

Examining the Valuation of Australian Small Caps

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The Australian Small Caps market offers attractive investment opportunities for institutional investors seeking additional alpha for their listed equity allocations. On most metrics Small Caps appear undervalued. Small Industrials look compelling relative to Large Cap Industrials and our research suggests Small Resources are oversold and should remain well supported by cost curves.

Key points

- Small Caps valuations have been de-rated aggressively and look to be about 10% cheap relative to history.
- Small Industrials appear to be 6% undervalued and valuation dispersion suggests plentiful “alpha” opportunities exist.
- The Resources sector has been oversold relative to key drivers with commodity cost curves offering significant price support. Relative to Large Cap Resources we estimate Small Resources are about 15-25% undervalued.
- Equity markets generally appear undervalued, assuming no GFC2 / earnings collapse – the Earnings Yield Gap is at 30 year highs (excluding GFC sell-off) while the Schiller PE is at 20 year lows.
- Long term investors should focus on the Small Cap alpha opportunity generated through the cycle.
- This analysis suggests the likely outperformance of Small Caps going forward.

How have Small Caps performed relative to the market?

Small Caps are traditionally thought of as high beta to the broad market and to Large or Mid Cap stocks. In the bull market from 2003 to 2007 Small Caps outperformed Large Caps by some 25% over a five year period. This was followed by a dramatic collapse in prices during the GFC, with Small Caps underperforming Large Caps by 30% in less than two years. In the post-GFC bounce, Small Caps outperformed again – peaking on a relative basis at the start of 2011, up 35% relative. Since the 2011 peak, Small Caps have underperformed Large Caps by 20%.

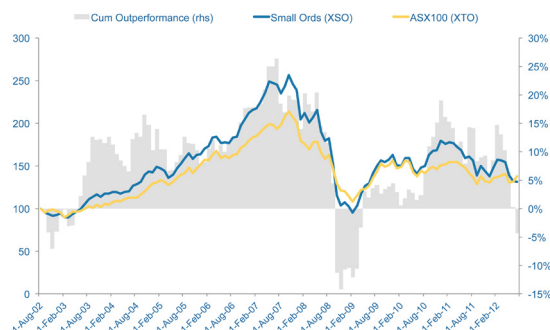
Market metrics suggest attractive relative valuations

The valuation premium/discount of Small Caps is often thought of as a good signal for timing Small Cap allocations to attempt to capture the beta inherent in the Small Cap sector. The standard approach is to look at the PE Ratio (1 year forward) of the Small Ords Index (XSO) relative to the ASX100 Index (XTO). This measure is shown here with data from Citi Research based on consensus earnings forecasts.

As a crude market timing tool the Small Cap PE Relative has some merit. It correctly identified the overvaluation of Small Caps in 2006 and 2011, ahead of periods of strong underperformance. It also demonstrated the extreme relative undervaluation in 2009 ahead of a strong post-GFC rebound.

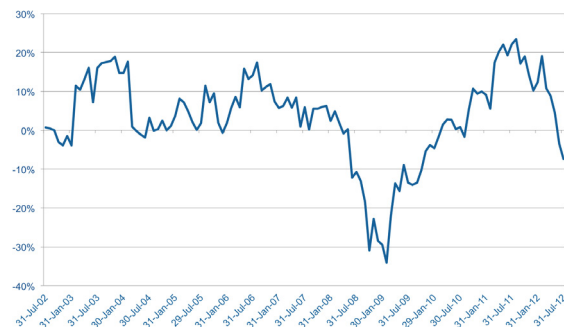
Currently this metric suggests that Small Caps are attractively valued. The Small Cap Index traded at a +20% PE premium to Large Caps at the start of 2012. This has now moved to a -7% discount, suggesting Small Caps are now attractively priced. The 10 year average for Small Caps has been to trade at a 3% premium to the ASX100 (6% excluding the GFC), so the current 7% discount suggests that Small Caps are 10% cheap relative to history.

