



Investment Update May 2012

Investment Headlines & Comment

- **Eurozone fears** drive investors into US and UK government bonds, whose yields hit new lows.
- **Spanish 10-year yields** return to levels last seen in 1997. €100bn of capital moved out in Q1 2012.
- **Commodities** were down 13% in US \$ terms this month, mostly due to falls in the oil price.

Feature Section

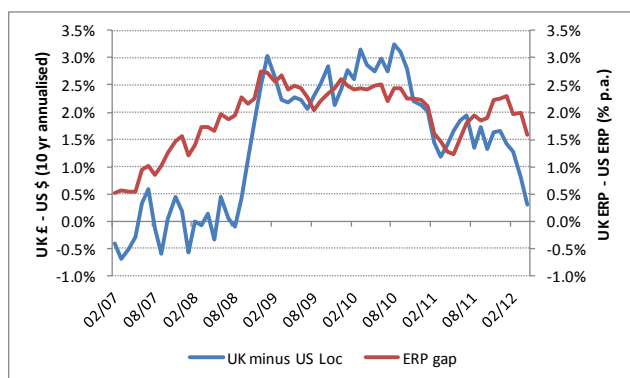
This month sees the 150th edition of Investment Update, although it may just get swamped by other Royal anniversary celebrations. 150 is a good number if you are an arithmetic anorak (it is “abundant”, and a “Harshad” number [in base 10], and the sum of eight consecutive primes ... **Ed:** ok, we get the idea), and some Rubik’s Cubes had 150 coloured squares on them – they were made with 6 faces of 5x5 instead of having 6 faces of 3x3 (and called Professor Cubes to reflect their difficulty).

For this edition of Update, Stagecoach’s Derek Scott noted how Update’s readership has increased over time (currently just under 400). He pointed out the aspect of 150 we could start with is *Dunbar’s number* – this is a suggested limit for the number of people with whom one can maintain stable social relationships. (**Ed:** What do you divide by to get the actuaries’ version?!) It may not be immediately obvious how this ties in with investment, but here goes. Dunbar’s number was first proposed by the British anthropologist Professor Robin Dunbar, who theorized that this limit “... is a direct function of relative neocortex size [**Ed:** part of the brain], and that this in turn limits group size”. He also established that it was species-dependent. His statistical analysis of primates suggested that 60 was relevant for chimpanzees, but 150 was a reasonable approximation for the limit for humans, and indeed 150 is cited as the estimated size of a Neolithic farming village. More recent analysis suggests the concept is applicable to online social networks as well (**Ed:** so it seems people can have too many online “friends” after all).

Dunbar’s “limit” element could also apply in investment. For example, it is an argument against investing in retailers with too many branches, or in firms growing too much through acquisition (because of the resulting reduced cohesion) – you only have to think of certain disastrous bank takeovers in the last decade. Dunbar’s number also gives an argument for why extremely large investment firms might lag their smaller counterparts. Some large firms get round this by having smaller divisions or boutiques within them, or by having joint ventures with boutiques by providing their compliance / back-office. Perhaps this is enough, but could the units break away and be happier as a result?

Interestingly, analysis by US anthropologists led to their own version, the Bernard–Killworth number, which has been evaluated at roughly double the Dunbar figure. Everything does seem bigger in the US. This in itself has a (tenuous) investment parallel – most of the time, the US stock market trades on a substantially higher price/earnings ratio than does the UK market (on average 25% higher, which is evidenced by FT All World data). Even though US index-linked government debt (TIPS) trades on a higher real yield than UK ILGs, the resulting Equity Risk Premium* is much lower for the US as a result of their P/E ratios. The comparisons can only really be done from 1997 onwards (when TIPS started), but interestingly we have found there is over 80% correlation between (a) the “UK minus US” ERP gap at a given date and (b) the relative return (both markets in local currency) over the following 10 years from that date. Figure 1 shows the outputs. Note that the “UK minus US” ERP gap has been positive in the entire dataset from 1997 onwards!

Figure 1: UK and US Equity markets



Sources: FT, J&A

* As per our November 2009 issue, we are using the earnings yield minus the real government yield, with a start position of earnings expected to grow in line with inflation on average.

