

Office for  
**Budget  
Responsibility**

## **Fiscal forecasting: the in-year challenge**

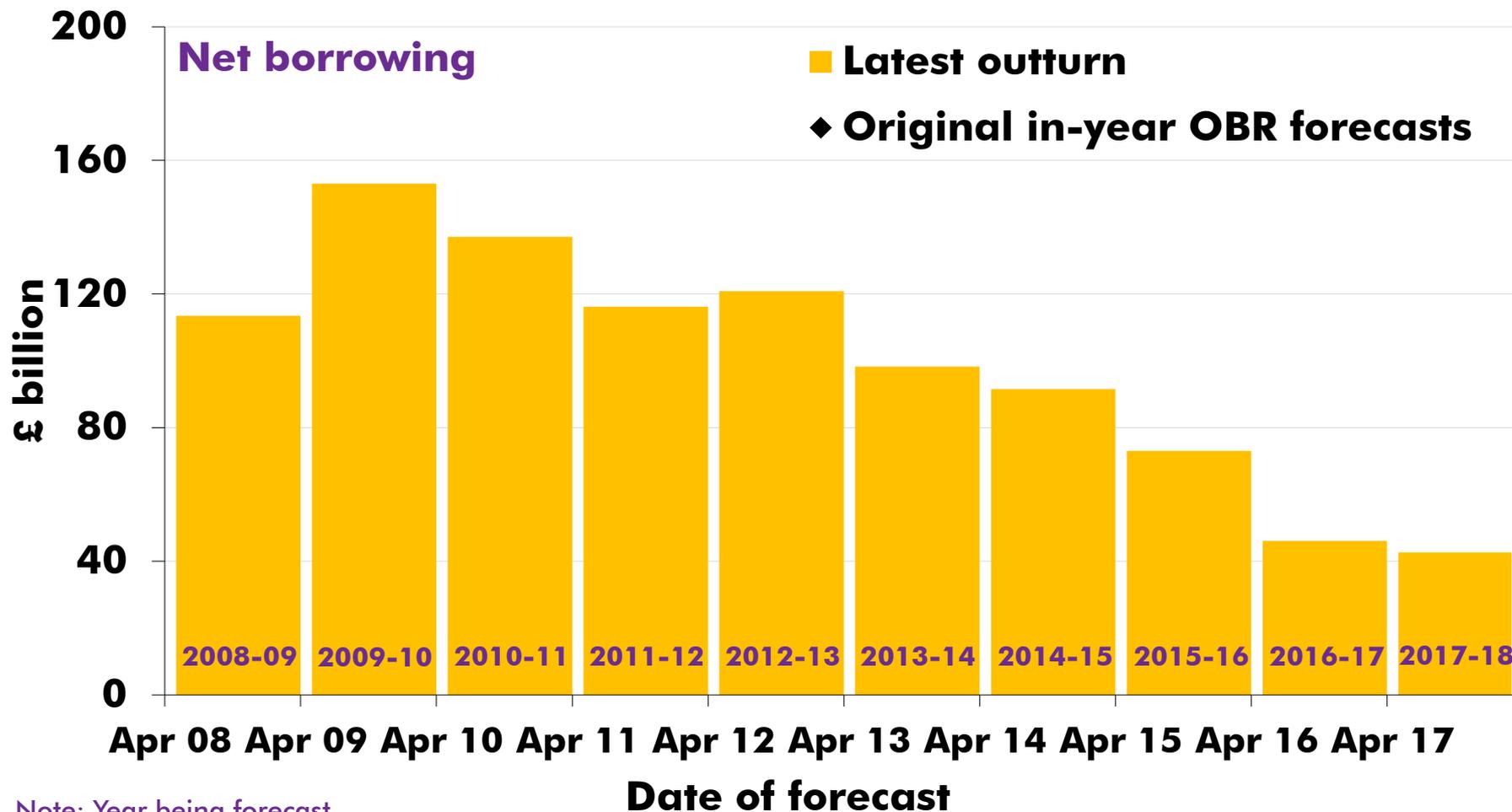
**Robert Chote**  
Chairman

Society of Professional Economists  
28 September 2018

# Background

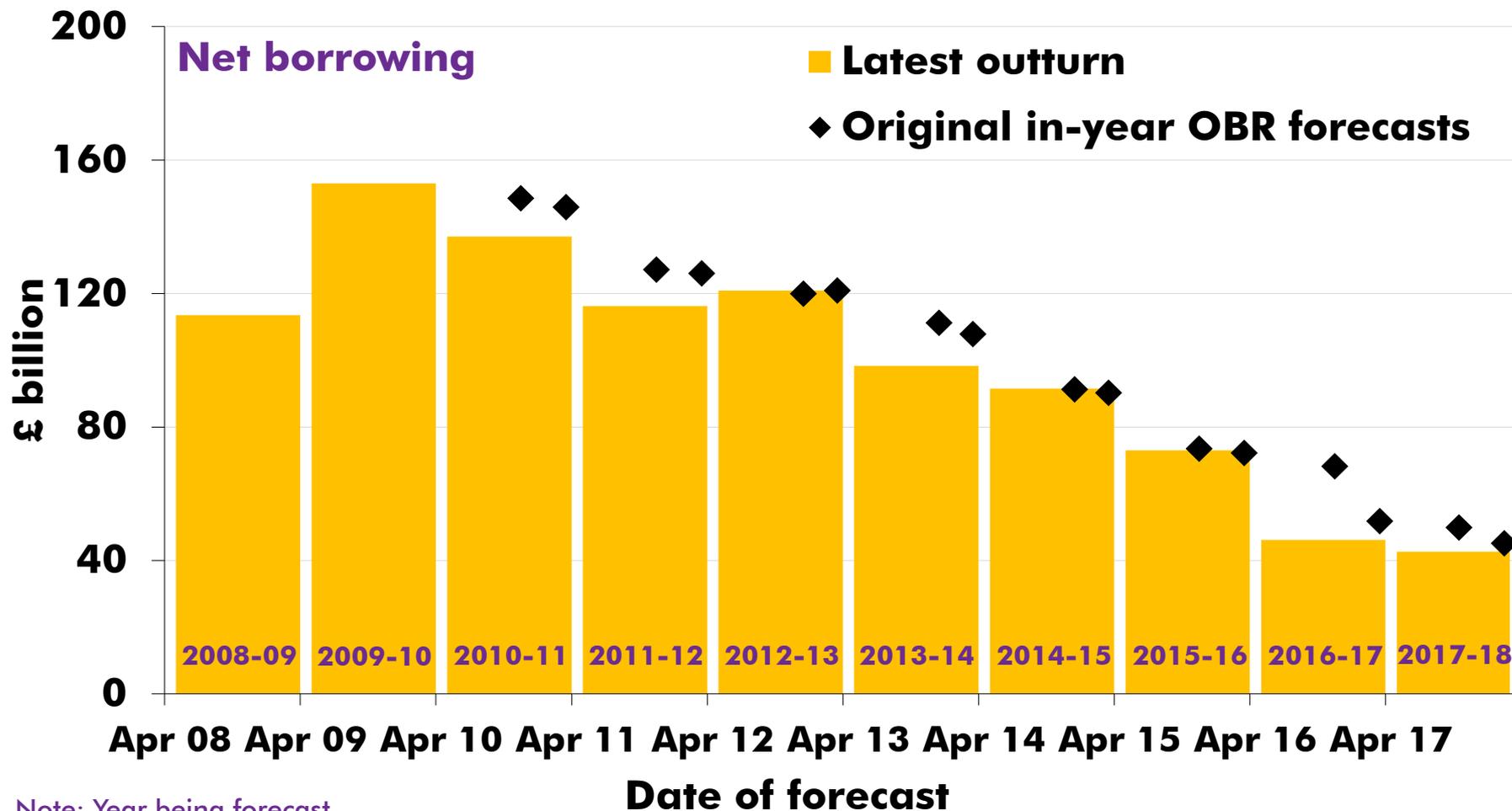
- In-year fiscal forecasts and monitoring matter
  - To market participants interested in government debt issuance
  - As the 'jumping-off point' for our medium-term forecasts
- So today I will discuss
  - How we produce in-year forecasts
  - Some of the challenges in tracking public finances in-year
  - Our performance to date and lessons
- More detail here:
  - <http://obr.uk/in-year-fiscal-forecasting-and-monitoring>

