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Heading for the Brexit

Ross Walker, NatWest Markets

Giles Gale, NatWest Markets

Andrew Kenyon FIA, NatWest Markets

02 October 2018

Agenda

- **UK Economic Outlook**

  Ross Walker, Head of UK & European Economics

- **An American Cycle**

  Giles Gale, Head of European Rates Strategy

- **Concerns for Insurers**

  Andrew Kenyon FIA, UK Insurance Origination & Solutions

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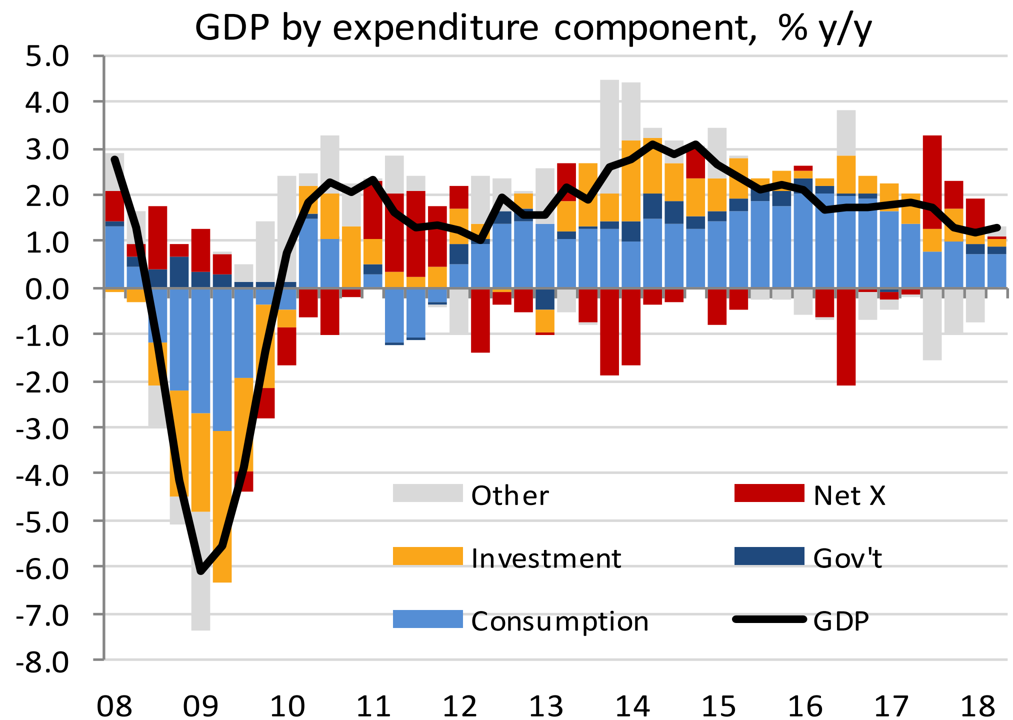
UK Economic Outlook

Ross Walker
Head of UK & European Economics

02 October 2018

UK | Economic Rebalancing

- **GDP EXPENDITURE components**: Clearer evidence in recent years of shift from consumption-led growth to investment and net exports (albeit within the context of slowing growth post-EU referendum).
- However, the most recent data signal slowdown risks in capex and trade.
- NWM GDP forecasts: 1.4% in 2018 & 1.6% in 2019 (vs long-run average ~2¼%).



Source: ONS, NatWest Markets

Brexit | Deal or No Deal

Financial markets have failed to distinguish between the **'Withdrawal Agreement**' and the **'Future Framework**'.

Withdrawal Agreement (WA):

- Concerns the constitutional & financial mechanics of EU exit (including 'divorce bill' & citizen's rights).
- 80-90% agreed. The border with Ireland/customs arrangements, the main outstanding issue, can be fudged – or given existing positions on future economic relations/customs arrangements simply accept a hard border).
- WA merely requires the EU to 'take account' of future relations, a detailed blueprint is not required at this stage.
- We expect a WA to be reached in autumn 2018 (18th October 2018 EU Summit at the earliest, 13-14th December 2018 EU Summit at the latest). Detailed negotiations on FF to follow, during transition period (to end-2020). We expect a 'harder Brexit': a Canada-type free trade agreement.

Future Framework (FF):

- Concerns a future 'trade deal' or extent of access to the Single European Market (SEM).
- Relatively little agreement on FF. EU27 has pushed back against various aspects of the UK's White Paper. Fundamental trade-off between SEM access and national sovereignty lies at the heart of the dilemma.
- UK Gov't seemingly putting higher priority on a quasi-SEM arrangement for goods rather than services access. The logic of the UK Government's 'red lines' and the EU27's stance on the integrity of the SEM is a 'harder Brexit' (a more limited 'Canada-plus' free trade agreement rather than an 'EEA' high-SEM access settlement).

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Brexit | Impact

- UK Treasury study of the long-term impact on the UK economy of EU membership and the alternatives (April 2016).
- **'EEA'** outcome would be a 'Norway' type deal, with a high degree of EU single market access (including financial services).
- **'Bilateral'** agreement would be akin to a 'Canada' or 'Switzerland' type free trade agreement.
- **'WTO'** is a 'no deal' outcome (tariffs on goods, no deal in services) – the hardest realistic Brexit.

Annual impact of leaving the EU on the UK after 15 years (difference from being in the EU)

	EEA	Negotiated bilateral agreement	WTO
GDP level (%) – central	–3.8	–6.2	–7.5
GDP level (%)	–3.4 to –4.3	–4.6 to –7.8	–5.4 to –9.5
GDP per capita – central[a]	–£1,100	–£1,800	–£2,100
GDP per capita[a]	–£1,000 to –£1,200	–£1,300 to –£2,200	–£1,500 to –£2,700
GDP per household – central[a]	–£2,600	–£4,300	–£5,200
GDP per household[a]	–£2,400 to –£2,900	–£3,200 to –£5,400	–£3,700 to –£6,600
Net impact on receipts	–£20 billion	–£36 billion	–£45 billion

[a] *Expressed in terms of 2015 GDP in 2015 prices, rounded to the nearest £100.*

Source: HM Treasury

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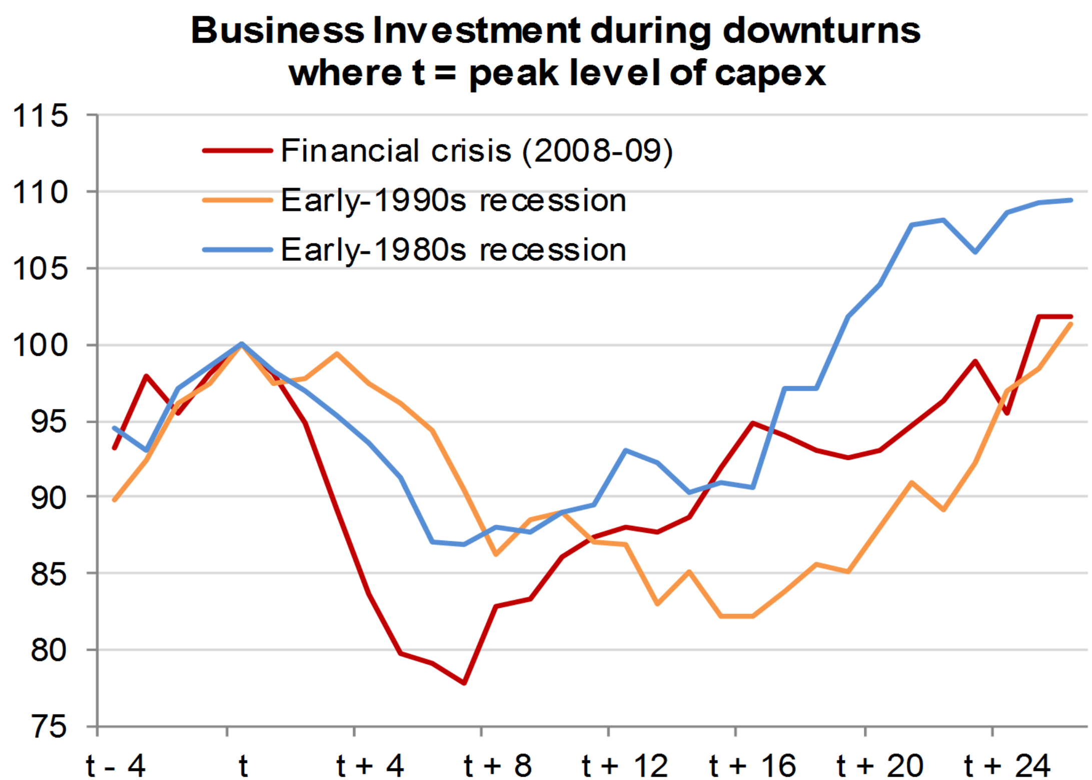
Brexit Risks | CapEx

- Economically, Brexit risks are centred most immediately on the corporate sector and capex.
- Business investment is one of the most cyclical components of GDP and previous downturns show an average peak-to-trough decline of 17.6%. . . At an average annual pace of 8.2%.
- **An 8% fall in capex would wipe almost 1½% points off GDP growth – i.e. the bulk of a full year's growth.**



