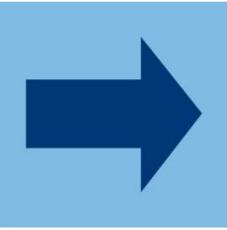


**PR19 Methodology webinar:
Aligning Risk and Return and Financeability**

19 July 2017



Aim

To explain draft methodology to assist your response

To take clarification questions – not for views on methodology (this is for your response)

We will provide stops in the presentation to allow questions

Structure

Balance of incentives

Risk and scenario analysis

Cost of capital

CPIH

Tax

Financeability



Risk and Return

- Current evidence indicates lower costs of both debt and equity and so we expect the return on capital or base returns to be lower for PR19.
- We propose to index the cost of new debt. This will reduce the scope for debt outperformance from changes in debt markets. We consult on our proposals for the detailed design of the indexation mechanism.
- We propose a high bar to accept any proposals for risk pass through mechanisms from companies to customers.
- We propose to increase the proportion of revenue at risk from service performance through ODIs and we propose to sharpen the cost sharing incentives to reward companies who deliver larger efficiency gains for customers. Inefficient companies will bear a greater proportion of the cost of underperformance. We consider these changes will encourage companies to focus delivering more that matters for their customers.
- We propose that price controls should be indexed to CPIH, so that water bills better reflect the overall rate inflation faced by customers and discontinuing using the RPI index, which tends to overstate inflation.
- We propose a mechanism to pass through material changes in tax to customers. Customers will benefit where there are reductions in tax rates that were not anticipated at the time of the price determination

Financeability

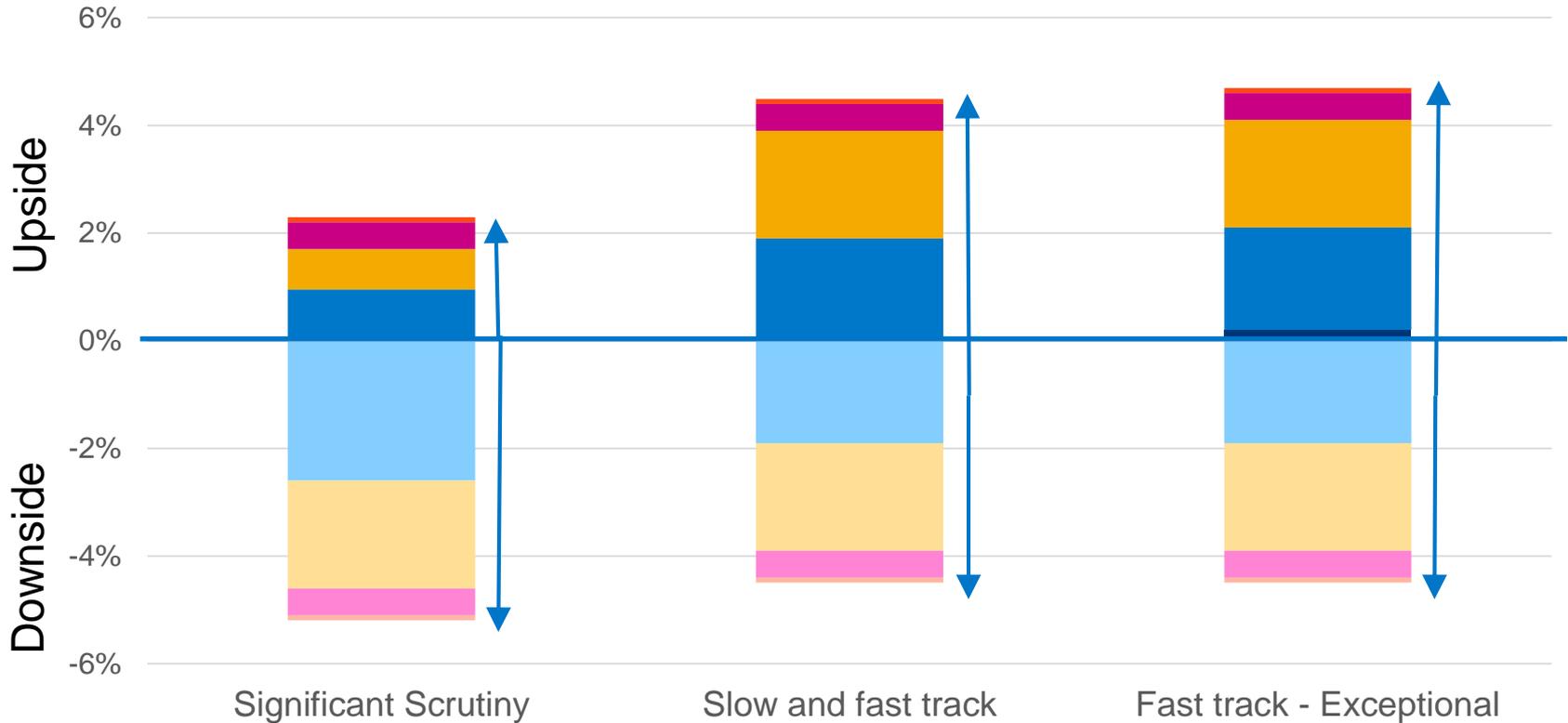
- Each company will need to submit a plan that is financeable and provide Board assurance that it is financeable on both the notional and actual financial structure.
- We propose to assess financeability at appointee level by reference to the notional structure that underpins the cost of capital.
- Companies have a number of options to address financeability constraints that arise under the notional financial structure. We will look for evidence of customer support where companies take steps to address such financeability constraints.
- Choice of capital structure and financing is a matter for companies and their shareholders. Companies should not expect customers to bear the costs of resolving financeability constraints arising from a company's choice of financial structure or inefficient financing strategy.

