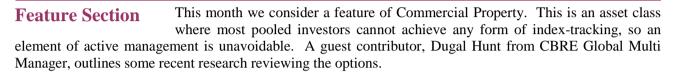
JAGGER & A SSOCIATES

Investment Update

December 2013

Investment Headlines & Comment

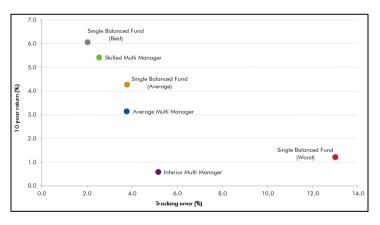
- **Infrastructure** gets a boost from six insurers pledging to invest £25bn over the next 5 years, as part of a wider government initiative.
- The **State pension age** may now adapt to produce "up to a third of adult lifetime in retirement" this could be harsh for some regions?
- **Stamp duty** on purchases in a UK domiciled Exchange Traded Fund (ETF) to be removed (but investors will still pay it on ETF units).



Indirect investors have a choice of investing in one or two "balanced" (i.e. diversified) property funds or appointing a multi manager to construct a mixed portfolio of balanced and specialist funds. Critics argue that multi managers represent an extra, unnecessary cost burden and that a single balanced fund strategy is more efficient. Recent experience in the UK property funds market, which has witnessed performance crises in two of the 10 largest balanced funds in the past two years, encourages investors to analyse carefully the significant concentration risk of a single balanced fund.

To quantify the expected return and risk of a single balanced fund compared to a multi manager proposition, CBRE Global Multi Manager (GMM) commissioned independent research from Property Funds Research (PFR) in mid 2013. Under the guidance of Cambridge Land Economy Professors Andrew Baum and Colin Lizieri, PFR studied 10 years of fund return data in the UK and calculated the returns and tracking errors of individual balanced funds and randomly simulated multi manager portfolios. Analysing the best and worst case scenarios provides an investor with greater appreciation of the tail risk associated with the respective strategies. The results are summarized in Figure 1. The

Figure 1: Historic Return versus Tracking Error



Sources: PFR, AREF/IPD Quarterly Property Fund Index (data to Q4 2012)

average return of a single balanced fund was higher than the average multi manager portfolio, the difference driven predominantly by (i) multi manager fees and (ii) the simulated multi manager portfolios being exposed to more highly geared specialist funds that underperformed over a period which saw severe financial market disorder.

A single balanced fund approach has, on average, the same tracking error as the average multi manager portfolio (3.8%), *but* the single fund approach has a much higher tail risk, with the worst single fund having a 13.0% tracking error compared to 5.2% for an inferior multi manager.

If a skilled multi manager is selected, they may add return that more than compensates for the additional fee, and at the same time reduces

tracking error (to 2.5%). An investor selecting a single balanced fund for their UK allocation could have selected the fund that achieved a superior risk/return profile to the multi manager approach over this ten year period. However, there was a significant risk of the wrong selection. By way of illustration, of the 10 largest UK balanced funds, two have had significant issues in the past 18 months that have led to cumulative underperformance by more than 12%. The multi manager approach, by virtue of its diversification, mitigates this tail risk.

The independent research used random combinations to simulate multi manager portfolios, but in practice the multimanager has various means of adding return that are not included in this analysis. In particular the multi manager is able to access property types with large lot sizes, and sectors requiring specialist management. This may be achieved via investing in specialist funds, or by co-investing with specialist managers. [J&A: These are not guaranteed to add value, particularly over short periods, but they may be expected to over longer periods.] The multi manager approach can also be more flexible to changing market conditions. In contrast switching out of a single under-performing balanced fund can be difficult; under-performance can lead to a run on redemptions which often results in redemptions being suspended, so investors have found themselves locked into balanced funds in crisis. [J&A: Liquidity for a multi-manager is certainly better, but you are still subject to notice periods, rather than being able to redeem instantly.] So, the multi manager approach will appeal to investors concerned with the downside, and may even create some upside of its own.

