

Key questions for RIIO-T2 and GD2

USE OF THE RETAIL PRICES INDEX



This is part of a series of discussion notes that are relevant for the next RIIO price controls.

Ofgem is under growing pressure to move away from using RPI in its price controls. It has a number of options for the extent to which it does so, and how it transitions any such move. The choices it makes on RPI use can have a material impact on consumer prices, network companies' ability to recover their costs, and on investor returns.

CONTEXT

The Retail Prices Index (RPI) is used in Ofgem's price controls to: (1) index network companies' allowed revenues annually, (2) index network companies' regulatory asset value (RAV), (3) calculate the weighted average cost of capital (WACC) in real terms, and (4) set allowances for real price effects (RPEs).

Changes in the way price information is collected by the Office for National Statistics (ONS) introduced in 2010 exacerbated known differences between RPI and the Consumer Prices Index (CPI). Subsequent reviews by the ONS and by the UK Statistics Authority resulted in RPI losing its status as a 'national statistic' as a result of growing recognition that it is not a good measure of general inflation.

"Government and regulators should work towards ending the use of the RPI as soon as practicable."

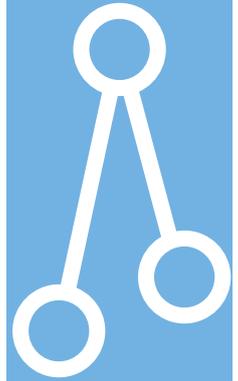
UK Consumer Price Statistics: A Review, UK Statistics Authority (January 2015)

A number of decisions since then have shown a growing consensus amongst sector regulators to move away from using RPI:

- **Ofwat** has proposed to use CPI (or a variant called CPIH)¹ to index allowed revenues starting with its next price control (2020-2025). Ofwat will also transition away from RPI for indexing water companies' regulatory capital values (RCV). From 2020, 50% of RCV will be indexed to RPI and the remainder to CPI or CPIH. All future RAV additions will be linked to CPI, so the RPI-linked share of the RAV will fall over time.
- **Ofcom** decided in 2014 to move to using CPI and has since done so in a number of regulatory decisions (e.g. BT's wholesale line rental, local-loop unbundling and wholesale broadband access charge caps). Ofcom did not apply transition, stating that nominal prices are likely to be similar regardless of whether an RPI-X or CPI-X approach is used.

In contrast, Ofgem has decided to continue using RPI indexation for the fourth offshore transmission (OFTO) tender round, and as the default index for its interconnectors 'cap and floor' regime.

¹ CPIH is methodologically identical to CPI, but includes a measure of house ownership, which is not included in CPI.





WHAT DOES IT MEAN FOR RIIO-T2 AND GD2?

Ofgem will be under increasing pressure to reconsider its use of RPI in RIIO price controls, particularly since the uncertainty around the official status of CPIH should be resolved by the time Ofgem makes its decisions on RIIO-T2/GD2.

Ofgem considered a move from RPI to CPI at its RPI-X@20 review, where it noted that the main obstacle for a change of approach is network companies' use of RPI-linked debt to finance investment in the RAV.

Ofgem revisited the issue for RIIO-ED1 – in light of RPI being de-designated a national statistic – and decided to continue using RPI but to reduce the allowed cost of equity in order to correct for the additional revenue that network companies earn as a result of RPI being upwardly biased relative to CPI (this bias is known as the 'formula effect').

Recent communications from Ofgem suggest that it may be more open to indexing revenues to CPI (or CPIH) than it is to changing the indexation of

the RAV.² The table below summarises Ofgem's options for using RPI in future RIIO price controls.

Ofgem has previously stated that it would make any change to the use of RPI in price controls neutral in NPV terms. This idea has been central to Ofwat's proposed approach. But it remains unclear how a regulator would give effect to this commitment in practice. In all likelihood, it will mean adjusting allowed expenditure and the WACC so that they are constant in nominal terms. This would be consistent with the precedent established in RIIO-ED1 by lowering the cost of equity to account for the 'formula effect' that results in RPI being upwardly biased.

Any transition would expose investors to short-term divergences between RPI inflation and CPI inflation; unforeseen structural changes in the relationship between RPI and CPI; and differences between Ofgem's view of the RPI-CPI gap and investors' own view.

	No change	Partial change	Transitioned change	Immediate change
Revenue indexation	RPI	CPI or CPIH	CPI or CPIH	CPI or CPIH
RAV indexation	RPI	RPI	RPI & CPI or CPIH, with share of RPI falling over time. New RAV additions indexed to CPI or CPIH. Options for existing RAV: (1) 50%-50% split (Ofwat approach) (2) 100% indexed to RPI (3) RAV share of index-linked debt indexed to RPI	CPI or CPIH
Impact on the allowed rate of return	Downward adjustment to cost of equity (approach used in RIIO-ED1)	Calculation of the WACC will need to be consistent with inflation measure used for RAV indexation Adjustment to cost of equity may be smaller than in no change scenario	Calculation of the WACC will need to be consistent with inflation measure used for RAV indexation Higher real cost of equity (RIIO-T1/GD1 value, or potentially higher) Potential upward adjustment to cost of debt index	No downward adjustment to cost of equity (RIIO-T1/GD1 value, or potentially higher) Potential upward adjustment to cost of debt index
Impact on RPEs	None	Measured against CPI or CPIH (likely higher, more stable)	Measured against CPI or CPIH (likely higher, more stable)	Measured against CPI or CPIH (likely higher, more stable)

² Ofgem, CPIH vs RPI – Presenting information in real terms, indexing cost allowances and indexing investor interests, presentation by Ian Rowson at UK Regulators Network and

ONS lunchtime seminar: Inflation indices in price control decisions, November 2016.



