JAGGER & ASSOCIATES

Investment Update
March 2013

Investment Headlines & Comment

- After 11 years at **Schroders**, Richard Buxton is moving to head up UK Equities at **Old Mutual**.
- **Royal London** are set to acquire **Co-op Banking Group**'s £19bn investment management business.
- **Cyprus** has been the latest wobble for the **Euro** and UK gilt yields have fallen as a result.

Feature Section

This month we return to corporate bonds, to consider Standard & Poor's annual analysis of historical default rates, which now includes the recently released 2012 data. We last looked at this subject in our February 2011 and July 2011 issues (and before then in 2002 and 2008).

Figure 1a: Average *Cumulative* Default Rates (%) (Extracts from "Table 24" in S&P)

Time	1 year	5-year	10-year
Investment grade	**0.11**	**1.12**	**2.45**
AAA	0.00	0.36	0.76
AA	0.02	0.37	0.88
A	0.07	0.62	1.65
BBB	0.22	2.18	4.59
High Yield	**4.11**	**16.44**	**23.46**
BB	0.86	8.37	15.09
B	4.28	20.18	27.84
CCC/C	26.85	46.64	51.13
All ratings	**1.55**	**6.48**	**9.63**

Source: Standard & Poor's (also for the Figures below)

Figure 1a shows historical default rates averages across global corporate bonds in 1-, 5- and 10-year versions. The dataset covers 1981-2012 (and the 5- and 10-year figures will be averages for rolling sets of overlapping periods, not for successive distinct ones), but it does not show comparable recovery rate statistics. However, as per our Figure 5 (on page 4) for Sterling investment grade bonds, actual default rates have been below those priced into yields, even if with no recovery. For example, over the last 5 years, the iBoxx All-Dated Non-Gilts Index returned 7.9% p.a. versus 7.1% p.a. for the FT-A All-Dated Gilt Index. Over 10 years, the position is closer with 5.9% p.a. versus 5.8% p.a. Over 15 years, it is 6.5% p.a. versus 6.2% p.a. (Ideally, you would make the comparison over a period where credit margins were similar at the start and end of the period, to avoid distortions from that factor.)

Figure 1b considers what happened in 2012 in isolation (row = start rating, column = end rating). For investment grade it was a good year, with very few bonds falling into sub-investment grade. We expect most bonds to retain the same credit rating at the end of the year as at the start, hence a dominant diagonal for the figures in bold, but note the extent of the 1-rating downgrades for AAA and AA bonds (particularly affecting European financials). Eventually there is a sharp decline on the CCC row, reflecting a greater instability for bonds that have got that close to the edge. Of the defaulted entities in 2012 that S&P initially rated investment grade, the time between first rating and date of default averaged 17.6 years, with an associated standard deviation of 8.4 years. (The longest case was Eastman Kodak, defaulting 29 years after it was AAA rated.) Figure 1c gives an alternative way of looking at the 1-year data from Figure 1a, with the minimum and maximum 1-year default rates by credit rating, which in turn prompts a question on what level of deduction it might be prudent to make from investment grade corporate bond yields in actuarial valuations. For example, the average cumulative investment grade *10*-year default rate is 2.45%, and the worst is 4.12% (from "Table 31", for the 10 years to 1991, when the market was much smaller than now). So, is there a reasonable case for making a deduction of more than, say, 0.4% p.a. from the yield as an allowance for future defaults? (If you do not yet hold the bonds, or expect to reinvest maturitng proceeds, there may be an argument for reducing the yield for the risk that credit margins contract before you buy the bonds, but that is a quite separate issue!)

Figure 1b: Global Credit Rating Transitions % in 2012 in isolation (Extracts from "Table 20" in S&P, with D = Default, N.R. = not rated)

	AAA	AA	A	BBB	BB	B	CCC	D	N.R.
AAA	**87.50**	12.50	0	0	0	0	0	0	0
AA	0	**84.29**	11.43	1.71	0	0	0	0	2.57
A	0	0.98	**88.57**	6.92	0	0.08	0	0	3.46
BBB	0	0	1.89	**89.19**	3.36	0.06	0	0	5.50
BB	0	0	0.10	4.39	**80.71**	7.07	0.10	0.29	7.35
B	0	0	0	0.20	3.67	**79.67**	4.21	1.50	10.74
CCC	0	0	0	0	0	14.94	**44.16**	26.62	14.29