Source: ONS, NatWest Markets

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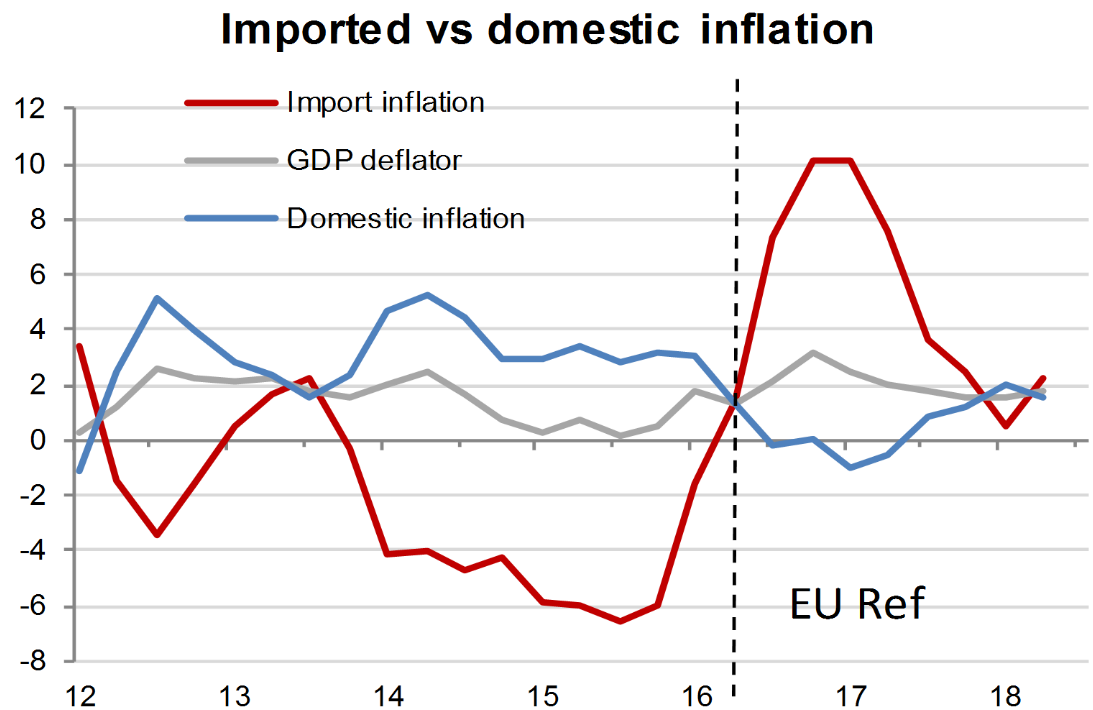
UK Inflation | Is There a Problem?

- 'GDP expenditure deflators' (gauges of inflation) show UK import price inflation peaking at 10.2% y/y in Q1 2017, falling to 2.2%% in Q2 2018.
- The overall GDP deflator – which correlates closely with CPI inflation – is running at 1.7%, **implying 'domestic' inflation is close to 1.5% - hardly troubling levels**.
- Implied domestic inflation has been trending up since 2017. . . but from negative rates and remains at subdued levels which are not obviously consistent with a CPI overshoot.



Source: ONS, NatWest Markets

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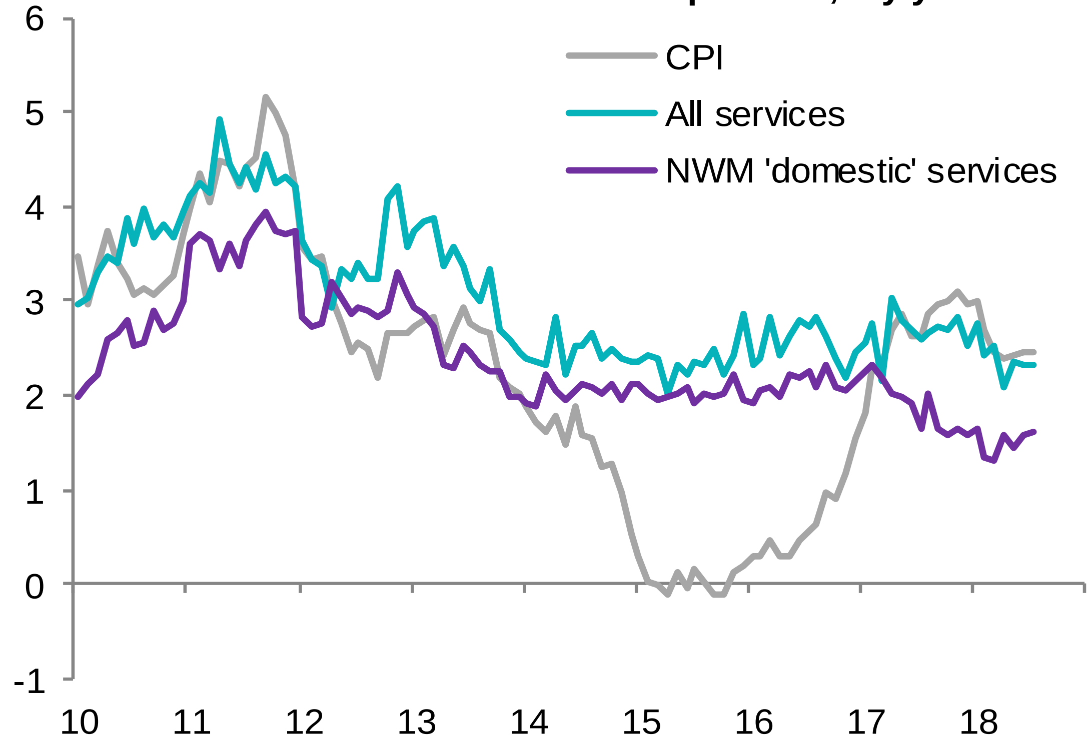
UK Inflation | Domestic Pressures Subdued

- **'Domestic-demand determined' services inflation** – strips out components which are more exogenous or administratively-determined (e.g. rail fares, university tuition fees).
- Our measure of domestic-demand determined services inflation has tended to run materially below total services inflation and remains close to historic lows.

CPI inflation & services components, % y/y



Source: ONS, NatWest Markets

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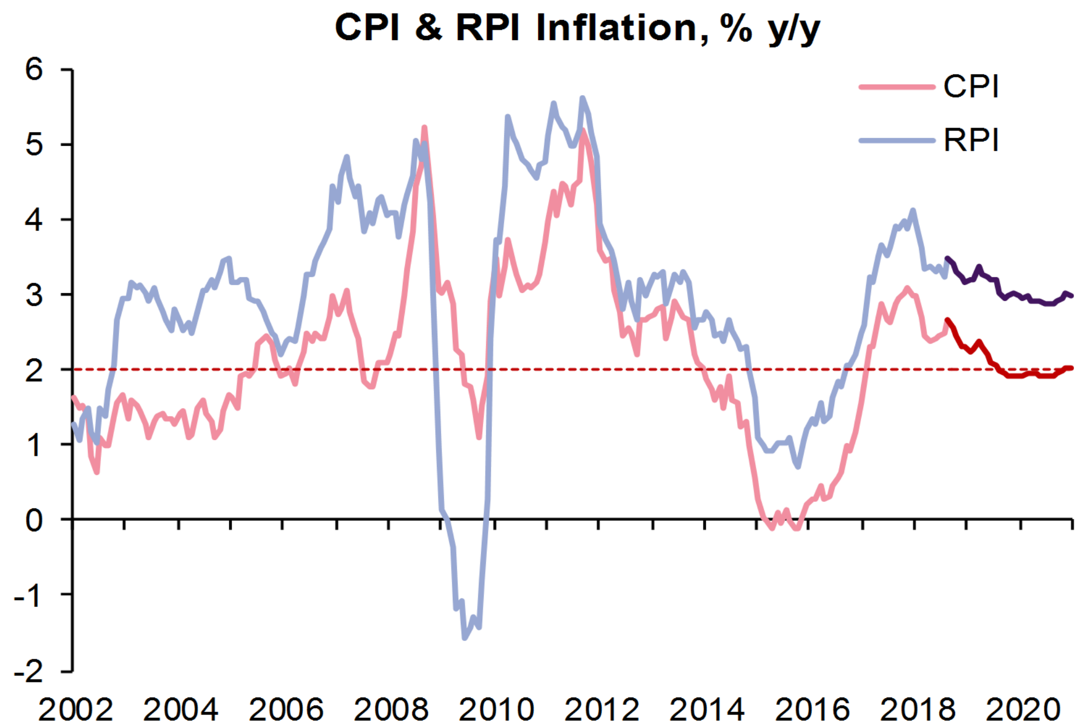
UK Inflation | Domestic Pressures Subdued

- **We forecast CPI to return to target in Q3 2019 and remain close to its 2% target during the remainder of 2019 and 2020.**
- Underlying inflation pressures continue to look subdued – little evidence of any material pick up in wage inflation and survey data suggesting that pricing power remains constrained **point to an undershoot of BoE forecasts.**
- BoE forecasts rest on contentious – or at least inconclusive – notions that slack continues to be eroded as a result of potential supply growth being as low as 1½%.