# The big picture

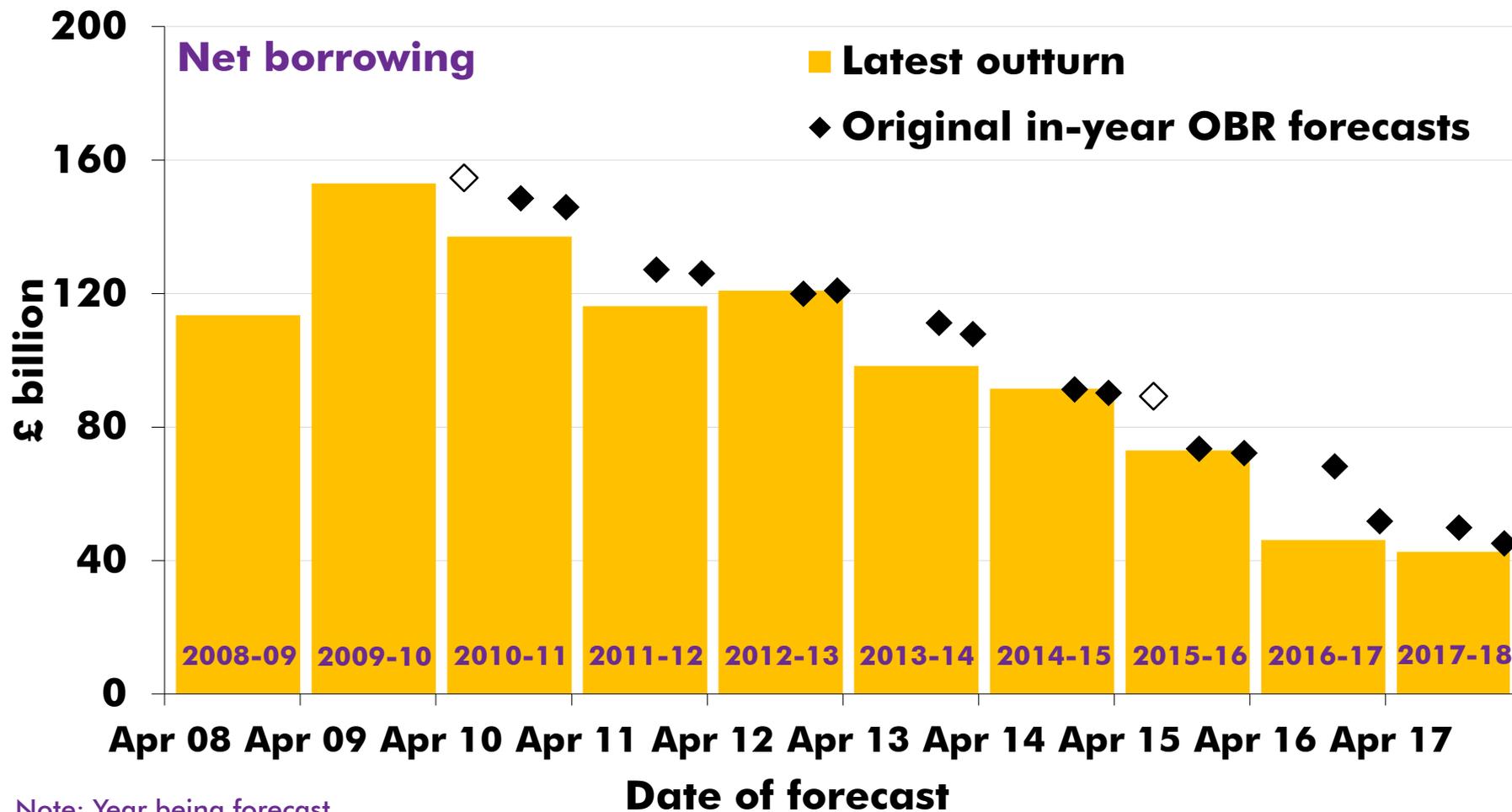


Note: Year being forecast

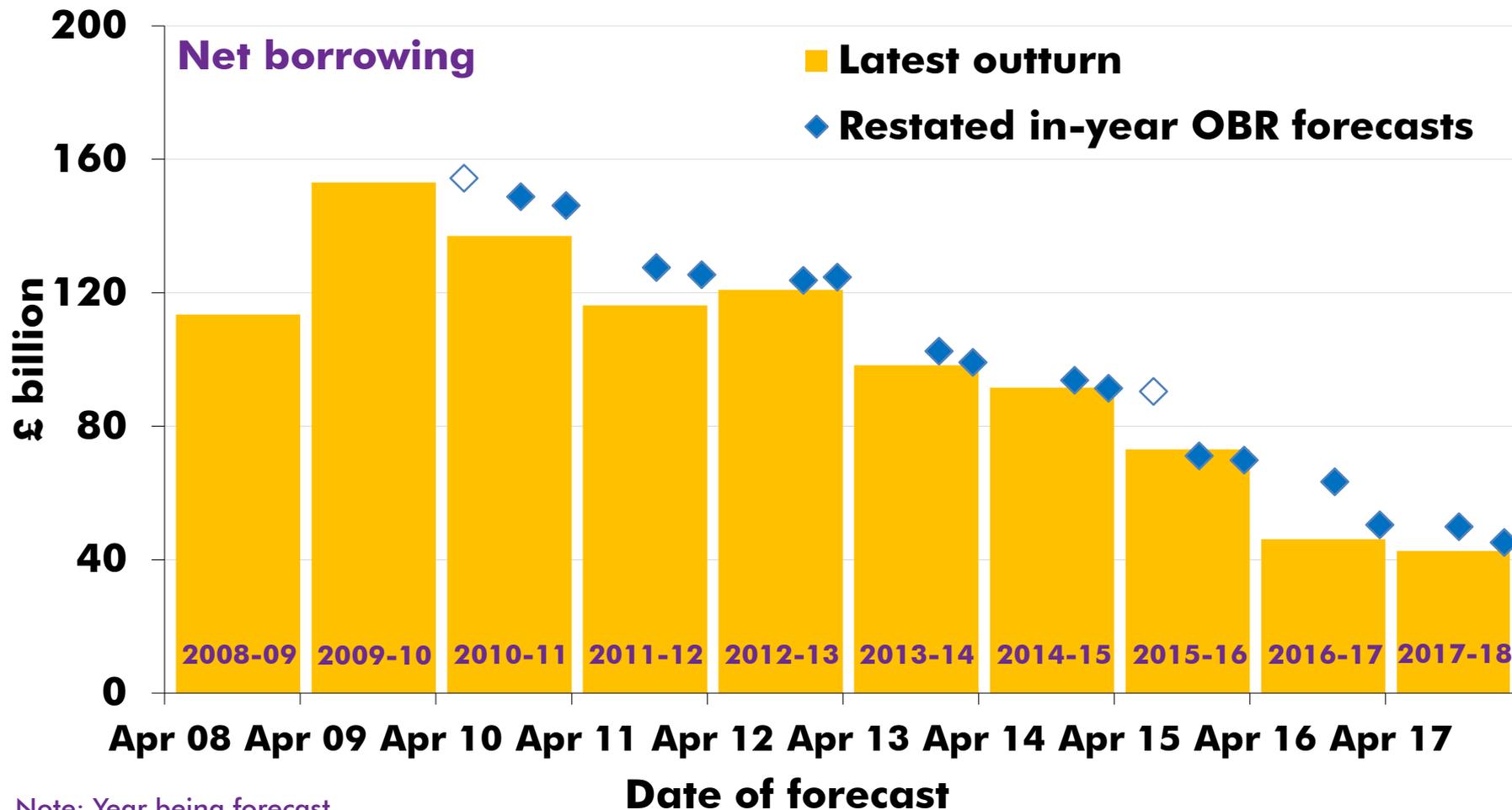
# The big picture



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# The big picture



# Like-for-like adjustments

- **Classification changes in/out of public sector**
  - Royal Mail Pension Plan
  - Bradford & Bingley
  - Housing associations
- **Treatment changes**
  - 3G spectrum auction
  - APF cash transfers
  - Tax litigation provision
  - Time-shifting corporation tax payments
- **Move to ESA10 and PSF reviews**

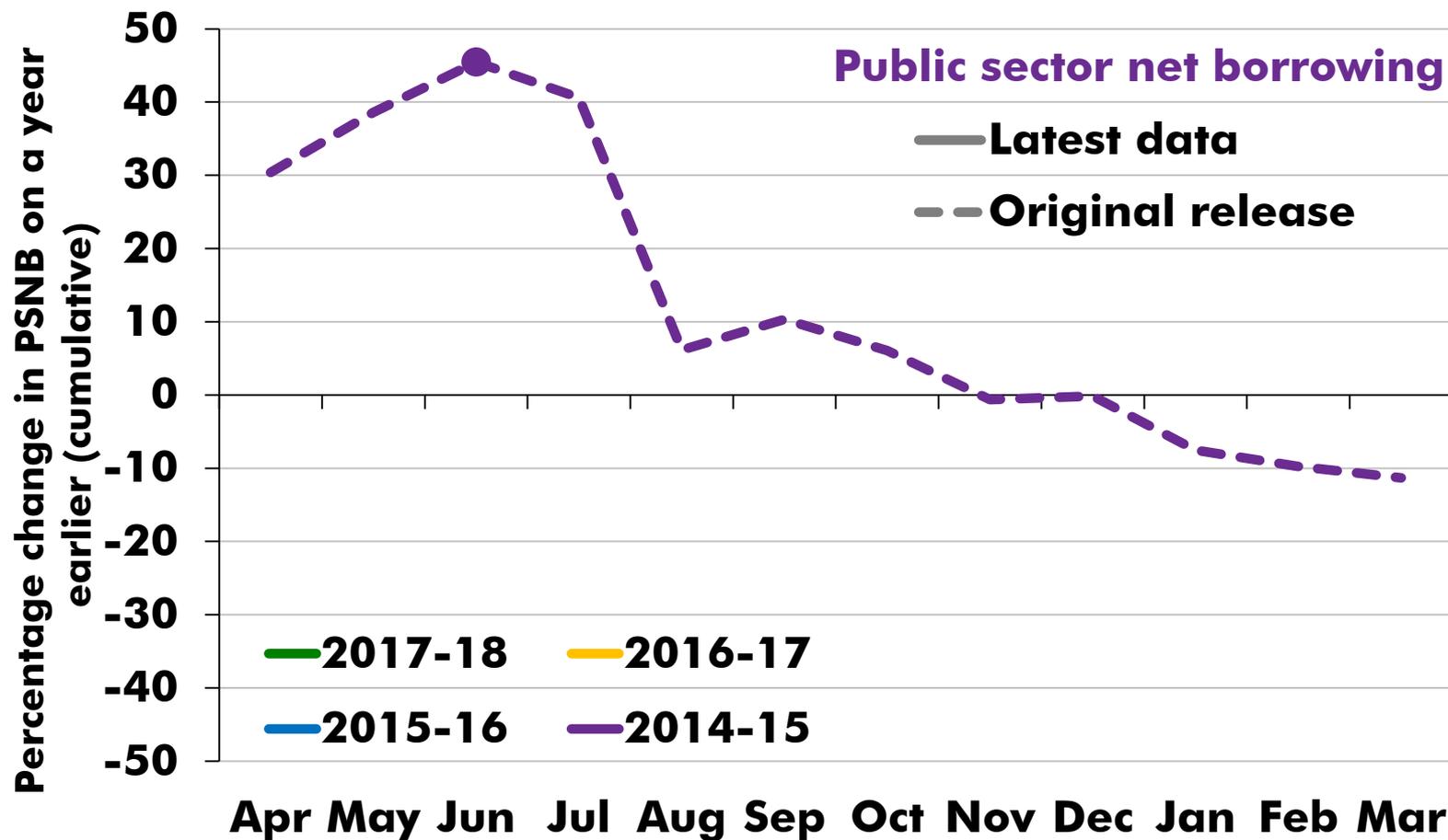
# Approaches to in-year forecasts

- Extrapolating year-to-date changes
- Comparing historical monthly shares
- Incorporating other factors

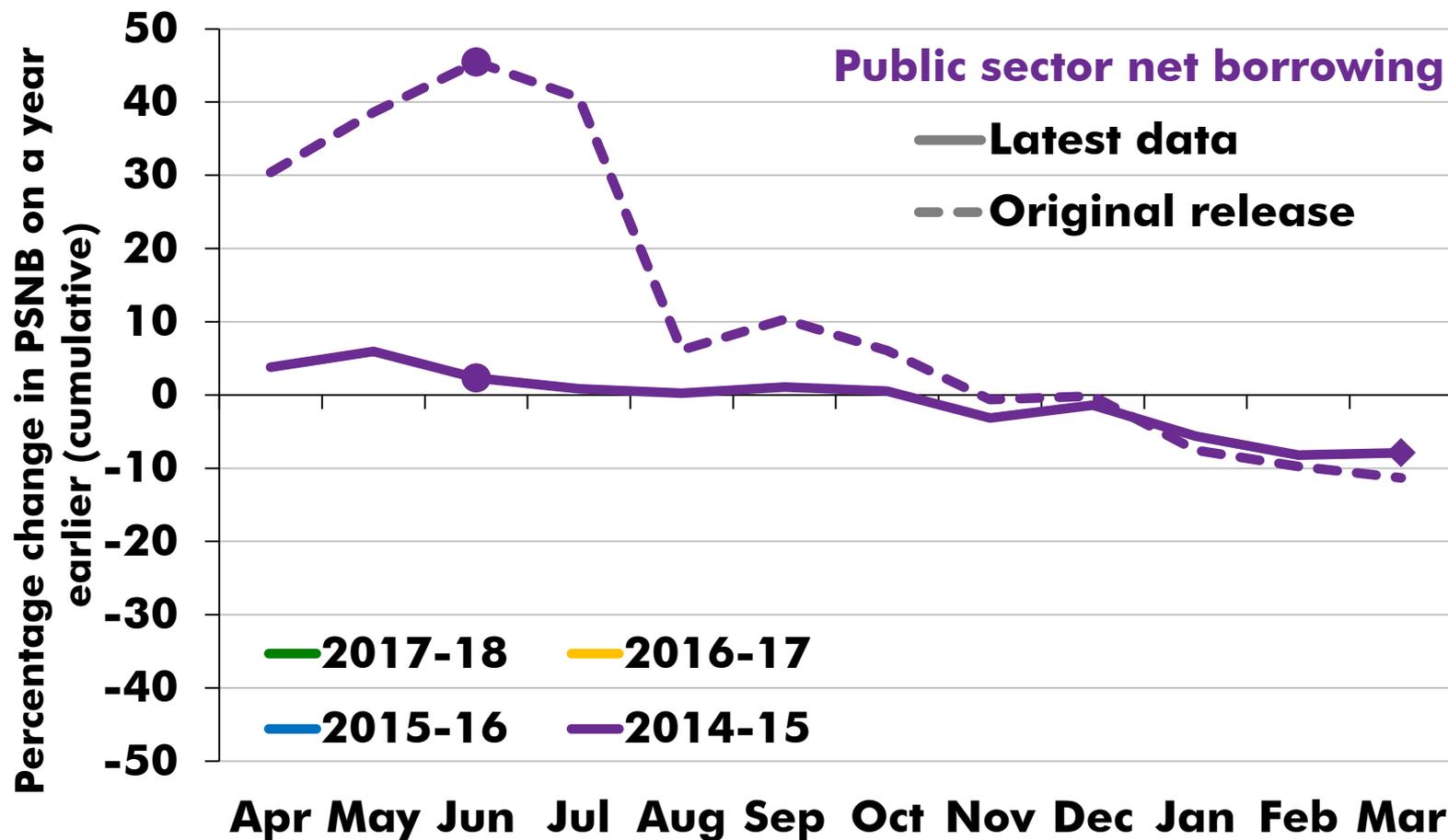
# Extrapolating year-to-date

- Look at growth rate over year to date relative to same period last year and apply over full year
- Simple, but
  - Outturn data prone to revision
  - Cashflows spread unevenly and inconsistently
  - Timing and policy can distort current and base year

