JAGGER & ASSOCIATES

Investment Update
June 2014

Investment Headlines & Comment

- Proposals for "**collective DC**" schemes have been announced – but is it back to the bad old days of opacity akin to With Profits?
- **UK Commercial Property** continues to recover, but over the last 12 months, office and industrial sectors far outstrip the retail sector.
- The **London Stock Exchange** is buying **Russell Investments** for $2.7bn, to get a US presence, and to broaden its intellectual property.

Feature Section

This month we think about the history of money, specifically about bank notes. Later in this item we welcome comment from one of our clients, Innovia Films, who are at the forefront of production of modern banknotes in the UK. First, though, why does money exist?

Coins came first, as a means of barter (e.g. as an alternative to trading X goats in return for Y camels). They are known to have developed independently in places including Iron Age Anatolia and Archaic Greece, India and China around 600-700 BC. Early paper money was introduced in Europe in the later Middle Ages. These banknotes were a promise to pay the bearer in coins, but later became a form of money in their own right. The idea of using a durable light-weight substance as evidence of a promise to pay a bearer on demand apparently originated in China during the Han Dynasty in 118 BC - interestingly, their note was made of leather. Fiat money (where it has value from government regulation or law) first arose in medieval China, with the jiaozi paper money. In Europe, the concept of banknotes was first introduced during the 13th century by travelers such as Marco Polo, with proper (paper-based) banknotes appearing in 1661 in Sweden. The basic approach stayed like that for the next 300 years or so.

However, paper notes have problems – forgery and damage, for example. This is where Innovia's work comes in, on the production of polymer notes. (Polymer is a posh word for plastic – the term was adopted in 1993 when it emerged that people did not respond well to the idea of plastic money!) The first such Guardian® polymer banknote was issued as a commemorative AU$10 note in 1988, the year of Australia's bicentenary, containing both the first transparent window and first hologram of any type, making it the most secure banknote of its time. After being successfully received by the public, the Reserve Bank of Australia (RBA) introduced a $5 note for general circulation in 1992 followed by successive notes in the years following. Throughout the 1990s, Guardian® banknote substrate steadily grew in popularity throughout the world, with the innovative polymer-based technology gaining the trust and confidence of more than 30 Central Banks to either adopt Guardian® for use in mainstream denominations or as a commemorative note as a test and forerunner to future use.

With a heritage of innovation and technical expertise that makes Guardian® the world's most sophisticated banknote substrate, Innovia is at the forefront of change and influence in an industry that has remained paper-based and relatively static for around 300 years. The Bank of England plans to introduce the new £5 (featuring Sir Winston Churchill) in 2016 and the new £10 note (featuring Jane Austen) a year later, and Innovia are to supply Guardian® polymer substrate for these next generation £5 and £10 notes. The new notes will be smaller than current paper notes by around 15%.

Looking to Scotland, Clydesdale Bank has announced that it will begin to issue polymer Sterling £5 notes in March 2015, to commemorate the 125th anniversary of the building of the Forth Road Bridge. The Royal Bank of Scotland plans to issue a £5 note, to commemorate the Ryder Cup.

As the polymer notes are thin and flexible they will easily fold to fit into wallets and purses. People will be able to use polymer notes in the same way as paper notes. For example, polymer notes will be available from ATMs and will be accepted by retailers and businesses. To ensure this goes as smoothly as possible, the Bank of England is already working closely with the manufacturers of machines that accept and dispense notes to ensure a smooth transition to polymer. The main benefits of using Guardian® notes are:

- Clean– the notes are waterproof and resistant to oils and dirt, and carry on average 75% less bacteria than paper
- Secure – these notes allow banks to stay ahead of counterfeiting through the use of leading edge security features. Central bank data shows a minimum 80-90% drop in counterfeit activity is typical when Guardian® is adopted, because polymer notes contain many security features that cannot be successfully reproduced by photocopying or scanning.
- Durable – by lasting 3 to 5 times longer than paper which means less notes need to be produced overall.
- Eco-friendly – Independent studies show that Guardian® is 30-60% more environmentally friendly than paper.