Overview

- The allocation of risk and setting of allowed returns affects how much customers pay and the quality of service they receive.
- The overall level of return includes financial penalties or rewards for service levels, cost out- or under-performance, as well as the base return from the allowed cost of capital.
- Our objective is to align the interests of companies and their investors with the interests of their customers.
- Companies need to be remunerated for the risk associated with their investment; customers should expect that the returns investors receive are no more than is reasonable to compensate for that risk.

Incentives	Summary of our proposal
Initial assessment of business plans	Reward calculated as +0.2% RoRE for exceptional plans.
ODIs	<p>Remove cap</p> <p>ODI rewards and penalties should deliver rewards and penalties within a $\pm 1\%$ to $\pm 3\%$ RoRE.</p> <p>Range includes enhanced rewards and penalties for common performance commitments.</p>
Totex	<p>Asymmetric cost sharing.</p> <p>Tougher incentive rates for companies assessed as significant scrutiny</p> <p>Illustrative RoRE range around $\pm 2.0\%$ based on 10% cost out/underperformance, and around -3% to +1% for companies under significant scrutiny</p>
C-MeX and D-MeX (customer and developer services measure of experience incentives)	<p>C-MeX symmetrical at 12% residential retail revenue</p> <p>D-MeX symmetrical at 5% developer services revenue.</p> <p>Overall impact around $\pm 0.5\%$ RoRE.</p>
Financing	Indexation of the cost of new debt means less scope for outperformance or underperformance on financing costs.

Illustrative notional RoRE range



- Upside Ambition reward
- Upside ODIs
- Downside Totex
- Downside C-Mex and D-Mex