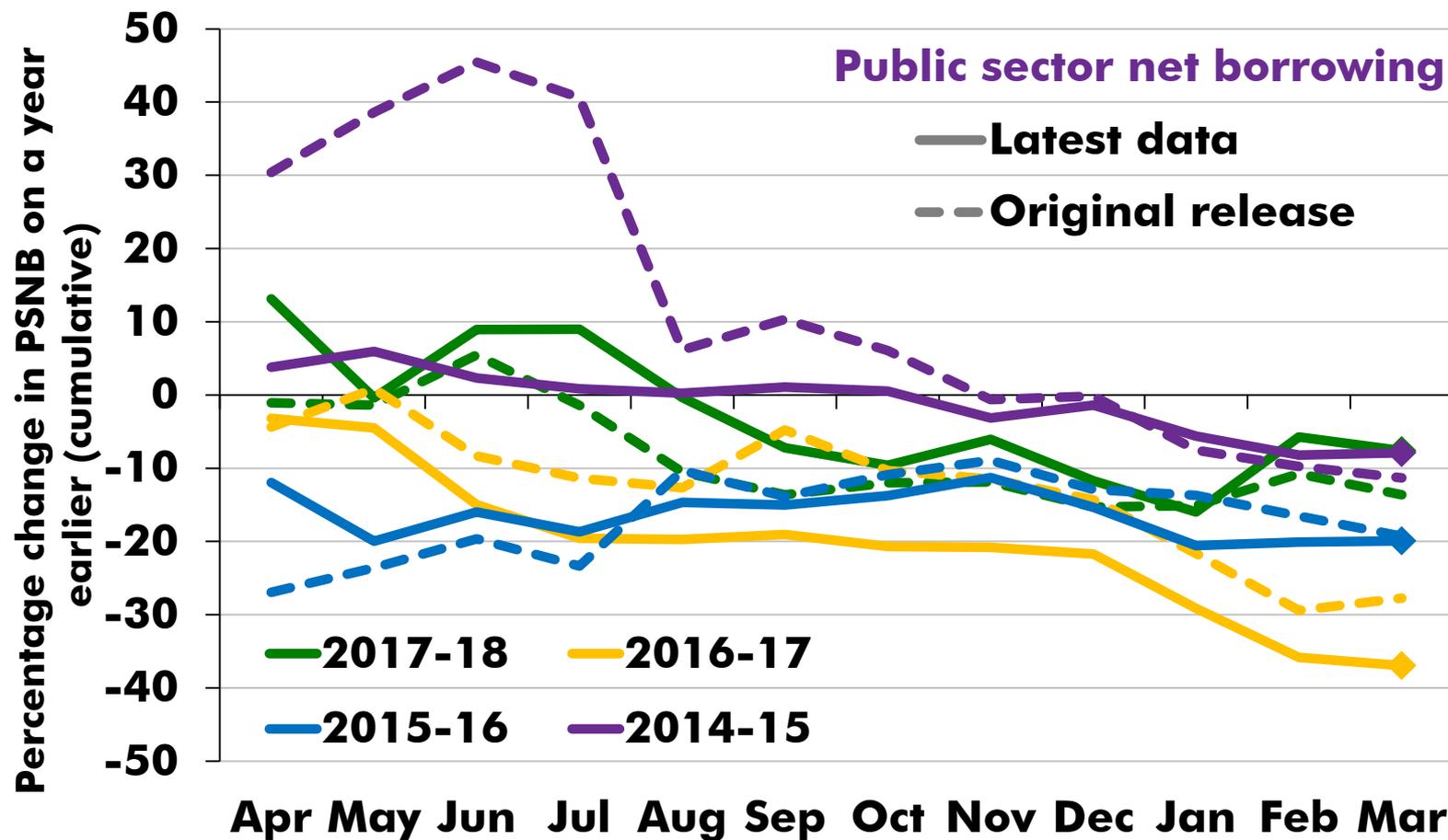
# Extrapolating year-to-date



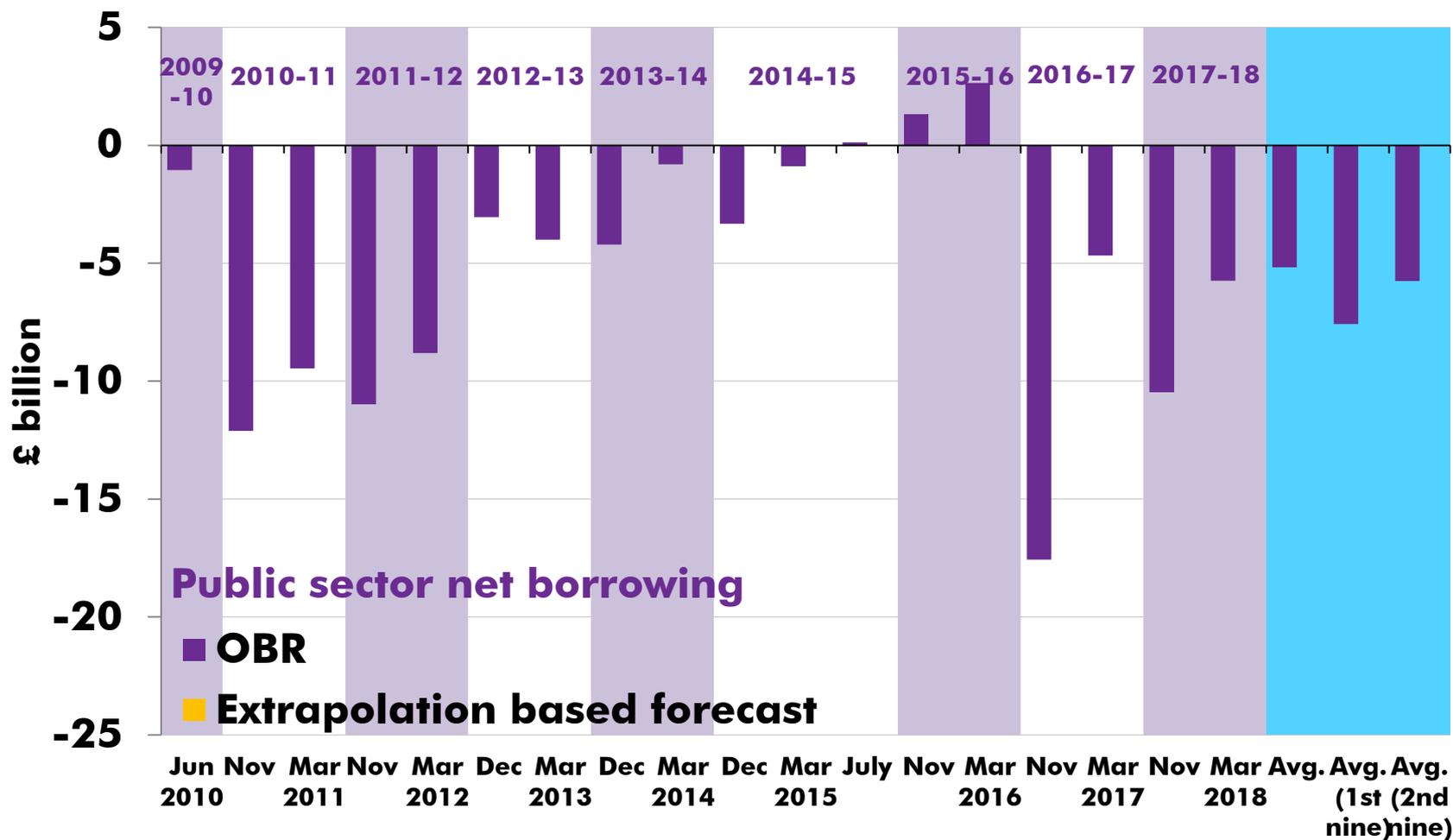
# Extrapolating year-to-date



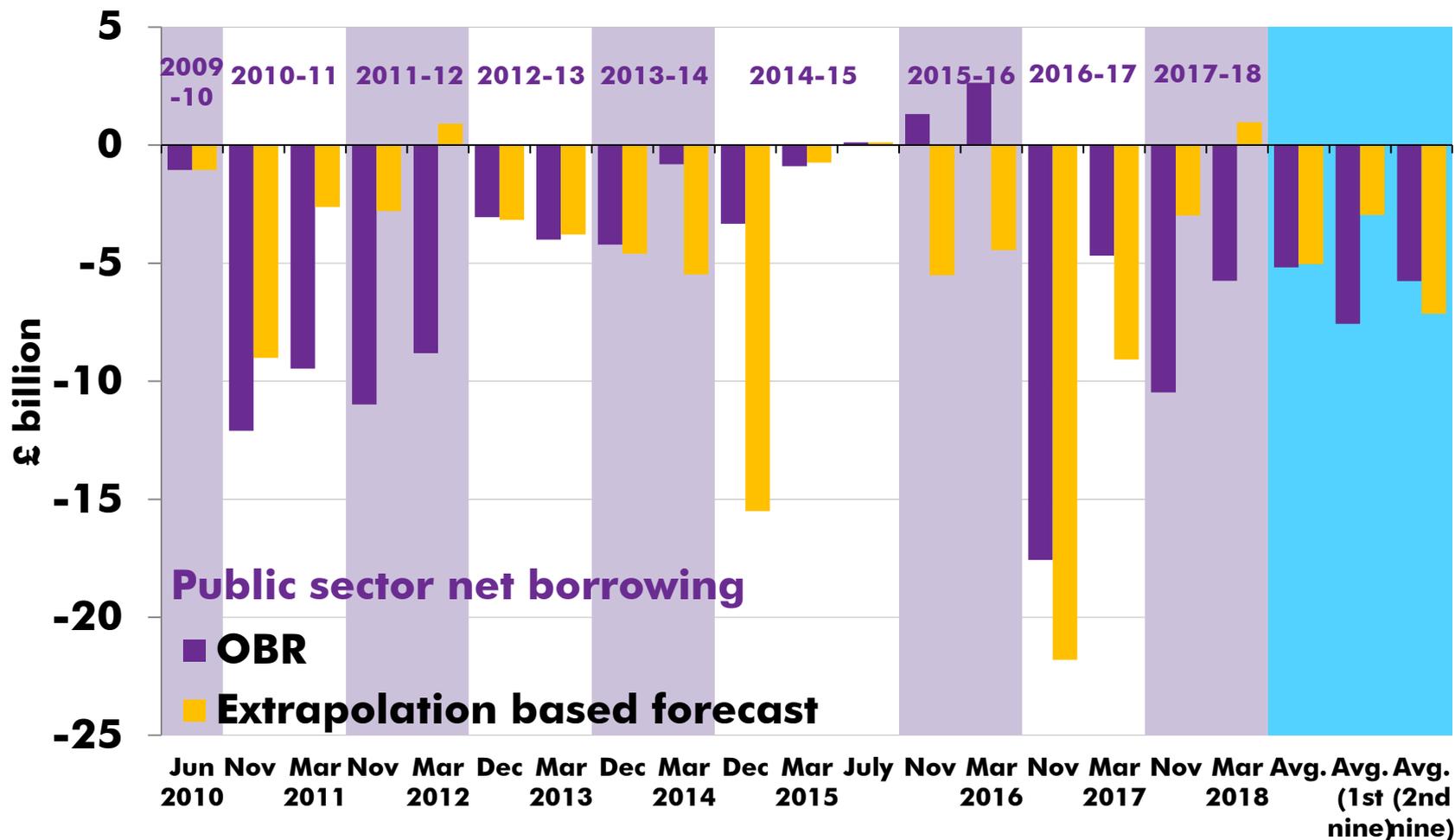
# Extrapolating year-to-date



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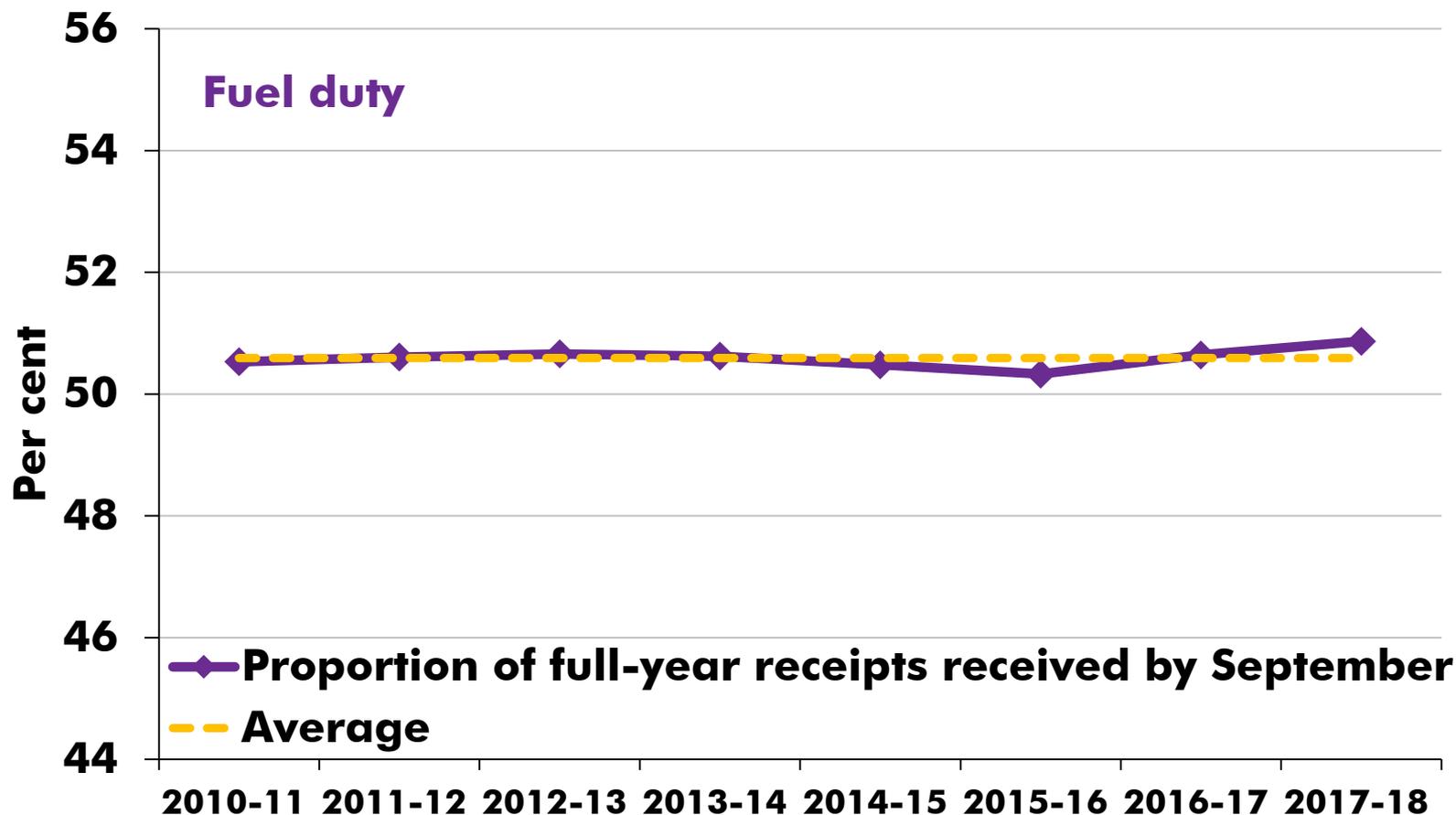
# Extrapolating year-to-date



