

Aurora Updates

Volatility: Where are we now?

2 July 2015

Executive Summary

- With the close of the 2014-2015 financial year, markets are focused on the global ramifications of the **Greek debt crisis**/potential **exit of the Euro** and the local ramifications of a **Chinese slow down**.
- **Markets are yet to react in any significant way**
 - In the month of June, equity markets were soft with the Australian market off 5.5% and global equity markets only off 2.5%.
 - Despite these recent falls, equity markets are still above the close of 2014: +0.9% for Australia and +1.5% globally.
- Mirroring the very modest equity market moves, **volatility is still firmly in the mid-range:**
 - Australian equity volatility is currently 15.1% (realised) - **only marginally higher than the end of 2014**.
 - Over the last ten years, the Australian equity market has been more volatile than current levels approximately 40% of the time.
 - International markets have been more volatile 60-70% of the last ten years.
- As with all asset volatilities, distributions are heavily skewed with **volatility capable of moving more on the upside rather than downside**.
- **Summary: It is too premature to suggest current macro driven volatility has run its course.**

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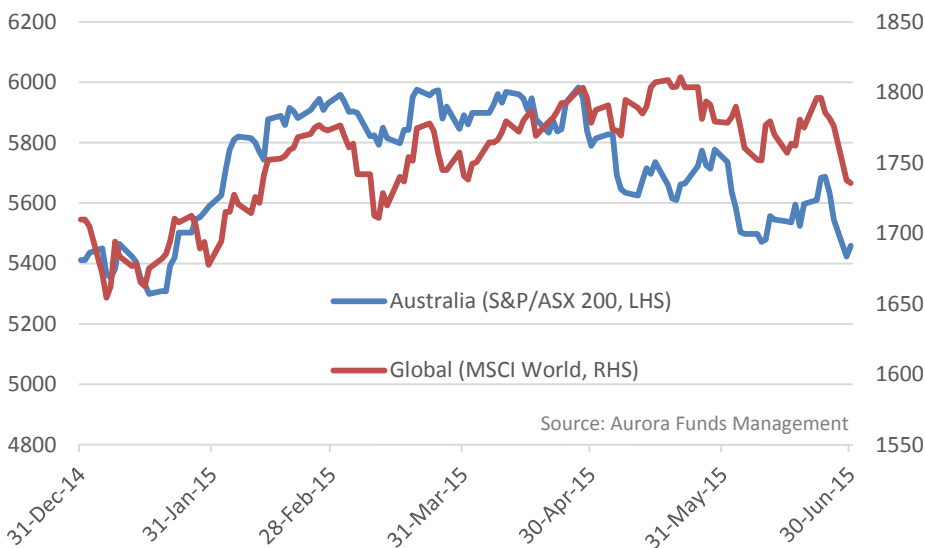
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With the close of the 2014-2015 financial year, markets have become focused on the global ramifications of the Greek debt crisis/potential exit of the Euro and more locally the ramifications of a Chinese slow down. While normally it is trite to be permanently pessimistic, the current situation is significant in that the possibility of asset price contagion is relatively high: UBS forecasts a 40% chance of 'GREXIT' and if this were to arise then a further 40% chance of 'severe contagion'.*

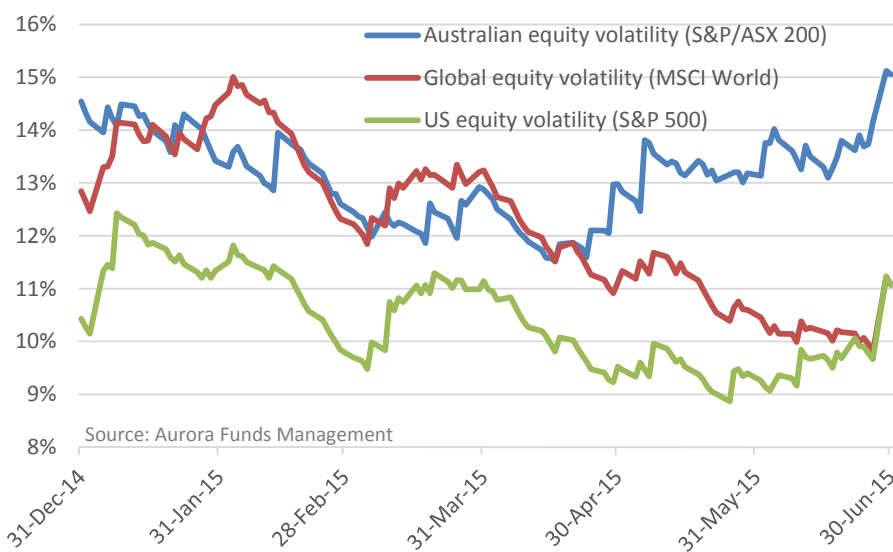
Consequently, the Australian equity market (S&P/ASX 200) fell by 5.5% in the month of June compared to 2.5% for global equity markets (MSCI) and 2.1% for US equity markets (S&P 500). However, these markets are all still marginally higher for the calendar year 2015: Australia up 0.9%, global up 1.5%, and the US up 0.2%. See Figure 1 below.

Figure 1: Australian and Global Equity Market Movements over 2015



Despite these recent market falls, equity realised volatility has barely risen – Figure 2.

Figure 2: Australian and Global Equity Volatility over 2015



In the longer term context, the modest rises in equity volatility volatilities has merely resulted in current levels remaining firmly in the mid-range – see Figure 3 below.

