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# **RIO-GD2 – CAWG9: Continuous Improvement**

**Jeremy Thomson**  
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**Cadent**  
Your Gas Network

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# Context and Objective

## Context

The emphasis in RIIO-GD2 is on the benchmarking of actual, rather than forecast costs to assess an efficient range of costs for each GDN, which will be distilled into a single number. Both the GDNs in their Business Plans and Ofgem in its approach to Cost Assessment, will need to roll that number forward until the end of the RIIO-GD2 period, assuming further Continuous Improvement / Ongoing Efficiencies can be made. The level of improvement should represent what could reasonably be expected over the period.

## Objective

For the GDNs and Ofgem, to find the level of Continuous Improvement that would reasonably be expected to be made by the GDNs from 2019/20 onwards until the end of the RIIO-GD2 period, for Opex, Capex and Repex.

# Ofgem approach at RIIO-GD1



For RIIO-GD1 we proposed and decided on common ongoing efficiency assumptions across companies

For RIIO-GD1 (and T1) we set the following ongoing efficiency assumptions:

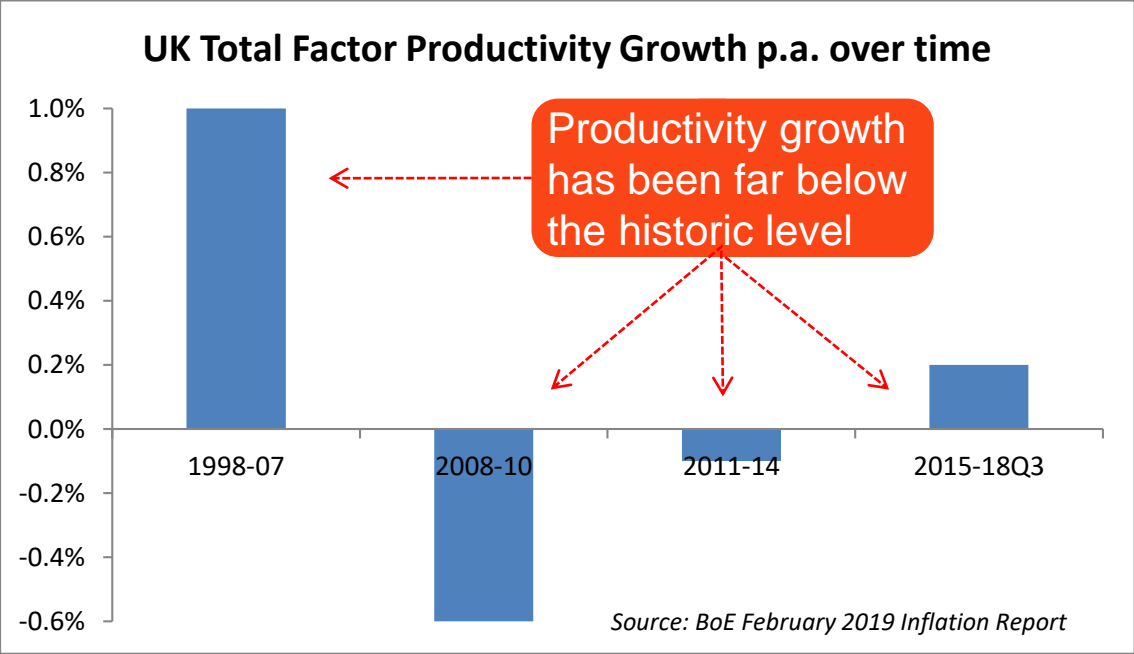
- **1% for opex** informed by industry averages of partial factor productivity measures (labour, and labour and intermediate outputs) from 1970 to 2007
- **0.7% for capex and repex** informed by total factor productivity measures in construction and industry averages

Covers a very long period prior to the financial crisis in 2007

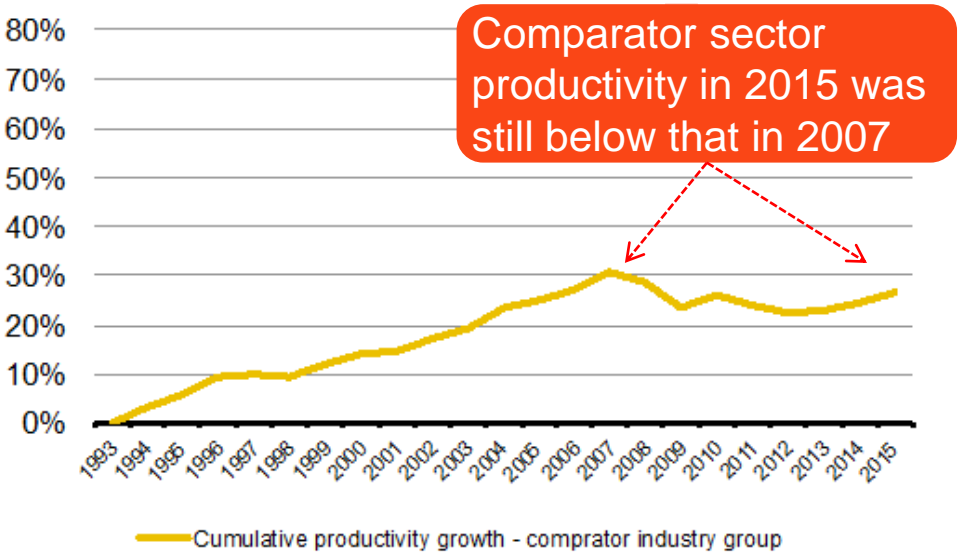
Average annual changes in productivity measures over the period 1970 to 2007 using the EU KLEMS dataset					
Sector	TFP (VA)	Labour productivity (VA) at constant capital	TFP (GO)	Labour & intermediate input productivity (GO) at constant capital	Labour & intermediate input productivity (GO)
Unweighted <u>ave, selected industries</u>	2.3%	2.8%	0.9%	0.9%	1.1%
Unweighted <u>ave, selected industries (exc. manufacturing)</u>	1.1%	1.2%	0.5%	0.6%	0.8%
Unweighted <u>ave, all industries</u>	1.3%	1.5%	0.5%	0.5%	0.8%
Weighted average all industries	1.1%	1.1%	0.5%	0.5%	0.8%
Construction	0.7%	0.7%	0.3%	0.3%	0.4%