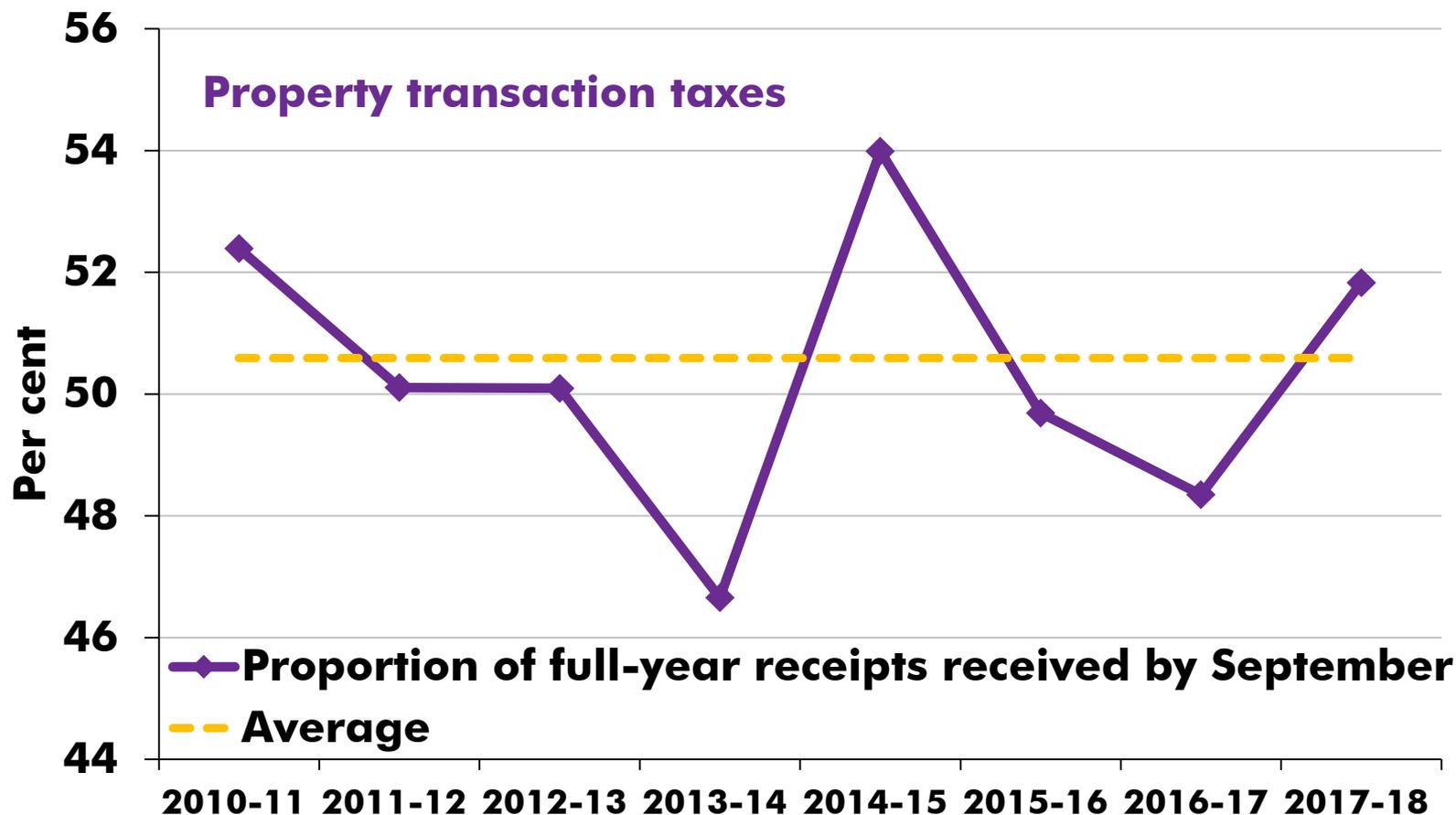
# Comparing historic monthly shares

- Scale up a category of receipts or spending year-to-date according to the proportion of the full-year total typically recorded at that point in the year
- Simple, and less prone to base-effect distortions
- But depends on stability of monthly distribution
  - So difficult when policy changes

# Comparing historic monthly shares



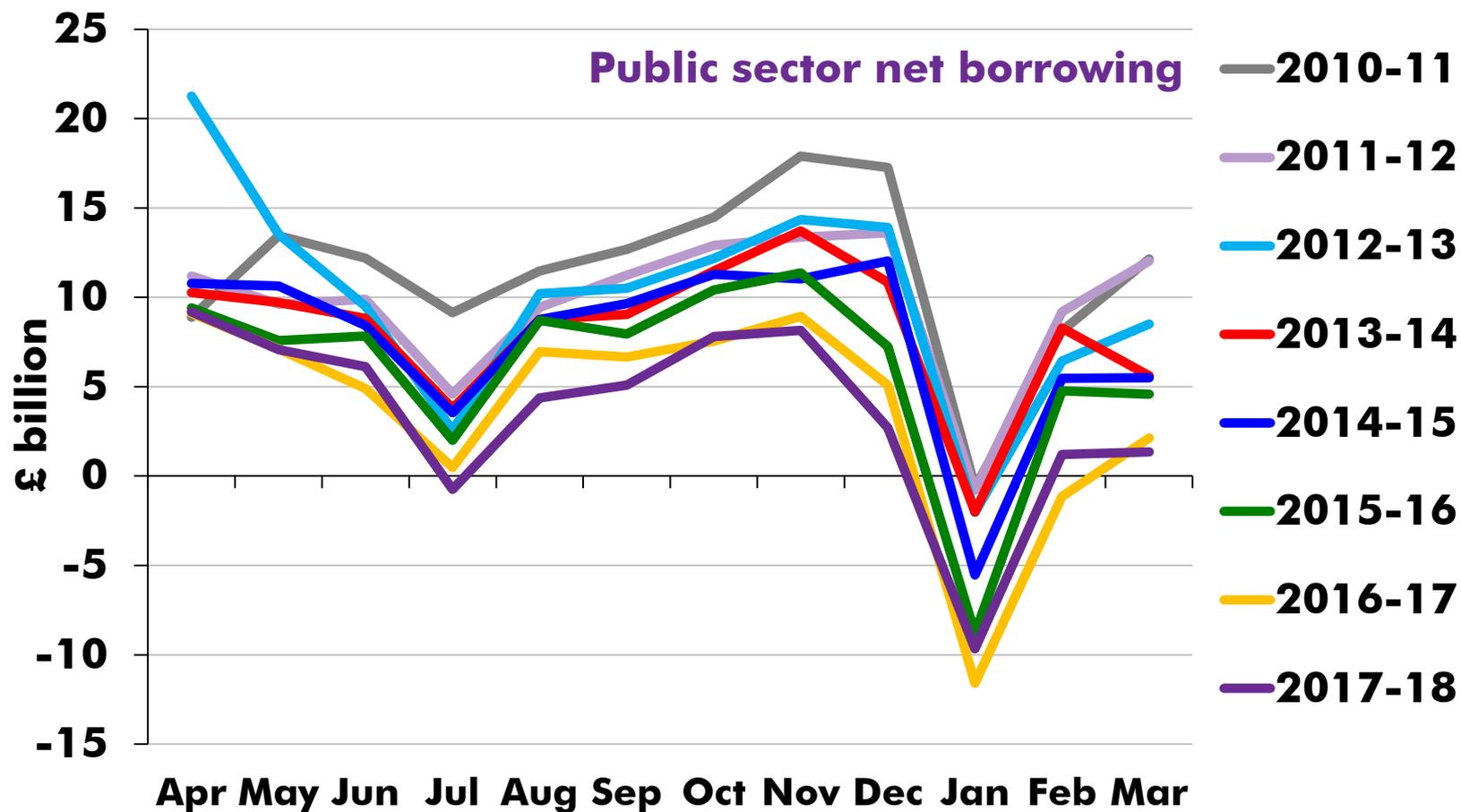
# Comparing historic monthly shares



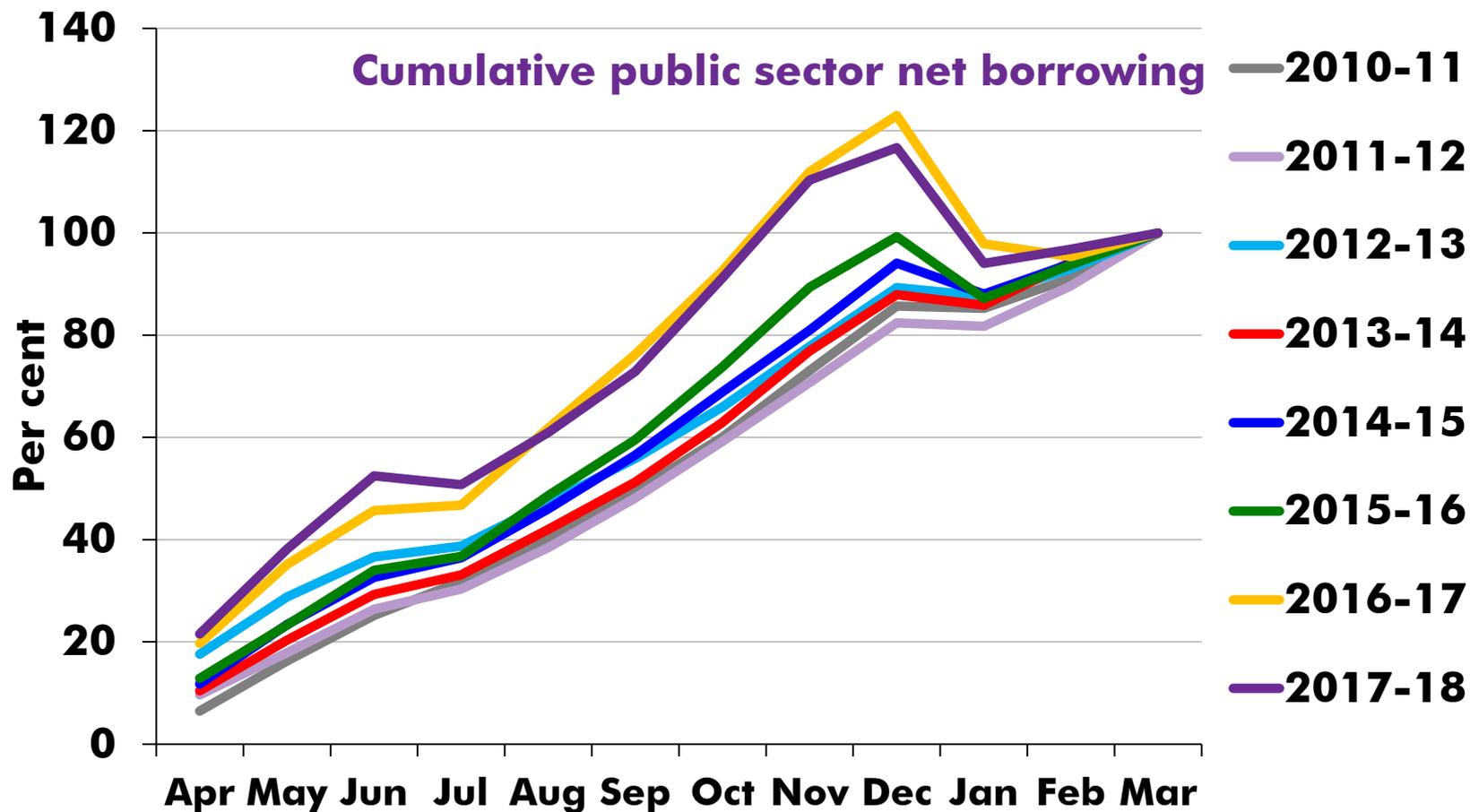
# Incorporating other factors

- Near-term economic developments
  - E.g. near-term RPI movements
- Operational factors and timing effects
  - E.g. date of Easter
- Policy effects
  - E.g. forestalling
- Departmental monthly profiles