Relative Performance of Small Caps vs Large Caps



Source: FactSet

Small Ordinaries Index PE Relative to ASX 100 Index



Source: Citi Research, IBES

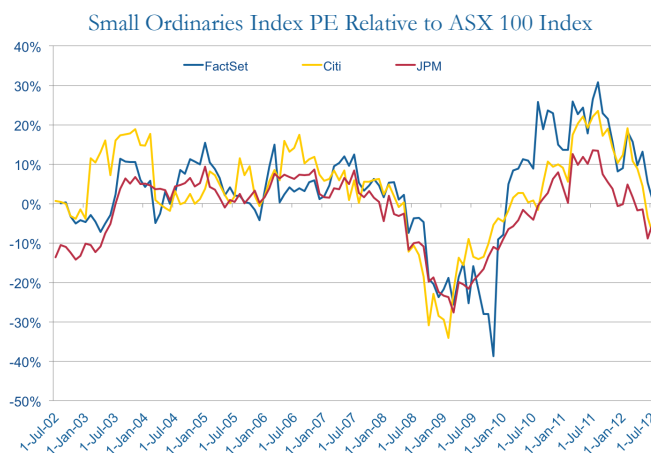


Valuations can be misleading – compare apples with apples

Data/Measurement variation

We must be cautious when making comparisons and endeavour to compare like-with-like. Different data sources and measurement methodologies inevitably produce variable results. For example as shown in the chart, three sources attempting to measure the same valuation metric can come up with at least three different results, albeit directionally the same.

Data from Citi, JP Morgan and FactSet endeavouring to measure the Small Cap premium / discount show significant variance. The periods of major under/over-valuation are directionally the same – all show Small Caps were cheap during the GFC, expensive in 2010/11 and have now reverted to being on the cheap side. But at other times, the different measures can be conflicting and confusing.



Source: FactSet, Citi Research, JP Morgan

Benchmark composition – exclude Resources & Banks

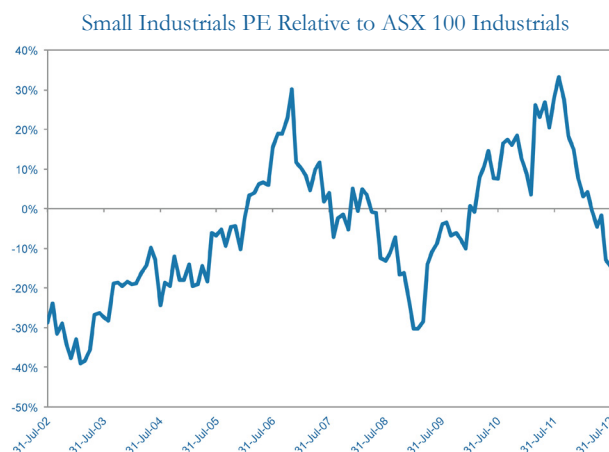
Small Resources sector stocks (which comprise around a third of the Small Caps Index) usually cannot be valued with PE ratios so should be excluded. Many Small Cap miners are pre-production and therefore pre-profit or are still in ramp-up phase so inevitably trade on high (or negative) PE multiples. Furthermore, mine life is a key variable that impacts whether a resource company should trade on a low PE (as a three year mine life would imply) or on a high PE, more comparable to an Industrial company (as a 30 year mine life would allow). For this reason we typically look at resource companies on a Price/NPV basis and believe they should be excluded from the XSO for overall valuation purposes.

In the ASX 100 index, the large diversified miners (BHP & Rio) and banks are large components which typically trade on low PE ratios. There are no equivalent companies in the Small Cap sector so we generally exclude these sectors for the comparison. As a result we focus on looking at Small Industrials (currently 68% of the XSO) vs Large Industrials (ASX100 excluding Banks and Resources, 58% of the index).

