

Resource reflection

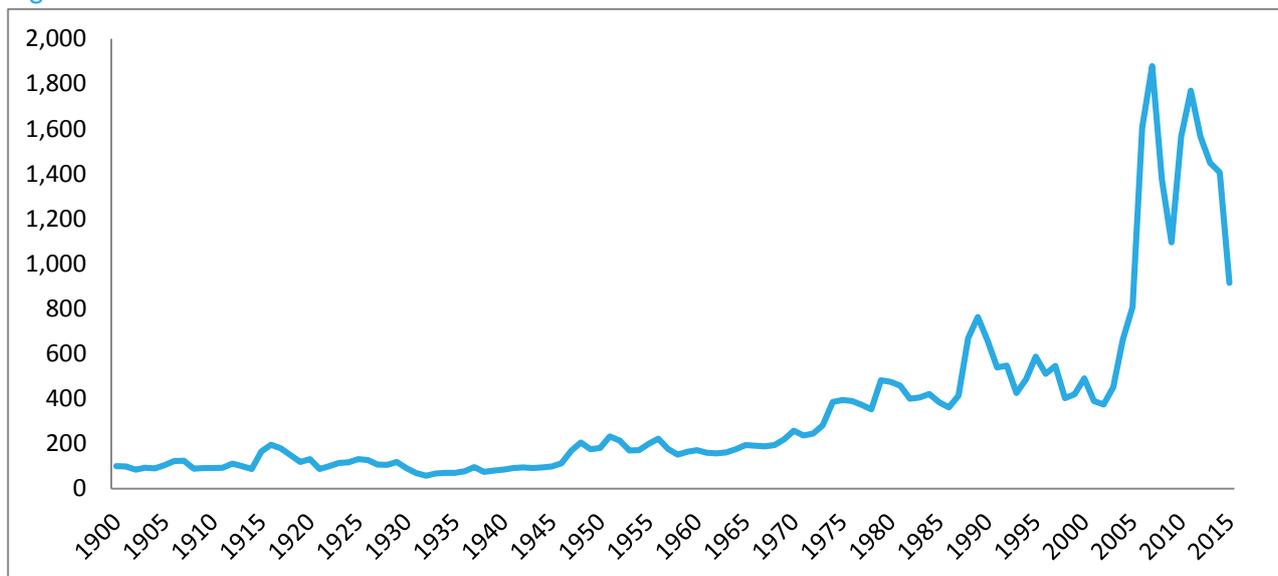
IML has a disciplined approach to investing, focusing on 'value' and 'quality'. Given the falls we have seen in the resource sector in the last 18 months, we provide this 'Resource reflection' piece written by IML's Resources sector analyst Tomas Vasquez discussing commodity cycles and 'value' and 'quality' in the Resource sector.

Commodity Cycles

Commodity prices have retreated after an extraordinary rise that started in the early 2000's as Chinese economic growth reached unprecedented levels. It is important to look at history not only to understand previous cycles and their key drivers but to also to gain perspectives on the current cycle.

The chart below shows the magnitude, scope and amplitude of the recent mining boom. It is the biggest mining boom of the past century with nothing comparing to it. Interestingly the previous mining booms, like those of the late 1970's and of the late 1980's, pale into insignificance when compared to the last boom.

Figure 1: IML Base Metals Index*



Source: IML.

*Production value weighted index of base metals (copper, aluminium, zinc, lead and nickel)

