HEALTH WEALTH CAREER

AVON PENSION FUND
BREXIT IMPLICATIONS DISCUSSION

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SUMMARY

- **Move to CPI Plus discount** basis has meant that the funding position has not been negatively impacted as a result of falling gilt yields (as previously would have been the case). Lower gilt yields may, however, reduce long-term asset class return expectations, which would impact funding. We will follow up on this in due course

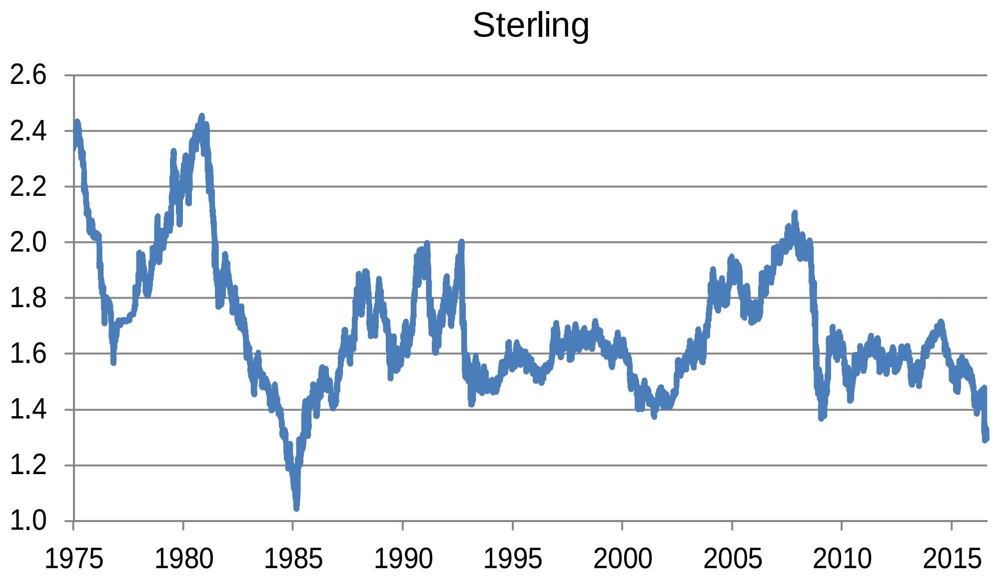
- Increased market uncertainty and potential for volatility further supports the strategic case for the proposed **risk management framework**, which has been agreed to be implemented. Actual yield triggers to be adopted will need to be reviewed closer to the point of implementation

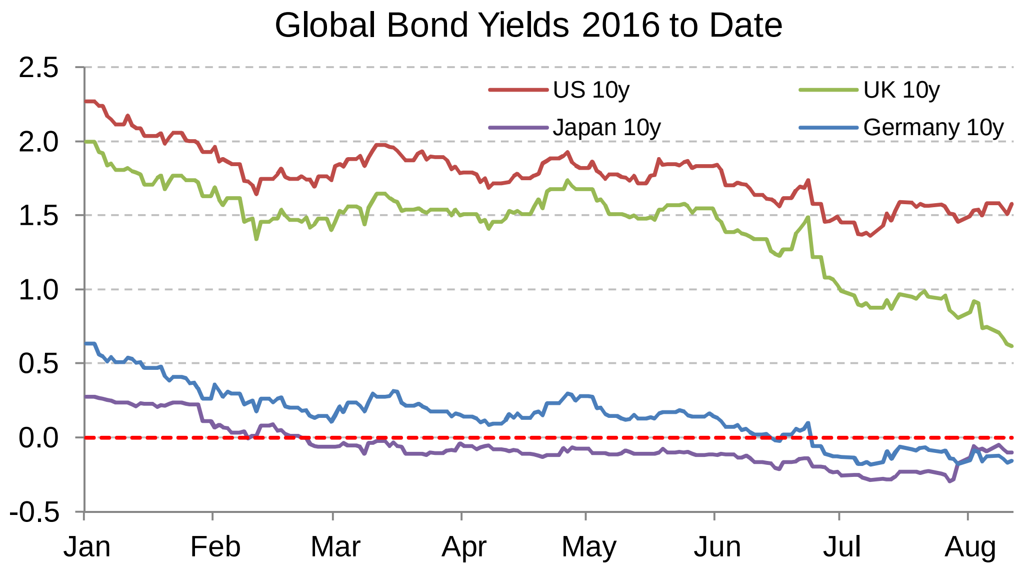
- We continue to support the current approach to **currency hedging** (see separate advice paper)