Figure 1c: Profile of individual year default percentages (Extracts from "Table 4" in S&P)

	AAA	AA	A	BBB	BB	B	CCC
Min	0	0	0	0	0	0.25	0
Max	0	0.38	0.38	1.02	4.22	13.84	48.94
Average	0	0.02	0.07	0.22	0.86	4.28	26.85

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 March 2013

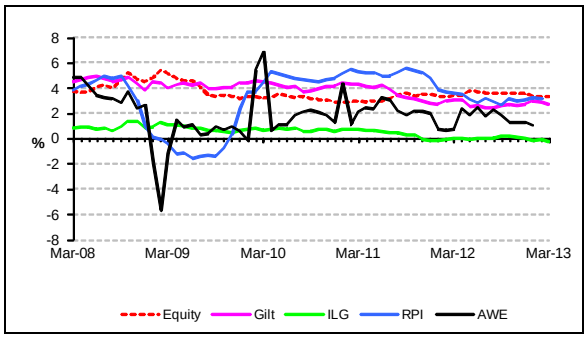
Asset Class	1 month (%)	3 months (%)	12 months (%)	3 years (% p.a.)	5 years (% p.a.)	10 years (% p.a.)	20 years (% p.a.)
UK Equities	1.4	10.3	16.8	8.8	6.7	10.7	8.1
Overseas Equities	1.8	14.4	17.2	8.2	8.6	10.6	7.4
US Equities	3.8	18.5	**20.1**	12.6	11.9	9.3	**8.8**
Europe ex UK Equities	-1.0	9.7	17.1	3.8	2.7	11.5	8.5
Japan Equities	**4.8**	**19.3**	14.3	3.5	5.1	7.3	**0.8**
Pacific ex Japan Equities	**-1.9**	8.8	16.7	7.3	10.1	16.9	8.5
Emerging Markets	-1.7	5.4	7.7	3.6	7.0	**17.9**	8.4
UK Long-dated Gilts	3.1	0.5	8.1	12.3	9.0	6.7	8.5
UK Long-dated Corp. Bonds	2.4	1.0	13.7	10.6	9.5	6.5	-
UK Over 5 Yrs Index-Linked Gilts	4.7	9.0	11.7	**13.0**	9.1	8.3	7.9
High Yield (Global)	0.5	9.1	19.1	10.7	**17.4**	10.9	-
Overseas Bonds	-0.4	4.3	4.5	4.0	9.0	6.0	5.9
Property *	0.3	1.0	2.4	7.2	**0.7**	5.7	8.5
Cash	0.0	**0.1**	**0.7**	**0.8**	1.6	**3.3**	4.6
Commodities £-converted	0.8	7.6	0.0	3.0	-4.7	2.8	3.4
Hedge Funds original $ basis *	0.1	4.2	4.2	4.6	2.4	6.9	9.8
Illustrative £-converted version *	4.6	10.0	9.6	4.6	8.0	7.3	9.4
Euro relative to Sterling	-1.8	4.3	1.5	-1.8	1.2	2.1	-
US $ relative to Sterling	0.0	7.0	5.3	0.0	5.5	0.4	0.0
Japanese Yen relative to Sterling	-2.0	-1.6	-7.9	-0.3	6.7	2.8	1.0
Price Inflation (RPI) *	0.7	0.8	3.2	4.1	3.2	3.3	2.9
Price Inflation (CPI) *	0.6	0.6	2.8	3.5	3.3	2.7	2.2
Price Inflation (RPIX) *	0.7	0.8	3.2	4.2	3.9	3.3	2.9
Earnings Inflation **	0.6	3.1	1.0	2.0	0.8	3.0	3.6
All Share Capital Growth	0.9	9.3	12.6	5.1	2.9	6.9	4.5
Net Dividend Growth	1.5	2.6	9.3	7.2	0.6	5.4	-
Earnings Growth	-0.2	-11.4	-21.8	10.2	-2.8	7.8	-

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

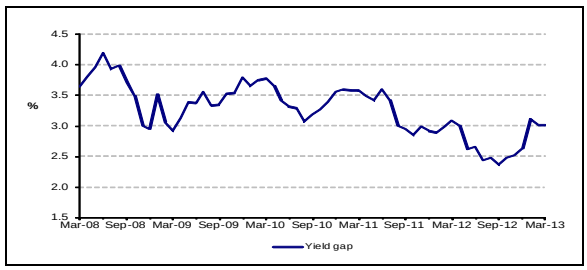
- *UK Equities (incl. dividends and earnings) – FT-A All Share.*
- *Overseas Equities (incl. regions) – blend of FT All-World / World subindices*
- *Emerging Markets from MSCI US $ based total return index (overall Index to 31 Oct 2001, Free Index from 1 Nov 2001 to take account of foreign investment 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.