It also seems that polymer notes can survive going through washing machines, and they are shreddable and recyclable at the end of their lives – eco-friendliness in action!

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 30 June 2014

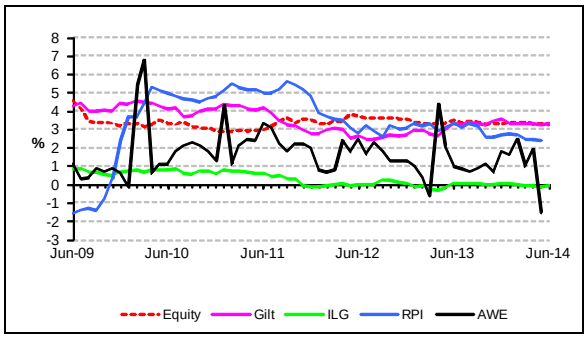
Asset Class	1 month (%)	3 months (%)	12 months (%)	3 years (% p.a.)	5 years (% p.a.)	10 years (% p.a.)	20 years (% p.a.)
UK Equities	-1.3	2.2	13.1	8.9	14.5	8.6	8.2
Overseas Equities	0.1	2.6	9.4	8.5	14.0	8.9	7.2
US Equities	0.2	2.6	10.9	**14.3**	**18.0**	8.8	8.7
Europe ex UK Equities	**-2.1**	0.3	15.6	5.3	12.1	9.2	**9.3**
Japan Equities	**3.4**	4.3	-1.7	5.7	6.6	3.9	**-0.5**
Pacific ex Japan Equities	-0.2	3.6	4.6	2.0	11.6	**13.3**	6.6
Emerging Markets	0.7	4.0	1.7	**-2.1**	8.8	13.0	6.2
UK Long-dated Gilts	-0.5	2.3	5.3	8.7	7.3	6.5	8.1
UK Long-dated Corp. Bonds	-0.3	3.4	9.3	9.6	10.1	6.5	-
UK Over 5 Yrs Index-Linked Gilts	-1.2	1.1	4.3	7.8	8.3	7.3	7.7
High Yield (Global)	-0.9	0.3	0.8	7.4	13.6	10.0	-
Overseas Bonds	-1.3	**-0.4**	**-6.1**	-0.9	2.9	5.6	5.2
Property *	1.6	**4.5**	**16.0**	8.1	11.1	5.8	8.1
Cash	0.0	0.1	0.5	0.7	**0.7**	**2.8**	4.3
Commodities £-converted	0.1	0.1	-2.1	-1.9	2.9	0.7	3.4
Hedge Funds original $ basis *	1.0	0.4	6.1	3.2	6.3	5.7	8.9
Illustrative £-converted version *	1.7	0.4	-4.1	2.6	5.5	6.7	8.3
Euro relative to Sterling	-1.6	-3.1	-6.6	-3.9	-1.2	1.8	-
US $ relative to Sterling	-1.9	-2.5	-11.3	-2.1	-0.7	0.6	-0.5
Japanese Yen relative to Sterling	-1.4	-0.9	-13.0	-9.2	-1.7	1.3	-0.6
Sterling trade weighted	1.7	2.8	9.8	4.3	0.9	-1.4	0.2
Price Inflation (RPI) *	0.1	0.7	2.4	2.9	3.8	3.2	2.9
Price Inflation (CPI) *	-0.1	0.5	1.5	2.3	2.9	2.7	2.1
Price Inflation (RPIX) *	0.1	0.7	2.5	2.9	3.8	3.3	2.9
Earnings Inflation **	-8.4	-0.4	-1.5	1.7	1.6	2.7	3.4
All Share Capital Growth	-1.5	1.3	9.4	5.1	10.6	4.9	4.6
Net Dividend Growth	-3.0	-2.9	1.4	8.3	3.5	5.3	-
Earnings Growth	-0.2	-1.8	0.3	-1.8	3.9	6.5	5.6