- Upside Totex
- Upside C-Mex and D-Mex
- Downside ODIs
- Downside Financing

- Upside ODIs
- Upside Financing
- Downside ODIs

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Risk and uncertainty

- Companies need to be able demonstrate, in their business plans, understanding, impacts and mitigation measures of the key risks to their activities. This to be underpinned by Board statement.
 - This will be assessed as part of the initial assessment of business plans.
 - High evidential bar where companies request notified items - no presumption the notified items that were allowed for at the PR14 price control should remain in place for the 2020-25 period.
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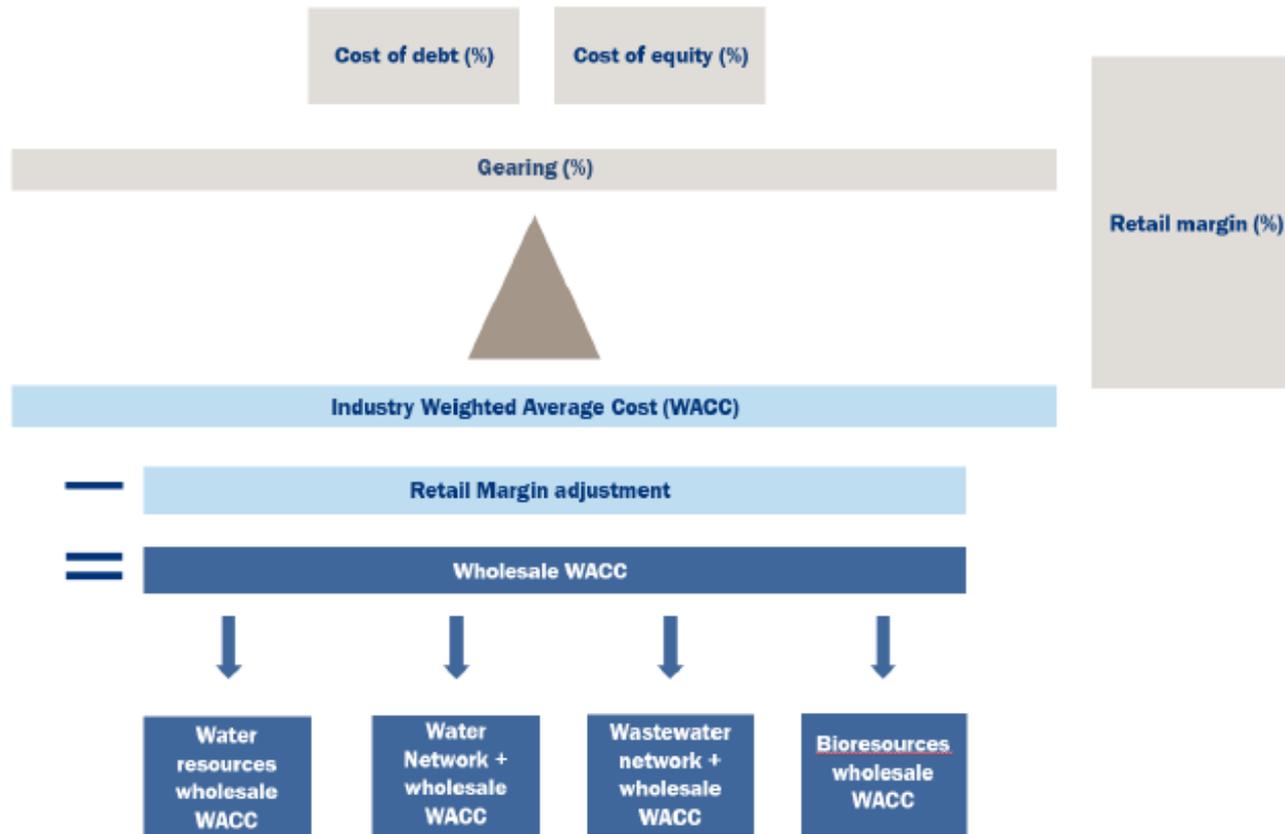
RoRE scenarios and analysis

- We propose companies use RoRE analysis to assess the impact of upside and downside risk.
- Companies should carry out sensitivities to show the impact of movements on RoRE of changes in revenue, totex, ODIs, C-MeX, D-MeX, retail costs and the cost of new debt – companies may provide additional information where considered appropriate
- Approach to risk management considers the interests of customers and investors in particular we expect companies to be clear about where they have made trade-offs and why they are appropriate.
- We consider the P10/P90 range of probabilities remains appropriate for RoRE assessment, but we invite views on this.

Initial assessment of business plan question: How clearly has the company understood and assessed the potential risks and shown evidence of the risk management measures it will have in place across each of the price controls?