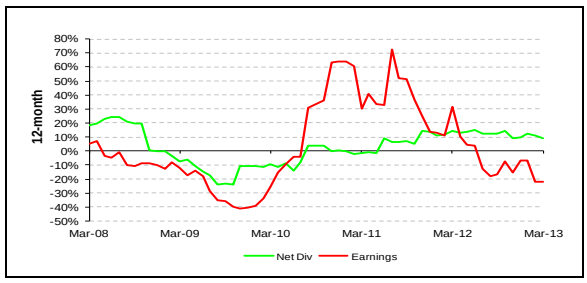


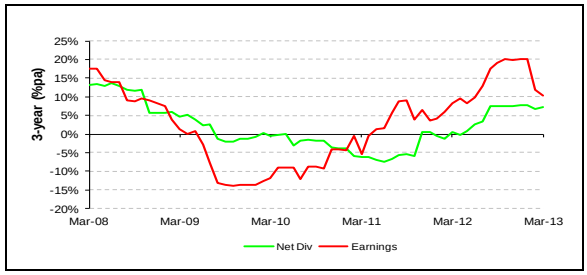
The gap gives a current expectation of about 3% for longer-term inflation + risk premium for gilts, relative to index-linked gilts.

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

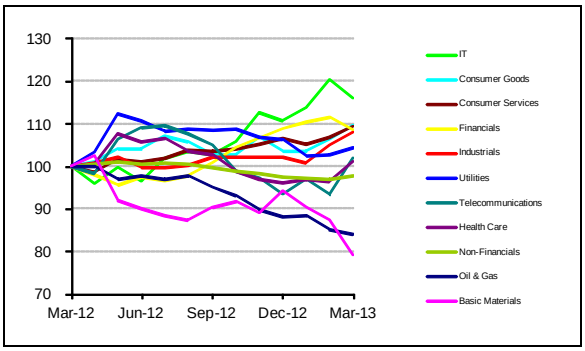




Sources for charts on this page:
Financial Times, Office for National Statistics, J&A

UK Equity Sector Returns

Figure 4a: Sectors relative to All Share



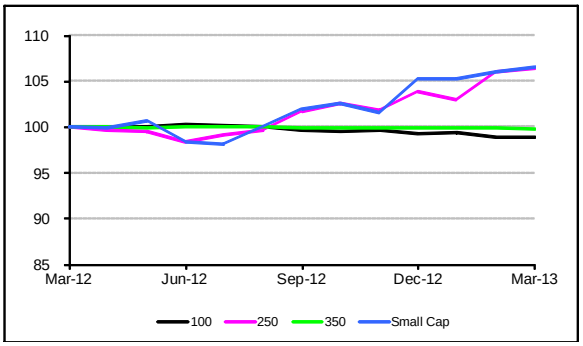
Note: Sector labels for relative lines are in end-value order

There was no change this month in the rolling 12-month sector dispersion (staying at 37%).

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	0.0	5.2	-2.0
Basic Materials	-8.4	-7.4	-7.7
Industrials	4.4	16.7	26.2
Consumer Goods	4.5	16.8	27.9
Health Care	6.4	16.1	18.1
Consumer Services	3.8	13.2	27.6
Telecommunications	10.5	20.6	19.0
Utilities	3.3	8.3	22.0
Non-Financials	2.2	10.4	14.1
Financials	-1.3	10.1	26.8
IT	-2.4	15.3	35.4
All Share	1.4	10.3	16.8

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



Mid and Small Cap rose in relative terms this month.

FRS17 volatility indicator

Now discontinued, but available on request.