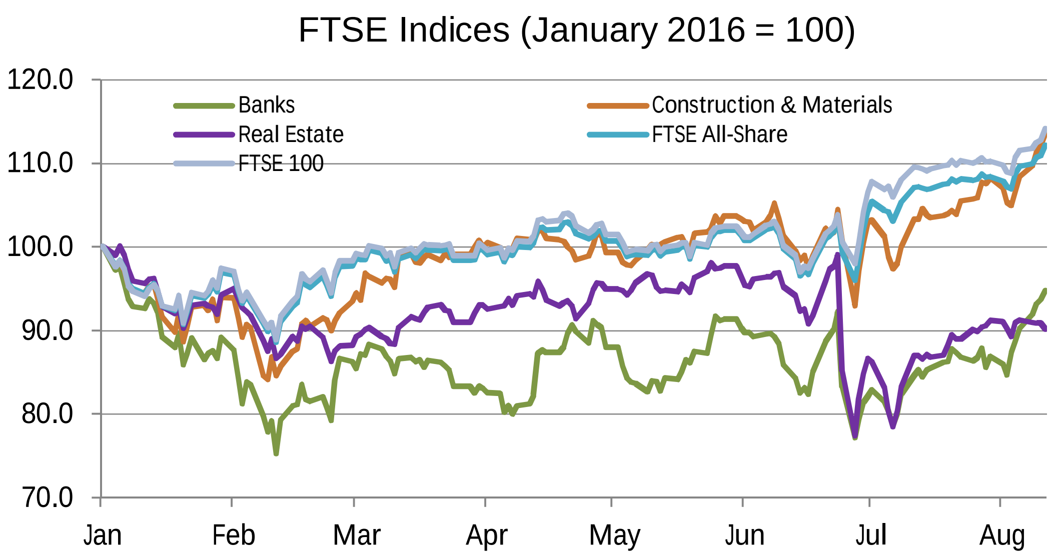
- Increased uncertainty, potential for future market shocks and general "high" level of most liquid growth market, **makes it relatively more attractive to reduce exposure to market directionality** (i.e. simply hoping for market to rise over time). Potential areas to consider include: Lower Volatility Equities, Structured Equities, Private Debt, Multi-Asset Credit and Secure Income assets.

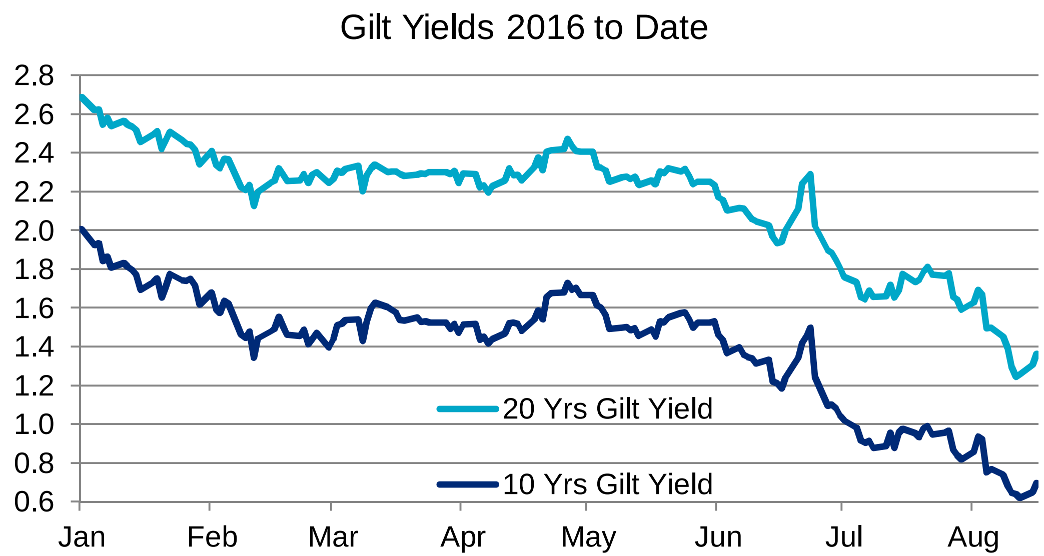
- **Having said this, we think priority should still be given to implementing the risk management framework. Reviewing sources of growth asset risk can be considered as part of the investment strategy review scheduled for next year.**