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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 <u>cannot</u> 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 December 2013

Asset Class	1 month	3 months	12 months	3 years	5 years	10 years	20 years
	(%)	(%)	(%)	(% p.a.)	(% p.a.)	(% p.a.)	(% p.a.)
UK Equities	1.8	5.5	20.8	9.4	14.3	8.8	7.4
Overseas Equities	0.5	5.0	21.2	8.1	12.3	8.8	7.1
US Equities	1.6	7.9	30.4	14.1	14.8	8.6	8.3
Europe ex UK Equities	0.6	5.2	24.0	7.4	9.9	9.1	8.7
Japan Equities	-0.4	0.1	25.0	4.0	4.7	5.0	0.7
Pacific ex Japan Equities	-2.2	0.0	1.3	0.5	14.3	12.6	5.2
Emerging Markets	-2.5	-0.4	-4.1	-3.6	12.3	12.4	5.5
UK Long-dated Gilts	-1.1	-1.8	-5.9	6.9	4.8	5.9	6.9
UK Long-dated Corp. Bonds	-0.9	-0.3	-0.6	8.0	9.2	5.7	-
UK Over 5 Yrs Index-Linked Gilts	-2.0	-0.9	0.6	7.6	7.5	7.0	6.8
High Yield (Global)	-0.2	1.5	6.0	7.7	16.2	9.8	-
Overseas Bonds	-2.2	-3.6	-6.4	-1.0	-0.8	5.1	4.9
Property *	1.5	3.8	8.9	6.6	5.9	5.6	8.3
Cash	0.0	0.1	0.5	0.7	0.8	3.0	4.4
Commodities £-converted	0.8	-2.6	-3.1	-2.6	1.3	1.5	3.7
Hedge Funds original \$ basis *	1.0	4.2	9.7	3.9	7.6	5.8	9.0
Illustrative £-converted version *	-1.0	-1.6	7.4	2.2	6.2	6.3	8.5
Euro relative to Sterling	0.1	-0.5	2.6	-1.0	-3.0	1.7	-
US \$ relative to Sterling	-1.1	-2.2	-1.9	-1.8	-2.5	0.8	-0.6
Japanese Yen relative to Sterling	-3.7	-8.7	-19.3	-10.0	-5.6	1.0	-0.3
Sterling trade weighted	0.4	1.6	1.7	2.2	2.7	-1.5	-0.1
Price Inflation (RPI) *	0.1	0.4	2.6	3.6	3.1	3.3	2.9
Price Inflation (CPI) *	0.1	0.5	2.1	3.2	2.9	2.7	2.2
Price Inflation (RPIX) *	0.1	0.5	2.7	3.6	3.7	3.3	2.9
Earnings Inflation **	-0.4	-1.4	1.1	1.5	1.5	2.7	3.4
All Share Capital Growth	1.7	4.8	16.7	5.6	10.3	5.0	3.9
Net Dividend Growth	-0.1	0.8	7.2	10.2	3.6	5.6	-
Earnings Growth	-0.3	11.7	-3.5	0.7	-0.1	7.6	6.6

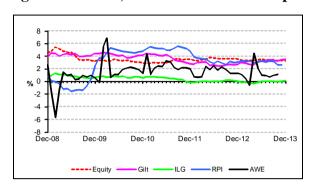
Note: All market returns are total returns for pension funds with income reinvested monthly. Indices used are as follows:

- 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

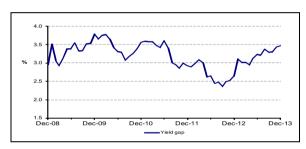
- Commodities GSCI Total Return, converted to UK £ by J&A
- Hedge Funds Composite HFRI US \$ based total return index plus converted to UK £ by J&A. NB A smooth "cash+x%" return will only be shown in the base 'hedged' currency, here the US \$.
- Cash an indicative index based on the three-month London 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.

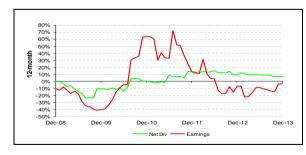


The gap gives a current expectation now clearly moving to 3.5% for longer-term inflation + risk premium for gilts, relative to index-linked gilts.

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

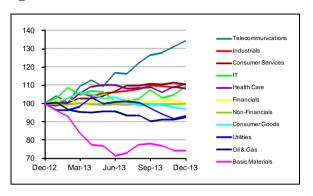




Sources for charts on this page: Financial Times, Office for National Statistics, J&A

UK Equity Sector Returns

Figure 4a: Sectors relative to All Share



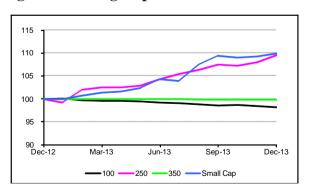
Note: Sector labels for relative lines are in end-value order

There was a rise this month in the rolling 12-month sector dispersion (from 47% to 60%).