So, if there is any meaningful degree of causation (i.e. any real truth in the statement “the UK ERP being greater than US ERP implies the UK equity return is expected to be higher than the US local market equity return over the following ten years”) then it follows that UK-based equity investors should be biasing their portfolios back to the UK, rather than increasing their exposure to US markets. The exception would be if they feel that UK-listed companies are more prone to default than US ones (hence earnings would not grow with inflation), but it’s not clear why that might be thought, given UK-listed does not equate to UK-centric.

There is arguably a parallel here with the situation in 2011 when it was cheaper to access Emerging Markets through multinationals operating in those regions rather than trying to invest directly in the relevant countries, but that doesn’t stop some investor herds. All of which is a long way from Prof Dunbar and his groups of monkeys ... or is it?!



Asset Returns and Financial Measures [in Sterling unless marked otherwise]

The cells in bold with light shading show the best and worst performing asset classes from each column. The commodities and \$-based and unhedged-£-conversion hedge fund returns are excluded from that.

[NB Future returns cannot be inferred from this table alone, but coupled with other items within *Update*, readers can make inferences as to whether they should be higher or lower than the past returns shown below.]

Table 1: Investment Data to 31 May 2012

| Asset Class | 1 month (%) | 3 months (%) | 12 months (%) | 3 years (% p.a.) | 5 years (% p.a.) | 10 years (% p.a.) | 20 years (% p.a.) |
|------------------------------------|-------------|--------------|---------------|------------------|------------------|-------------------|-------------------|
| UK Equities | -7.0 | -8.2 | -8.2 | 10.7 | -0.8 | 4.7 | 7.4 |
| Overseas Equities | -3.6 | -5.7 | -5.8 | 11.1 | 2.2 | 4.8 | 7.7 |
| US Equities | -0.8 | 0.1 | 6.4 | 16.7 | 4.4 | 3.9 | 8.0 |
| Europe ex UK Equities | -8.0 | -13.5 | -24.3 | 2.6 | -4.2 | 4.1 | 9.0 |
| Japan Equities | -3.9 | -7.2 | -3.9 | 2.3 | -2.6 | 1.0 | 1.6 |
| Pacific ex Japan Equities | -5.4 | -9.5 | -11.8 | 12.3 | 6.4 | 11.1 | 8.4 |
| Emerging Markets | -6.3 | -11.9 | -14.5 | 9.9 | 5.6 | 12.5 | 8.6 |
| UK Long-dated Gilts | 7.5 | 6.1 | 27.0 | 14.0 | 10.6 | 8.0 | 9.2 |
| UK Long-dated Corp. Bonds | 4.1 | 2.9 | 12.8 | 14.1 | 7.0 | 6.6 | - |
| UK Over 5 Yrs Index-Linked Gilts | 3.5 | 2.8 | 20.4 | 13.3 | 10.6 | 8.4 | 8.3 |
| High Yield (Global) | 2.7 | 1.8 | 7.7 | 17.9 | 12.7 | 8.7 | - |
| Overseas Bonds | 5.5 | 4.2 | 10.8 | 7.6 | 13.5 | 7.0 | 7.5 |
| Property * | 0.2 | 0.7 | 6.1 | 11.9 | -1.9 | 6.4 | 8.4 |
| Cash | 0.1 | 0.3 | 1.0 | 0.8 | 2.5 | 3.5 | 4.9 |
| Commodities £-converted | -8.2 | -12.3 | -10.7 | 3.5 | -0.2 | 3.1 | 3.9 |
| Hedge Funds original \$ basis * | -0.5 | 1.4 | -4.3 | 7.9 | 2.2 | 6.1 | 10.4 |
| Illustrative £-converted version * | -2.1 | -1.5 | -1.7 | 4.7 | 6.5 | 5.0 | 10.9 |
| Euro relative to Sterling | -1.4 | -4.1 | -8.0 | -2.9 | 3.4 | 2.3 | - |
| US \$ relative to Sterling | 5.5 | 3.8 | 7.0 | 1.6 | 5.2 | -0.5 | 0.9 |
| Japanese Yen relative to Sterling | 7.5 | 7.1 | 10.8 | 8.4 | 14.8 | 4.2 | 3.4 |
| Price Inflation (RPI) * | 0.7 | 1.9 | 3.5 | 4.7 | 3.4 | 3.3 | 2.8 |
| Price Inflation (CPI) * | 0.6 | 1.5 | 3.0 | 3.7 | 3.3 | 2.6 | 2.2 |
| Price Inflation (RPIX) * | 0.7 | 1.9 | 3.5 | 4.7 | 4.0 | 3.3 | 2.9 |
| Earnings Inflation ** | 4.2 | 10.3 | 0.1 | 2.9 | 2.5 | 3.6 | 4.0 |
| All Share Capital Growth | -7.5 | -9.3 | -11.5 | 7.0 | -4.3 | 1.1 | 3.8 |
| Net Dividend Growth | 1.5 | 5.3 | 13.8 | 0.8 | 2.4 | 4.5 | - |
| Earnings Growth | -4.2 | -5.3 | 4.7 | 8.2 | 1.0 | 9.7 | - |