Source: ONS, NatWest Markets

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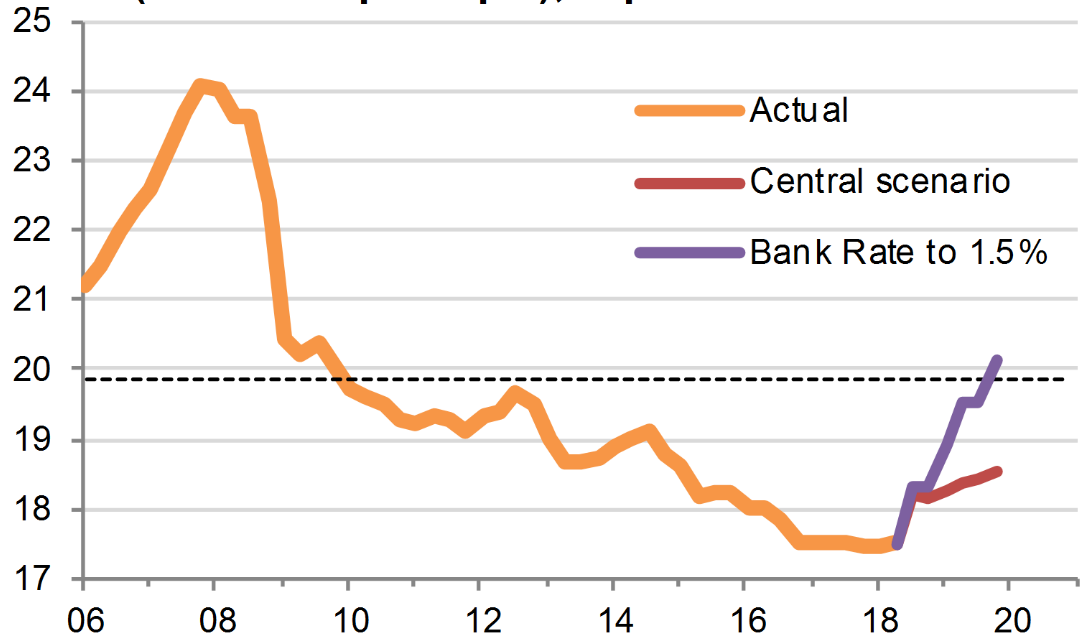
UK Bank Rate | How High Can it Go?

- UK household debt-servicing costs at multi-decade lows (>50% of the stock of mortgage debt is at fixed rates of interest, 2-3 years typically).
- **NWM CENTRAL SCENARIO: Includes 25bp rise in Bank Rate to 0.75% in Aug 2018. Debt-servicing costs remain some way below long-run averages.**
- Bank Rate would need to rise to 1.5% (100bp of increases) to take debt-servicing up to decade averages.

UK household debt-servicing costs (interest & principal), % pre-tax income



Source: ONS, NatWest Markets

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An American Cycle

Giles Gale
Head of European Rates Strategy

02 October 2018

Theme 1 | Neutral Rates are much lower

Lower rates are here to stay. The good news is that it might not get worse

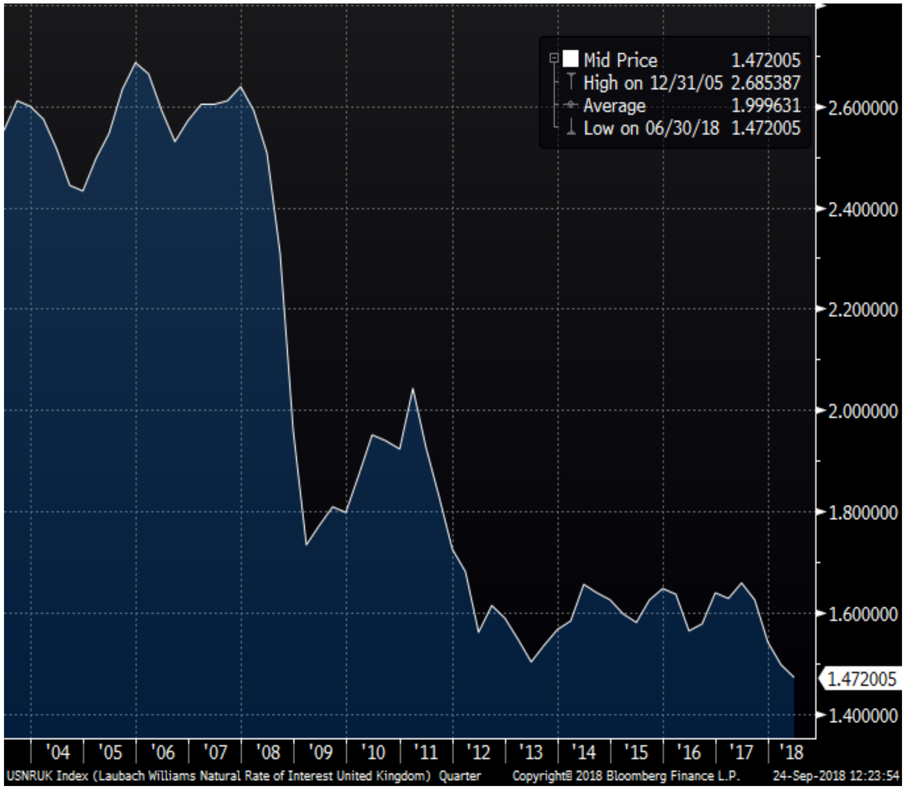
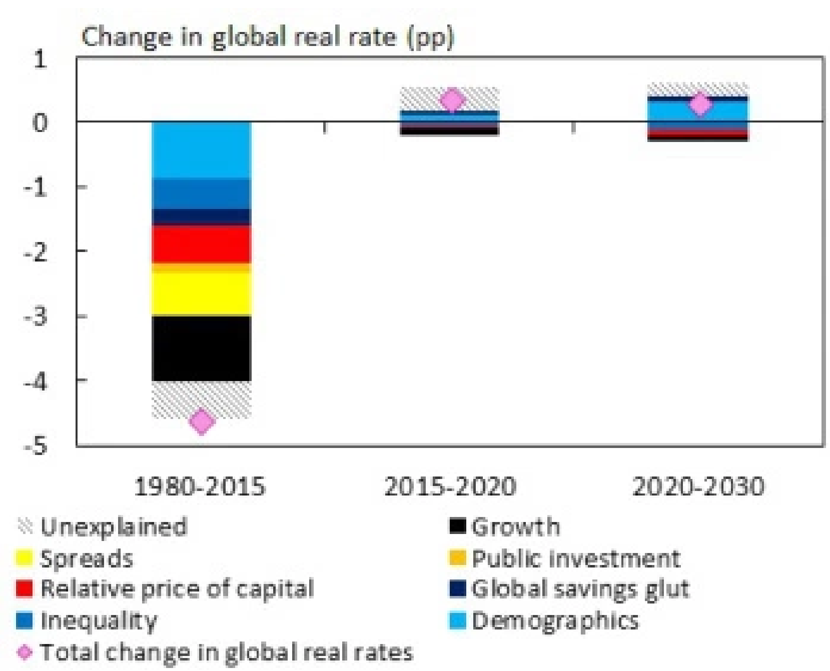


Figure 6: Secular drivers of global real interest rates



Source: BIS, ONS

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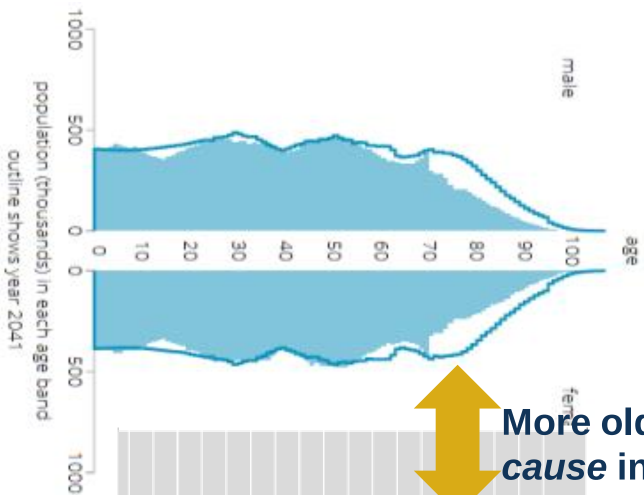
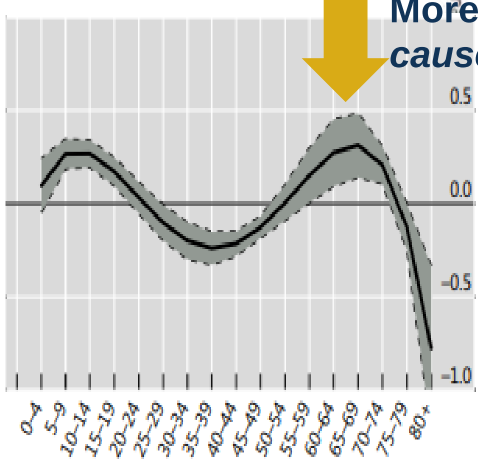
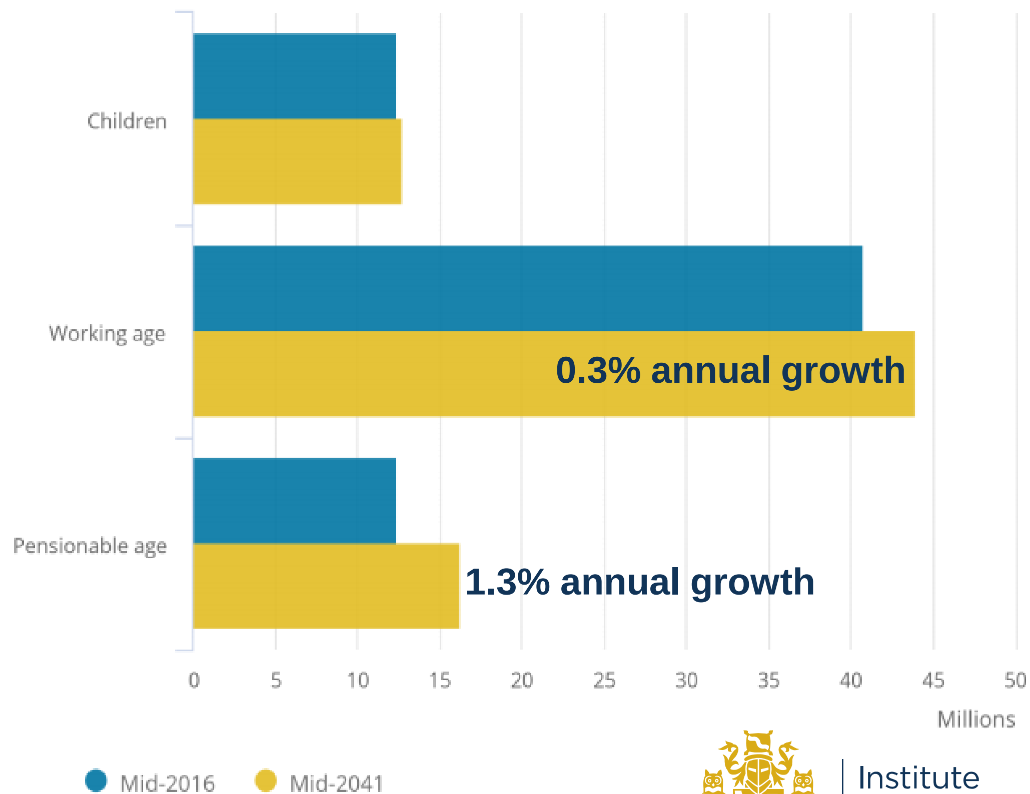
Theme 2 | Inflation won't be easy to keep down

