

A global (quant) perspective on the Australian equities market

Michael Furey | Delta Research & Advisory | 31 March 2016

It's well known that the Australian equity market is only around 2% of the global equity market. When we overweight the Australian equities asset class compared to the global equities asset class in our portfolios, it is typically justified by the benefits of franking credits, higher dividends and, perhaps, familiarity. The primary risks associated with the Australian equity market are mostly its concentration and therefore lack of diversification – it is dominated by two sectors, being financial services (~50%) and materials (~15%).

When choosing strategies or managers for each asset class, practitioners will often look at capturing or avoiding particular systematic risks. For example, we may combine value and growth styles. Or, perhaps we acknowledge particular anomalies and bias a portfolio towards a value or quality style across a variety of equity markets, and other systematic risks such as size, momentum, low volatility, or illiquidity (amongst others) may also be considered.

However, I think it's fair to say the impact of systematic risks is rarely considered across asset classes. So I believe there may be a few unanswered questions – one of which is:

What systematic risks does the Australian equities asset class bring to the global equities asset class?

I'm glad I asked...

One might argue that, compared to major developed markets, Australia's high dividend yield, currently lower PE Ratio and generally smaller companies, means the Australian equity market behaves like a global small cap with a value style tilt. Perhaps the high commodities exposure and economic link with China might suggest there's a growth component and/or behaviour that is emerging markets-like.

So what is the truth?

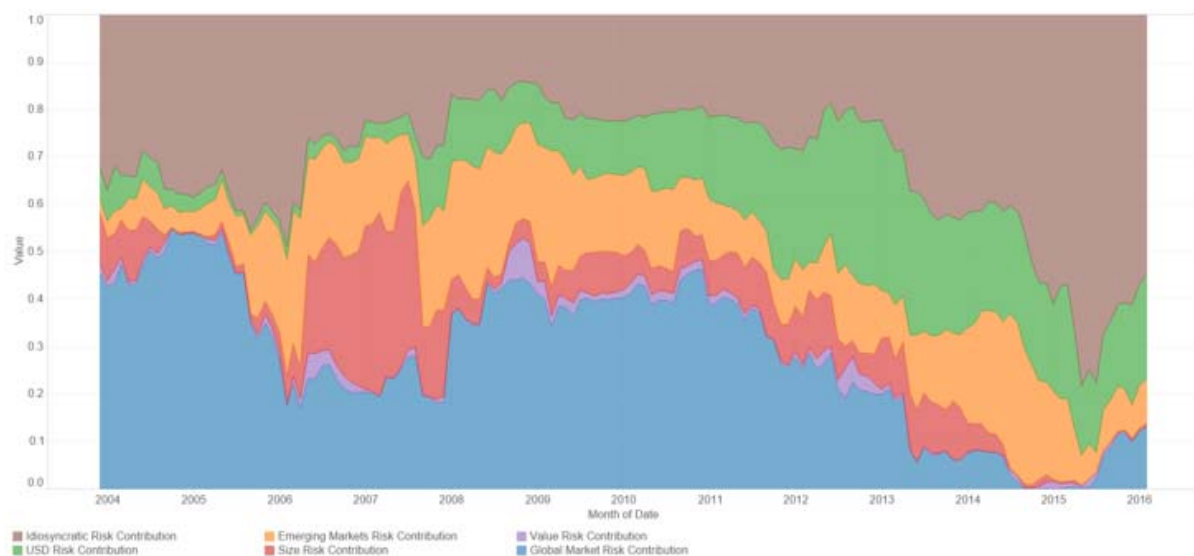
Figure 1 shows the risk contribution or risk "make-up" of the Australian equity market based on a number of global equity market risk factors, namely:

- Global Market Risk – MSCI World GR AUD risk premium to Cash
- Value – MSCI World Value minus MSCI World Growth
- Size – MSCI World Small minus MSCI World Large
- Emerging Markets – MSCI EM minus MSCI World GR
- US Dollar – US Dollar vs Australia Dollar

- Idiosyncratic – i.e. everything else, which I assume may be mostly Australian company specific risks.

Each point on Figure 1 represents a rolling 3-year contribution to risk of the various factors mentioned above.

Figure 1: Australian equities – risk contribution
Benchmark – MSCI World GR AUD – rolling 3 years



Source: Delta Research & Advisory

While numerous studies of managed funds have shown high levels of risk contribution from the market (e.g. more than 90% according to the famous Brinson, Hood, Beebower study of US Pension funds), the contribution to Australian equity market risk from the global equity market has been consistently less than 50% since the start of this analysis in 2001 (don't forget, this is rolling 3-year analysis so the graph starts at 2004).

As you can see, the global Value factor (purple) barely gets a look-in, but there are strong risk contributions from Size (red) until the three years to mid 2014, Emerging Markets (orange) and US Dollar (green), particularly since the three years to mid-2007.

Idiosyncratic Risks (or those risks that can't be captured by the other factors, as shown in brown) are a very large contributor to the total risk of the the Australian equity market, and over the last three to four years contributed between 60% to 80% of total Australian equity market risk.

