Volatility Report
February 2008

Executive Summary

- The opening month of 2008 witnessed further market weakness with inflation, stagflation, recession and property meltdown never far from barstool discussions or page 1 headlines. Wall Street fell 6% as measured by the S&P 500 – more by the broader indices, Europe 11%, Japan 11% also and the UK 9%. The biggest casualties however were the smaller and emerging markets, which had previously appeared to offer the hope of contrarianism as developed markets slumped in the closing months of 2007. HK was down 15%, China 14% and India 16%.
- Volatility, however, stabilised somewhat in January; the VIX holding ground around 25% after its 07 "high" of 31% and its December close of 23%.
- Clearly, Central Bank measures aimed at averting local (particularly in the US) and global recession were designed to calm investor nerves but there remain worrying signs of, at worst, growth stagnation – as distinct from the greater evil of stagflation. These "designs" did not work with canny investors proving to have read between the lines of their PR.
- What this means for global markets in the short term is anyone's guess – despite broker, trader and financial journalist consensus that "now" is **the** buying opportunity to end all buying opportunities! For risk/volatility there is, however, little chance of reversion to long-term mean – so investors will need to stay on their mettle to avoid either rebound or backlash.
- Interestingly, there appears to be growing preoccupation with quant strategies and the impact these are having on market risk; on the one hand, expecting the hedge characteristics of derivatives to contain volatility, only to discover that unexpected and unpredicted illiquidity of many derivative instruments is proving the hedgers wrong. This in turn is contributing to pockets of dramatic volatility as brokers, traders and asset managers – the trinity of action in this arena - struggle to unwind exposed positions. More to come on this front we fear.
- Finally, commodities – hard is proving "very hard" – oil over $100 , gold nudging $950 – but "soft" is proving even harder – wheat up 25% in one day this month and up 85% year-on-year – palm oil, maize and sugar all higher too – last month's wheat chart is updated – and palm oil, maize and sugar added for elucidation.

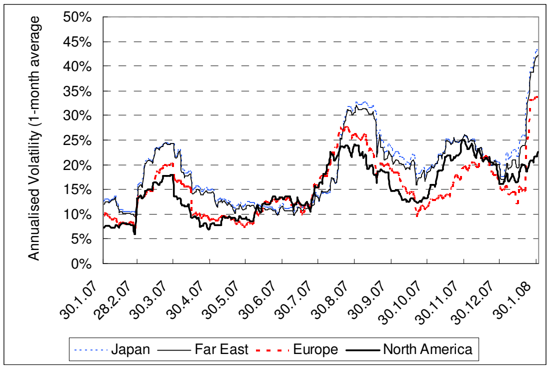
Author: Peter Jeffreys

Equities

Volatility: Regions

Intra-regional volatility revealed some marked variations; Japan volatility soaring to 43.5% from 17.6%, Far East 42.3% vs. 17.1%, Europe 33.8% vs. 14.9% and the US comparatively stable at 22.7% against 16.2% at the previous month end. This represented a sharp turnaround from December where, with the benefit of hindsight, emerging optimism was proved to have been a false dawn.

Volatilities have begun to rise already surpassing the highs of 2007

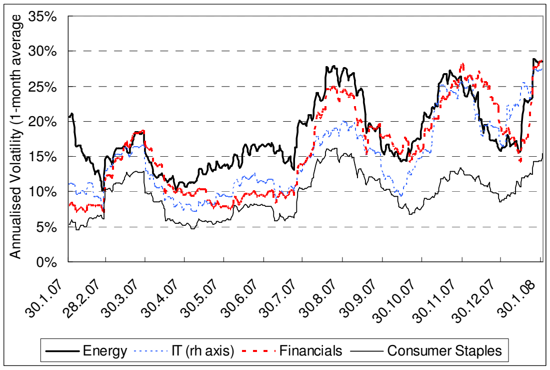


Note: based on MSCI regional indices

Volatility: Sectors

A similar pattern in sectors with marked increases in the second half of January; oil volatility jumping from 16% to 29% and financial sector volatility from 16% to 28%.

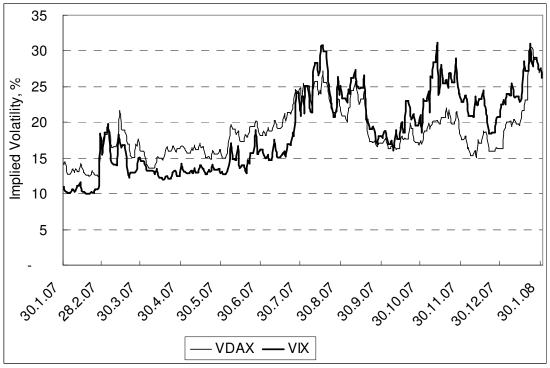
Sector volatilities have begun to rise



Implied Volatility (Market-Implied Near Term Outlook)

Although the VIX recorded a further rise in the first half of January, there were some signs of stabilisation towards the month end. VIX topped at 31.1% in mid-January retracing to 26.2%.