More inflation though?



More old people *cause* inflation





Source: BIS, ONS

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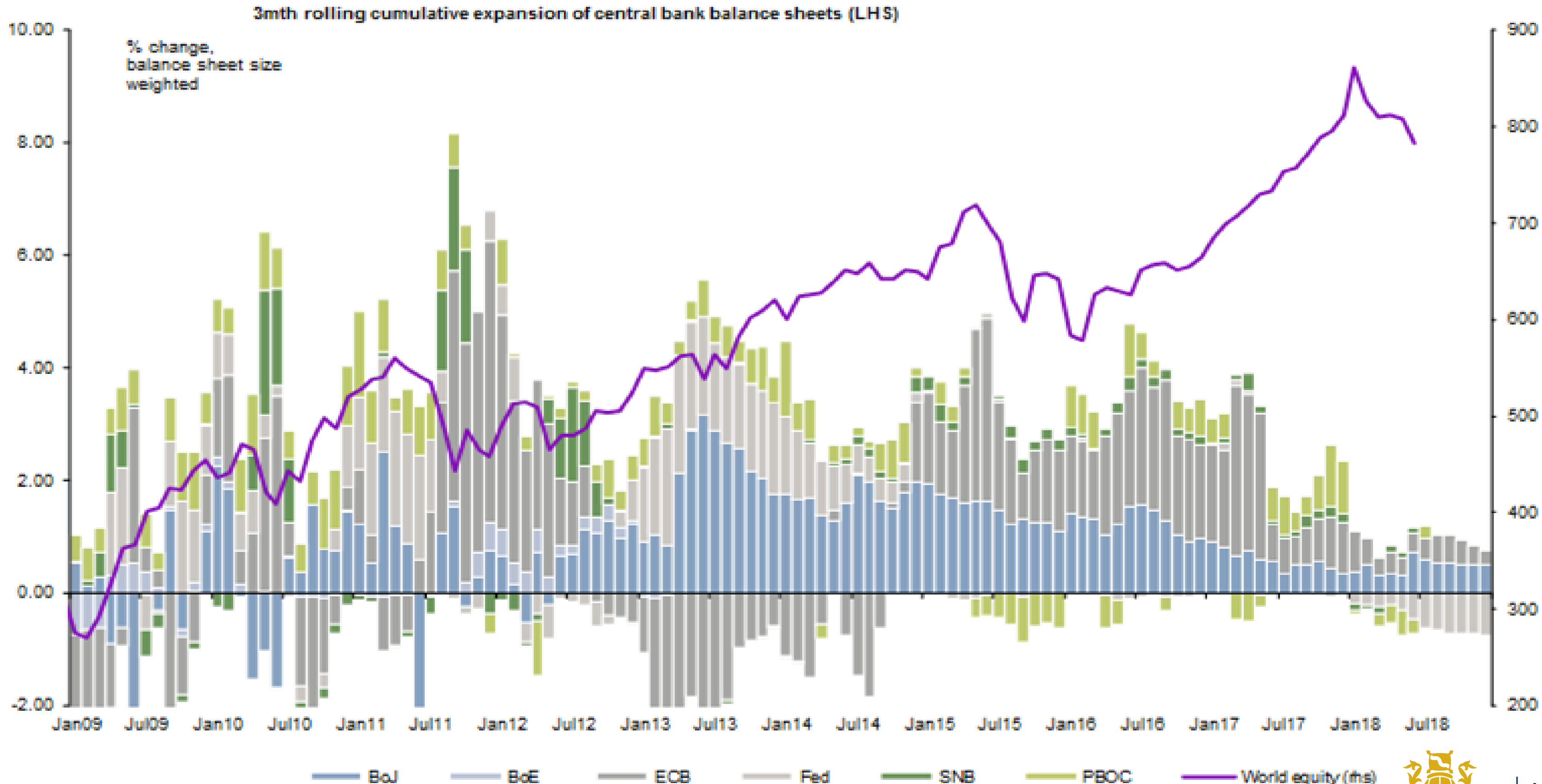
Theme 3 | Global (central bank) liquidity not growing. Concerned?



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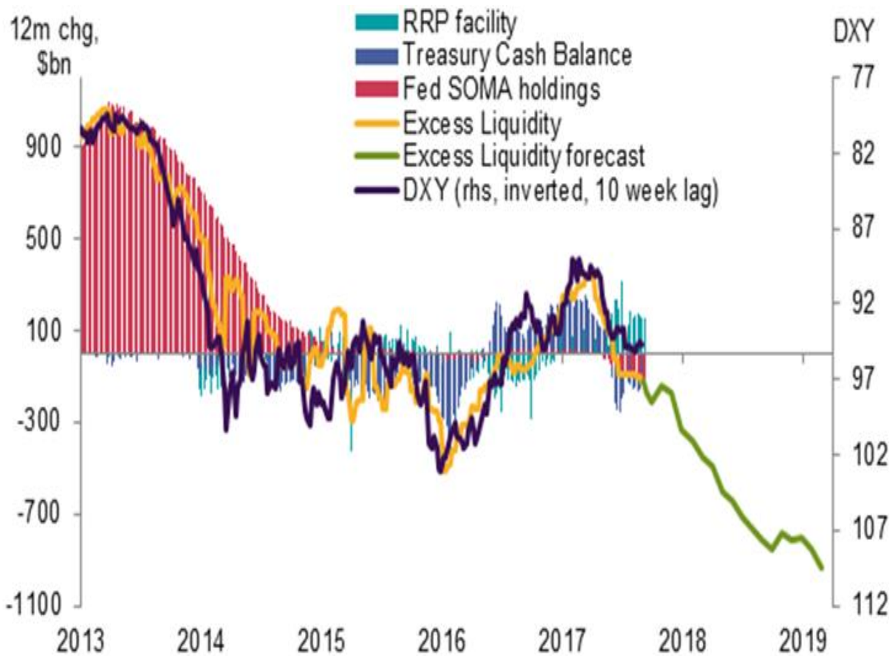
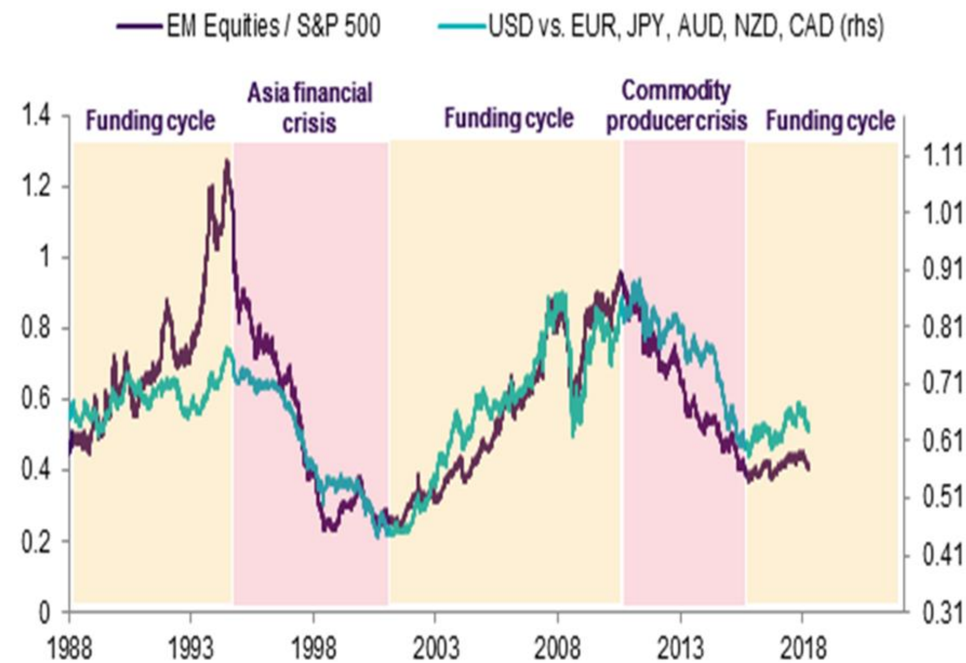
Source: NatWest Markets, ECB

Theme 3 | Global (central bank) liquidity. US only region tightening.