Small Industrials look good value

This chart suggests that Small Caps have moved from being overvalued in 2011 to being relatively attractive currently. Note that this measure also suggested being over-weight Small Caps in 2002/2003 and moving underweight towards the end of the bull market at the end of 2006.

The 10 year average for Small Cap Industrials has been to trade at a 5% discount to Large Cap Industrials. So the current 11% discount suggests that **Small Cap Industrials are 6% cheap relative to history.**



Source: JP Morgan

The Small Cap discount's alive and well

Another way to look at valuation in Small Caps is with reference to the spread of valuations. As company size decreases, stock specific risk increases due to a number of factors (diversification, management quality etc). Therefore, the smaller a company is the lower its PE ratio (or other valuation benchmark) should be, everything else being equal.

The small company discount varies over time, largely in response to investors' risk tolerance. In times of risk aversion the small company discount should be expected to widen as investors seek safety and greater liquidity in large cap stocks. In more risk tolerant environments, the small company discount reduces as investors are more willing to pay a relative premium for the perceived higher growth prospects offered by Small Caps.

The chart from Wilson HTM captures the relationship between size and valuation over time. In 2007 at the peak of the bull market, the size discount was muted – reflected in a flat line of best fit through the Market Cap/PE Relative spectrum (with an R-squared of 48%, indicating a weak relationship between size and valuation).

In contrast, this line became exceptionally steep in the GFC with microcap companies trading on unusually large discounts to the broader market (e.g. <\$100m market cap companies were at a 50% discount, reflecting perceived company specific risks and liquidity discounts). This risk averse environment provided excellent investment opportunities in Small Caps generally, supporting the broader signal given by the overall discount of the Small Cap index to Large Caps.

Currently the small cap discount remains relatively steep, reinforcing our view that there are significant valuation anomalies available for Small Cap managers to take advantage of.

Small Resources under-performance – key drivers

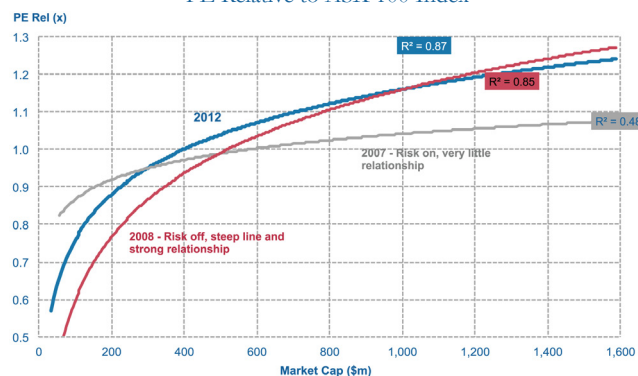
While the industrial sector lends itself to overall valuation comparisons, timing the allocation to the resources sector is considerably more complex due to the interaction between commodity prices and the Australian dollar.

Traditionally, Small Cap Resources have been highly correlated with both commodity prices and the Australian dollar, but this relationship appears to have broken down recently. The Small Resources Index has fallen 30% since the beginning of March, whilst the Australian dollar is flat (versus the US dollar) and commodity prices are down only modestly (for example, the S&P Goldman Sachs Commodity Index is -4%, and copper is down -10%).

This divergent performance suggests that equity investors have been aggressively discounting a collapse in commodity prices, driven perhaps by fears of a China hard landing and the sovereign debt crisis in Europe. While we cannot rule out such a scenario, it remains a tail risk rather than a base case, and we believe that policy makers have a number of tools at their disposal (mainly QE-type initiatives) that can mitigate the most drastic scenarios.