Commodity cycles have averaged 10-30 years

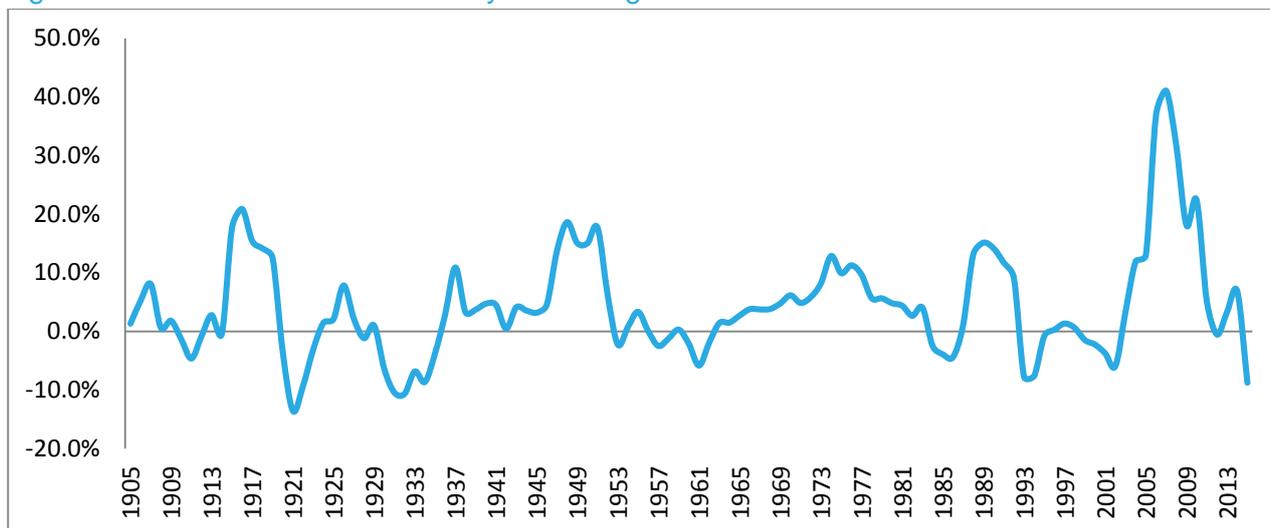
Commodity prices exhibit cycles due to supply/demand imbalances. This happens when one side of the equation moves out of balance with the other, sending commodity prices higher or lower. Eventually, the imbalance adjusts and prices correct to a new equilibrium point.

The current cycle is not dissimilar to previous cycles. However, the magnitude of the upswing was like no other cycle in the last century driven by the development of China, which generated a demand shock. Commodity prices continued to climb as demand grew and supply seemed unable to keep up with this ever increasing demand. Mining investment accelerated but infrastructure, labour and supply shortages drove prices even higher as projects were delayed. Capital cost inflation also pushed

commodity incentive prices higher. Supply finally came online but by then China and the corresponding commodity demand growth had begun to slow and prices started to retreat.

A better way to illustrate commodity cycles is looking at the five year average rate of return over the past century.

Figure 2: IML Base Metals Index – 5 year average rate of return



Source: IML

The data shows that commodity cycles have averaged 10-30 years, with price upswings greater than 100% with downswings of around 50%.

Cycles with shorter upswings (length in years) resulted in 2-4 times longer downswings as shown during the 1914-1921, 1921-1932 and 1986-2002 periods. The current cycle had a short upswing of significant larger amplitude, which may lead to a prolonged downswing.

Figure 3: Key statistics of cycles in metal prices

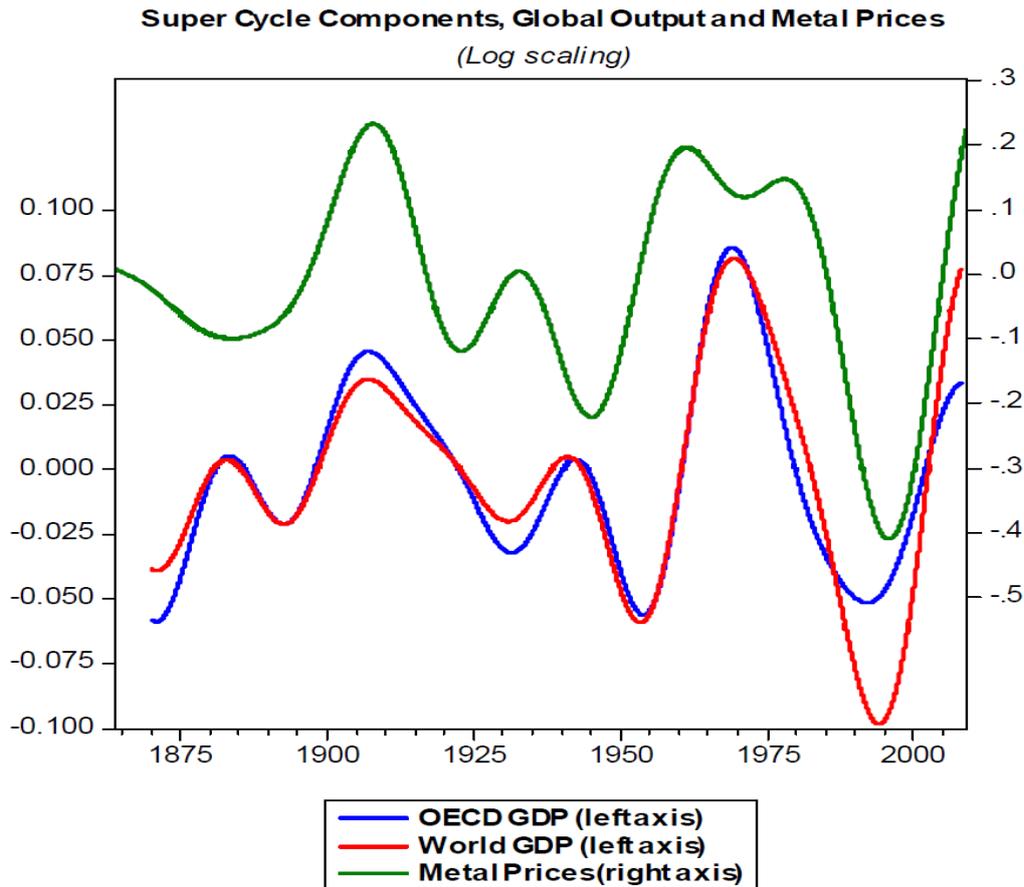
	1914-1921	1921-1932	1932-1958	1958-1986	1986-2002	2002-ongoing
Peak year	1916	1925	1951	1979	1989	2007
% rise in prices during upswing	123%	50%	303%	218%	111%	312%
% fall in prices during downswing	-55%	-56%	-35%	-25%	-51%	
Length of cycle in years	7	11	26	28	16	
Upswing	2	4	19	21	3	5
Downswing	5	7	7	7	13	