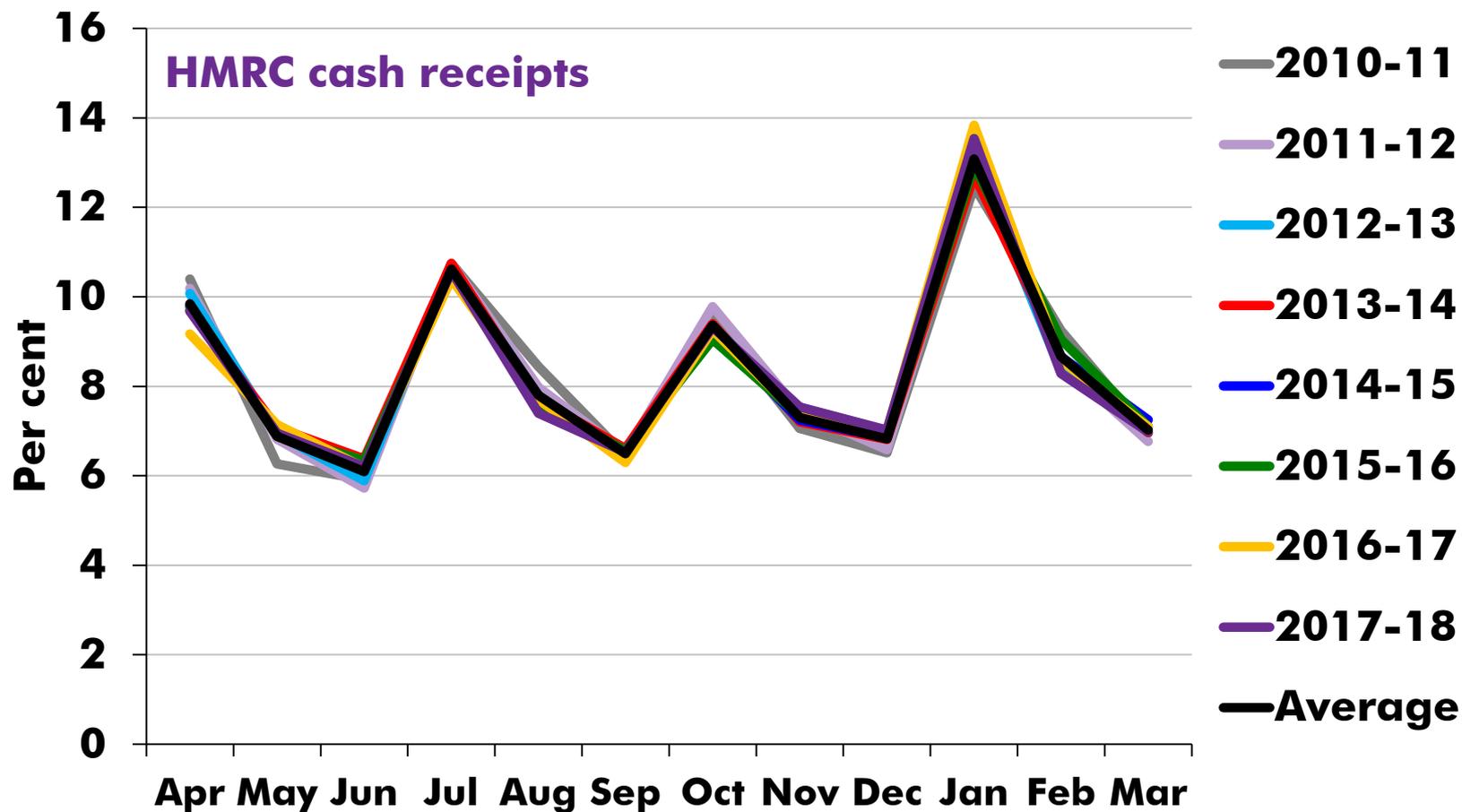
# Public finances month by month



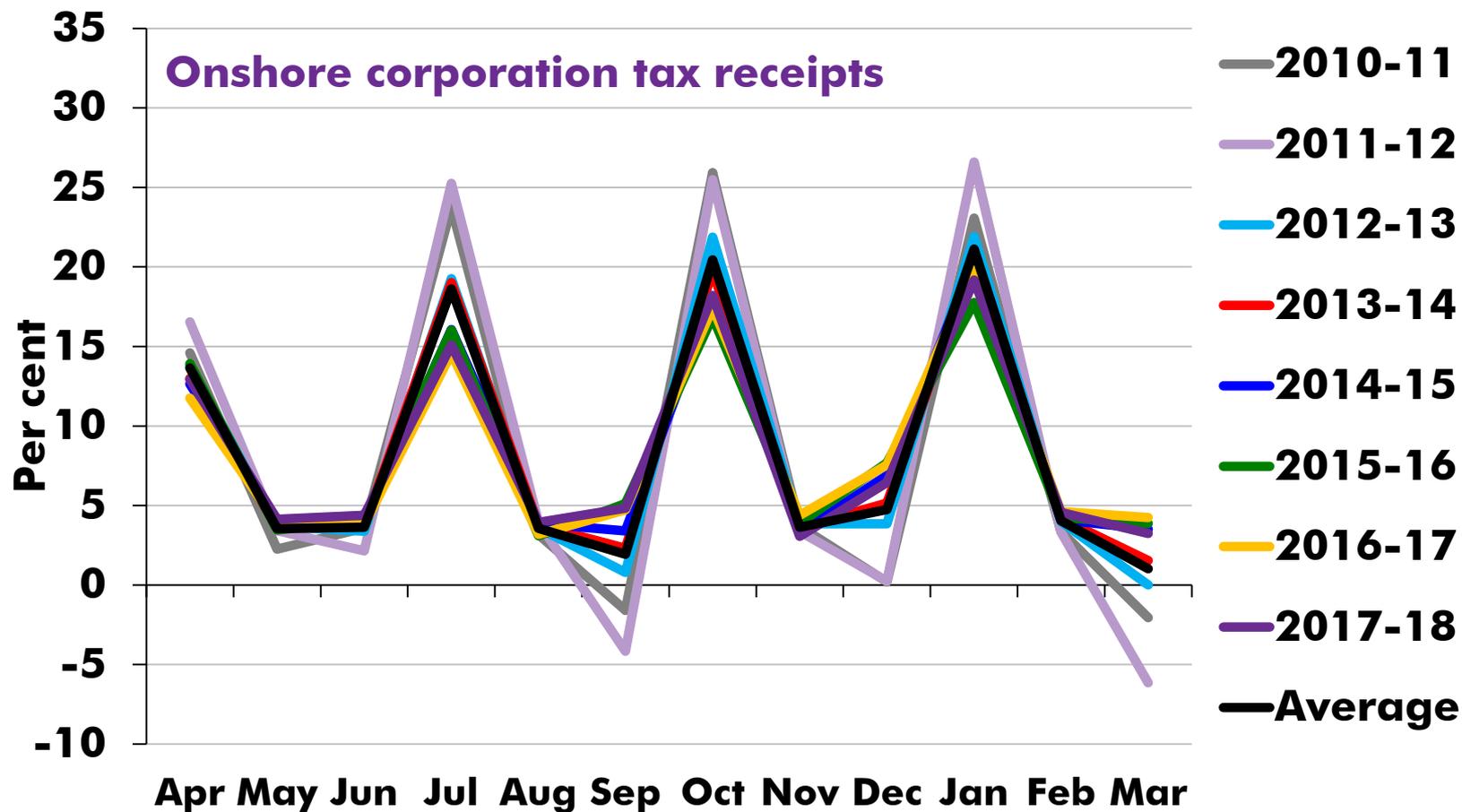
# Public finances month by month



# Receipts month by month

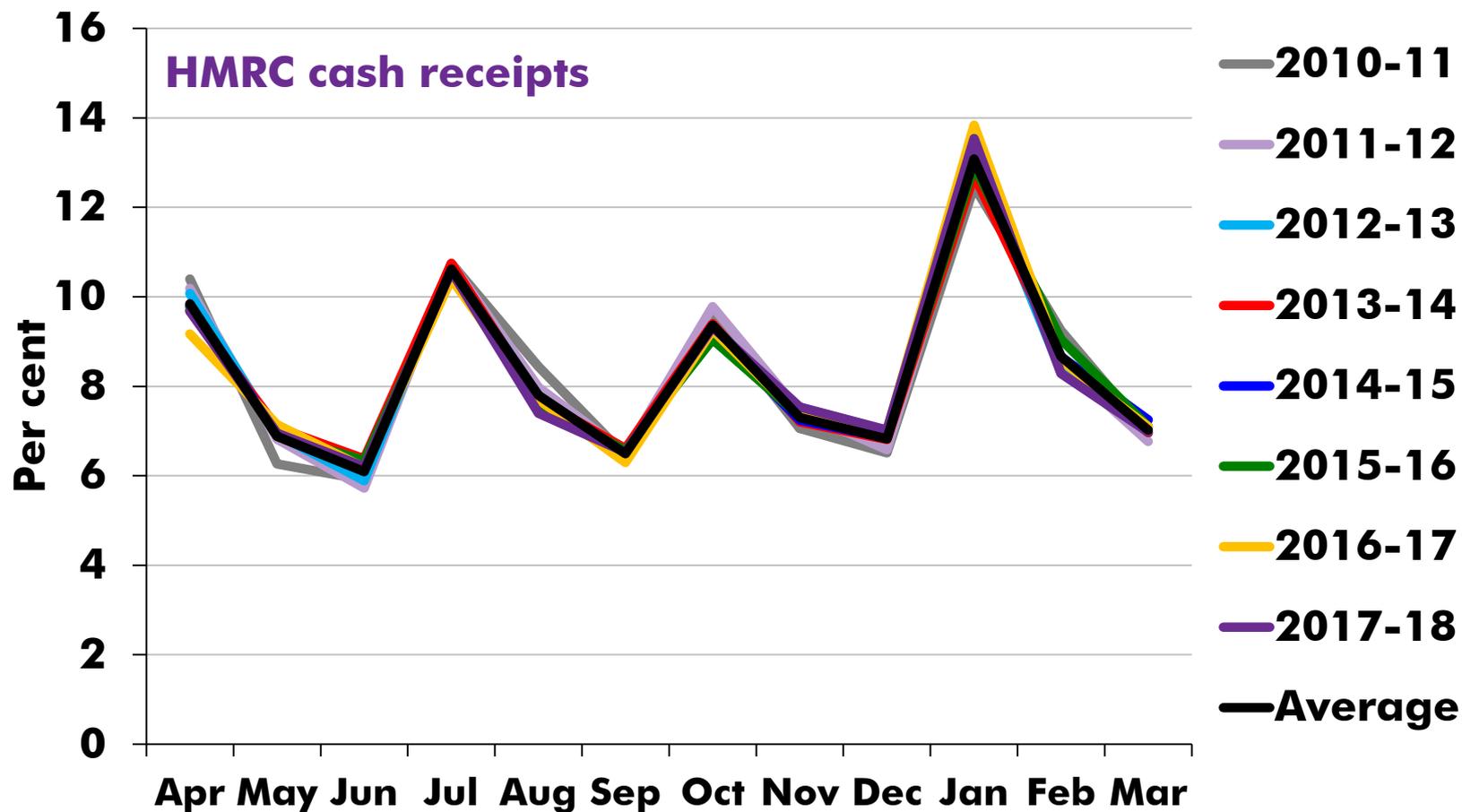


# Receipts month by month





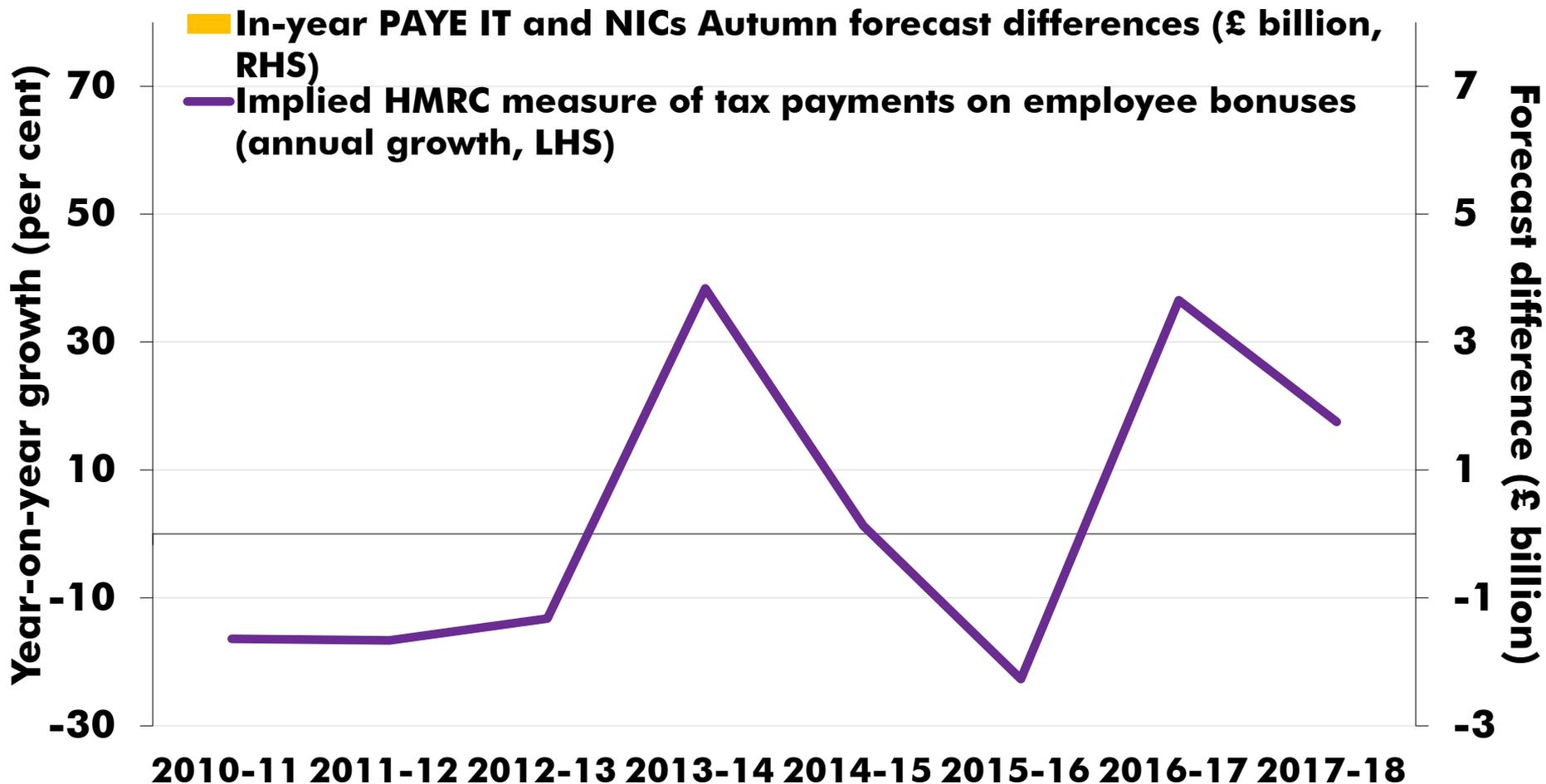