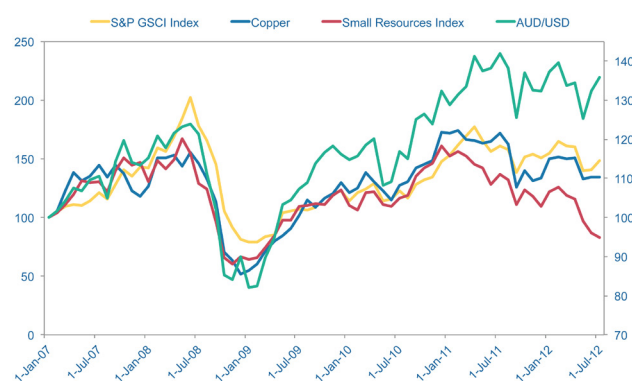
Commodity cost curves are generally supportive of current commodity price levels, and therefore this suggests Resources stocks are oversold. The chart to the right shows C1 (direct operating) cash costs for copper, nickel, iron ore and gold. Note that fully costed operations would typically be some 30-40% ahead of C1 costs (including royalties, capital costs, overheads, profit margins etc). So while in the short-run, prices can continue to come under pressure, long-term prices may need to rise from current levels in order to incentivise production in some commodities.

PE Relative to ASX 100 Index



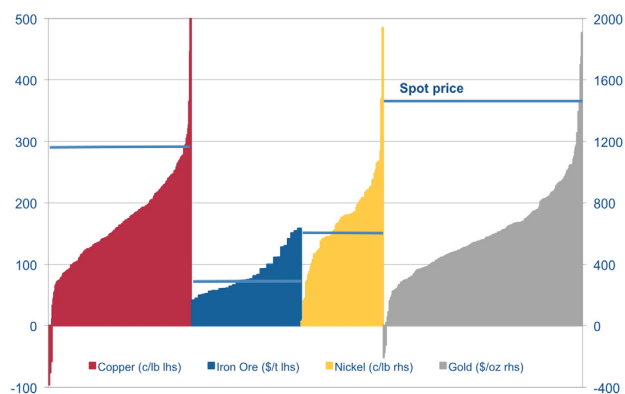
Source: Wilson HTM

Small Resources Index vs Key Drivers



Source: Factset

Commodity Cost Curves



Source: Mackenzie, Macquarie Research, IFM



Small Resources valuation

For Small Resources, the primary valuation tool is P/NPV, unlike industrials, which is the PE Ratio. PE Ratios are less useful for small resource companies, many of whom are not yet in production, or are in the throes of ramp-up. The problem with P/NPVs is that the data is not collected and stored systematically by brokers and data providers so it is hard to get time series data. Also different brokers use different assumptions for cost of capital and the various inputs (e.g. mining costs, treatment of exploration assets etc). Therefore our approach is to model as many companies as possible within a sector on a consistent basis, so that we can compare like with like. For example, we have DCF models for more than 20 gold companies.

Looking at our internal models, as an overall observation, Small Resources companies are trading at 25% to 30% discount to NPV. Many juniors that requiring funding are trading at a 50%+ discount. Normally we would expect companies to trade at or around NPV, with gold companies trading on a premium (historically 25-50% in Australia and more in North America). However, funding and execution risk remain acute, with the dual challenge of less than supportive capital markets and cost inflation for operators and project builders. In terms of Resource sub-sectors, we have a preference for gold, oil & gas, followed by copper.

Small Resources valuation over time

Assessing Small Cap Resources valuations over time is difficult because it is hard to get a consistent time series of P/NPVs. We can however look at PE Ratios and Price to Book (P/B) as a proxy (likely to be directionally correct at least). Looking at PE and P/B (one year forward) shows a significant de-rating on both measures, with discounts of 8% and 33% respectively compared to their 10-year histories.

Comparing Small Cap Resources to Large Cap Resources over time is equally difficult, but we can perform the same analysis on a relative basis, using BHP as a proxy for Large Cap Resources.