More $ upside coming…





Another problem for the world is that FOMC sensitivity to EM downside, may be likely lower than in past cycles => higher than expected US rates, lower than expected global (ex US) risk assets

Source: NatWest Markets FX Strategy, Bloomberg

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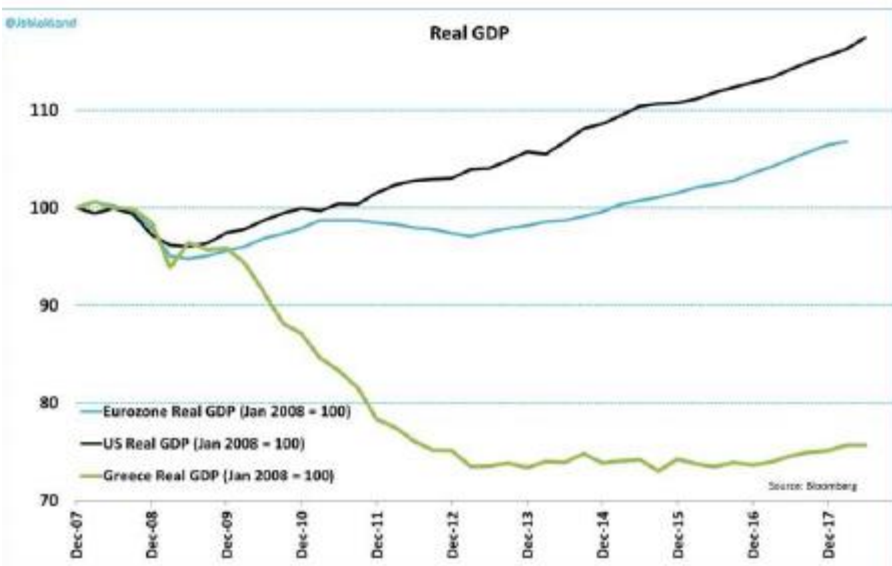
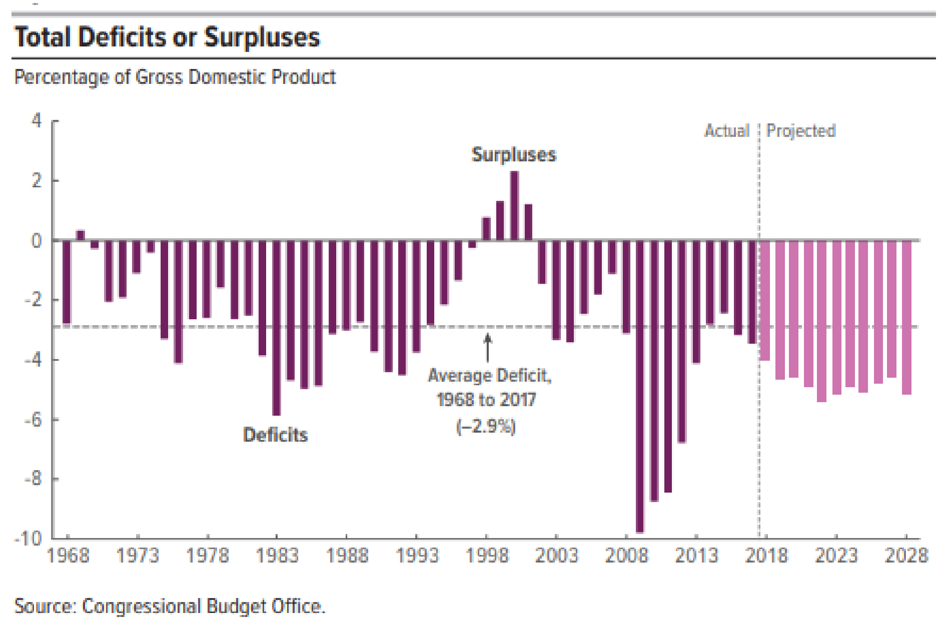
Theme 4 | The US is asking the questions now. Is this time different?

US was already leading the world



Is now aided by the continual fiscal ease, that is SUPPLY Driven



Source: https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/53651-outlook.pdf

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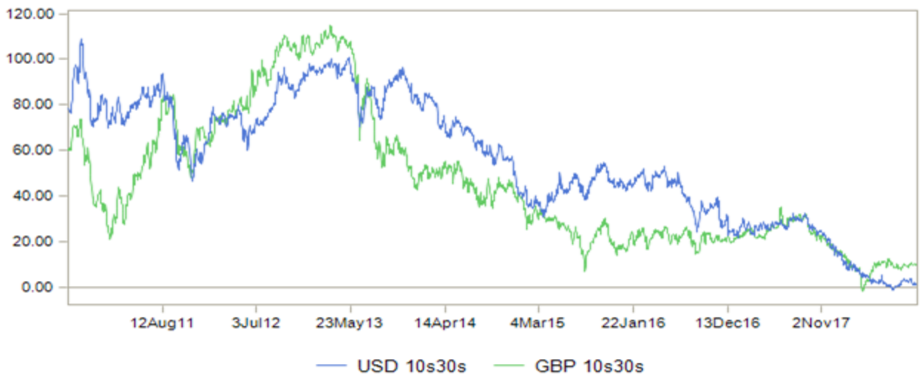
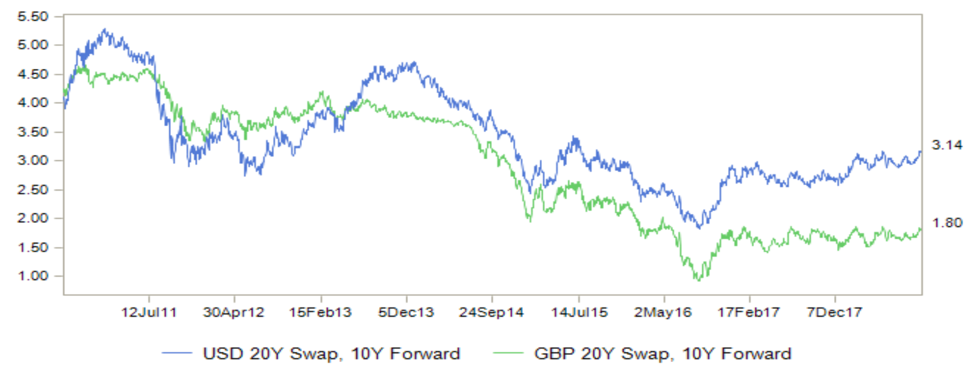
Theme 4 | The US is asking the questions now. Is this time different?

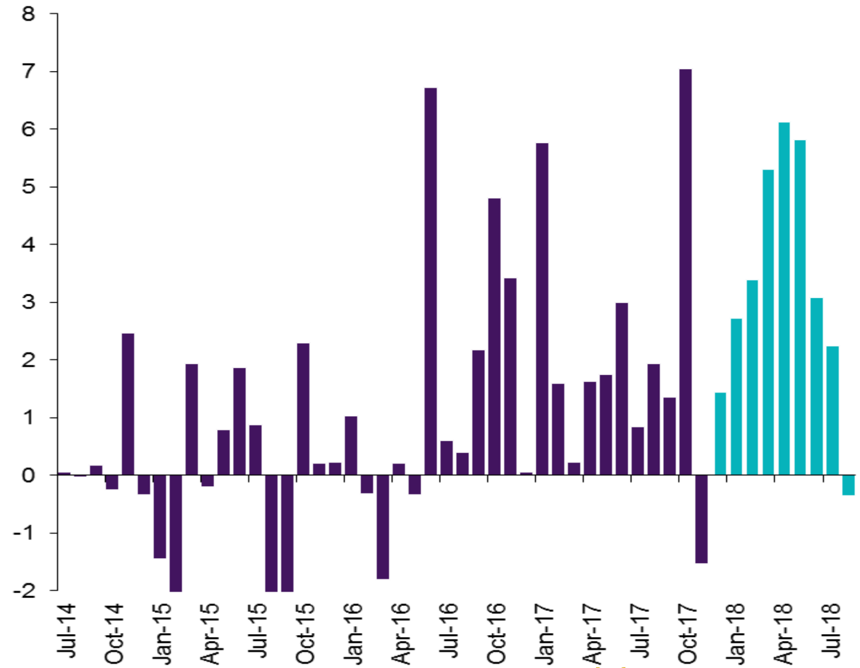
10s30s US curve has flattened and flattened



But long-term rates are rising in the US… more to come?



US pensions have been pouring money into duration… judging by stripping activity. Will that outlast the tax incentive?