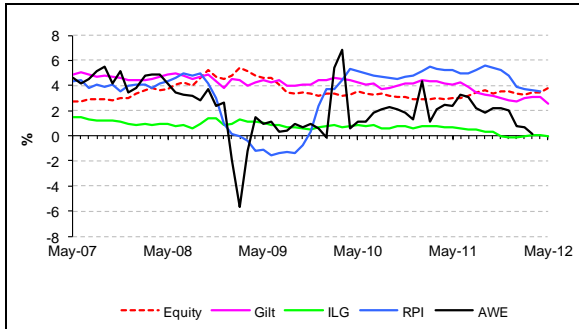
Note: All market returns are total returns for pension funds with income reinvested monthly. Indices used are as follows:

- UK Equities (incl. dividends and earnings) – FT-A All Share.
- Overseas Equities (incl. regions) – blend of FT All-World / World subindices
- Emerging Markets from MSCI US \$ based total return index (overall Index to 31 Oct 2001, Free Index from 1 Nov 2001 to take account of foreign investment restrictions), conversion to UK £ by J&A.
- UK Bonds – FT-A indices (Gilts Over 15 Years, ILG Over 5 Years)
- UK Corporate Bonds – iBoxx Non-Gilt Over 15 Year index (all credit ratings combined)
- High Yield – Merrill Lynch Global, £ Unhedged
- Overseas Bonds – JP Morgan Traded Unhedged World ex UK
- Property – IPD Monthly Index
- Commodities – GSCI Total Return, converted to UK £ by J&A
- Hedge Funds Composite – HFRI US \$ based total return index plus converted to UK £ by J&A. NB A smooth “cash+x%” return will only be shown in the base ‘hedged’ currency, here the US \$.
- Cash – an indicative index based on the three-month London Interbank Sterling mid-rate, calculated internally by J&A
- Price and earnings inflation – RPI, CPI, RPIX, and Average Weekly Earnings (whole economy, not seasonally adjusted, latest provisional data)
- Currency data – London close, from the Financial Times
- * denotes data lagged by 1 month, ** by 2 months – these reflect the later publication dates of these data items.

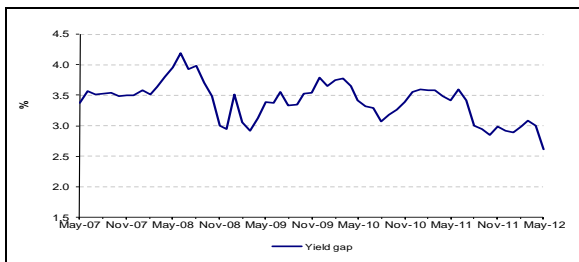


Yields and Yield Gaps

Figure 2: Yields, Inflation and Yield Gaps



The yield gap is a measure of expected average future inflation, derived as long bond yield minus ILG yield.

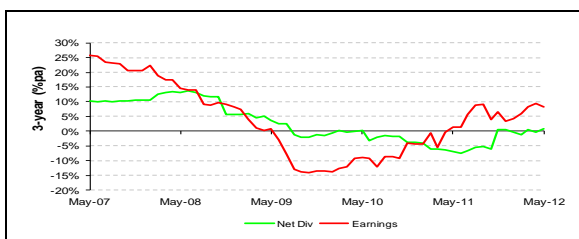
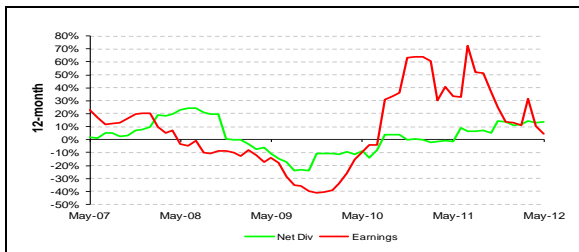


The gap gives expectations dropping to just over 2.5% for longer-term inflation + risk premium for gilts, relative to index-linked gilts.