BREXIT VOTE - MARKET REACTION





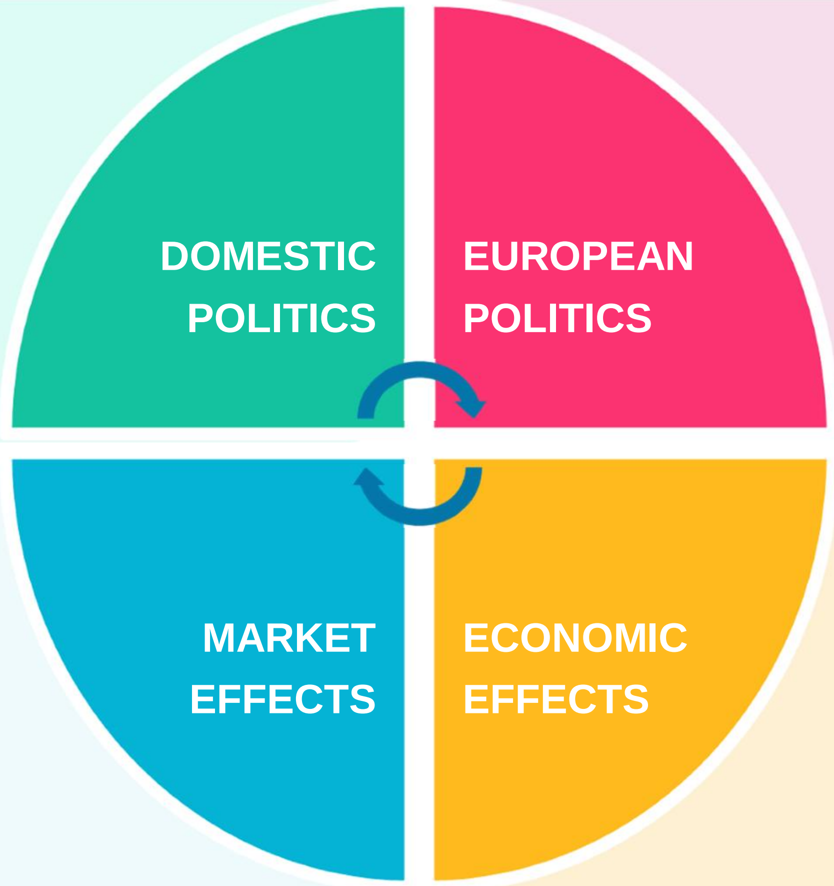




Source: Bank of England, Thomson Reuters Datastream, Mercer calculations

KNOWN UNKNOWNS

- General election / another referendum?
- UK's negotiating stance?
- Scottish referendum?
- Irish referendum?



- EU negotiating stance?
- Calls for referenda in other countries?
- Elections in Germany, France and Netherlands in 2017 and a constitutional referendum in Italy (October 2016)

- Markets remain fragile due to heightened uncertainty and reduced liquidity
- Policy-maker response will also be important (i.e. monetary and fiscal policy)

- Short-term impact on UK economy expected to be negative
- Medium to longer-term effects much harder to predict.

Brexit is not taking place within a vacuum – it is just one part of a complex macro-economic picture containing many sources of uncertainty (e.g. China and the US)

BRExIT SCENARIOS

More favourable | Less favourable | Least favourable

Quick resolution - Hard Brexit

- UK leaves EU, reverts to WTO rules, has conclusive trade negotiations with EU.
- Brexit creates winners and losers on industry sector level.
- Economic activity recovers by 2018 causing short term inflation.
- GBP recovers modestly by the end of the period.

Quick resolution - Soft Brexit

- Sharp slowdown in economic activity in 2016 HY2, GBP weakens.
- Political resolution in mid-2017 (EEA type arrangement, or even a vote reversal).
- Political clarity returns the markets to the pre-referendum levels.
- No ‘EU exit’ referenda in pan-Europe and market-friendly parties win elections.

Protracted uncertainty - Inflationary

- UK fails to negotiate access to the single market on good terms.
- UK economy slows down sharply, in a recession through 2018.
- Monetary and/or fiscal stimulus and falling GBP impose inflationary pressures.
- Anti-EU parties lose popularity in Europe after ‘Brexit’ sets an example.

Protracted uncertainty – Disinflationary

- No fruitful negotiations with EU by 2019, UK remains in the single market.
- Economic growth is close to 0% in 2018, BoE cuts rates to 0%.
- Continued uncertainty keeps global bond yields low and dampens equity markets.
- GBP falls slightly.

