

# Regional factors

## Cost assessment approaches and key issues



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09/05/2019

Regional labour

Urbanity/sparsity

Evidential bar

Key issues

## Ofgem approaches (GD1, ED1)

- Ex ante adjustments – using ONS ASHE data, pre-modelling adjustments were applied based on the proportion of work undertaken in London and the South East.

## Ofwat (PR19)

- CEPA considered two approaches:
  1. Ex ante cost adjustments (broadly as per Ofgem approach)  
*When compared with baseline models (without adjustments), the introduction of the adjustments did not seem to improve the capacity of the model to explain the data (less than a 1% increase in  $R^2$  was observed)*
  2. Introduction of explanatory variable in the model (Ofwat PR14 approach)  
*This variable was not significant in most of the models and the sign and size were different to the prior expectation for this variable.*
- Ofwat found that regional wage level was not a robust cost driver and considered that companies can also mitigate this impact
- Ofwat also considered that the inclusion of a density variable (and a square of density) in its models captures the effect of regional wage as the two are correlated

Sum of average annual variation in  
adjustments, all GDNs (£m, 2009-10)

Activity	Direct labour	Contract labour
Work mgmt	-0.85	-0.80
Emergency	-0.41	+0.47
Repairs	-0.54	+0.59
Maintenance	-0.29	+0.14
ODA	-0.02	+0.02

Sum of average annual variation in  
adjustments (£m, 2009-10)

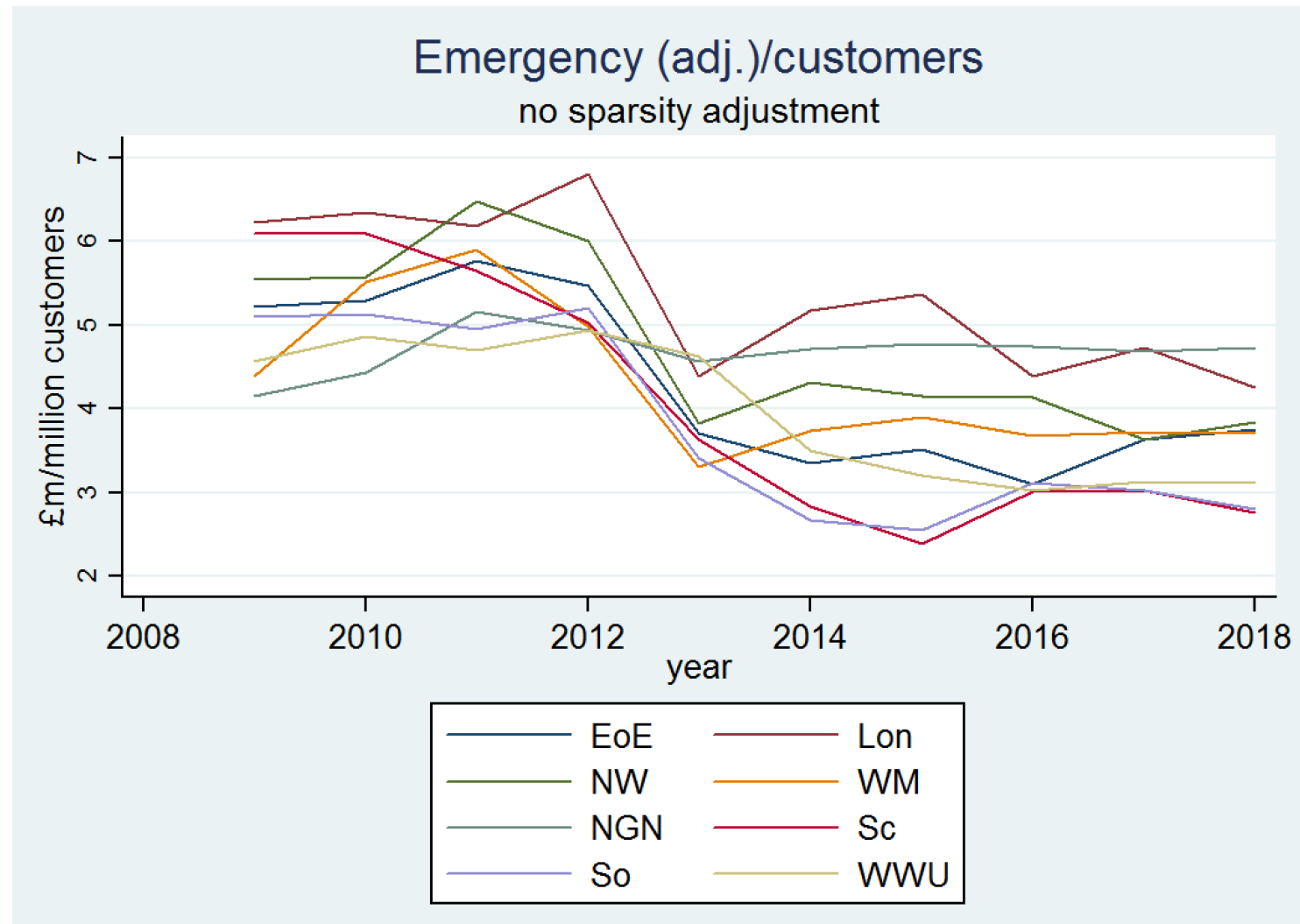
GDN	Direct labour	Contract labour
EoE	+0.20	+0.21
Lon	-0.93	-0.99
NW	+0.11	+0.22
WM	+0.13	+0.05
NGN	-0.26	-0.09
Sc	+0.08	-0.34
So	-1.28	+1.41
WWU	-0.18	-0.06

