JAGGER & ASSOCIATES

Investment Update
March 2008

Investment Headlines & Comment

- **Market turmoil** in financials was the dominant story this month. As they account for 25% of the UK market, daily volatility was high, although the All Share ended the month only slightly down.
- *Update* started in December '99. Back then, RPI was 1.8% (yes, really), real gilt yields were steady at 2%, but the TMT equity bubble was about to burst (UK shares returned –14.2% pa for 2000-02).

So, this is our **Issue 100 - competition with prizes!** Submit 150 words max to us by 23 April, on "has anything really changed in investment since *Update* issue 1, or has it just been re-packaged?"

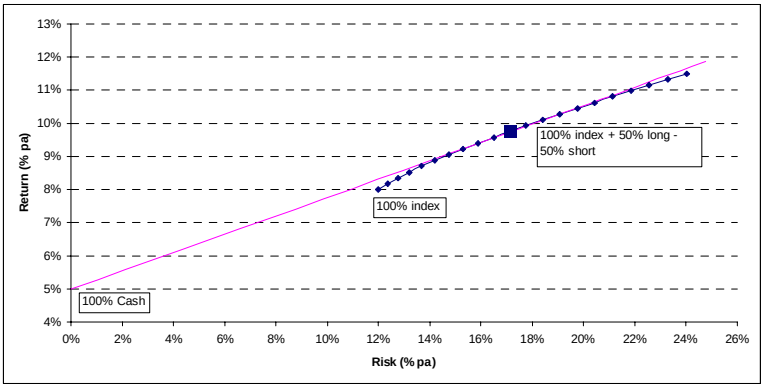
Feature Section

This month we conclude our review of 130/30 investing begun last time. Something to watch before starting is whether a 130/30 product means "100% index + 30% long – 30% short" (100/30/30), or an absolute "130% long – 30% short" (which might be better labeled as 0/130/30 than just 130/30). If you are trying to control risk relative to a chosen index, the latter structure can involve risk from taking positions relative to the index without going short in absolute terms (eg holding 0% in a stock with a 1% index weighting – no shorting in absolute terms, but 1% short relative to the index). So, 0/130/30 might be closer to 100/50/50 than 100/30/30.

With that headache on interpretation out of the way, it is fair to ask whether 130/30 is clearly better than another weighting. For our modeling, we take it as the 3-component "100% index + x% long - x% short" approach, and vary x% from 0% through to 100%. Key assumptions are not just the extent to which the 'long' and 'short' portfolios are expected to out- and under-perform the index, but also how much correlation there is between the three components. (For simplicity, we assume that all 3 have the same amount of volatility.) Unsurprisingly, the "100%" risk is going to be much higher than the "0%" risk. The question is whether there is any risk-reduction at lower values for x% (which would in turn explain why 130/30 would be deemed better than 100/0).

We started by assuming some slight outperformance of the index by the "long" portfolio, and more material underperformance by the "short" portfolio (i.e. that the investment manager has skill on both sides of the product). Intuitively, the "long" portfolio will still have reasonable correlation with the index (assuming a market's trend is to rise over time in nominal terms), but the "short" portfolio should have low (or negative) correlation with the index, and likewise with the "long" portfolio. We were unable to derive a set of correlations that led to any risk-reduction at lower values for x% - it was more a case of finding sets that minimized the additional risk. So, another method is needed for the concept of an "optimal" x%.

Figure 1: Modelling output



The easiest way is to introduce cash as a risk-free asset, and to find the most efficient mix of it with an equity portfolio based on the 3 components. Figure 1 shows the results – the blue line is for varying the 3 components alone (with the diamonds marking steps of 5% in the long/short weighting), the red line shows the move from 100% cash to the blue square, being 100% in the optimal 3-components mix (the line is tangent to the blue curve, for those who remember their maths). For the line beyond the square, you would be borrowing cash to gear up into more equities.