Global contagion

- Negotiations between UK & EU are acrimonious, extreme political instability.
- Anti-EU parties popular in EU, sovereign debt problems re-emerge in Eurozone.
- UK moves into a recession and global growth slows, no GBP impact.
- Yields continue to fall and inflation remains subdued.

Loss of confidence in UK

- Negotiations between UK & EU are acrimonious, extreme political instability
- Anti-EU parties popular in EU, sovereign debt problems re-emerge in Eurozone.
- Global growth slows while UK falls into a deep recession.
- Further cuts in UK credit rating, GBP declines which is inflationary.

LIABILITY RISK MANAGEMENT STRATEGY

Issues for discussion:

- Brexit (and the dramatic falls in gilt yields following the Referendum results) expected to have had limited direct impact on the liabilities on the 2016 “CPI plus” basis, although the impact on long-term return expectations may be to increase liabilities. We will provide advice if we believe this to be case in due course.
- In terms of the liability risk management strategy due to be implemented, yield trigger levels should be reviewed given the substantial fall in yields this year (as already built into the implementation plan).
- Need to ensure that collateral levels are sufficient to cover a material (e.g. 1-2%) rise in yields. If not, need to agree where additional collateral would be sourced from (e.g. passive equity portfolio).
- Need to ensure sources of financing for the liability risk management portfolio are stable, diversified and cost-effective – will form part of design and documentation.
- The above points would have been covered anyway as part of the risk management framework implementation. But, post the Brexit vote, we think it is even more important to address these issues.

GROWTH PORTFOLIO STRUCTURE

Issues for discussion:

- Does the level of equity and credit exposure remain appropriate, especially where there is a UK tilt?
- Consider tilting towards less “market-sensitive” asset exposures:
  - Low volatility equity / structured equity (making use of options to tailor the return distribution)
  - Private Debt or defensive real assets in place of equity
  - Credit based strategies that the Fund does not already have exposure to, e.g. Multi-Asset Credit
- Seek opportunities in less liquid markets:
  - Impact of Brexit on the banking sector may create some interesting opportunities in Private Markets
  - Secured income strategies (semi-liquid credit) offer a yield premium as compensation for reduced liquidity and greater complexity

APPENDIX

POSSIBLE BREXIT MODELS

	Tariff free trade with EU	Negotiates own trading terms with countries outside the EU?	Free movement of persons	Contribution to EU budget	Eurozone membership	Require domestic legislation equivalent to EU law	Votes on EU law?
The Norway Model (EEA Model)	Yes	Yes	Yes	Yes	No	Yes except on fishing or farm policies	No
The Swiss Model	Partially – most goods, but not most services	Yes	Yes	Yes	No	Yes	No
The Turkish Model	Partially – some goods, not services	Yes, but tariffs must be aligned with EU.	No	No	No	Yes in certain areas such as consumer protection, competition and intellectual property	No
The Canadian Model	Partially – some goods, not services	Yes	No	No	No	No	No
The World Trade Organisation Model	Exports would face EU's WTO tariff rates and will continue to have to meet EU product standards	Yes	No	No	No	No	No

Source: Based on information in the HM Government "Alternatives to membership" paper (March 2016).

LIES, DAMNED LIES AND ECONOMIC FORECASTING

- Economic forecasters do not have a good track record at predicting the future
  - One of the key problems is that large scale models used by international organisations and central banks have difficulty in accurately modelling the financial sector
- There is no counter-factual (i.e. we will not know what would have happened had the UK voted to remain part of the EU), so it will be impossible to assess the accuracy of any projections
- Critical to assessing the broader economic impact are assumptions about the policy response and the exchange rate (which are extremely difficult to forecast)
- Forecasts should therefore be approached with caution

SUMMARY OF FORECASTS

- HM Treasury projects that *anything other than EEA membership* will have a *significant impact* on trade and Foreign Direct Investment (FDI)
- Short term forecasts suggest an average impact per annum of *1 to 1 ½ percentage points reduction in GDP*
- Given current rates of GDP growth, this suggests that the UK will *be close to recession* over this period
- HM Treasury forecasts a much more pessimistic long-term impact than Oxford Economics
- A comparison between the short and long term forecasts suggests that *short term losses in output will be greater than longer term losses*, which is intuitive as trade and FDI will suffer less once the future trading relationships between the EU and other countries evolve