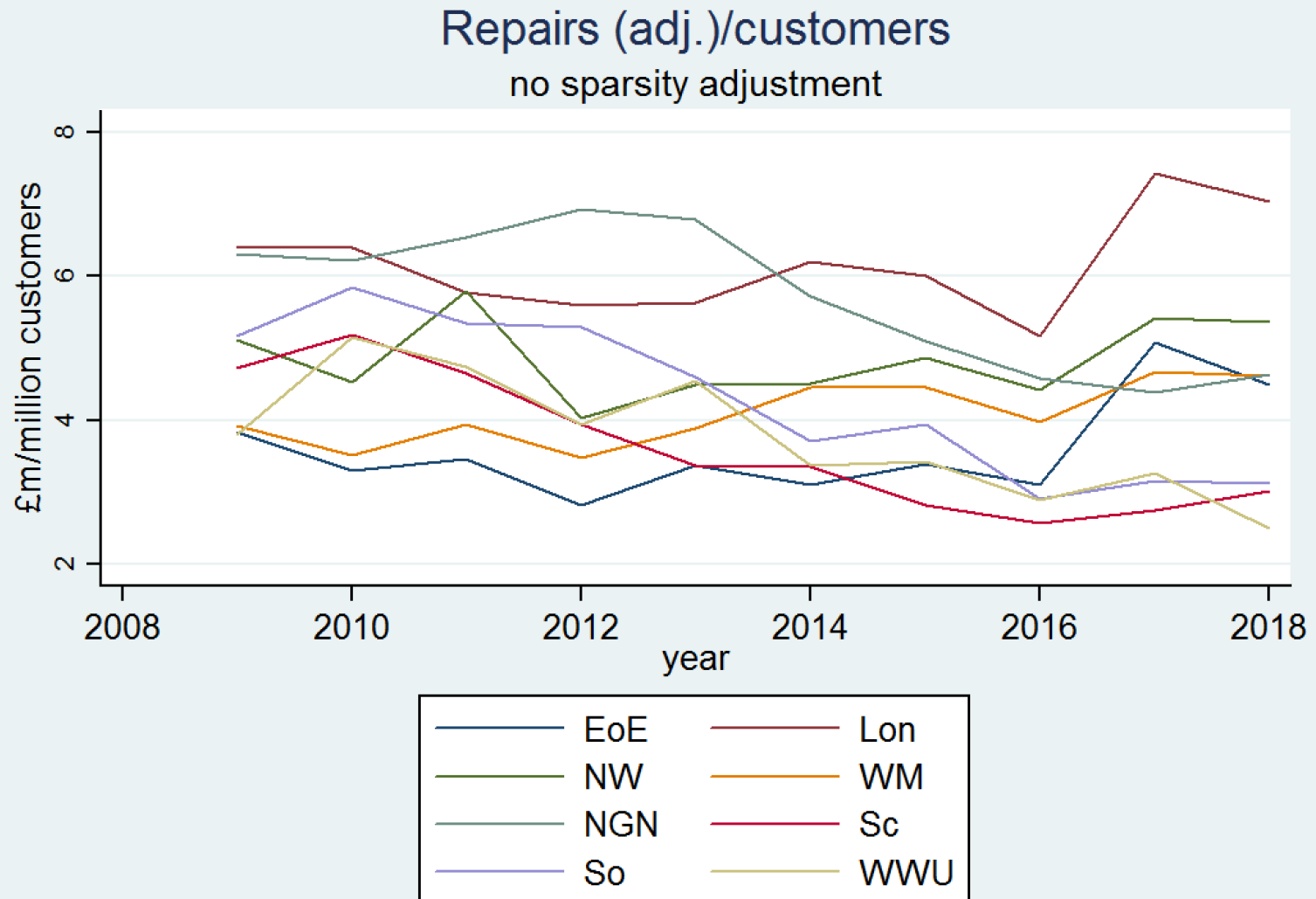
## **Ofgem approaches (GD1, ED1)**

- In **RIIO-GD1** we applied a 15% productivity adjustment to labour costs for work undertaken within the M25 (repex, connections and reinforcement – one way adjustment). We also recognised productivity losses associated with reinstatement and transport activities (repairs and maintenance).
- We also used district level area and population estimates to arrive at pre-modelling sparsity adjustments to GDNs' costs (emergency and repairs – two way adjustment)
- In **RIIO-ED1** we accepted 30% of cost adjustments proposed by UKPN for urbanity considerations, particularly in terms of transport and travel costs in the London area.
- We also accepted most cost adjustments proposed by SSEPD for sparsity (largely driven by transport, communication and depot staffing costs).

## **Ofwat (PR19)**

- Cost driver within model – weighted average density
  - Densities: Ofwat calculated the population density per local authority district (LAD) as population per square km.
  - Weights: Ofwat calculated weights as the population in the LAD (which resides within the company's service areas) divided by the total population in the companies' service area.
- Ofwat also included a quadratic term of density to allow for potential opposing effects on costs.
- Ofwat's model density terms suggested that, at lower levels of density, scale economies are strong and therefore increasing density reduced costs. However, the positive effect of the quadratic term suggested that as density rises its negative impact on costs decreases, ultimately becoming positive at high values of density.







## **Ofwat (PR19)**

### Evidence to support cost adjustment claims

- Need for cost adjustment