The blue line's curvature is not particularly pronounced, which acts as a clear reminder that although 130/30 is about adding return, this does come with increased volatility. The blue square brings out neatly the point about how you define 0/130/30. The red line is not far from where a line joining "100% cash" and "100% index" would be, so the diversification benefit from introducing the cash and the long & short portfolios is fairly limited, compared to just considering the "100% index". On this modelling, at the index's risk level, it would add barely 0.3% pa to the return before acceptance of increased risk was required.

Asset Class Returns

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 this.
[**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 March 2008

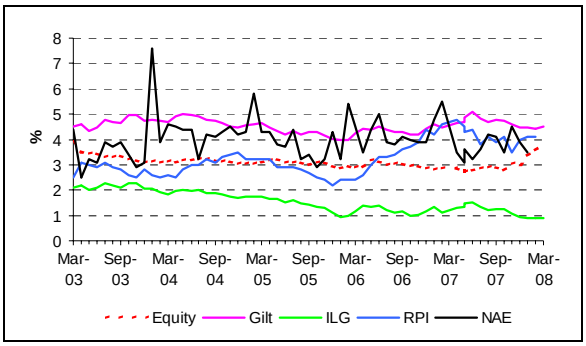
Asset Class	1 month (%)	3 months (%)	12 months (%)	3 years (% p.a.)	5 years (% p.a.)	10 years (% p.a.)
UK Equities	-2.1	-9.9	-7.7	9.5	14.7	3.5
Overseas Equities	-1.3	-8.9	-0.9	10.4	12.7	4.2
US Equities	-0.5	-9.3	-6.2	4.6	6.7	**1.9**
Europe ex UK Equities	1.7	-7.7	3.3	16.8	21.1	6.5
Japan Equities	-3.7	-7.2	**-15.4**	4.1	9.6	2.3
Pacific ex Japan Equities	**-5.6**	**-13.3**	15.0	22.4	24.1	9.8
Emerging Markets	-5.4	-11.2	**20.0**	**27.5**	**29.9**	**11.2**
UK Long-dated Gilts	0.2	-0.1	5.1	4.8	4.5	6.0
UK Long-dated Corp. Bonds	-1.0	-5.5	-4.4	**1.7**	3.6	6.0
UK Over 5 Yrs Index-Linked Gilts	1.9	3.7	13.5	8.3	7.4	7.2
High Yield (Global)	0.1	-2.3	-3.5	3.8	4.7	3.5
Overseas Bonds	**3.4**	**10.3**	19.1	5.5	**3.1**	5.3
Property *	-1.0	-6.2	-9.2	8.2	10.9	10.8
Cash	0.5	1.4	6.2	5.3	4.9	5.2
Commodities £-converted	-1.3	9.6	36.7	6.6	10.8	9.5
Hedge Funds original $ basis *	1.9	-0.2	7.3	9.9	11.8	9.6
Illustrative £-converted version *	2.1	3.5	5.9	8.7	6.7	7.5
Euro relative to Sterling	4.5	8.6	17.5	5.1	2.9	-
US $ relative to Sterling	-0.1	-0.3	-1.4	-1.7	-4.5	-1.7
Price Inflation (RPI) *	0.8	0.8	4.1	3.7	3.3	2.8
Price Inflation (CPI) *	0.8	0.7	2.5	2.5	2.1	1.6
Price Inflation (RPIX) *	0.8	0.9	3.7	3.2	2.8	2.6
Earnings Inflation **	2.7	7.6	3.5	3.8	4.7	4.5
All Share Capital Growth	-2.9	-10.9	-10.8	6.0	11.0	0.5
Net Dividend Growth	2.0	10.9	18.0	13.2	10.4	5.3
Earnings Growth	-2.0	-5.2	5.3	17.5	19.5	7.3

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

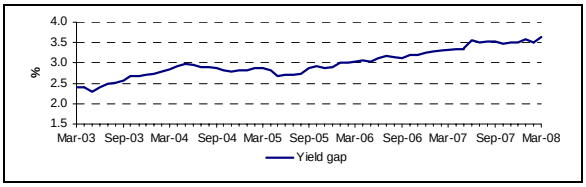
- *UK Equities (incl. dividends and earnings) – FT-A All Share.*
- *Overseas Equities (incl. regions) – blend of FT All-World / World subindices*
- *Emerging Markets from MSCI US $ based total return index (overall Index to 31 Oct 2001, Free Index from 1 Nov 2001 to take account of foreign investment restrictions), conversion to UK £ by J&A.*
- *UK Bonds – FT-A indices (Gilts Over 15 Years, ILG Over 5 Years)*
- *UK Corporate Bonds – Barclays Capital 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 the National Average Earnings Index (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.