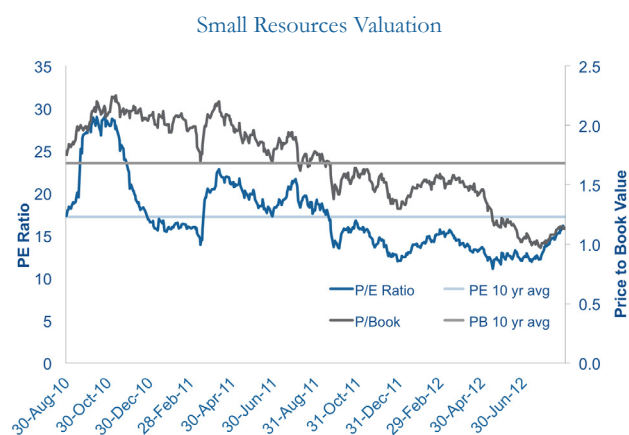
Small Caps have traded on an average PE premium of 80% over the last 10 years. On P/B though, Small Cap Resources have traded on a discount of 41%. While this might at first seem anomalous, it is explainable because PEs for Small Resources companies are inflated due to early stage ramp-up being less profitable than steady state production. Although both are imperfect measures, P/B is probably a better reflection of the capital value of a project.

Looking at these measures over time, both have de-rated in the last six months. On a relative PE basis, Small Caps now trade on a 52% premium to BHP – 15% below the 10 year average of 80%. Interestingly, on P/B, Small Resources now trade on a 49% discount – 14% below the 10 year average (which is 41%). Combining the above analysis suggests that Small Resources are some 15-25% undervalued.

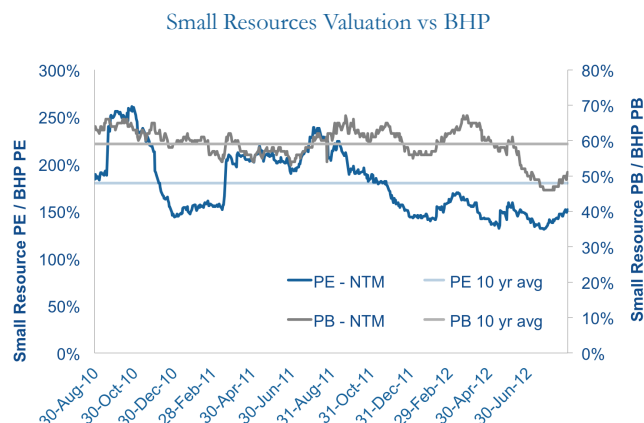
Price to Net Present Value (P/NPV) Multiples

Sector	Producers		Explorers	
	Current	Target	Current	Target
Gold	0.9x	1.2x	0.4x	0.8x
Oil & Gas	0.7-0.8x	1.0x	0.3-0.4x	0.7x
Copper	0.75x	1.0x	0.35x	0.8x
Coal	0.45x	1.0x	0.2x	0.5x
Iron Ore	0.7x	1.0x	0.2-0.4x	0.6x
Nickel	0.9-1.2x	1.0x	-	-

Source: IFM



Source: Factset



Source: Factset



Equity markets cheap – assuming no GFC2

Looking at the overall level of the equity market, valuation metrics suggest that equity markets are undervalued. The yield gap between equities and bonds – shown here using forward earnings yields – shows a yield gap of some >5%, levels not seen since the late 1970s except during the GFC. This indicates either extreme overvaluation of bonds, undervaluation of equities or possibly both – on the assumption that the equity yield is sustainable. Of course if we were to experience an earnings collapse, equity yields might come down to meet bond yields, but again there is no evidence to support such a bear case for profits at the moment.

Looking at longer term valuations, we can see that the Shiller PE ratio on 10 year average earnings is currently at lows not seen in 20 years, providing further comfort that equity valuations are attractive.

Long term investors focus on the Alpha

Small Cap fund managers typically look to generate +5% pa excess return over the Small Ords index. The alpha available in Small Caps dominates the beta effect over any sensible time horizon. The final chart assumes a +5% alpha is delivered in the “Patient Alpha” strategy – which despite the ups and down of the XSO relative performance has delivered a CAGR% of 7.9% over the last 10 years.