Figure 3 also shows significant variability in key statistical measures such as cycle duration, price appreciation etc.

We believe the magnitude and duration of commodity cycles is highly dependent on global GDP growth. Global output is a strong indicator of commodity demand as per Figure 4.

This explains why commodity prices rebounded sharply following the Global Financial Crisis as China and other economies undertook unprecedented stimulus measures to restore growth. The stimulus effectively interrupted the commodity down cycle and prolonged the duration of the cycle.

Figure 4: Global GDP and Metal Prices



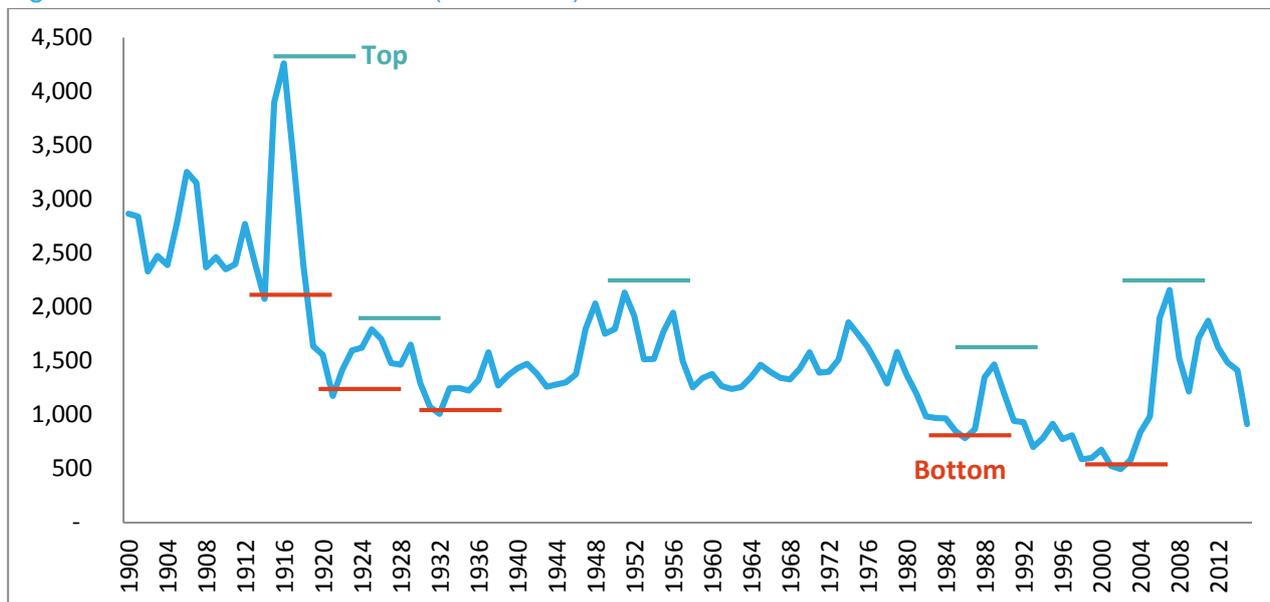
Source: Ocampo Parra 2010

Unfortunately, the Chinese Government stimulus measures had the unintended consequences of encouraging huge overinvestment in many sectors of the economy. China is now dealing with the legacy of this stimulus and has to try and tackle the massive heavy industry overcapacity and large property inventories overhanging its economy. In our view, it will take many years until this overinvestment is absorbed by market demand.