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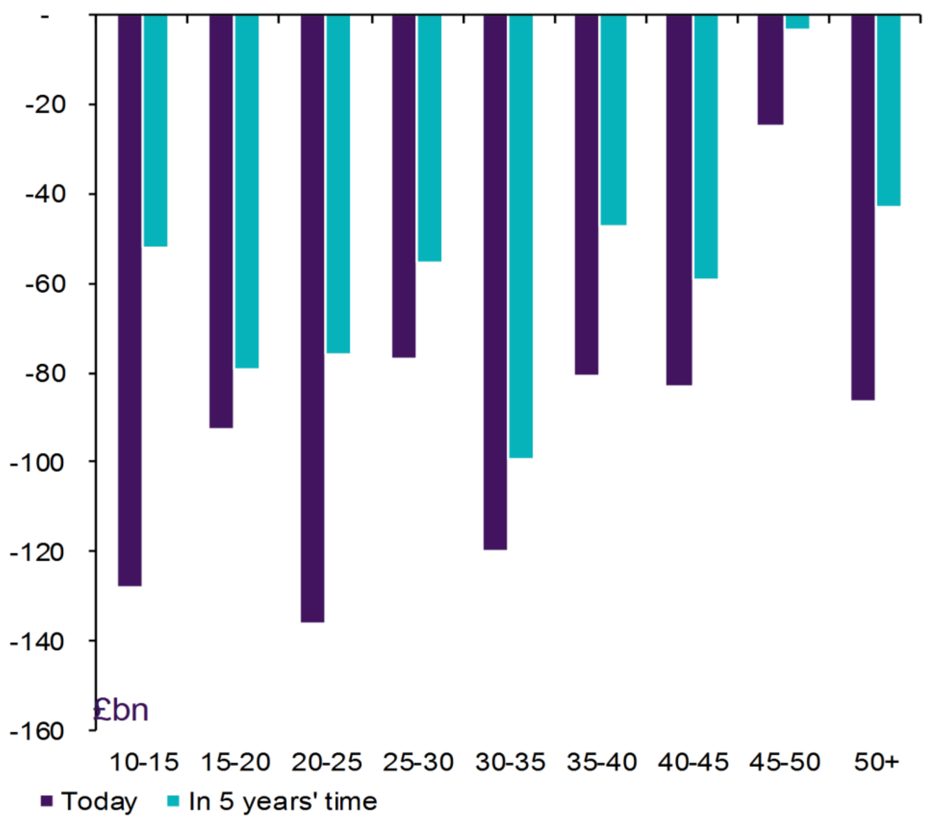
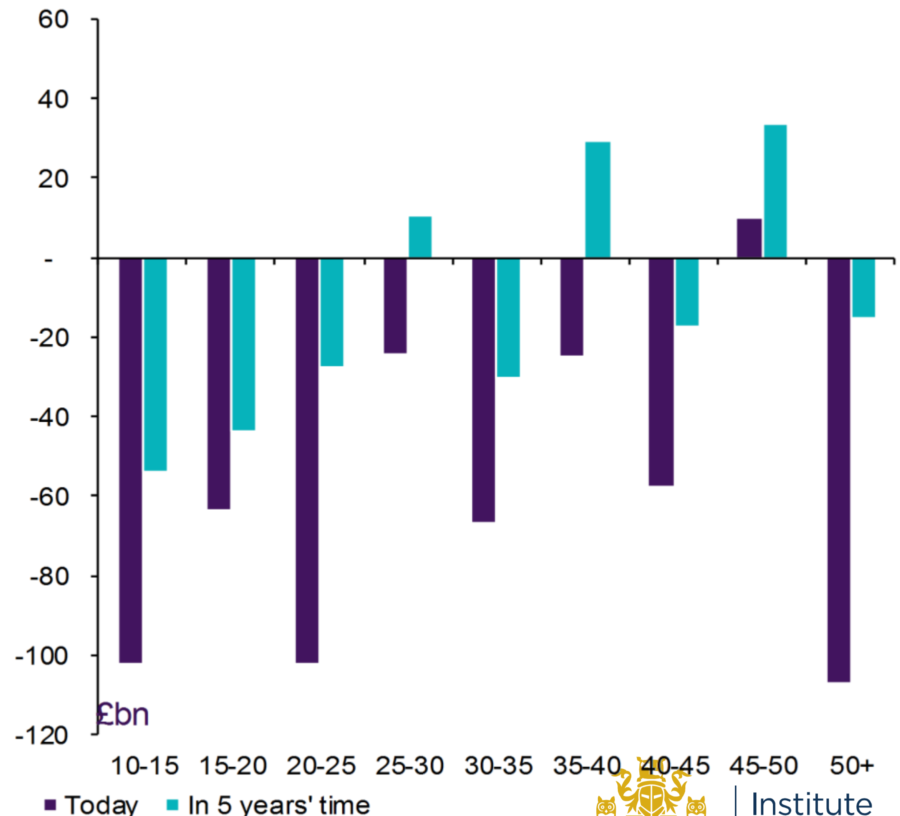
Source: https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/53651-outlook.pdf

Theme 5 | How might the 'structural short' in the UK develop?

The structural short will shrink. A bit.



But for Inflation-Linked it may collapse!



Source: BIS, ONS

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Key Themes

Long term and global:

Theme 1 | Neutral Rates are much lower …

Theme 2 | … but the forces pushing real rates lower may be more inflationary

Medium-term and cyclical:

Theme 3 | Global central bank liquidity is no longer growing, but financial conditions are very easy

Theme 4 | The US is driving the world economy, and the yield curve

Local and structural:

Theme 5 | The 'structural short' in the UK will remain very big. But inflation linkage may be less in-demand.

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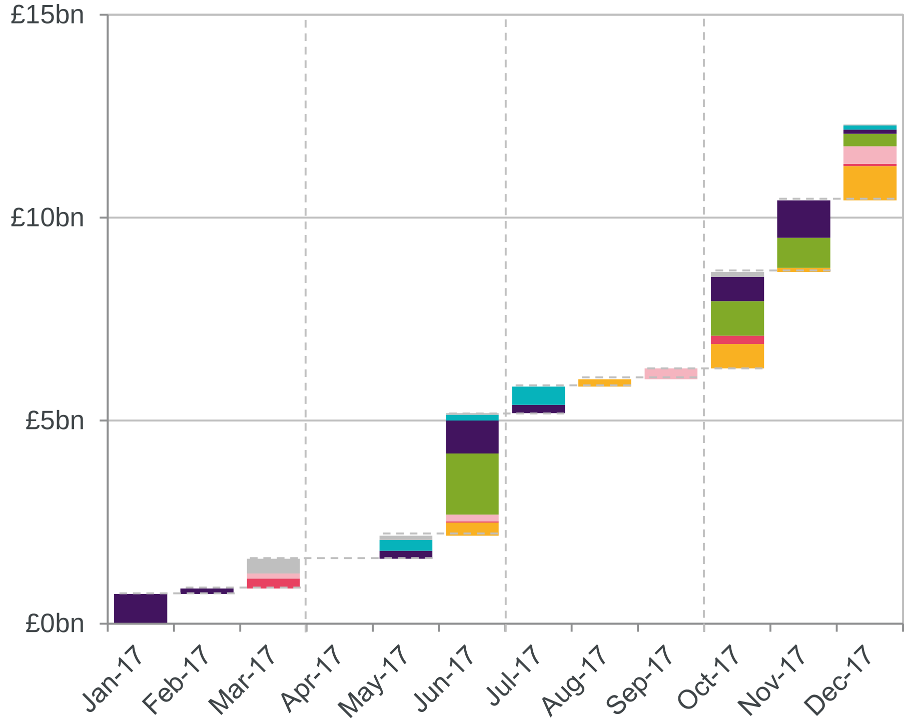
Implications for Insurers

Andrew Kenyon FIA
Insurance Origination & Solutions

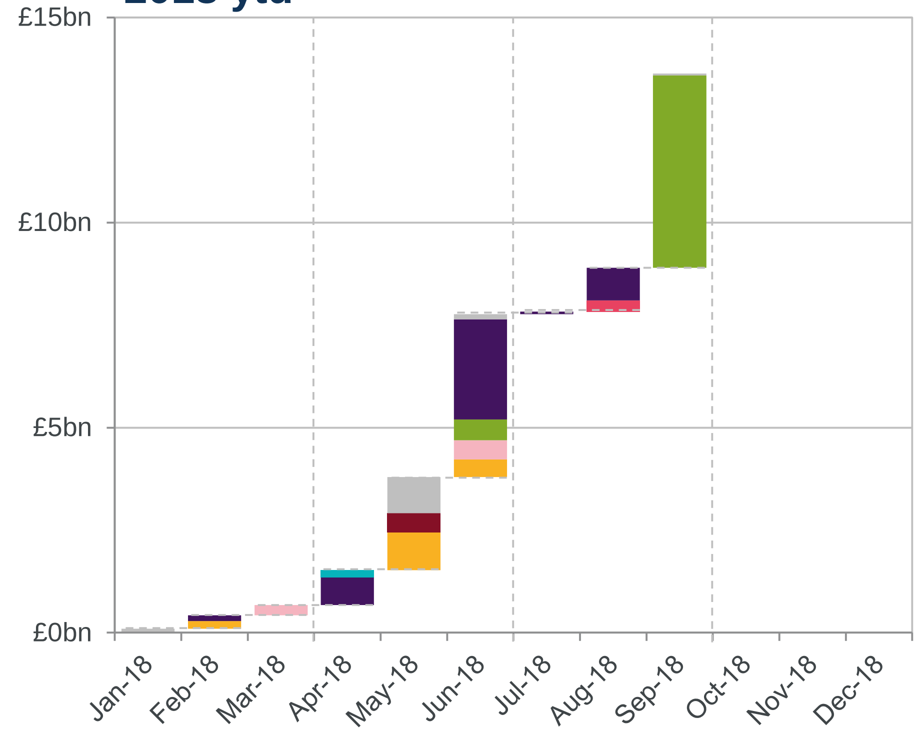
02 October 2018

Insurers | Bulk Annuity Market Volumes

2017



2018 ytd



Aviva | Canada Life | Just | Legal & General | Phoenix | PIC | Rothesay | Scottish Widows