Conclusion – Compelling opportunity in Small Caps

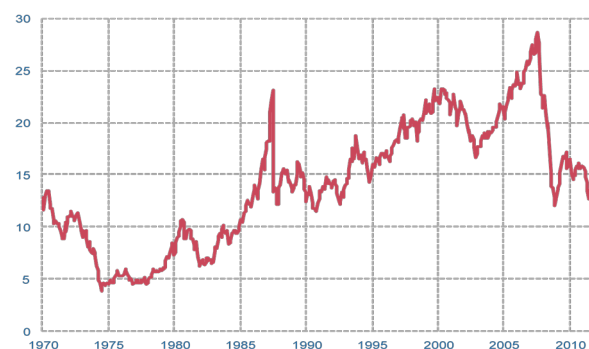
Notwithstanding the difficulties of timing the market, Small Cap valuations appear relatively attractive. Small Industrials sector valuations look compelling relative to Large Cap Industrials, and our research suggests Small Resources are oversold and should remain well supported by cost curves. Equity valuations more generally appear well placed to generate higher returns relative to bonds, assuming no GFC2 or extreme earnings collapse. To the extent equities do perform, a period of outperformance can be anticipated for Small Caps. Not least, long term investors should focus on the Small Cap alpha opportunity generated through business cycles.

12m Forward Earnings Yield (E/P) less 10Y Govt. Bond Yield



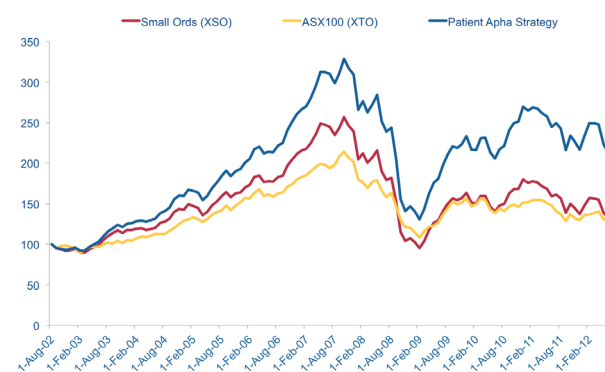
Source: Wilson HTM

Shiller PE (Price/10 year average inflation adjusted earnings)



Source: Wilson HTM

Small Cap Alpha vs Smalls Ords and ASX100



Source: Factset, IFM



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Neil is responsible for managing all aspects of IFM's small capital investment, advisory and management functions. This includes optimising the performance of small caps funds, building and maintaining strong client and third party relationships, managing and developing staff, and developing and maintaining quality assurance and compliance practices. Previously Neil held the role of Division Director at Macquarie Investment Management Ltd (Sydney), where he was responsible for portfolio management, research methodology, recruitment and marketing. Prior to this Neil held the role of Director at Rutherglen Capital (Sydney), Media Analyst at ABN Amro (London) and Strategy Consultant at The L.E.K Partnership (London, Sydney).

About IFM

IFM is a world leading investment manager with over A\$34 billion in funds under management across four asset classes in three of the world's largest pension markets. We manage portfolios across listed equities, private equity, infrastructure and debt via a global team based in Australia, North America and Europe.

Australian Small Caps Wholesale Fund

The IFM Australian Small Caps Wholesale Fund aims to outperform the S&P/ASX Small Ordinaries Accumulation Index by 3% pa before fees over rolling five-year periods. Portfolio tracking error is expected to be in the range of 5% to 8% pa.

The IFM Australian Small Caps strategy aims to exploit identified inefficiencies among the smaller capitalisation companies listed on the Australian stock market. These inefficiencies can create value adding opportunities for disciplined professional investors. The IFM Australian Small Caps Wholesale Fund, launched in March 2012, is managed by an experienced investment team with niche sector expertise in resources and has a long-term track record of outperformance. IFM's approach applies rigorous fundamental research to populate proprietary investment models and quantitative methods to construct broadly diversified portfolios with low relative risk.

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