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



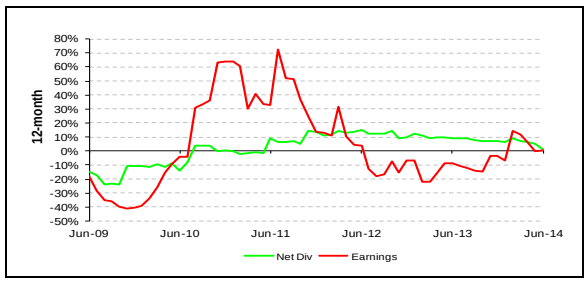
The yield gap is a measure of expected average future inflation, derived as long bond yield minus ILG yield.

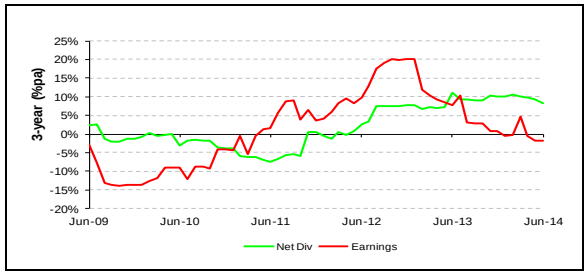
The gap gives a current expectation now just below 3.5% for longer-term inflation + risk premium for gilts, relative to index-linked gilts.

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

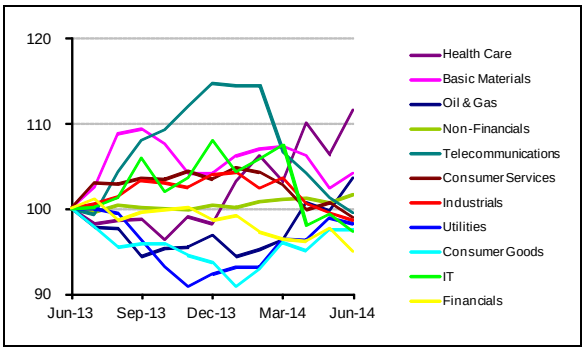




Sources for charts on this page:
Financial Times, Office for National Statistics, J&A

UK Equity Sector Returns

Figure 4a: Sectors relative to All Share



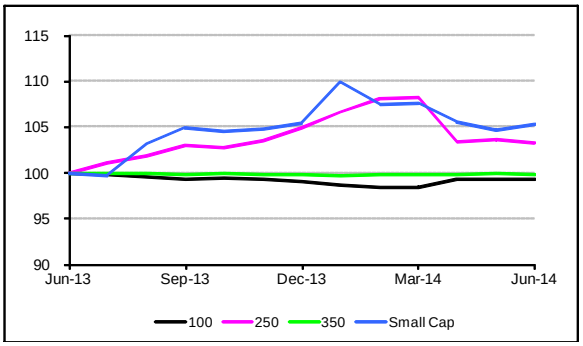
Note: Sector labels for relative lines are in end-value order

There was a slight rise this month in the rolling 12-month sector dispersion (from 14% to 17%).

(% absolute return)	1 mth	3 mth	12 mth
Oil & Gas	2.6	10.0	17.2
Basic Materials	0.5	-0.8	17.8
Industrials	-2.0	-2.7	11.6
Consumer Goods	-1.3	3.8	10.3
Health Care	3.5	10.5	26.2
Consumer Services	-3.0	-1.6	12.0
Telecommunications	-3.1	-4.7	12.5
Utilities	-1.9	4.2	11.2
Non-Financials	-0.3	2.8	15.0
Financials	-4.1	0.6	7.3
IT	-3.4	-7.5	10.0
All Share	-1.3	2.2	13.1