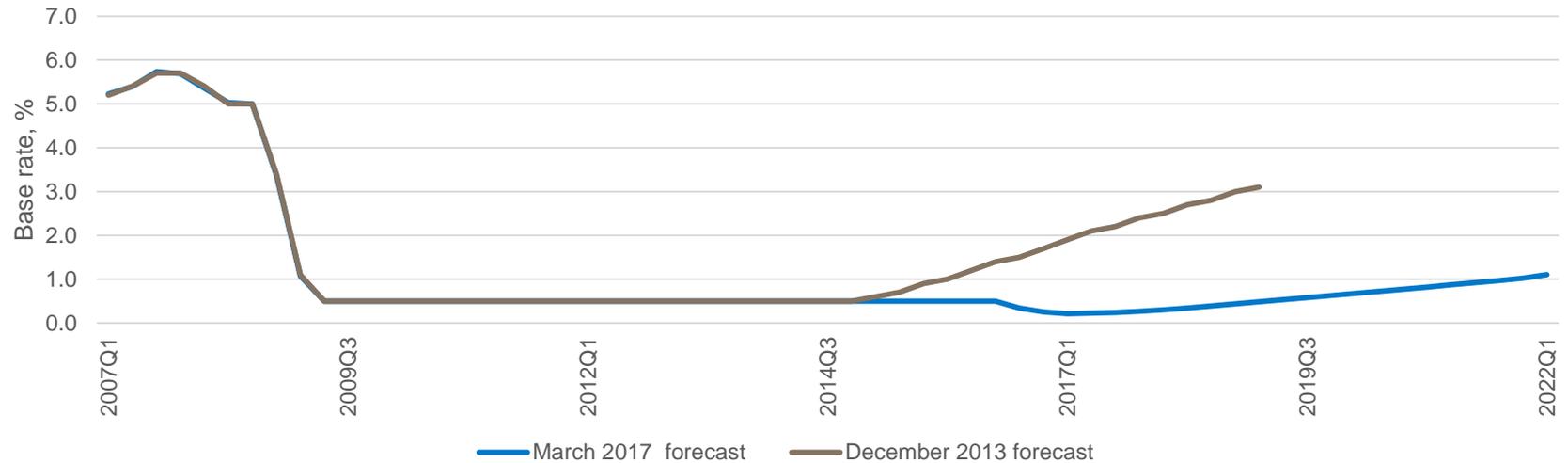
Any questions?

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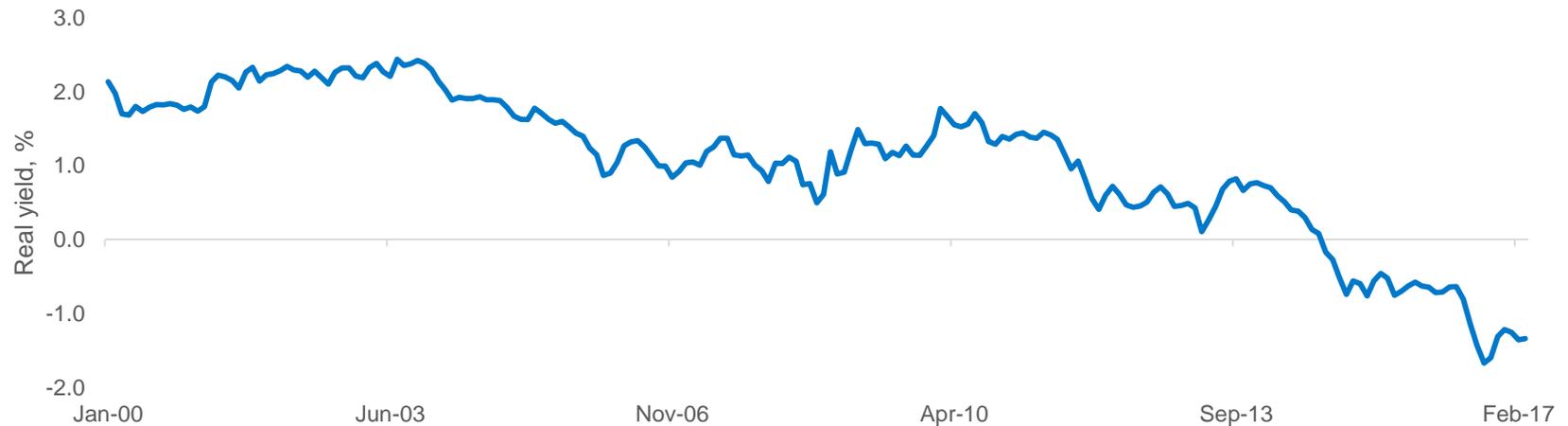