The real price of base metals trends lower over the long-term

Approximately 115 years of commodity data shows clearly that the real price of industrial commodities trends lower over the long term. The chart below shows this trend. Note in Figure 5 the lower bottoms in each down cycle.

Figure 5: IML base metals index (real terms)



Source: IML

Innovation plays a significant role in this declining trend. Technological innovations have a material impact in reducing the cost of producing commodities. An example is the development of nickel-pig iron (NPI) production in nickel and stainless steel markets. Innovation also occurs across other commodity markets. In the last decade, the implementation of hydraulic fracturing and horizontal drilling in the oil and gas industry has untapped major shale oil reserves in the USA which has, at least temporarily, caused a supply issue in the oil market.

Commodities are now clearly in a down cycle. However, if history is any guide real prices generally will at least reach the previous bottom before one can be convinced that the bottom has been reached. This suggests that if history is repeated metal prices may potentially have to fall ~40% below current levels in real terms before a bottom is reached. This may sound extreme, but the point is one has to be very cautious before one assumes, as many have, that prices have bottomed.

With this in mind, we find it difficult to currently form a positive investment thesis on mining stocks.

'Chinese stimulus is the key'

One key variable often mentioned to mitigate the above cautious stance is the potential for material Chinese government stimulus measures in heavy industry to reignite growth in the economy.

However, we see this as fairly unlikely given there is clear signs of overinvestment in many areas of China's physical infrastructure.

Furthermore, the Chinese Government is moving from its "old growth model", which was driven by direct government investment in fixed assets, to a new model in which the services sector and the consumer will have a larger contribution in the economy.

In addition, the Chinese Government has learnt its lesson from the stimulus undertaken during the Global Financial Crisis, as it has resulted in substantial overinvestment in many heavy industries leaving the country with an overcapacity issue.

In our view, the Chinese Government's efforts will be concentrated around reforming its financial and economic system using western style monetary tools. At the same time, it will seek to address industry

overcapacity by limiting new capacity and increasing environmental regulations, which may result in closures. This may actually put further pressure on commodity demand and prices.

As such, we believe it is prudent to remain cautious and to retain our very underweight position in the Resource sector.

Quality and value

Another factor that makes us cautious on the Resource sector is the lack of quality companies:

- There are no diversified mid-cap miners anymore (except for South 32). Diversity reduces the volatility of a company's earnings – a key measure of quality.
- The balance sheets of most miners are fairly stretched and companies are at risk of further credit downgrades.
- Progressive dividend policies are inappropriate for highly cyclical and capital intensive businesses and many dividends seem unsustainable. Maintaining a high dividend through the downturn also has the effect of putting additional pressure on balance sheets and also constrains the companies from investing counter-cyclically.
- Australia's cost competitiveness has eroded due to escalating capital costs, labour inflation, our relatively strong currency as well as increasing red and green tape.
- Capital deployment has been poor. Resource companies have had an appalling track record of buying assets at the top of the cycle and selling at the bottom.
- The majority of new "Tier One" deposits are located in unstable countries with significant political risk (e.g. RIO's Oyu Tolgoi copper mine in Mongolia).
- Earnings predictability has deteriorated as sales prices have become more volatile with the move from contract pricing to spot pricing (such as in the iron ore and alumina markets).

Conclusion

While it is true that many stocks in the resource sector have declined substantially, the question is do they offer good value today?

On spot prices, valuations look stretched. For example, RIO trades at a P/E of around 50x FY17 IML forecast earnings. Valuations only look attractive if you use much higher commodity forecasts than current spot rates. And as mentioned earlier in this article, while commodity prices have dropped significantly, there is still the very real possibility of further falls before we reach the bottom of the current cycle.

In our view, the commodity complex will remain oversupplied for a few years yet, particularly as the demand outlook looks more challenging. We will continue to monitor the sector closely but in our view it is still too early to make a convincing case for buying heavily into the Resources sector.