UK Equity Size Returns

Figure 4b: Size groups relative to All Share



Mid Cap fell slightly but 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

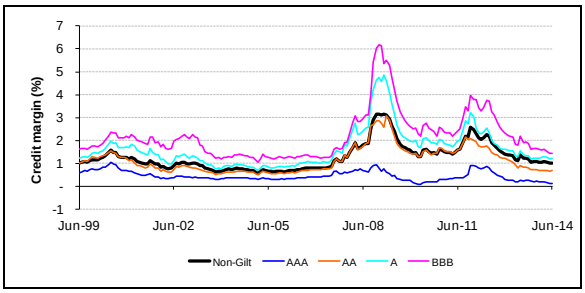


Table 2a: Over 15 Yr Corporate Yields & Margins

Month End	iBoxx Corp AA Y'ld (%)	FT 20 yr Gilt (%)	Margin (%)
Jan '14	4.19	3.34	0.85
Feb '14	4.17	3.35	0.82
Mar '14	4.25	3.35	0.90
Apr '14	4.17	3.34	0.83
May '14	4.07	3.26	0.81
Jun '14	**4.12**	**3.31**	**0.81**

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

Category	Mkt Val @ Jun 14 & 11, 08			Weight (%)
Gilts (38)	1,095	832	343	67.1
Non Gilts (1,051)	537	469	419	32.9
AAA (132)	104	128	148	6.4
AA (175)	88	73	72	5.4
A (358)	171	163	131	10.5
BBB (386)	173	105	67	10.6

Category	Mkt Val @ Jun 14, & 11		W't (%)	Dur'n (yrs)
Gilts (38)	1,095	832	67.1	9.6
< 5 Yrs (10)	308	251	18.9	2.7
5–15 Yrs (13)	381	287	23.3	7.1
> 15 Yrs (15)	406	294	24.9	17.1
Non Gilts (1,051)	537	469	32.9	7.9
< 5 Yrs (331)	158	121	9.7	2.7
5–15 Yrs (450)	227	211	13.9	7.6
> 15 Yrs (270)	151	138	9.3	13.9

£ Gilt Market "main" Issuance

- £4.03bn 1¾% 2019 (1.61x, 1.94%, prev Apr 14)
- £3.25bn 2¾% 2024 (2.04x, 2.82%, Apr 14)
- £5.00bn 3½% 2045 (3.30x, 3.46%, new)
- £1.47bn ILG $^{1}/_{8}$% 2019 (2.78x, r.y -0.92%, Mar 14)

Note: Issuance amounts are nominals.

Tables 2d, 2e: € Market Size and Maturity (Jun 14)

Category	Mkt Val (€bn)	Weight (%)
Sovereigns (284)	5,204	59.7
Non Sovereigns	3,507	40.3
AAA (552)	1,052	12.1
AA (450)	767	8.8
A (805)	880	10.1
BBB (783)	808	9.3

Category	Mkt Val (€bn)	Weight (%)
1 – 3 Yrs (824)	2,231	25.6
3 – 5 Yrs (705)	1,806	20.7
5 – 7 Yrs (596)	1,475	16.9
7 – 10 Yrs (502)	1,605	18.4
10+ Yrs (247)	1,593	18.3

Table 2f: Breakdown of £ Index-Linked Market

Category (Number of issues)	Mkt Val (£bn @ Jun 14 & 11)		W't (%)	Dur'n (yrs)
Gilts (23)	405	272	92.4	19.1
< 5 Yrs (2)	44	22	10.0	2.5
5 – 15 Yrs (7)	126	104	28.9	9.3
> 15 Yrs (14)	235	146	53.6	27.5
Non Gilts (43)	33	25	7.6	16.8

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

Month End	US (%)	Euro (%)	Sterling (%)
Dec '13	5.67	4.52	5.75
Jan '14	5.63	4.41	5.65
Feb '14	5.37	4.16	5.50
Mar '14	5.40	4.11	5.45
Apr '14	5.31	4.01	5.39
May '14	5.21	3.94	5.43
Jun '14	**5.16**	**3.91**	**5.51**

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

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.