Initial assessment of business plan question: Has the company based the separate costs of capital that underpin each of its wholesale price controls, and the margin that underpins its retail price control(s), on those we stated in our methodology statement? If not, has the company robustly justified, for customers, its proposed costs of capital and retail margin(s) within the context of expected market conditions for 2020-25?

Office for Budget Responsibility forecasts on UK interest rates over the next five years

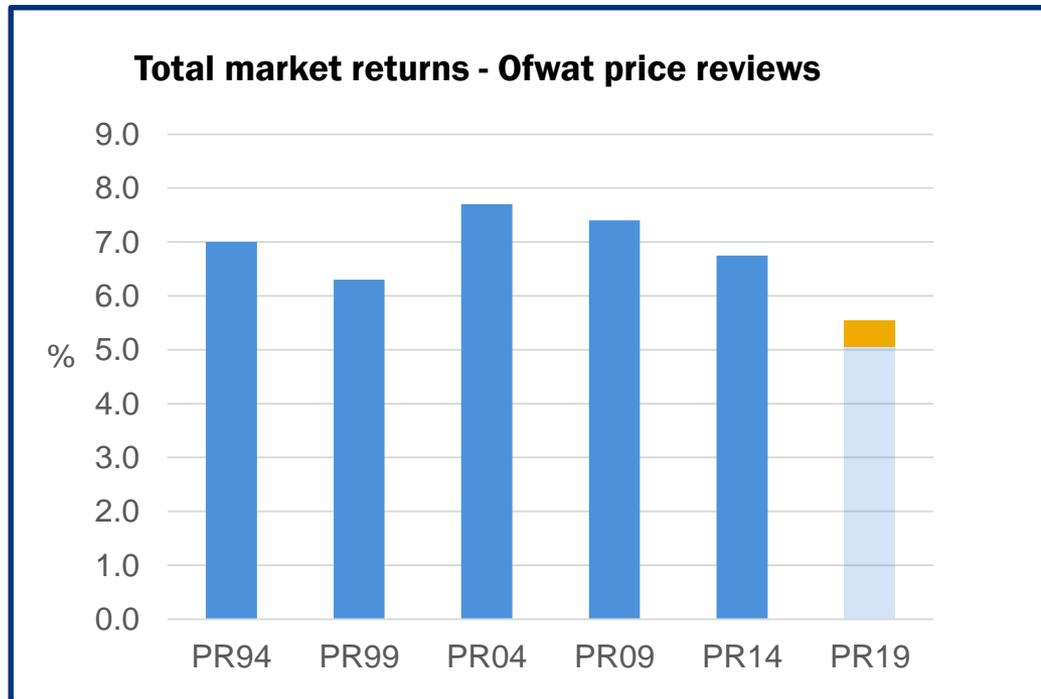


10-year forward rate for 10-year government bonds



Strong evidence that total market returns will be much lower at PR19

CAPM component	PR14	What does current evidence suggest for PR19?	View for PR19
Total Market Return (TMR) Nominal	9.7%	Forward looking approaches suggest the TMR has decreased from historic and PR14 values.	8.0% to 8.5%
Total Market Return (TMR) Real	6.75%	Real TMR based on long term view of (RPI) inflation of 2.8%	5.1% to 5.5%
Real cost of equity (Real RPI terms)	5.65%	Based on current market evidence, including for the risk free rate the cost of equity at PR19 will be much lower than PR14	3.8% to 4.5%