Growth in Earnings and Dividends

These charts show movements in rolling 12-month and 3-year dividend and earnings growth for UK Equities over the last 5 years. [NB the charts have different scales]

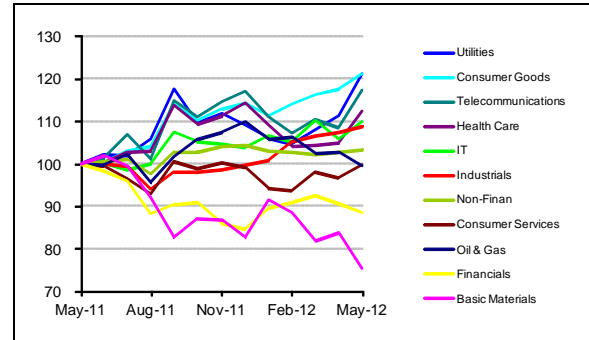
Figure 3: Dividend & Earnings Growth



Sources for charts on this page:
Financial Times, Office for National Statistics, J&A

UK Equity Sector Returns

Figure 4a: Sectors relative to All Share



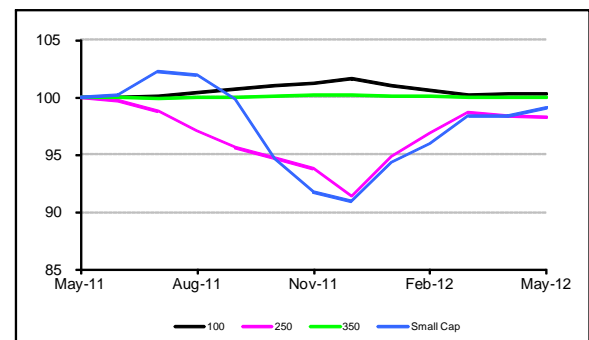
Note: Sector labels for relative lines are in end-value order

There was a slight rise this month in the rolling 12-month sector dispersion (up from 44% to 46%).

| (% absolute return) | 1 mth | 3 mth | 12 mth |
|---------------------|-------|-------|--------|
| Oil & Gas | -9.9 | -14.1 | -8.7 |
| Basic Materials | -16.6 | -21.9 | -31.0 |
| Industrials | -5.9 | -5.1 | -0.1 |
| Consumer Goods | -4.2 | -2.5 | 11.2 |
| Health Care | -0.6 | -0.9 | 3.1 |
| Consumer Services | -4.0 | -2.2 | -8.4 |
| Telecommunications | 0.5 | 0.6 | 7.7 |
| Utilities | 1.2 | 6.3 | 11.3 |
| Non-Finan | -6.4 | -7.6 | -5.1 |
| Financials | -9.3 | -10.6 | -18.8 |
| IT | -3.4 | -4.1 | 0.8 |
| All Share | -7.0 | -8.2 | -8.2 |

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



Small Cap rose slightly in relative terms this month.

FRS17 volatility indicator

Now discontinued, but available on request.



Bond market information

Figure 5: £ Non-Gilt Credit Margins

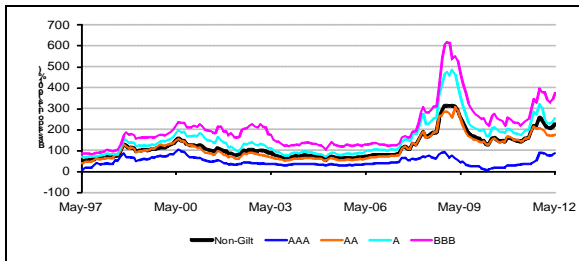


Table 2a: Over 15 Yr Corporate Yields & Margins

| Month End | iBoxx Corp AA Y'ld (%) | FT 20 yr Gilt (%) | Margin (%) |
|-----------|------------------------|-------------------|-------------|
| Dec 11 | 4.63 | 2.78 | 1.85 |
| Jan 12 | 4.55 | 2.75 | 1.80 |
| Feb 12 | 4.47 | 2.95 | 1.52 |
| Mar 12 | 4.57 | 3.09 | 1.48 |
| Apr 12 | 4.56 | 3.05 | 1.51 |
| May 12 | 4.18 | 2.54 | 1.64 |