Figure 3: Australian Equity Historic Volatility Time Series and Distribution

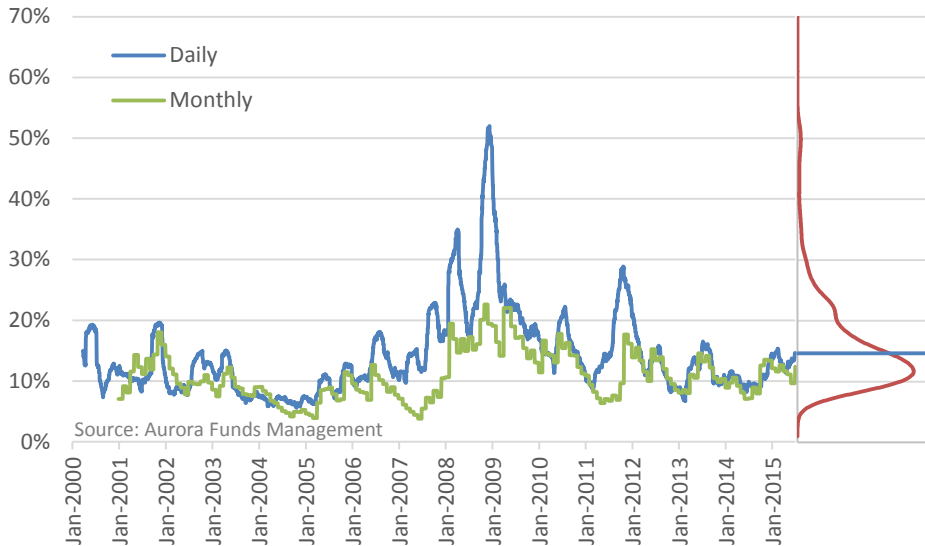
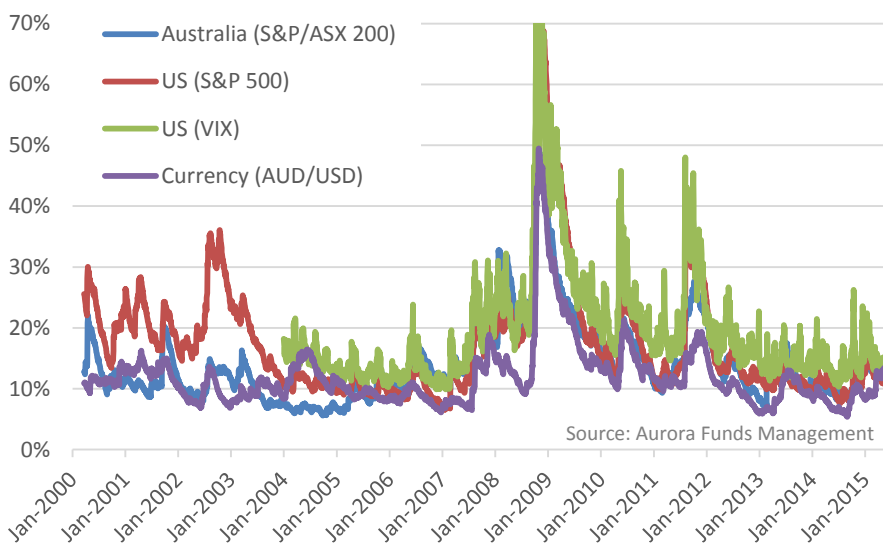


Figure 3 also shows the important characteristic of asset volatilities: volatility has the potential to move significantly more on the upside than downside. Equivalently, it is usual for volatility to be in the low/moderate zone for the vast majority of time, but can rise significantly over a short period of time. Hence, the current levels of approximately 15% are around the median of levels seen in the last 15 years, the highs in volatility over this period have been extreme at over 50% volatility.

The current moderate levels of Australian equity volatility are reflected in other equity markets and other risk assets. See Figure 4 below.

Figure 4: Currency and International Equity Historic Volatility Time Series



Investors who believe a volatility spike may be a non-negligible possibility in the near future need to carefully examine their investments in the current environment. Most, if not all risk assets (equities etc) have a strong negative exposure to volatility – as volatility rises, asset value typically declines sharply. Moreover, many alternative assets would appear to monetise volatility premia and so are also significantly short volatility. The Aurora Fortitude Absolute Return Fund is very different in that our core strategy of maintaining a 'volatility smile' as a portfolio risk management tool generates a positive exposure to volatility through the management of bought option positions. See our note *Aurora Updates: Defensive Strategies and Low Volatility*, 13 August 2014 (available at <http://www.aurorafunds.com.au/category/news-archives-2014/>) for more analysis for this phenomena.

Summary: It is too premature to suggest the volatility cycle driven by these significant drivers has played its course and in our opinion there is a non-negligible risk of an asset volatility spike and/or markets entering a regime of higher levels of volatility seen for the last couple of years. While much has been written on the potential outcomes for the current situation, most signals point to a sustained period of higher volatilities. It is too early in the cycle to short volatility.

* Yianos Kontopoulos et al, 'Greece and the Markets: The Only Thing to Fear is...', *UBS Research*, 28 June 2015.

Note

The Aurora Fortitude Absolute Return Fund (ARSN 145 894 800, APIR Code AFM0005AU) has been issued by Aurora Funds Management Limited.

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