The VIX (US) and VDAX (Germany) are both implying that equity volatility will remain (very) high over the next month

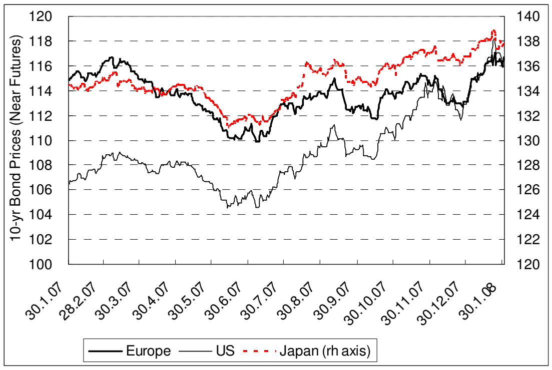


Fixed Income (10 Year Government Bonds)

Prices

Central Bank intervention, with Fed Funds cut by 125 bps in two bites in January, kept fixed income prices rising – the US index up from 113.4% to 116.7% and comparing with last year's low of 104.6%.

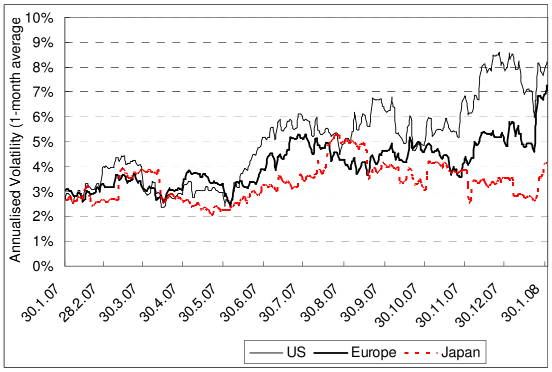
10-Year bond prices are on the rise



Volatility

Fixed income volatility also rose – in the US from a mid-month low of 6.9% to 8.2%. Europe up form its month low of 4.6% to 7.3% and Japan up from 2.7% to 4.1%

10-Year bond price volatility remained high, Europe hit a new 12-month high

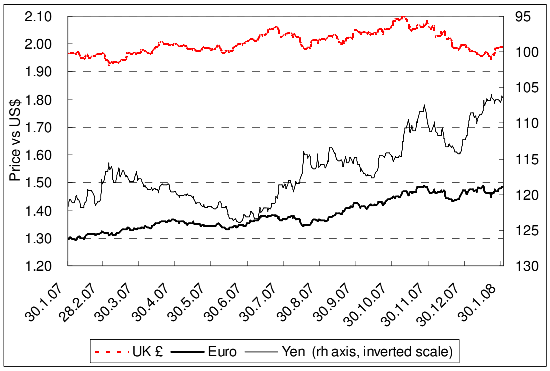


FX

Prices

January was all about the Euro – gaining against USD, GBP and the Yen.

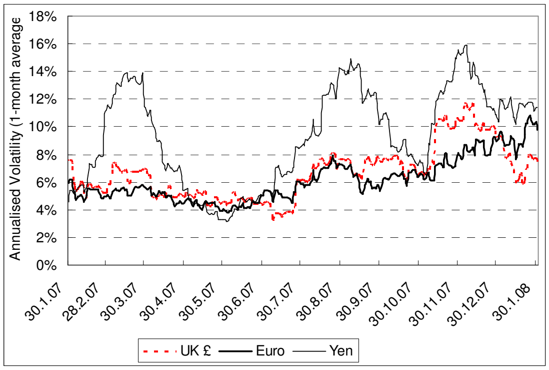
The Dollar continued to weaken



Volatility

FX volatility, however, appeared more stable after last year's gyrations – Euro volatility rising from 9.1% to a modest 9.8%, Yen from 10.3% to 11.4% with GBP bucking the trend with volatility falling from 9.4% to 7.4%.