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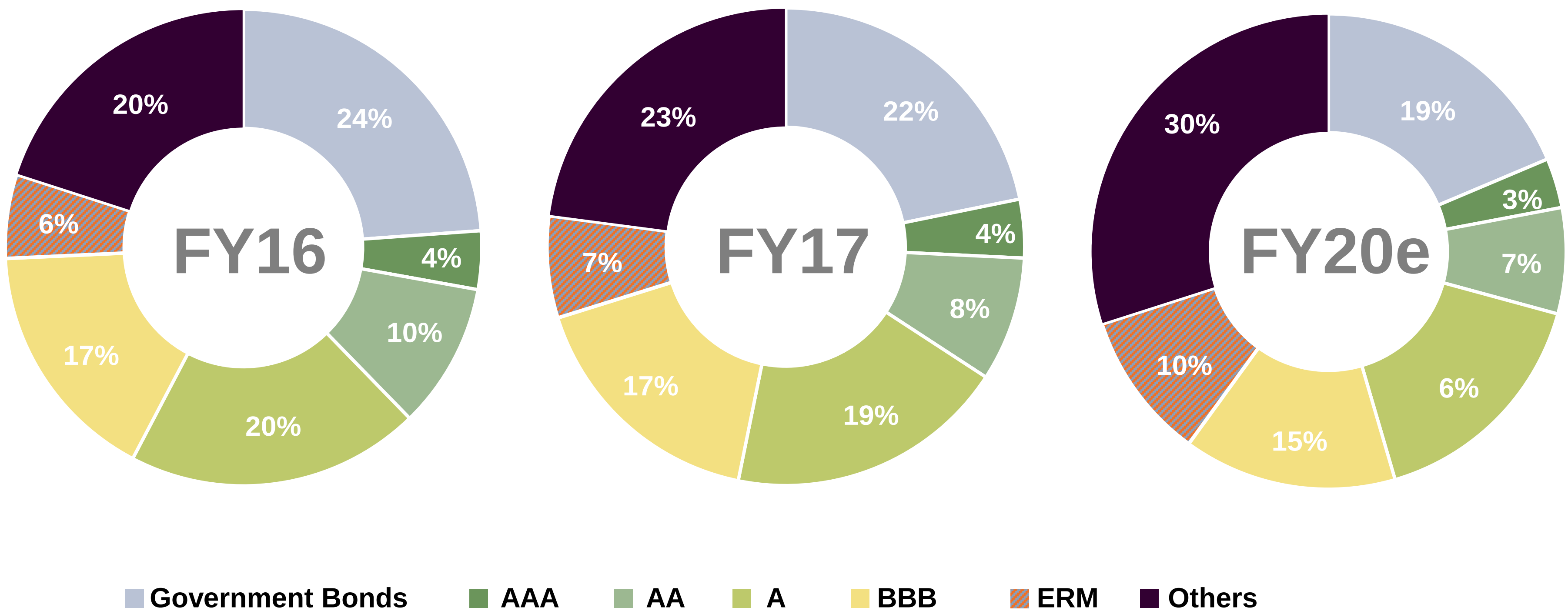
Source: Company press releases, LCP, Hymans Robertson, buy-ins and buy-outs

Assets | Annuity Funds



Source: SFCRs, Annual Reports, FY20 estimate based on “Solvency II one year in”, PRA Feb-17

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Assets | Scrambled NNEGs…

BANK OF ENGLAND

Speech

'An annuity is a very serious business'[1]

Speech given by
David Rule, Executive Director of Insurance Supervision

Bulk Annuities – The Expanding Market, Westminster and City
26 April 2018

BANK OF ENGLAND
PRUDENTIAL REGULATION AUTHORITY

Consultation Paper | CP13/18
Solvency II: Equity release mortgages
July 2018

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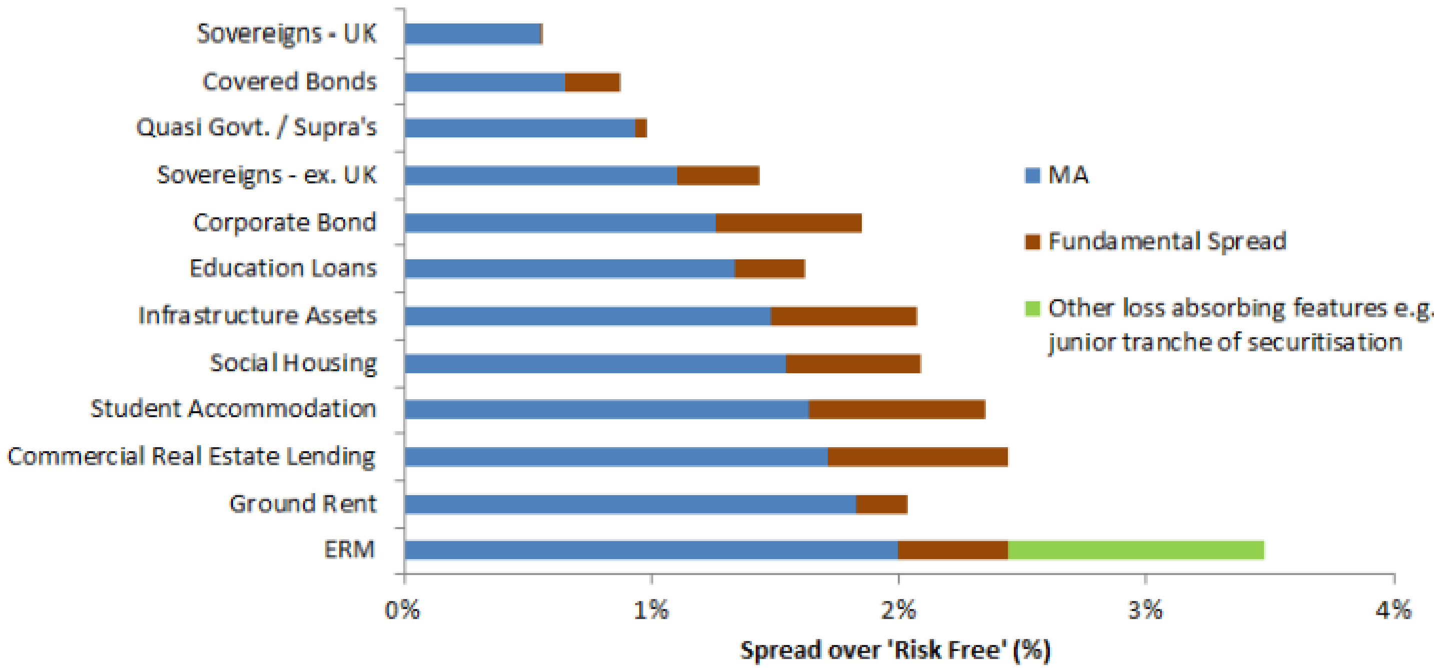
Assets | Putting all your NNEGs in one basket…



Source: David Rule, "An annuity is a very serious business", 26-Apr-2018

Assets | What about inflation?

- BoE suggest **house prices** could fall by as much as **35% over 3 years** following a "no-deal" Brexit[1]
- **Higher inflation**, if correlated to house prices may help correct this
- Inflation **exposures other than RPI** are more difficult to hedge
- More insurers are **lending directly** to borrowers who are prepared to link repayments to **LPI** (i.e. capped / floored inflation) or **CPI**