Bond market information

Figure 5: £ Non-Gilt Credit Margins

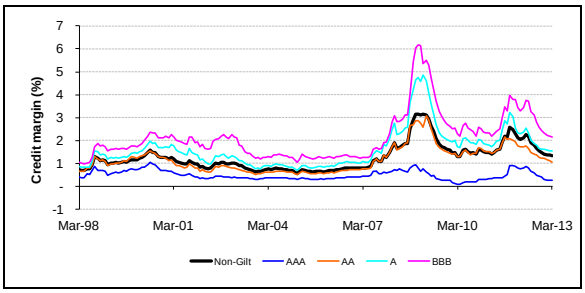


Table 2a: Over 15 Yr Corporate Yields & Margins

Month End	iBoxx Corp AA Y'ld (%)	FT 20 yr Gilt (%)	Margin (%)
Oct 12	3.98	2.72	1.26
Nov 12	3.92	2.64	1.28
Dec 12	4.03	2.71	1.32
Jan 13	4.26	2.99	1.27
Feb 13	4.18	2.94	1.24
Mar 13	**4.01**	**2.76**	**1.25**

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

Category	Mkt Val @ Mar 13 & 10, 07			Weight (%)
Gilts (37)	1,130	718	310	67.9
Non Gilts (1,024)	534	469	405	32.1
AAA (152)	127	146	146	7.6
AA (148)	71	73	66	4.3
A (378)	186	160	123	11.2
BBB (346)	151	90	67	9.1

Category	Mkt Val @ Mar 13, & 10		W't (%)	Dur'n (yrs)
Gilts (37)	1,130	718	67.9	9.5
< 5 Yrs (10)	310	223	18.7	2.6
5–15 Yrs (12)	407	234	24.5	7.2
> 15 Yrs (15)	413	261	24.8	17.1
Non Gilts (1,024)	534	469	32.1	8.0
< 5 Yrs (287)	144	139	8.7	2.8
5–15 Yrs (442)	218	200	13.1	7.3
> 15 Yrs (295)	173	130	10.4	13.4

£ Gilt Market "main" Issuance

- £4.40bn 1¼% 2018 (2.17x, 1.04%, Feb 13)
- £1.00bn 5% 2025 (2.25x, 2.10%, May 12)
- £1.52bn 3¾% 2052 (1.64x, 3.43%, Nov 12)
- £0.99bn $^{1}/_{8}$% IL 2044 (2.02x, ry -0.03%, Nov 12)

Note: Issuance amounts are nominals.

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

Category	Mkt Val (€bn)	Weight (%)
Sovereigns (266)	4,679	58.4
Non Sovereigns	3,335	41.6
AAA (538)	1,087	13.6
AA (375)	639	8.0
A (795)	912	11.4
BBB (678)	697	8.7

Category	Mkt Val (€bn)	Weight (%)
1 – 3 Yrs (821)	2,176	27.2
3 – 5 Yrs (739)	1,833	22.9
5 – 7 Yrs (411)	1,089	13.6
7 – 10 Yrs (470)	1,512	18.9
10+ Yrs (211)	1,403	17.5

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ Mar 13 & 10)		W't (%)	Dur'n (yrs)
Gilts (21)	375	222	92.1	18.9
< 5 Yrs (2)	46	35	11.3	3.7
5 – 15 Yrs (5)	105	88	25.9	9.8
> 15 Yrs (14)	223	98	55.0	26.3
Non Gilts (43)	32	23	7.9	17.3

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

Month End	US (%)	Euro (%)	Sterling (%)
Nov 12	6.13	6.36	8.02
Dec 12	5.89	* 5.17	* 6.43
Jan 13	5.76	5.27	6.30
Feb 13	5.76	5.07	6.33
Mar 13	**5.69**	**5.11**	**6.24**

Sources: Barclays Capital, DMO, iBoxx, J&A, MLX
*Note: * MLX methodology changed in Dec 2012, so indices with significant "fixed-to-float" constituents now appear low-yielding, whereas specific High Yield fund yields may be somewhat different.*

JAGGER & ASSOCIATES

Contact: Ground Floor, 14 Exchange Quay,
Salford Quays, Manchester M5 3EQ
Tel.: 0161 873 9350, Fax: 0161 877 4851
web: www.jaggerandassociates.co.uk ,
e-mail: enquiries@jaggerandassociates.co.uk

See our website for details of the investment consultancy services we provide to actuarial firms, pension funds, universities and other endowment funds, and charities.