FX Volatility has stabilised

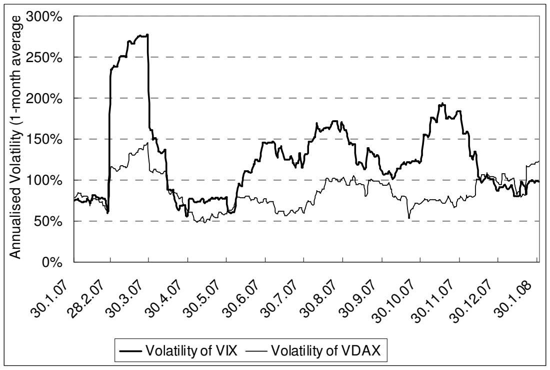


(Equity) Options

Volatility of Implied Volatility

Against the dramatic swings of last year, 2008 appears to have started in more docile manner but looking behind the chart shows volatility of VDAX up from 94.1% to 123.1% in the month. Although below the April 07 peak of 145.8%, it is interesting to note that VDAX has broken out of mid-07 highs around the 100% level.

Volatility of volatility rose in the Europe while in the US remained relatively stable



Note on Treatment

Options show more complex behaviour than the other instruments we look at in this report, so we make some simplifying assumptions. As Calls and Puts are in effect polar opposites and in and out of the money options behave very differently, it is hard to generalise all options' behaviour. However, we look at the two key drivers: volatility of implied volatility and major price movements of the underlying security.

Implied volatility (via the option Vega) drives option prices, so a big indicator of option price volatility is the "volatility of implied volatility".

Of course the biggest driver of individual option prices is the movement of the underlying (via the option Delta): a move in either direction will cause the option to go in or out of the money (and a corresponding change in the option Delta and price volatility). As a proxy for this, we look at the 30-day price swing of equity market indices; options on bonds or FX could of course behave differently. Calls and Puts will respond in opposite fashions: calls becoming more volatile as prices rise.

Note on Convertibles

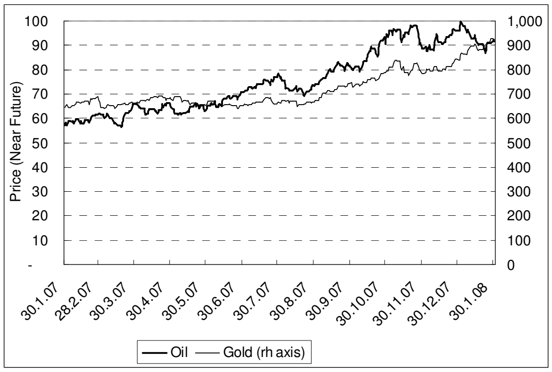
Convertibles are in effect a combination of a bond and a call option, with the bond portion usually making little contribution to the instrument volatility unless the option is out of the money. As such, convertible portfolios' volatilities will normally behave similarly to call option portfolios, and this commentary can be applied to convertibles as well as options.

Commodities

Prices

Little respite from last year's surges; gold up from $835 to $923 over the month, oil down from $96 to $92 – but to be proved short lived with the price back to the $100 level in early February.

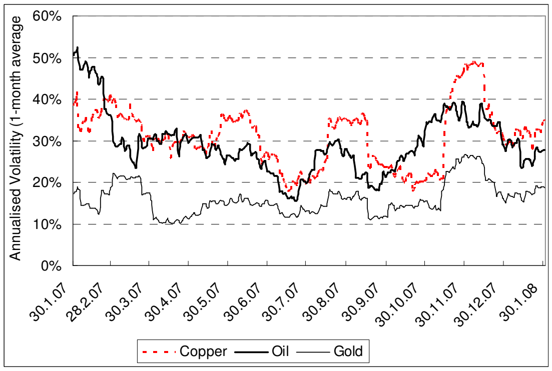
Oil prices rose again and the Gold price continued its march upwards



Volatility

Little to add to last month's comment; a more stable picture but like equity markets in December, perhaps to be proved short-lived?

Volatility rose for Oil

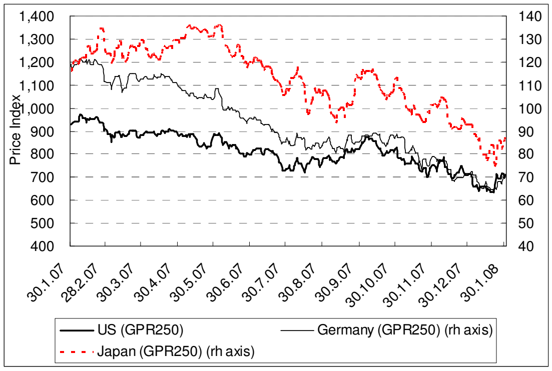


Real Estate (Real Estate Equities)

Prices

A continuation of last year’s trend – much publicised so little by way of constructive comment to be added.