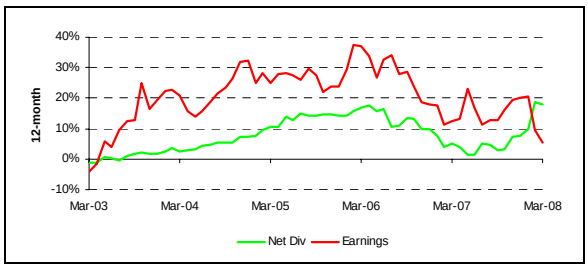


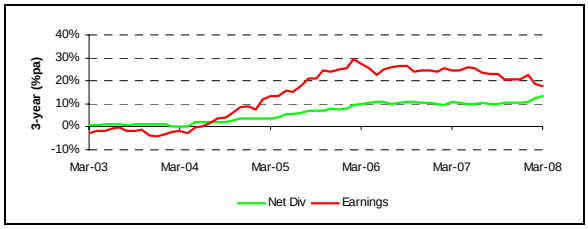
The gap is still through the 3.5% level, suggesting expectations of higher longer-term inflation as well as an increased risk premium for conventional bonds, relative to index-linked.

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

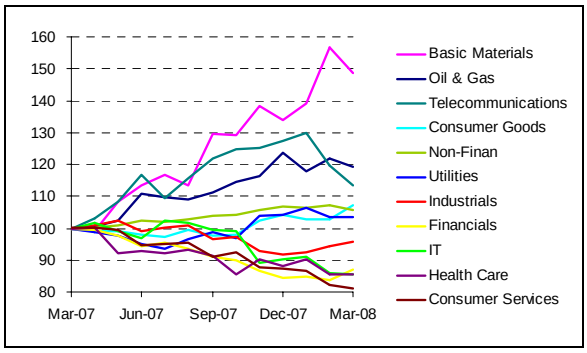




Sources for charts on this page:
Financial Times, Office for National Statistics, J&A

UK Equity Sector Returns

Figure 4a: Sectors relative to All Share



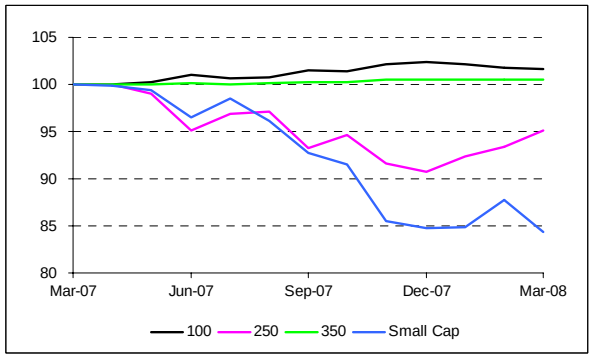
Note: Relative lines' labels for sectors in end-value order

Basic Materials were still strongest over the last 12 months by a very large margin.

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	-4.4	-13.2	9.9
Basic Materials	-7.2	0.0	37.0
Industrials	-0.3	-5.6	-11.5
Consumer Goods	2.2	-7.3	-1.2
Health Care	-2.4	-12.5	-21.2
Consumer Services	-3.7	-16.3	-25.3
Telecommunications	-7.1	-19.6	4.8
Utilities	-2.1	-10.7	-4.6
Non-Finan	-3.4	-10.8	-2.5
Financials	1.9	-7.2	-19.8
IT	-2.4	-14.3	-21.0
All Share	-2.1	-9.9	-7.7

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



Mid Cap rallied slightly in relative terms, but Small Cap fell.

FRS17 volatility indicator

A scheme whose actives on average now have 15 years to retirement will have seen their FRS17 liability value change by approx -12% over the last 12 months, and 2% over the last three years, which is 1% per annum.