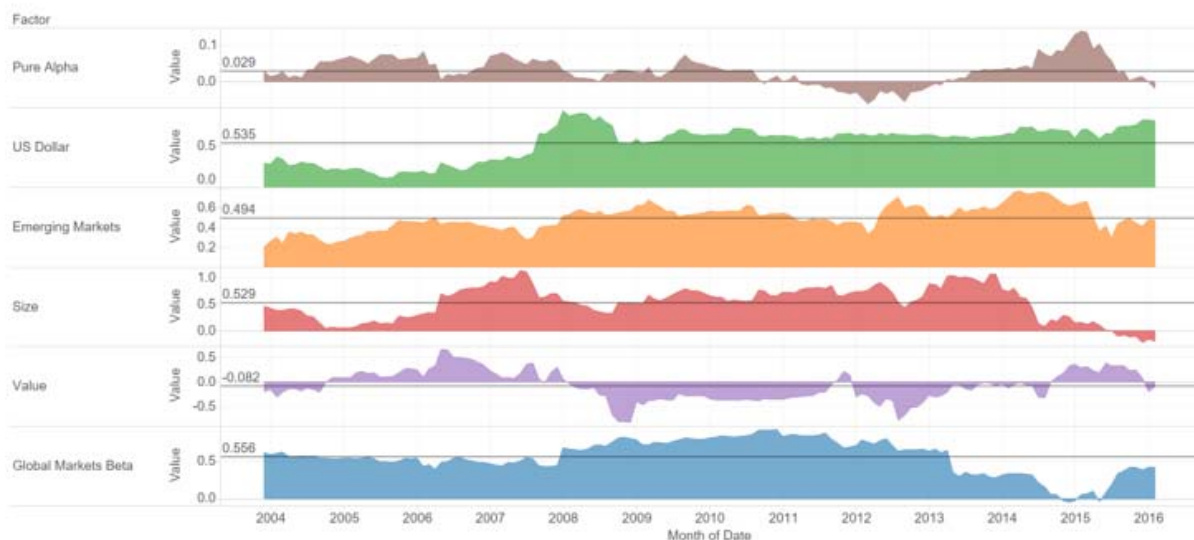
From a portfolio construction perspective, this may be a good thing. Why? Because, these idiosyncratic risks, which are possibly mostly Australian company-specific, are uncorrelated

with global equities and the other systematic factors. This means the Australian equities asset class does bring a reasonable level of diversification to a portfolio – or, at least, a lack of correlation.

So, how big are the risk contributions?

Figure 2 shows that Global Market Beta has averaged around 0.55 over the last 15 years or so, suggesting the Australian market in the context of global equities is a low beta strategy. This risk factor is not the majority contributor to risk of the Australian equities market (Figure 1). So there's a lot more to Australian equities than behaving like a low beta global equities strategy. But, nevertheless, it is still significant and having lower relative risk than the global equity market may not be a bad thing.

Figure 2: Australian equities – size of risk factor exposures
Benchmark – MSCI World GR AUD – rolling 3 years



Source: Delta Research & Advisory

Given its low contribution to overall risk shown in Figure 1, unsurprisingly, the Value risk factor is pretty much zero. It jumps between being value-like (above the zero line) and growth-like (below the zero line) to average slightly growth-like at -0.08 . But it's not at all statistically significant, so can be ignored. The Australian market is neither a value nor growth equity market.

The Size factor has mostly been positive, and strongly so. This suggests the Australian equity market has behaved mostly like a small-cap biased global equities strategy – and considering the average market cap of the Australian market, that should come as no surprise. Let's face it, Australian companies are nowhere near as big as Apple, Microsoft, etc.

In fact, the combined market cap of those two companies alone is more than the market cap of the Australian equity market as a whole.

The Emerging Markets risk factor, which I've treated as an extension to the Global Market risk factor, is also significantly positive. This suggests that the Australian equity market has a positive correlation with the performance of Emerging Markets. However, with levels consistently around 0.5, the Australian equity market also has lower Emerging Markets beta, so has slightly lower price volatility. This is probably our close trading relationship with China coming through, but at least it comes with slightly lower risk.

And the final systematic risk, being the US Dollar relationship with the Aussie Dollar, is also a very significant factor at over 0.5 (up to 0.8 in recent years) suggesting that, on average, when the Australian Dollar falls by 10%, it has a performance drag on the Australian equity market of around 6%. This US Dollar factor might be regarded as an economic factor given the Australian Dollar weakens when the economic outlook weakens, so this result is also not too surprising.

That leaves, the "Pure Alpha" which is the additional return the Australian equities market provides after all of the above-mentioned systematic factors are removed. Given the significant overweight most portfolios have to Australian equities, it is pleasing to note that, since 2001, this higher allocation has produced an average risk-adjusted alpha of a positive 2.9% per annum. The alpha hasn't always been positive, particularly in recovery years following the Global Financial Crisis, but it does suggest the inclusion of the Australian equities asset class in portfolios has been a worthy one. And, these figures don't include franking credits which would add even more alpha (say, around another 1.5% per annum).

To summarise – over the past 15 years, the Australian equities market has been driven by some systematic factors and there is some relationship with global equity markets, emerging markets, global small caps, plus some US Dollar influence. The Australian equity market cannot be considered either value or growth. A large proportion of its performance is probably unique to Australian conditions. Hopefully, the positive alpha that has been generated over that time can continue.



Michael Furey is Managing Director of [Delta Research & Advisory](#), which specialises in providing independent, conflict-free investment research and asset consulting services to dealer groups (AFSLs), financial planners, and self-directed investors. He has worked in the financial planning industry since 1999, both in research and financial planning roles.
