuters; NAB Economics

Gold Price Forecasts – Quarterly Average

Gold Price Forecast - Quarterly Average

	Spot	Actual	Forecasts							
	Current	Dec 13	*Mar 14*	*Jun 14*	*Sep 14*	*Dec 14*	*Mar 15*	*Jun 15*	*Sep 15*	*Dec 15*
Gold - US$	1326	1273	1290	1280	1220	1170	1120	1090	1060	1060
Gold - AU$	1482	1371	1440	1460	1430	1380	1350	1320	1300	1320

Sources: Thomson Datastream; NAB

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