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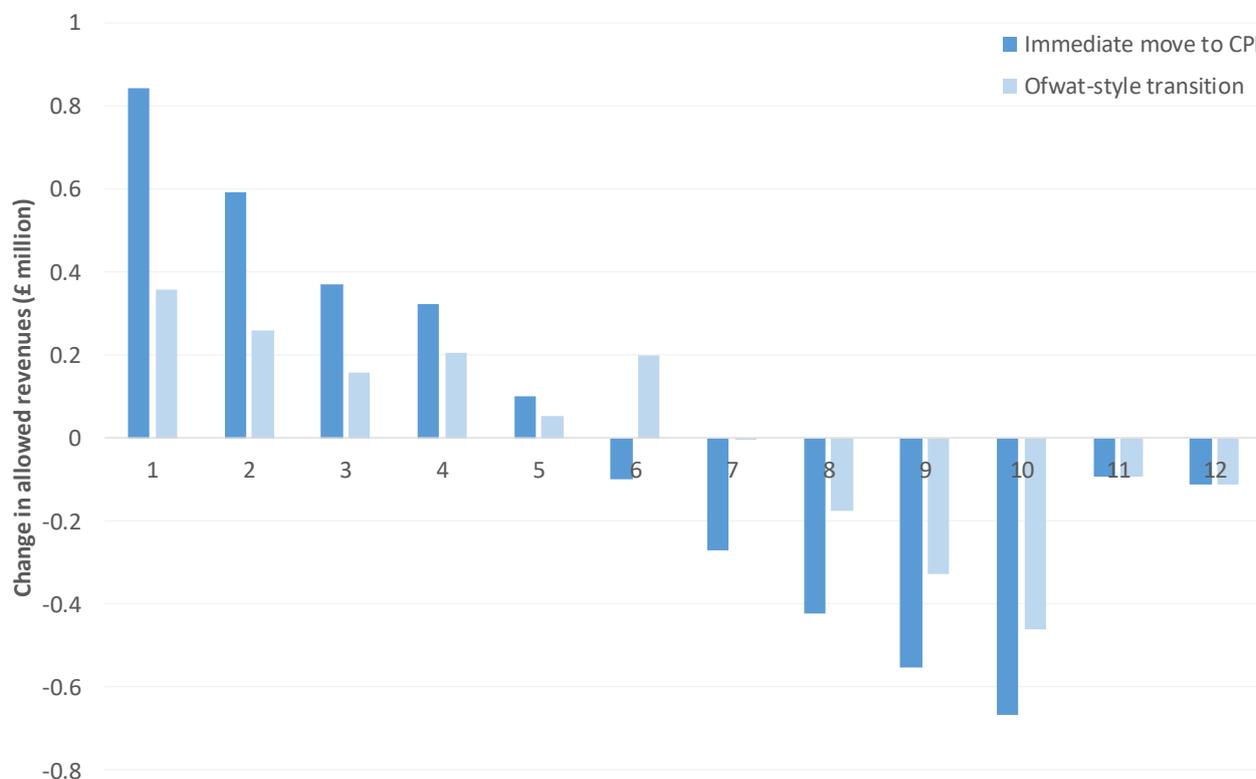
The chart below illustrates the net impact on allowed revenues of two of the options listed above:

- an immediate change to indexing both

revenue and the RAV to CPI; and

- a transitional approach such as proposed by Ofwat.

Illustrative impact on allowed revenues (NPV-neutral case)



Assuming that CPI is around 1% lower than RPI, the impact of a change is to initially increase revenues as a result of a higher real WACC and higher real RAV additions. However, over time as the RAV is depreciated, the impact on allowed revenues reverses.

Overall, the shift to CPI brings forward nominal revenues relative to RPI. And that impact is greater

the sooner the transition. However, the change is NPV neutral once all assets have fully depreciated.

Ofgem is required to have regard to network companies' ability to finance their regulated activities efficiently. To do so, it may adjust the rate of RAV depreciation and/or capitalisation of totex, in order to maintain balanced cash flows for the companies over time.



EFFECT ON DIFFERENT INDUSTRY PLAYERS

Network companies
<ul style="list-style-type: none"> • Indexation has a direct impact on their revenues and ability to recover costs • Indexation and any changes to WACC will impact on investor returns • Potential impact on contracting with suppliers and staff wages, which often include indexation to RPI
Suppliers
<ul style="list-style-type: none"> • Indexation has a direct impact on the volatility of network charges • Potential impact on energy prices and, consequently, public pressure on suppliers
Ofgem
<ul style="list-style-type: none"> • Stakeholder acceptability/legitimacy of Ofgem’s role as a regulator if it continues to use a discredited index

<ul style="list-style-type: none"> • Will need to reconsider level of cost of equity and approach to cost of debt indexation in light of a move away from RPI
Consumers
<ul style="list-style-type: none"> • The inflation index used affects both the level and volatility of charges

KEY QUESTIONS

1. Will Ofgem move to CPI-indexation and, if so, how does it transition to it?
2. How does Ofgem ensure that the change is NPV-neutral?
3. What is the impact on financeability in the medium/long-term?

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