  - Is there persuasive evidence that the cost claim is not included (or, if the models are not known, would be unlikely to be included) in the modelled baseline?
  - Is it clear that the allowances would, in the round, be insufficient to accommodate special factors without a claim?
- Management control
  - Is the cost driven by factors beyond management control?
  - Is there persuasive evidence that the company has taken all reasonable steps to control the cost?

### Materiality thresholds

- 1% - water network plus, wastewater network plus
- 4% - residential retail
- 6% - water resources, bioresources, business retail

## **Ofgem (GD2)**

- No prescribed checklist, however we consider Ofwat's evidence list (re: 'need for cost adjustment' and 'management control') are relevant.
- GDNs should justify, through robust and transparent evidence, that a regional or company specific adjustment is warranted.
- GDNs must demonstrate that they have managed these factors to reduce the impact.
- GDNs must demonstrate that cost adjustment claims are material.

## **1. Maintain 'status quo' approach (ex ante adjustments)**

- How to identify downward cost adjustments?  
(currently no incentive for GDNs to limit their number of claims)
- Should GDNs be able to challenge potential downward adjustments if they are affected by them?
- Is there evidence to justify a materiality threshold?
- Still a number of specific issues to consider

## **2. Introduce within model approaches**

- Is the regional wage level variable or weighted average density variable a robust cost driver?
- How do these models perform relative to existing models?
- Could weighted average density also account for regional wage differences?
- How would existing cost drivers be affected?

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