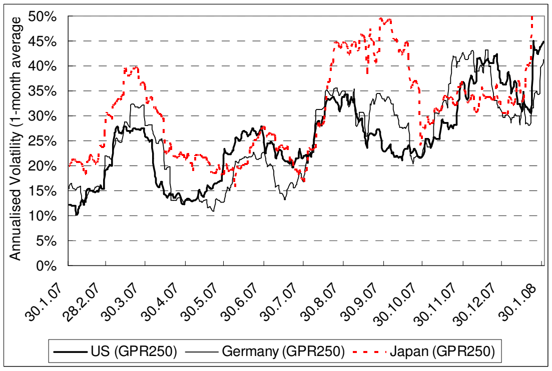
Real Estate prices were flat to down



Volatility

Real Estate volatility, however, was a different story; Japan’s real estate volatility doubled to 60.8% in the month of January on the back of a 5% month-on-month price drop but with some very sharp intra-month volatility – a one day 22% move on 22nd January for example accompanying a price correction of 8.3% on the same day.

Real Estate volatility levels remain high



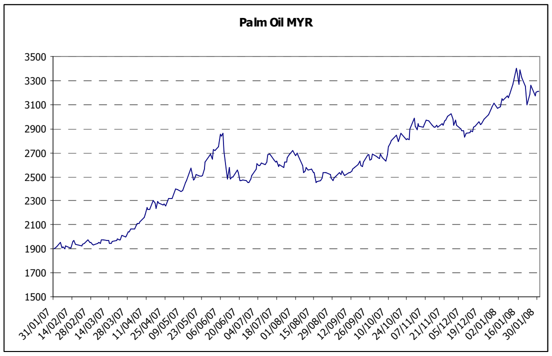
Note

Note that for property we just look at indices of the share prices of property companies, and not the underlying property directly, for which little data is available. This is usually consistent with funds which tend to invest in property indirectly, e.g. via REIT’s.

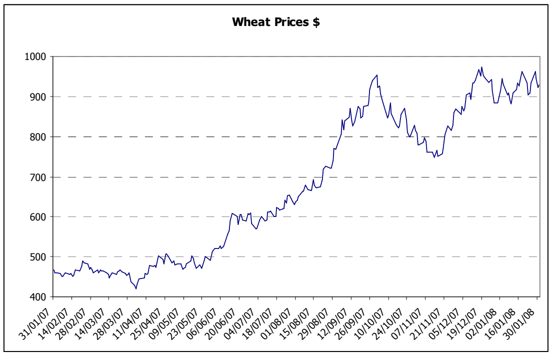
As REIT’s are usually focussed on commercial property, residential housing may also follow a slightly different pattern to that discussed in this article.

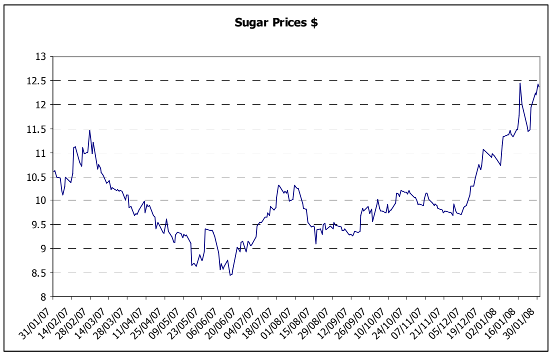
Wheat

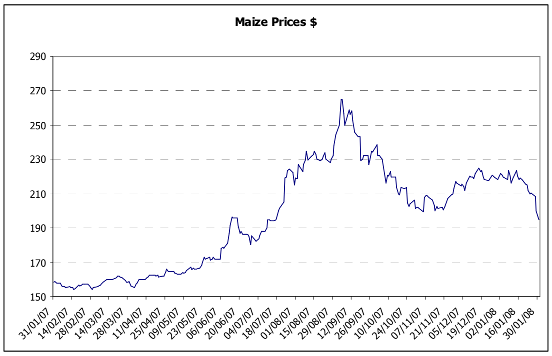
A month-on-month rise of 5% in wheat futures, year-on-year plus 85% - speaks volumes and should have prepared us perhaps for the one-day rise of 25% in early-February. We have updated last months chart and also added palm oil, maize and sugar – also speaking volumes – and for themselves. Not to be ignored!



The amazing rise of soft commodities







Definitions

To avoid repetitions, the term volatility refers to annualised, 30-day average realised volatility in local currency unless otherwise specified. As such it may be lower than, and lag, shorter-term market volatility in times of high market volatility.

Disclaimer

The commentary does not constitute and is not intended to constitute investment advice.

Any views expressed in this report are based on historical market data and as such cannot be interpreted as being forward-looking, or to constitute forecasts. Past movements are not necessarily indicative of future movements.

Employees of IRML may hold positions in securities mentioned.

All expressions of opinion reflect the judgment of IRML at this date and are subject to change. Information has been obtained from sources considered reliable, but we do not guarantee that the report is accurate or complete.

This document is not for US clients or distribution to the US.