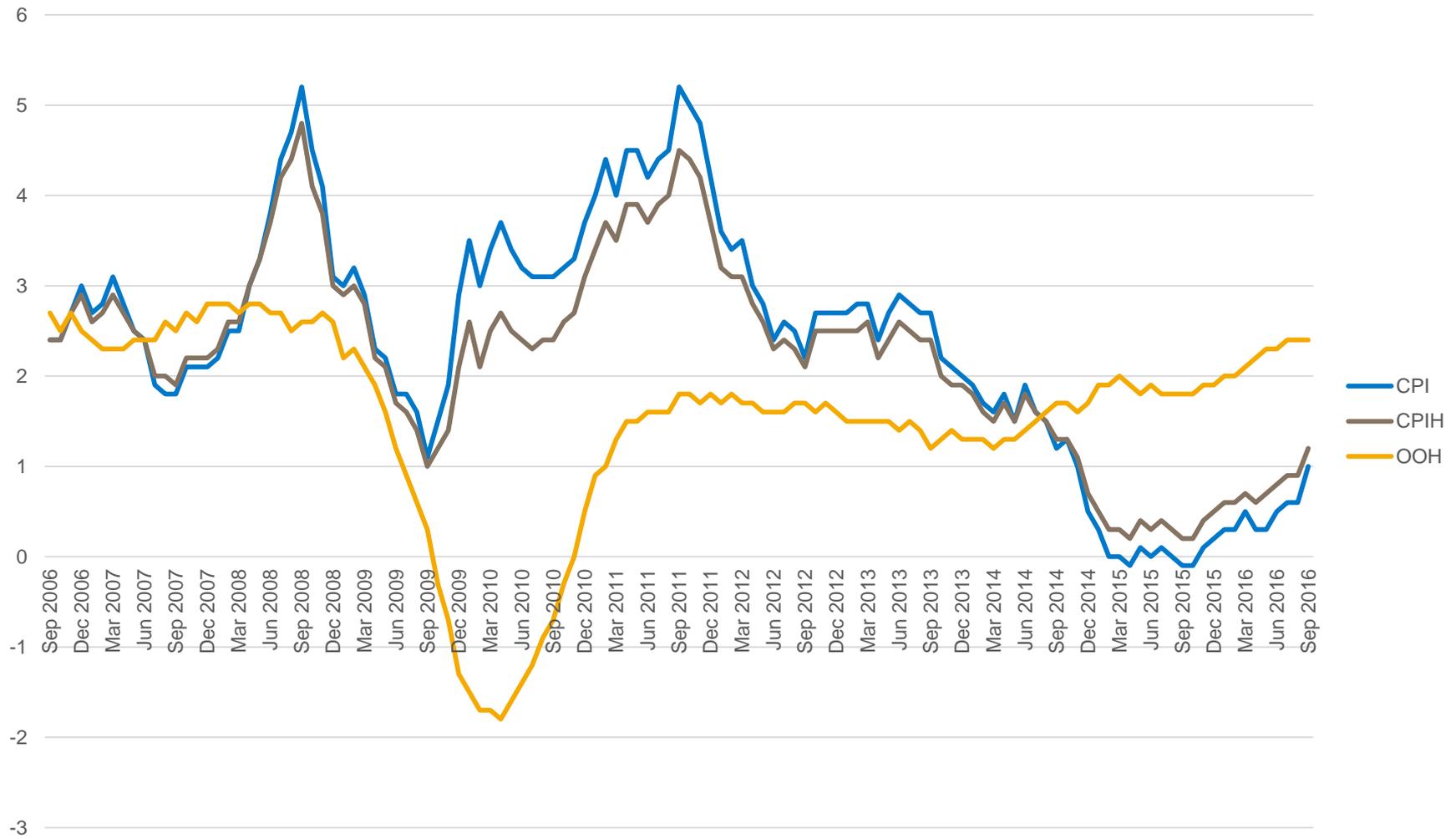


Embedded debt: We propose to set a fixed allowance for the cost of embedded debt, drawing on relevant benchmark data (for example, indices of bonds for companies with similar credit ratings) and information contained in company balance sheets.