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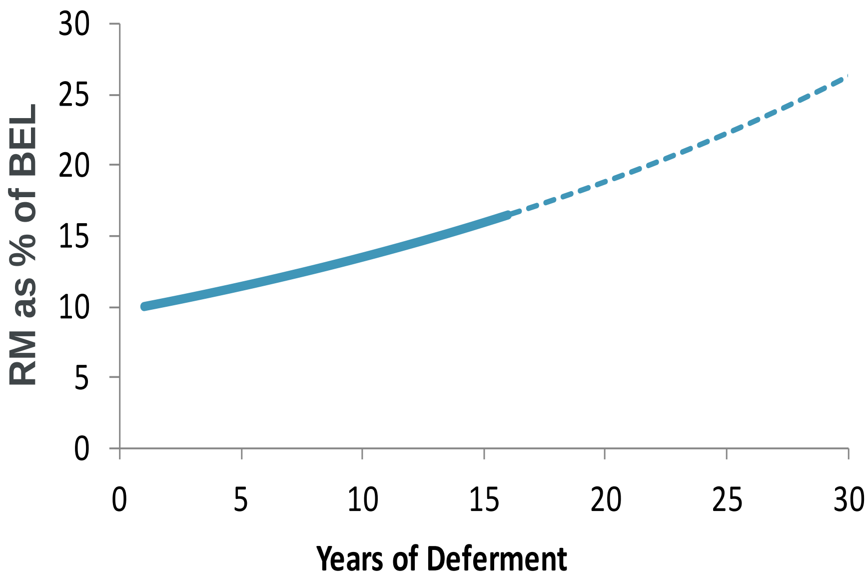
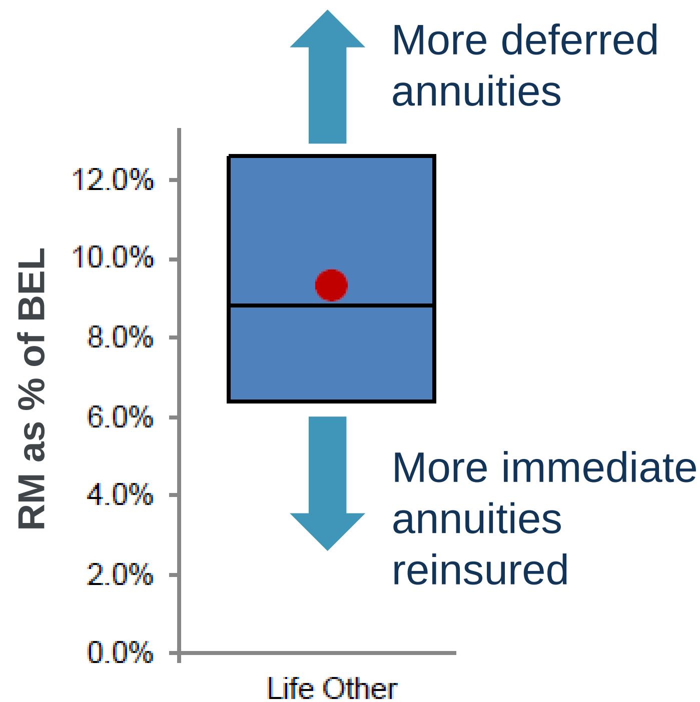
Source: (1) Mark Carney, 14-Sep-2018

Liabilities | Risk Margin





Source: http://www.bankofengland.co.uk/pra/Documents/publications/reports/idr181017.pdf

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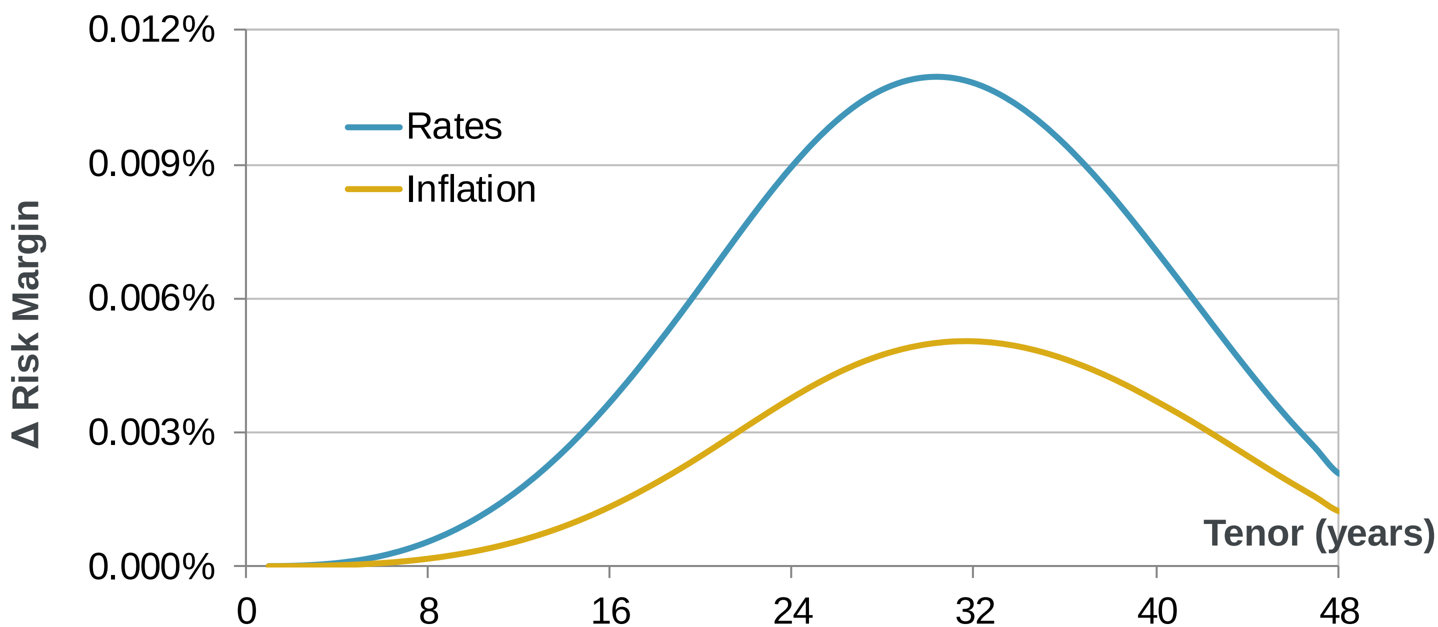
Liabilities | Risk Margin

- Risk margins for annuity writers **increase by 40%-50%** for a **100bps fall in interest rates**, which the PRA believes to be excessive[1]



Source: (1) David Rule, “A ‘D to Z’ of current issues in Insurance Supervision”, 26-Sep-2018

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Risk Margin | EIOPA Advice

- Allowing for **hedgeability** of **longevity** risk
  - “It is not clear why the reference undertaking should apply more (or less) risk-mitigation than the original undertaking.”
- **Alternatives** to EIOPA / SII:
  - Current IFRS – addition of prudence, not RM
  - IFRS 17 – what should RM look like?

Source: EIOPA’s advice to the European Commission on specific items in the Solvency II Delegated Regulation

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Risk Margin | PRA Ambitions

"Many hours have been spent highlighting the **biblical scale** of the **reporting requirements**, the **wickedness** of the **risk margin calculations**, the **mystical nature** of the Ultimate Forward Rate…

I could extend this list tenfold"

Sam Woods, Deputy Governor and CEO, PRA

Source: ABI Annual Conference – 27-Feb-2018

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Risk Margin | PRA Ambitions

- Further discussion on the PRA's supervisory approach to use of future **risk mitigation and transfer mechanisms**
- Solvency II allows the use of these in a number of contexts, **including** the calculation of the **risk margin**
- Response to **proposals** by firms that are currently reinsuring **longevity risk** on a substantial portion of **new business**

Source: Sam Woods, letter to the Treasury Select Committee, 27-Mar-2018

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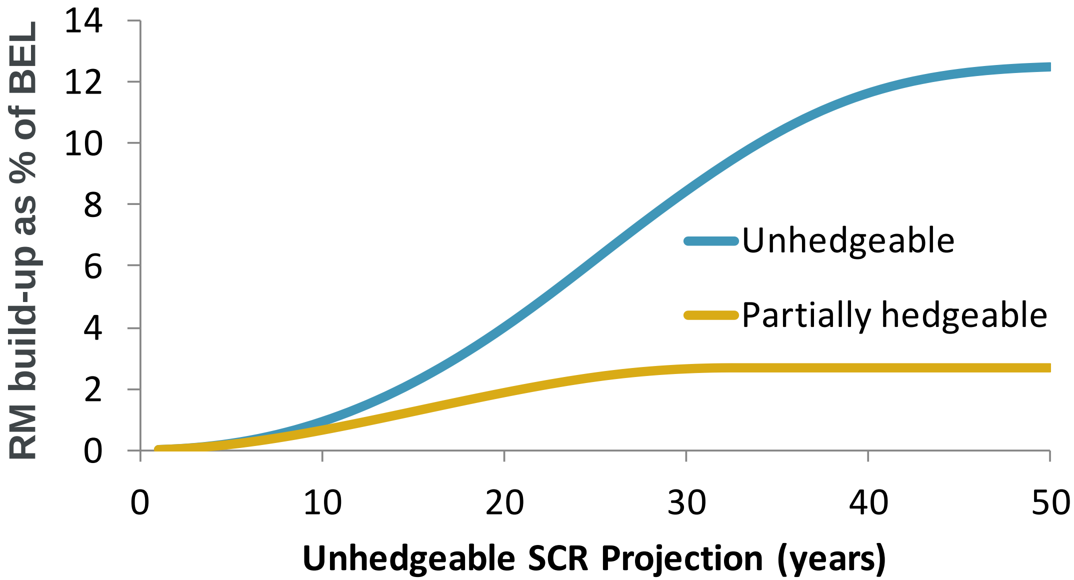
Risk Margin | Longevity Risk



$$RM = 6\% \sum_i SCR_i \; .df_i$$

$$SCR_i \approx \sum_{j>i} K_j . \frac{df_j}{df_i}$$

$$RM \approx 6\% \sum_i \sum_{j>i} K_j . df_{j_i}$$

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Risk Margin | PRA Ambitions

- The current design of the risk margin is **too sensitive** to the level of interest rates
- The use of **future risk mitigation and transfer mechanisms**… has **some merit** as a solution
- In the context of the **ongoing uncertainty** about our future relationship with the EU… we do not yet see a durable way to implement a change

Source: Sam Woods, letter to the Treasury Select Committee, 04-Jun-2018

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Summary

1 Low interest rates

- Persistent burden of the **risk margin**
- Higher cost of **options and guarantees** (including NNEG)

2 Rising inflation

- Greater need to **reduce exposure** (particularly LPI, CPI)

3 Direct Investments

4 FX

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Questions

Comments

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