# Receipts month by month



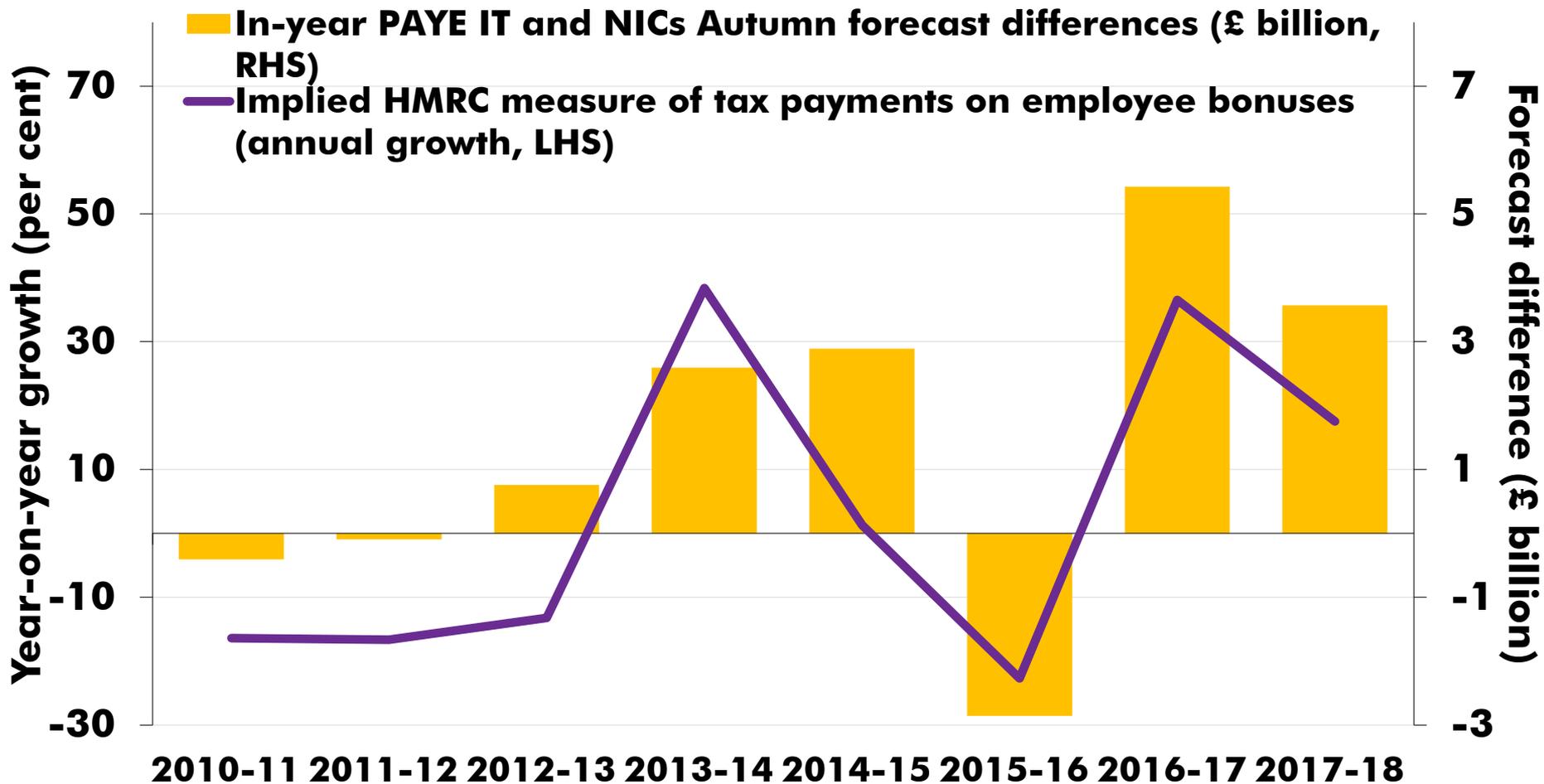




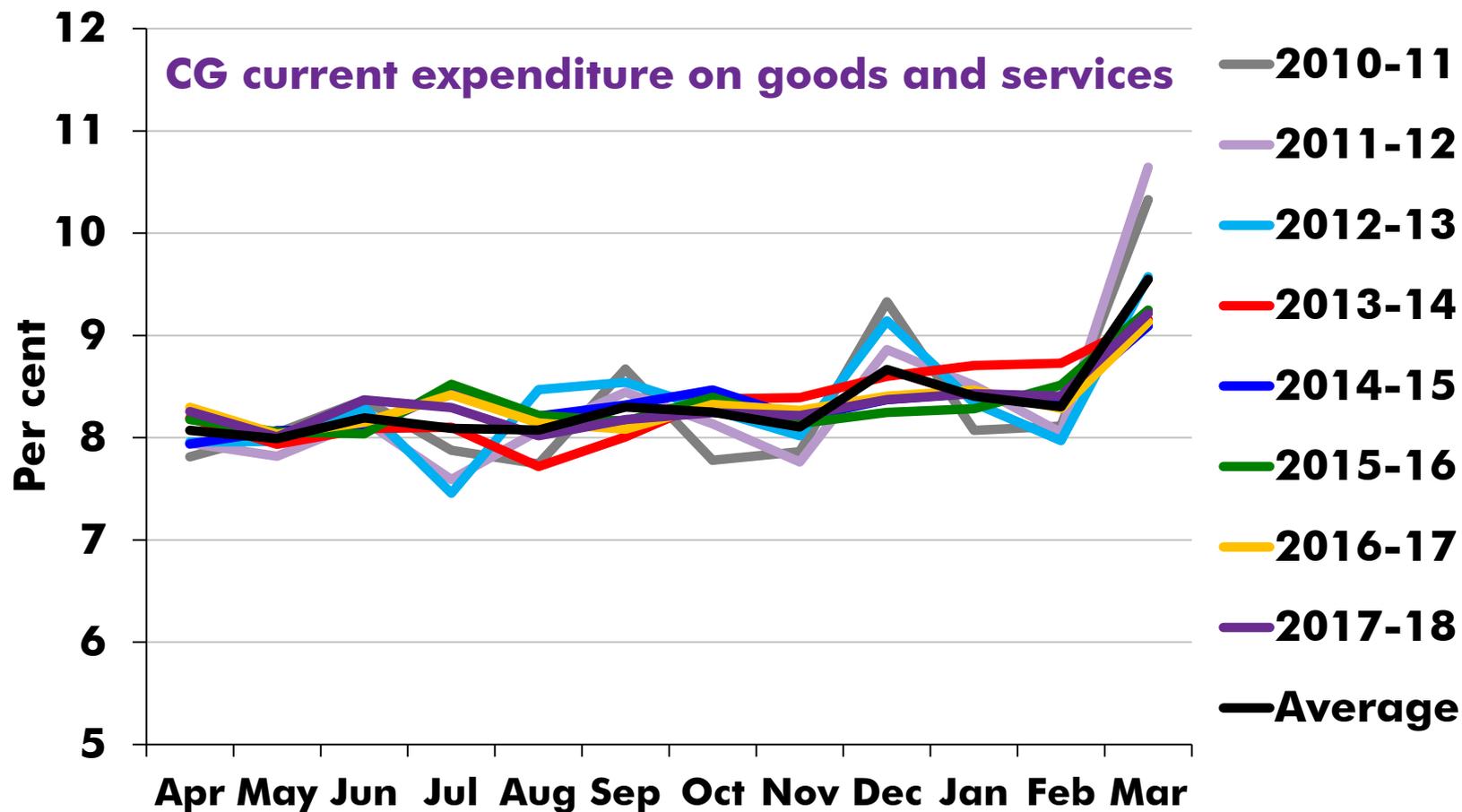
# Tax payments on bonuses



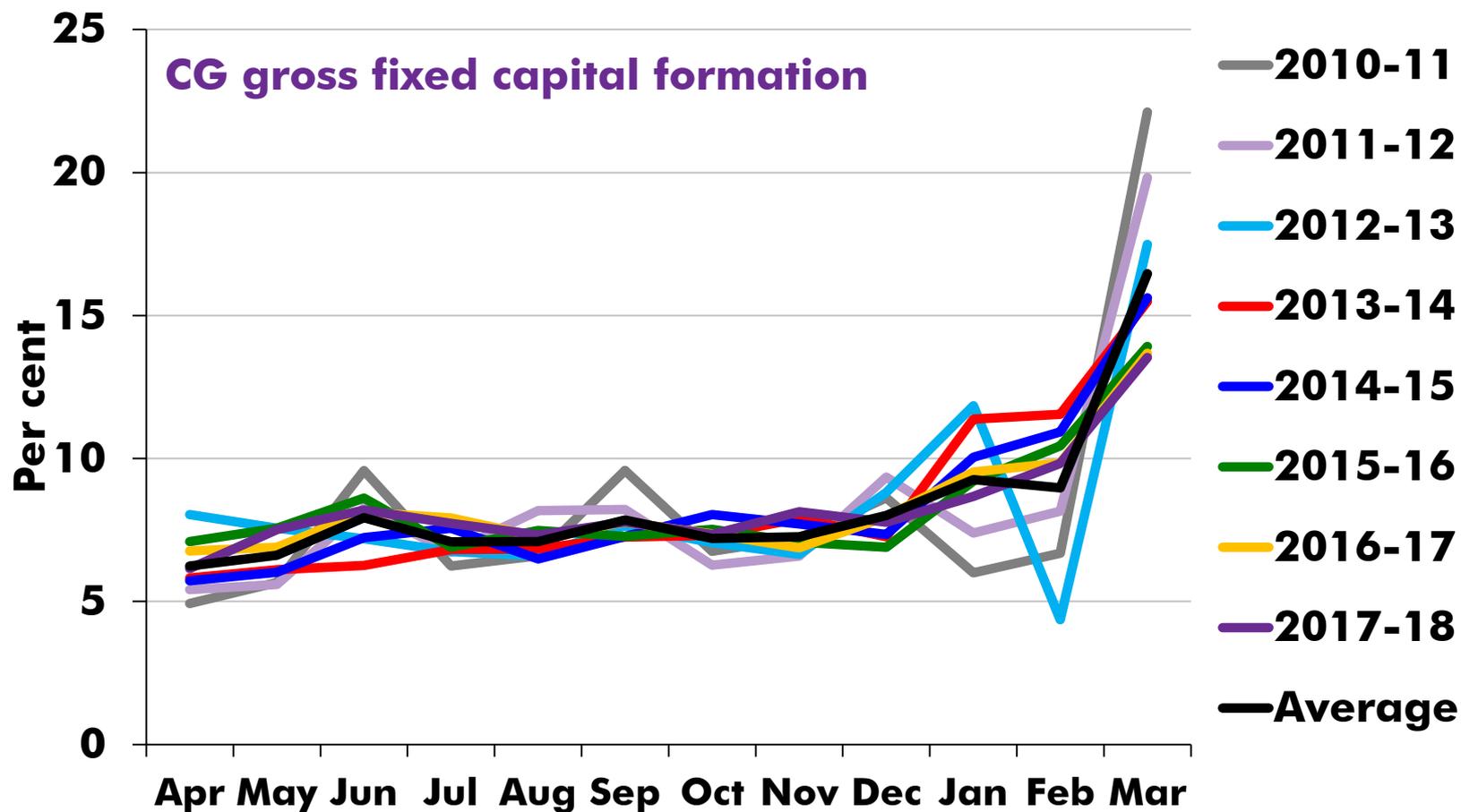
# Ta payments on bonuses



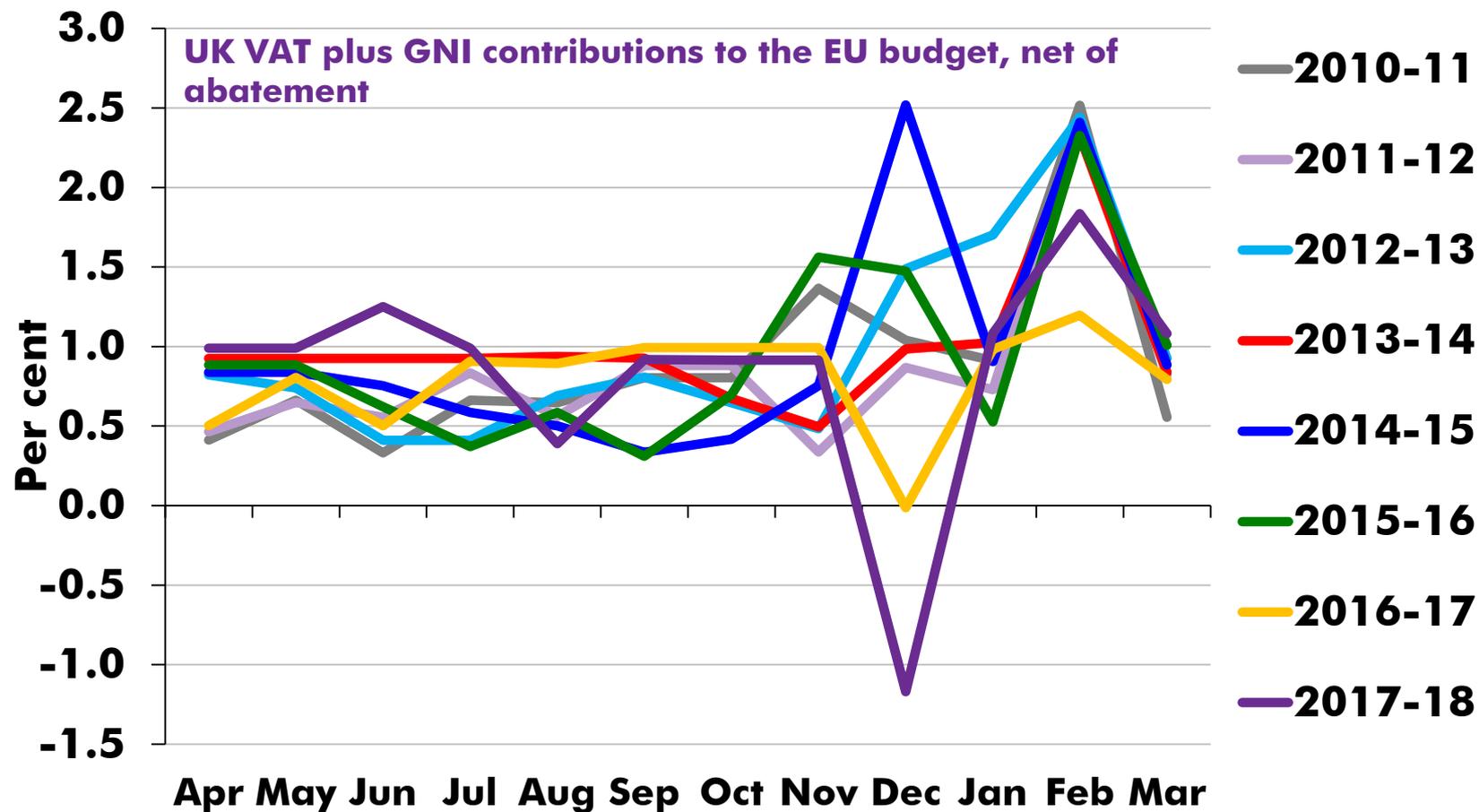