HM Treasury: Cumulative Effect of Leaving EU after 15 Years

	EEA	Bilateral Agreements	WTO
Trade			
Best	-9%	-14%	-17%
Worst	-9%	-19%	-24%
FDI			
Best	-10%	-15%	-18%
Worst	-10%	-20%	-26%

Forecasts of GDP Impact

	GDP Best	GDP Worst	Worst Average p.a.
PWC/CBI (5 years)	-3.1%	-5.5%	-1.1%
SocGen (5 years)	-4.0%	-8.0%	-1.6%
Citibank (3 years)	-4.0%		-1.3%
Deutsche (3 years)	-3.0%		-1.0%
HM Treasury (15 years)	-3.8%	-7.5%	-0.5%
Oxford Econ* (15 years)	-0.1%	-3.9%	-0.3%

*Details of the Oxford Economics study are copyright and confidential to subscribers. Numbers shown were obtained from publically available summary document

Source: “HM Treasury analysis: the long term economic impact of the EU and other alternatives”, April 2016

WHERE DOES THIS LEAD US?

- While the likely *short-term* economic implications of Brexit are widely accepted – a *negative impact due to increased uncertainty* – the medium and longer-term implications are much harder to assess:
  - Over the *medium-term* (3-5 years) the economic impact on the UK is likely to be driven in large part by the nature any *trade deals* agreed with the EU and non-EU countries
  - The *longer-term* implications will depend on an extremely wide range of factors. However, the empirical evidence throughout history, across a multitude of time periods and countries, suggests that an *increase in barriers to trade*, and *reduced immigration*, *detract from economic growth.*
- Uncertainty over the economic impact is *compounded* by *other uncertainties:*
  - *Policy response:* Bank of England Governor Mark Carney has already announced further QE and a cut in base rates. What happens if this is ineffectual? What will be the fiscal response from the new Chancellor and the Government?
  - *Global growth* has been *weak for some time*. Disentangling global effects from Brexit effects will prove very difficult.
  - Both major *political* parties are experiencing a period of significant *turmoil* and the political implications of Brexit for Scotland and Northern Ireland are still unclear.
- Perhaps the most significant potential risk factor related to Brexit is *contagion in other EU members*. From a *global perspective*, Brexit does *not pose an existential risk*, but an *implosion of the EU* could have *catastrophic consequences.*

BREXIT SCENARIOS

- We set out a number of plausible scenarios for the period from now until the end of 2018
- There is a great deal of uncertainty over how the situation will develop. The scenarios we outline are not exhaustive, they are simply designed to illustrate a range of outcomes that will have differing implications for financial markets.
  - We have not attempted to be specific about the institutional outcomes – e.g. the nature of the UK's future trading arrangements or whether Scotland leaves the UK
  - We have not assigned probabilities to each of the scenarios on the basis that this would be highly speculative given the political nature of the discussions to follow.
  - It is quite possible that we move through some combination of the scenarios outlined below as well as some that we have not explicitly addressed.
- Rather than trying to "optimise" portfolios to achieve the best average outcome across scenarios, we would suggest that investors seek to understand the potential funding and investment implications of different outcomes and consider actions to help mitigate the impact of the most painful outcomes.

BREXIT SCENARIOS
SUMMARY

	Now	Quick resolution - Hard Brexit 1a End 2018	Quick resolution - Soft Brexit 1b End 2018	Protracted uncertainty - Inflationary 2a End 2018	Protracted uncertainty - deflationary 2b End 2018	Global Contagion 3a End 2018	Loss of Confidence 3b End 2018
20 yr Gilt yield	1.50%	2.00%	2.50%	2.00%	0.75%	0.00%	2.00%
20 yr ILG yield	-1.40%	-0.75%	-0.50%	-2.25%	-1.75%	-2.50%	-1.50%
GBP/USD	$ 1.30	$ 1.30	$ 1.45	$ 1.00	$ 1.20	$ 1.15	$ 1.00
UK RPI Mid 2016 - End 2018, p.a.	1.4%	3.5%	3.0%	5.0%	1.5%	2.0%	4.0%
UK Mid Cap / Commercial Property	100	115	120	70	80	70	65
Global Equity in USD	100	115	120	110	100	60	70
Global Equity in GBP unhedged	100	115	108	143	108	68	91
Sterling Credit Spread	1.9%	1.7%	1.5%	2.2%	2.2%	3.0%	3.5%

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MAKE TOMORROW, TODAY