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	3.3	8.2	11.9
Basic Materials	1.8	0.4	-10.5
Industrials	3.5	6.2	33.7
Consumer Goods	0.9	3.1	17.2
Health Care	1.0	4.9	30.7
Consumer Services	1.0	5.3	33.5
Telecommunications	4.3	11.9	62.1
Utilities	3.5	1.1	12.5
Non-Financials	2.3	5.8	20.8
Financials	0.2	4.4	20.9
IT	6.2	7.5	31.9
All Share	1.8	5.5	20.8

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



Mid Cap and Small Cap both rose slightly in relative terms this month.

FRS17 volatility indicator

Now discontinued, but available on request.

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Bond market information

Figure 5: £ Non-Gilt Credit Margins

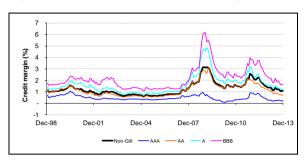


Table 2a: Over 15 Yr Corporate Yields & Margins

Month	iBoxx Corp	FT 20 yr	Margin
End	AA Y'ld (%)	Gilt (%)	(%)
Jul '13	4.29	3.27	1.02
Aug '13	4.35	3.42	0.93
Sep '13	4.27	3.34	0.93
Oct '13	4.13	3.29	0.84
Nov '13	4.28	3.44	0.84
Dec '13	4.37	3.57	0.80

Tables 2b, 2c: £ Market Size (£bn) and Maturity

Category	Mkt Val			Weight
	@ Dec 13 & 10, 07			(%)
Gilts (38)	1,065	827	340	67.4
Non Gilts (1,033)	516	467	420	32.6
AAA (138)	104	136	152	6.6
AA (167)	84	72	63	5.3
A (352)	164	162	133	10.4
BBB (376)	164	96	69	10.4

Category	Mkt Val @ Dec 13, & 10		W't (%)	Dur'n (yrs)
Gilts (38)	1,065	827	67.4	9.4
< 5 Yrs (10)	299	257	19.0	2.7
5–15 Yrs (12)	359	286	22.7	6.9
> 15 Yrs (16)	406	283	25.7	16.6
Non Gilts (1,033)	516	467	32.6	7.8
< 5 Yrs (308)	148	130	9.4	2.6
5–15 Yrs (444)	210	199	13.3	7.2
> 15 Yrs (281)	157	138	10.0	13.3

£ Gilt Market "main" Issuance

- o £4.55bn 13/4% 2019 (2.04x, 1.99%, Nov 13)
- o £1.25bn 5% 2025 (1.99x, 2.98%, Mar 13)
- o £1.00bn ILG 3/4% 2047 (1.72x, r.y 0.04%, Nov 12)
- More ILG ¹/₈% 2068 to be issued in January 2014.
 Note: Issuance amounts are nominals.

Tables 2d, 2e: € Market Size and Maturity (Dec 13)

Category	Mkt Val (€bn)	Weight (%)
Sovereigns (279)	4,835	59.4
Non Sovereigns	3,311	40.6
AAA (533)	1,015	12.5
AA (428)	705	8.7
A (759)	826	10.1
BBB (756)	764	9.4

Category	Mkt Val (€bn)	Weight (%)
1 – 3 Yrs (789)	2,169	26.6
3 – 5 Yrs (723)	1,766	21.7
5 – 7 Yrs (526)	1,323	16.2
7 – 10 Yrs (491)	1,498	18.4
10+ Yrs (226)	1,390	17.1

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ Dec 13 & 10)		W't (%)	Dur'n (yrs)
Gilts (23)	374	246	92.2	18.8
< 5 Yrs (2)	44	21	10.9	3.0
5 – 15 Yrs (6)	103	97	25.5	9.0
> 15 Yrs (15)	226	128	55.8	26.4
Non Gilts (43)	31	25	7.8	16.9

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

Month End	US (%)	Euro (%)	Sterling (%)
Jun 13	6.26	5.36	6.64
Jul 13	5.96	5.06	6.22
Aug 13	6.16	5.09	6.32
Sep 13	6.06	5.04	6.19
Oct 13	5.66	4.64	5.85
Nov 13	5.67	4.54	5.79
Dec 13	5.67	4.52	5.75

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

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