# Spending month by month



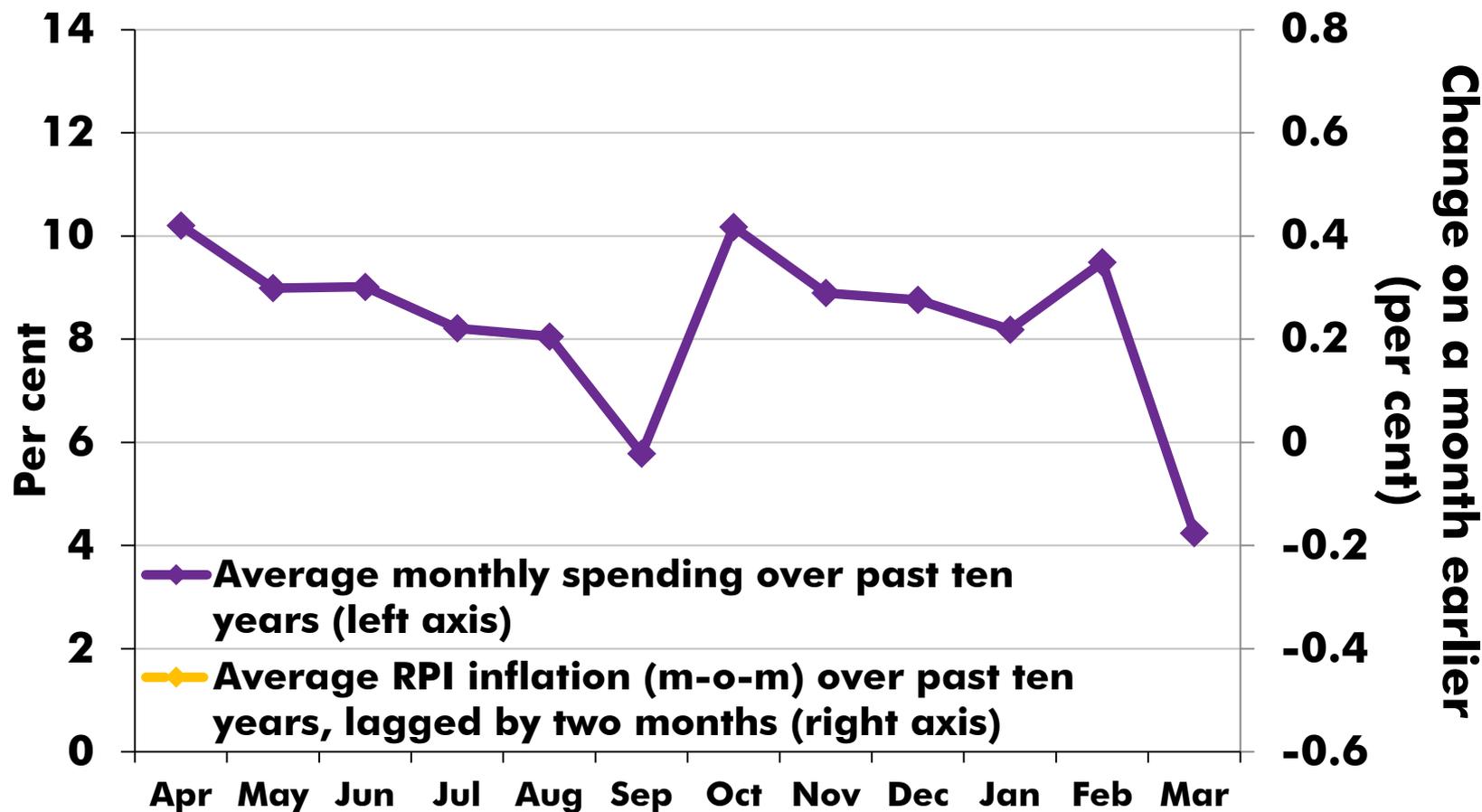
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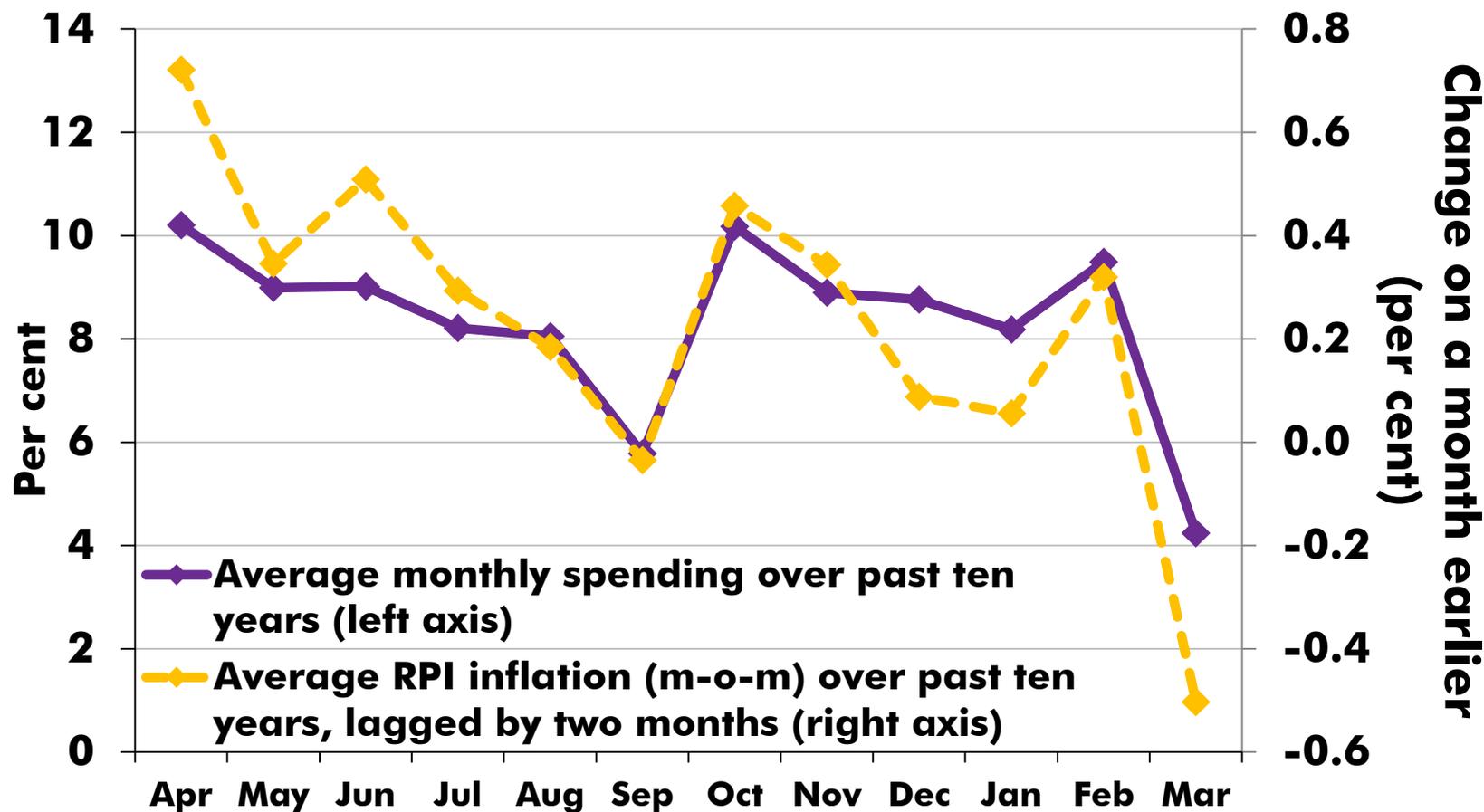
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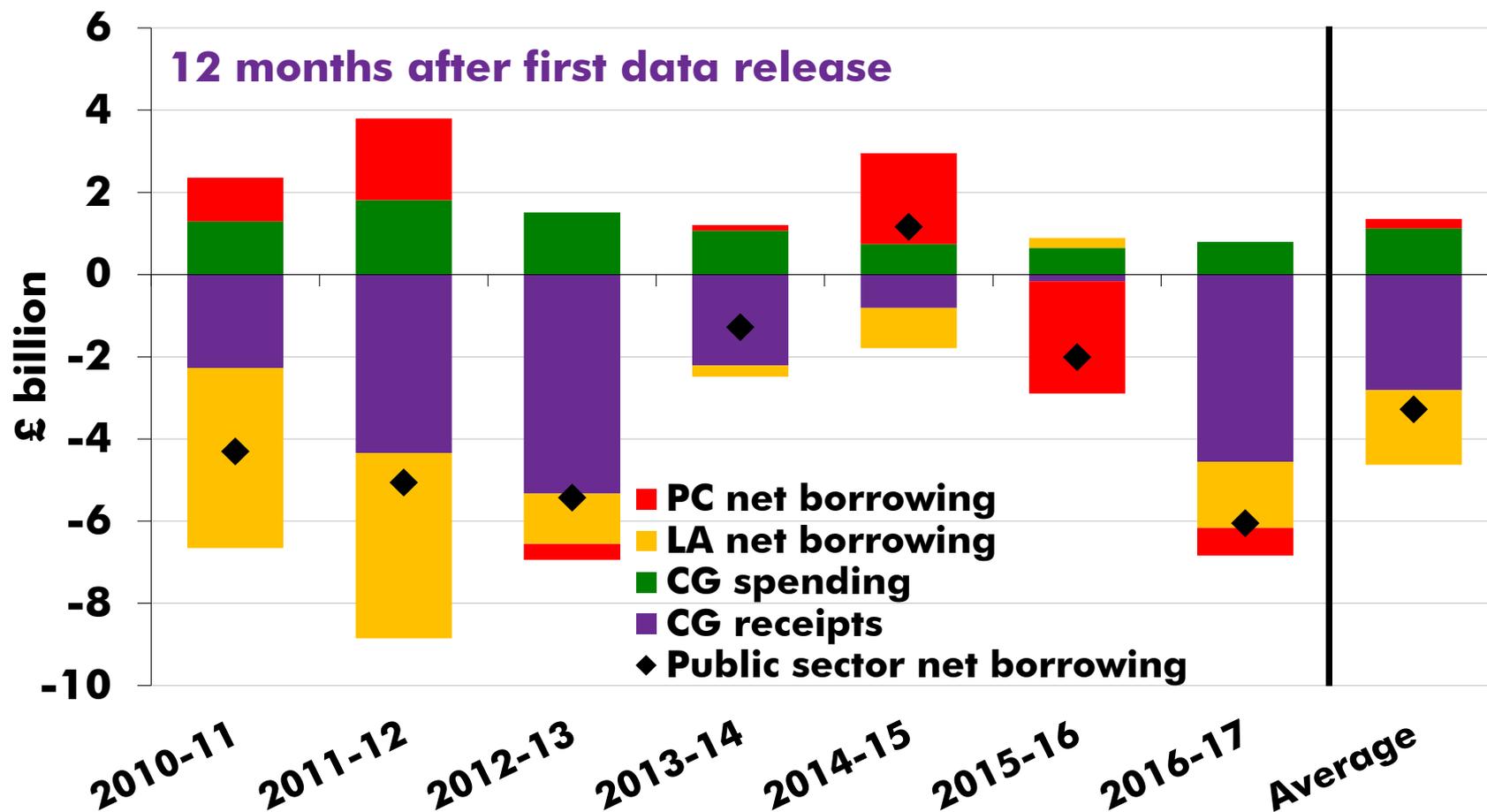
# Debt interest spending