The RIIO2 Sector Specific Methodology Paper (December 2018) proposes to carry on using the (updated) EU Klems dataset, for industries with similar characteristics to networks

# The fall in productivity growth post 2007



**Total factor productivity growth in comparator sectors (cumulative)**



Comparators comprise: Construction, manufacture of chemicals & chemical products, manufacture of electrical and optical equipment, manufacture of transport equipment, transport & storage, electricity, gas & water supply, maintenance & repair of motor vehicles & the retail supply of fuel, renting of machinery, equipment & other business activities, finance, insurance, real estate & business services, financial intermediation, post & telecommunications.

The UK as a whole and comparator sectors both show a drastic fall in UK productivity growth over a long period since the financial crisis up to the present

Sourced from Frontier Economics

# What has caused the fall in productivity growth ?

No-one knows, however there are many theories:

- Low business investment since the financial crisis, perhaps due to increased risk aversion
- Ultra loose monetary policy having an adverse effect on creative destruction within the economy (unproductive firms going out of business and being replaced by more efficient rivals)
- Increasing concentration in many industries leading to a weakening of competitive pressures
- A fundamental slowing of the rate of human progress

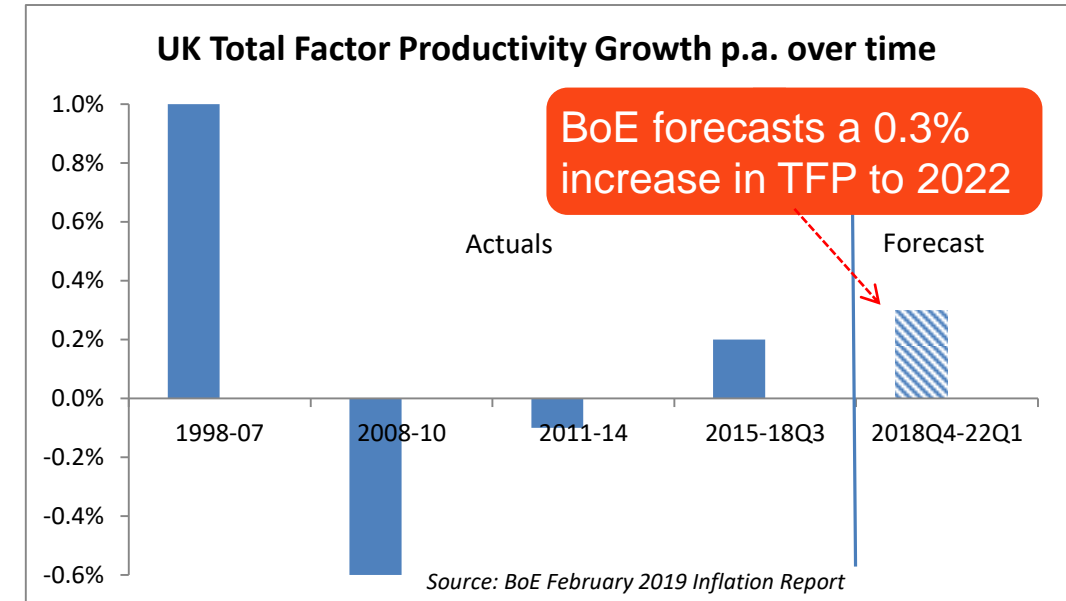
With no clarity over what has caused productivity growth to fall, how do we obtain a reasonable view on the future?

*Sourced from Frontier Economics*



## Forecast evidence

- The Deputy Governor of the Bank of England in a speech in 2018 “...after such a long period of weak productivity growth it is reasonable to argue that we are in a new paradigm of lower productivity growth, and that is reinforced by the global nature of the weakness”.
- The Bank of England February 2019 Inflation Report forecasts Total Factor Productivity Growth to Q1 2022 – of 0.3% p.a.
- The OBR in 2017 stated that “As the remarkable period of post-crisis weakness extends – and as various explanations pointing to a temporary slowdown become less compelling – it seems sensible to place more weight on recent trends as a guide to the next few years.”



Authoritative forecast evidence suggests that any recovery in productivity growth will be gradual at best

Sourced from Frontier Economics

## Implications for RII0-GD2

Our objective is to “*find the level of Continuous Improvement that would reasonably be expected to be made by the GDNs from 2019/20 onwards until the end of the RII0-GD2 period, for Opex, Capex and Repex*”

Hard to be definitive but:

- The Historic assumption (0.83% p.a. totex equivalent) is significantly higher than that supported by the evidence of the last 10 years or more
- The Bank of England and OBR both foresee weak productivity growth continuing into the future – “*a new paradigm of low productivity growth*” with 0.3% forecast to Q1 2022
- Question over whether and, if so, how fast it is reasonable to expect to expect productivity growth to improve after Q1 2022
- Assumptions need to be split between Opex, Capex and Repex