Tables 2b, 2c: £ Market Size and Maturity

| Category | Mkt Val (£bn @ May 12 & 09, 06) | | | Weight (%) |
|-------------------|---------------------------------|-----|-----|------------|
| Gilts (35) | 1,052 | 602 | 306 | 68.1 |
| Non Gilts (1,011) | 494 | 422 | 386 | 31.9 |
| AAA (161) | 132 | 145 | 148 | 8.5 |
| AA (142) | 619 | 57 | 59 | 4.0 |
| A (366) | 173 | 144 | 117 | 11.2 |
| BBB (342) | 128 | 74 | 59 | 8.3 |

| Category | Mkt Val (£bn @ May 12, 09) | | W't (%) | Dur'n (yrs) |
|-------------------|----------------------------|-----|---------|-------------|
| Gilts (35) | 1,052 | 602 | 68.1 | 10.1 |
| < 5 Yrs (9) | 274 | 177 | 17.7 | 3.0 |
| 5-15 Yrs (11) | 349 | 206 | 22.5 | 7.1 |
| > 15 Yrs (15) | 430 | 220 | 27.8 | 17.2 |
| Non Gilts (1,011) | 494 | 422 | 31.9 | 7.9 |
| < 5 Yrs (273) | 128 | 150 | 8.3 | 2.8 |
| 5-15 Yrs (457) | 211 | 159 | 13.6 | 7.1 |
| > 15 Yrs (281) | 155 | 114 | 10.0 | 13.2 |

Sources: Barclays Capital, DMO, iBoxx, J&A, MLX

£ Gilt Market “main” Issuance

- £1.50bn 5% 2014 (3.67x, 0.35%, Sep 10)
 - £4.12bn 4½% 2019 (1.79x, 1.50%, Jun 09)
 - £2.91bn 5% 2025 (2.09x, 2.25%, Feb 12)
 - £2.20bn 4½% 2042 (2.22x, 3.22%, Mar 12)
 - £1.20bn ILG ¾% 2034 (1.93x, r.y 0.05%, Mar 12)
 - £4.00bn ILG ⅜% 2062 (2.75x, r.y 0.04%, Feb 12)
- Note: Issuance amounts are nominals.

Tables 2d, 2e: € Market Size and Maturity (May 12)

| Category | Mkt Val (€bn) | Weight (%) |
|------------------|---------------|------------|
| Sovereigns (258) | 4,333 | 57.7 |
| Non Sovereigns | 3,178 | 42.3 |
| AAA (569) | 1,207 | 16.1 |
| AA (442) | 629 | 8.4 |
| A (785) | 902 | 12.0 |
| BBB (523) | 440 | 5.9 |

| Category | Mkt Val (€bn) | Weight (%) |
|------------------|---------------|------------|
| 1 – 3 Yrs (860) | 2,146 | 28.6 |
| 3 – 5 Yrs (732) | 1,729 | 23.0 |
| 5 – 7 Yrs (365) | 935 | 12.5 |
| 7 – 10 Yrs (410) | 1,371 | 18.3 |
| 10+ Yrs (210) | 1,329 | 17.7 |

Table 2f: Breakdown of £ Index-Linked Market

| Category (Number of issues) | Mkt Val (£bn @ May 12 & 09) | | W't (%) | Dur'n (yrs) |
|-----------------------------|-----------------------------|-----|---------|-------------|
| Gilts (19) | 356 | 179 | 92.2 | 17.7 |
| < 5 Yrs (2) | 50 | 33 | 12.9 | 2.7 |
| 5 – 15 Yrs (4) | 90 | 61 | 23.2 | 8.5 |
| > 15 Yrs (13) | 217 | 84 | 56.1 | 25.0 |
| Non Gilts (47) | 30 | 18 | 7.8 | 17.6 |

Table 2g: High Yield bond yields (BB-B indices)

| Month End | US (%) | Euro (%) | Sterling (%) |
|-----------|-------------|-------------|--------------|
| Jan 12 | 6.99 | 9.40 | 10.21 |
| Feb 12 | 6.65 | 8.36 | 9.40 |
| Mar 12 | 6.78 | 8.12 | 9.27 |
| Apr 12 | 6.68 | 8.58 | 9.47 |
| May 12 | 7.16 | 9.31 | 10.63 |