New debt: Following September 2016 consultation, we propose to index the cost of new debt. We consult on the proposed mechanics :

- Nominal iBoxx index for non-financial companies with a tenor of 10-plus years.
- Potential for ex-ante adjustments to this benchmark if evidence persists that efficient companies outperform the benchmark.
- End of period reconciliation adjustments.
- Inflation adjustment based on long term view.
- But as inflation adjustment is linked to CPIH, which closely tracks CPI, the adjustment can be based on movement in the nominal index.

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Calculate tax allowances for each control as if they were a stand alone entity, but total tax allowances will not exceed the amount payable by the appointee

- based on allowed revenue and expenditure and assumed levels of tax relief
- rates for corporation tax and allowances, as set out in UK tax law
- use the higher of a company's actual gearing and the notional level of gearing to calculate interest deductions

Introducing a tax **true up mechanism**

- adjust for changes in CT or CA rates
- adjust at the end of AMP - in line with cost of debt
- seeking views as to whether further adjustments should be included (e.g for other legislation)

Changes in the AMP

- set out guidance for the treatment of group relief
- revise approach to calculating CA's - in line with standard pools
- BEPS – assume all companies qualify for the PBIE and all debt is 3rd party

Any questions?

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We will assess **financeability at appointee** level by reference to the **notional capital structure** that underpins the cost of capital.

We will also carry out a **cross-check** to make sure there is enough cash flow headroom in each wholesale and retail price control to allow eachone to operate on a stand-alone basis.

Each company will be required to submit a business plan that is financeable with Board assurance that its plan is financeable on both the notional and actual capital structure.

The financeability assessment will be made by reference to a suite of cash flow financial metrics – set out in the consultation and the financial model

We will not be specifying targets for individual credit metrics as we do not want to influence conversations with customers.

Companies remain responsible for their choice of actual capital structure and shareholders not customers bear the risk from inefficient choices.

PAYG and RCV run-off rates allow companies to balance recovery of costs between different generations of customers.

We expect companies to

- provide evidence setting out how they have selected the rates that they have chosen
- provide evidence of customer support for their proposals and demonstrate how they have taken into account customer views.

As part of the IAP we will consider how the proposed PAYG and RCV run-off rates reflect

- the levels of proposed expenditure (opex/capex split)
- bill profiles in the current and future periods
- overall affordability and customer views relevant to the short and the long term.

There will be separate PAYG and RCV Run off rates for each control and each component of RCV and we are asking companies to set out

- how they have determined appropriate rates?
- any adjustments that they have made to address the transition from RPI to CPIH or for other reasons ?

Initial assessment of business plan questions:

- 1. Has the Board provided a clear statement, with appropriate supporting evidence, that its plan is financeable on both an actual and a notional basis?**
- 2. How appropriate are the company's PAYG and RCV run-off rates? How well evidenced are these, including that they are consistent with customers expectations' both now and in the longer-term?**

Any questions?

Risk and Return

Q1. Do you agree with our proposed approach to setting the cost of equity, based on the best estimate of expected returns in the 2020-25 period?

Q2. Do you agree with our approach to indexing the cost of new debt?

Q3. Do you agree with our proposal to index price controls to CPIH (subject to its redesignation as a national statistic before we publish our final methodology)?

Q4. Do you agree with our approach to setting tax allowances at PR19, including the proposed true up mechanism?

Q4a. Should the true up mechanism be limited to change in corporate tax rates and capital tax allowances or should we extend that true-up mechanism so we can also make adjustments for other changes in tax legislation or accounting regulations which have a material impact on the amount of tax companies are liable to pay?

Q5. Do you agree with the set of scenarios for RoRE analysis we have prescribed, the guidance we propose and to use our financial model to provide the suite of prescribed scenarios?

Financeability

Q1. Do you agree with our overall approach to assessing financeability?

Q2. Do you agree the calculation of the metrics set out in section 11.5 of the 'Aligning Risk and Return: Financeability' chapter that we are proposing to use in our assessment?