Bond market information

Figure 5: Credit Margins for last 15 Years

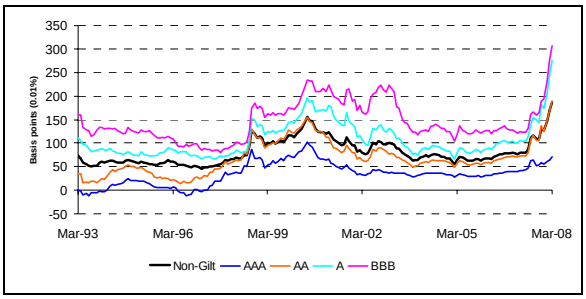


Table 2a: Trends in Long-dated AA Margins

Month End	AA rated Yield (%)	(Barclays) Gilt Yield (%)	Credit Margin (%)
Oct 07	5.63	4.58	1.05
Nov 07	5.80	4.50	1.30
Dec 07	5.58	4.34	1.24
Jan 08	5.85	4.37	1.48
Feb 08	6.08	4.42	1.66
Mar 08	**6.16**	4.42	**1.74**

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

Category	Mkt Val (£bn @ Mar 08 & 06, 04)			Weight (%)
Gilts (27)	339	301	245	45.3
Non Gilts (1,113)	410	379	296	54.7
AAA (281)	157	143	107	21.0
AA (203)	60	59	40	8.0
A (391)	126	116	92	16.8
BBB (224)	64	57	51	8.5
Not rated (14)	3	4	6	0.3

Category	Mkt Val (£bn @ Mar 08 & 06)		W't (%)	Dur'n (yrs)
Gilts (27)	339	301	45.3	9.6
< 5 Yrs (8)	81	87	10.8	2.8
5–15 Yrs (9)	117	93	15.7	7.2
> 15 Yrs (10)	141	120	18.8	15.5
Non Gilts (1,113)	410	379	54.7	7.2
< 5 Yrs (337)	134	106	17.9	2.7
5–15 Yrs (466)	158	138	21.1	7.1
> 15 Yrs (310)	118	136	15.8	12.4

£ Gilt Market Issuance and Coverage

- £2.5bn of 4½% 2013 (2.48x, yield 4.27%, new)
- £2.0bn of 4¾% 2030 (1.41x, yield 4.52%, prev Jan 08)
- £0.975bn of ILG 1¼% 2027 (1.41x, r.y. 0.99%, May 07)

- **iBoxx Sterling corporate:** 11 new sterling corporate issues (£3.8bn) from 10 issuers across the world, and aggregate net funding or redemption (+£4.2bn) by 12 (mostly non-UK) corporate or sub-sovereign issuers. 5 bonds redeemed early or eliminated. 10 bonds fell within 1 year of maturity.

- **iBoxx Euro:** New euro issues €59bn (including €23bn governments), and aggregate net funding or redemption (€23bn) of existing bonds (of which €21bn by governments). 21 bonds fell within 1 year of maturity. No early redemptions.

Tables 2d, 2e: € Market Size and Maturity

Category	Mkt Val (€bn @ Mar 08)	Weight (%)
Sovereigns (237)	3,211	60.8
Non Sovereigns	2,068	39.2
AAA (614)	1,105	20.9
AA (403)	429	8.1
A (453)	372	7.0
BBB (218)	162	3.1

Category	Mkt Val (€bn @ Mar 08)	Weight (%)
1 – 3 Yrs (466)	1,354	25.7
3 – 5 Yrs (484)	1,177	22.3
5 – 7 Yrs (358)	780	14.8
7 – 10 Yrs (400)	975	18.5
10+ Yrs (217)	993	18.8

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ Mar 08 & 06)		W't (%)	Dur'n (yrs)
Gilts (14)	166	115	91.2	12.5
< 5 Yrs (2)	23	8	12.6	2.4
5 – 15 Yrs (5)	74	67	40.7	8.2
> 15 Yrs (7)	69	40	37.9	20.6
Non Gilts (56)	16	12	8.8	15.3

Sources: Barclays Capital, DMO, iBoxx, Jagger & Associates

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