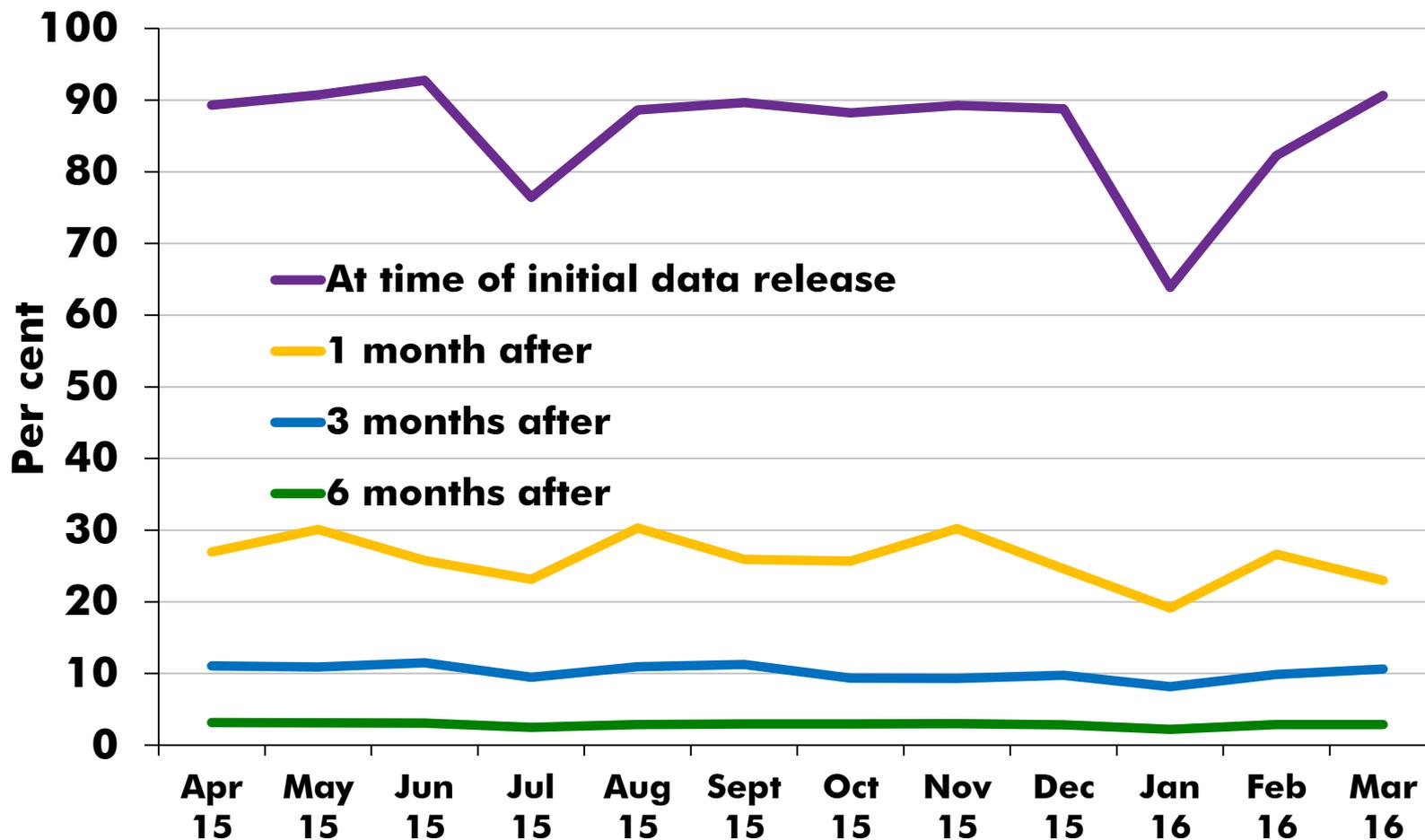
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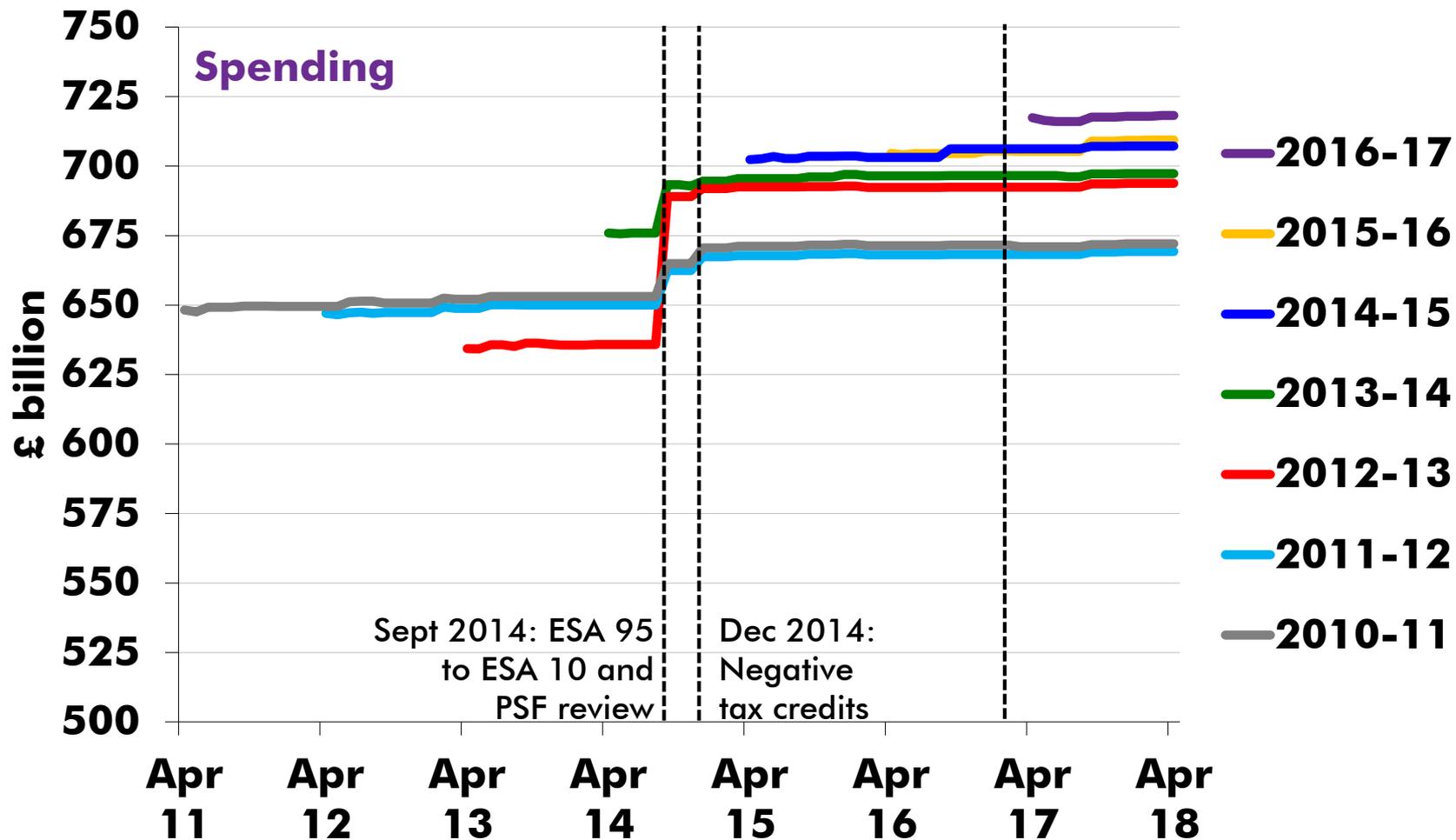
# Data revisions



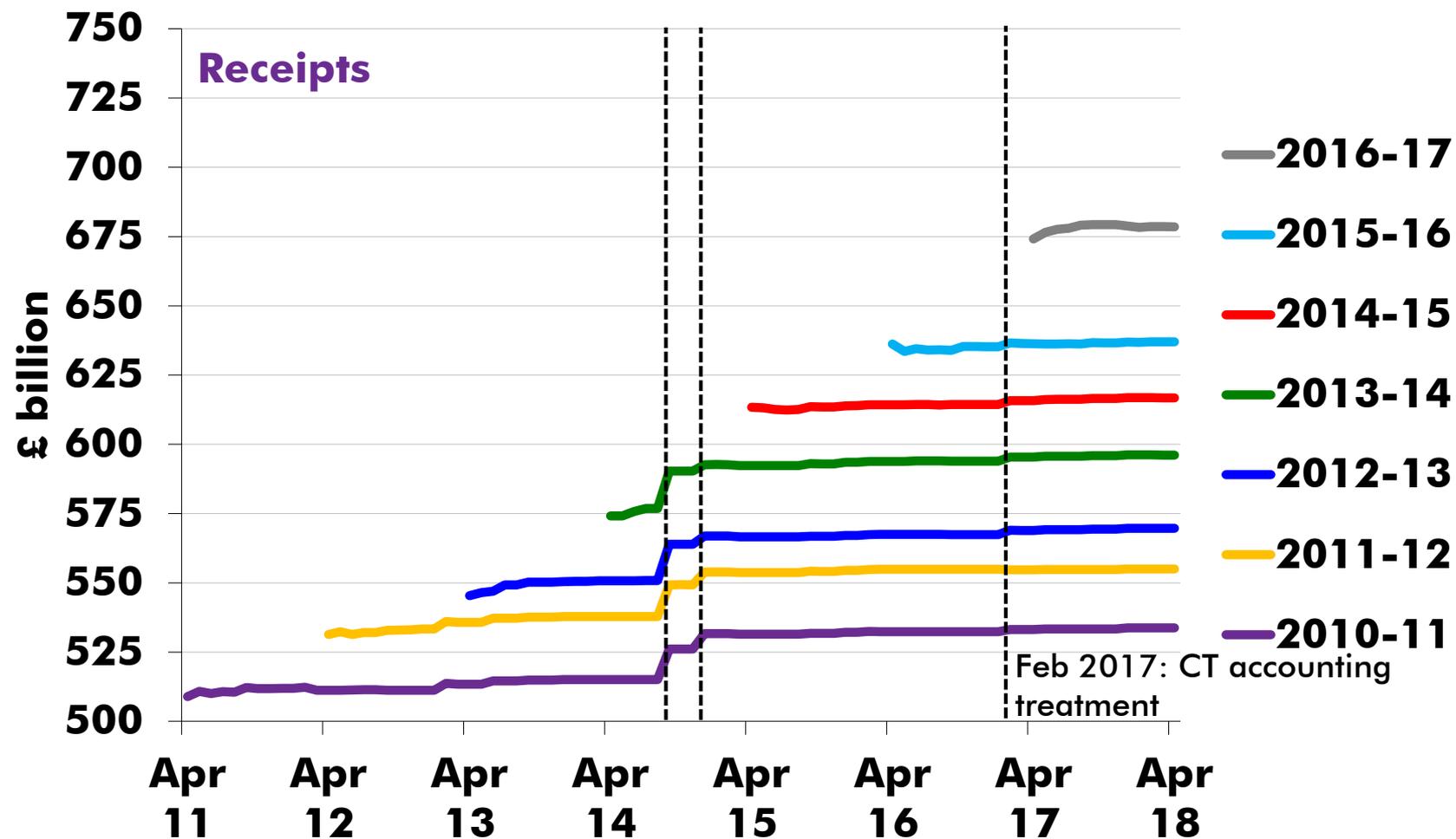
# When outturns are forecasts



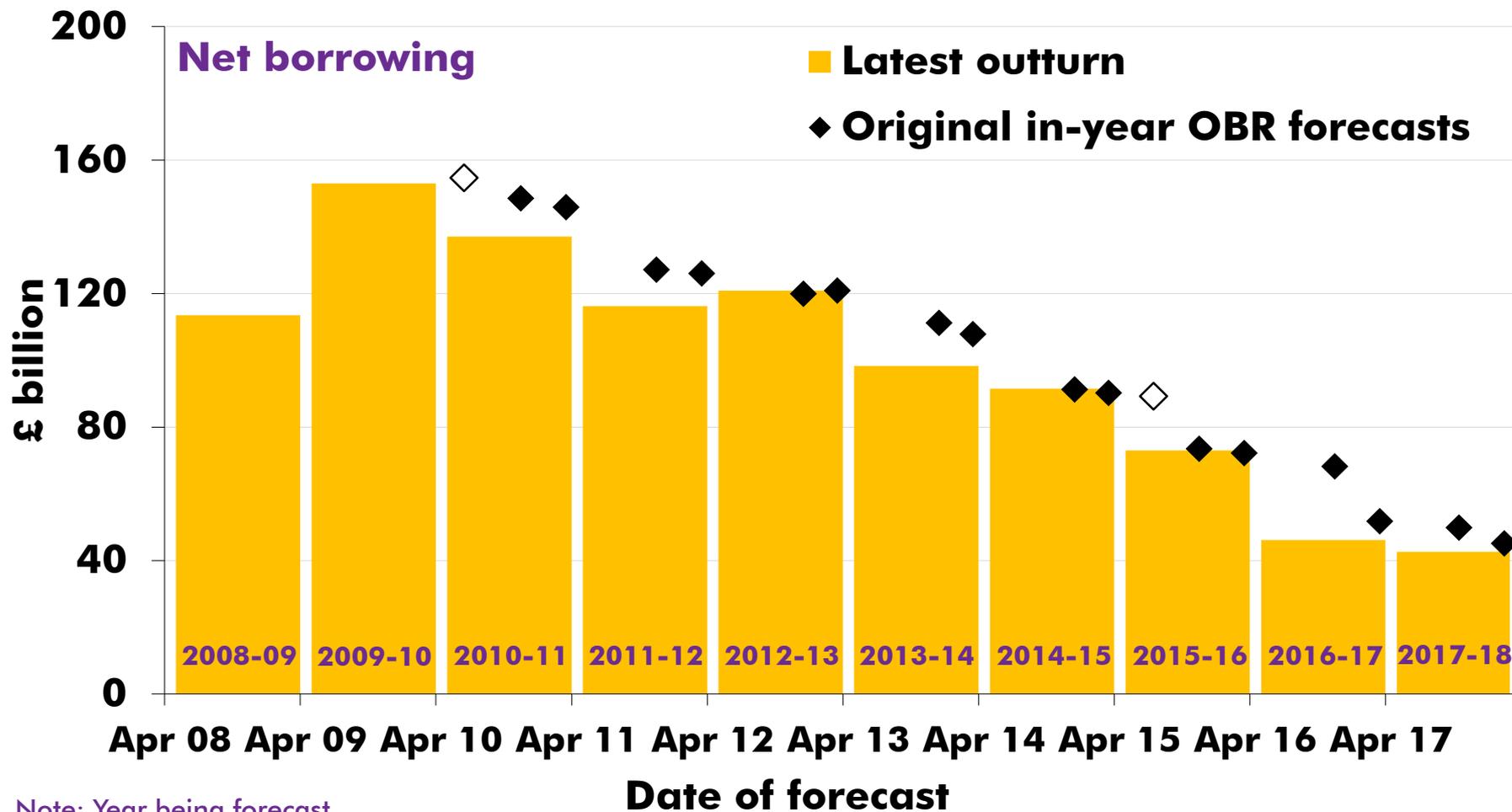
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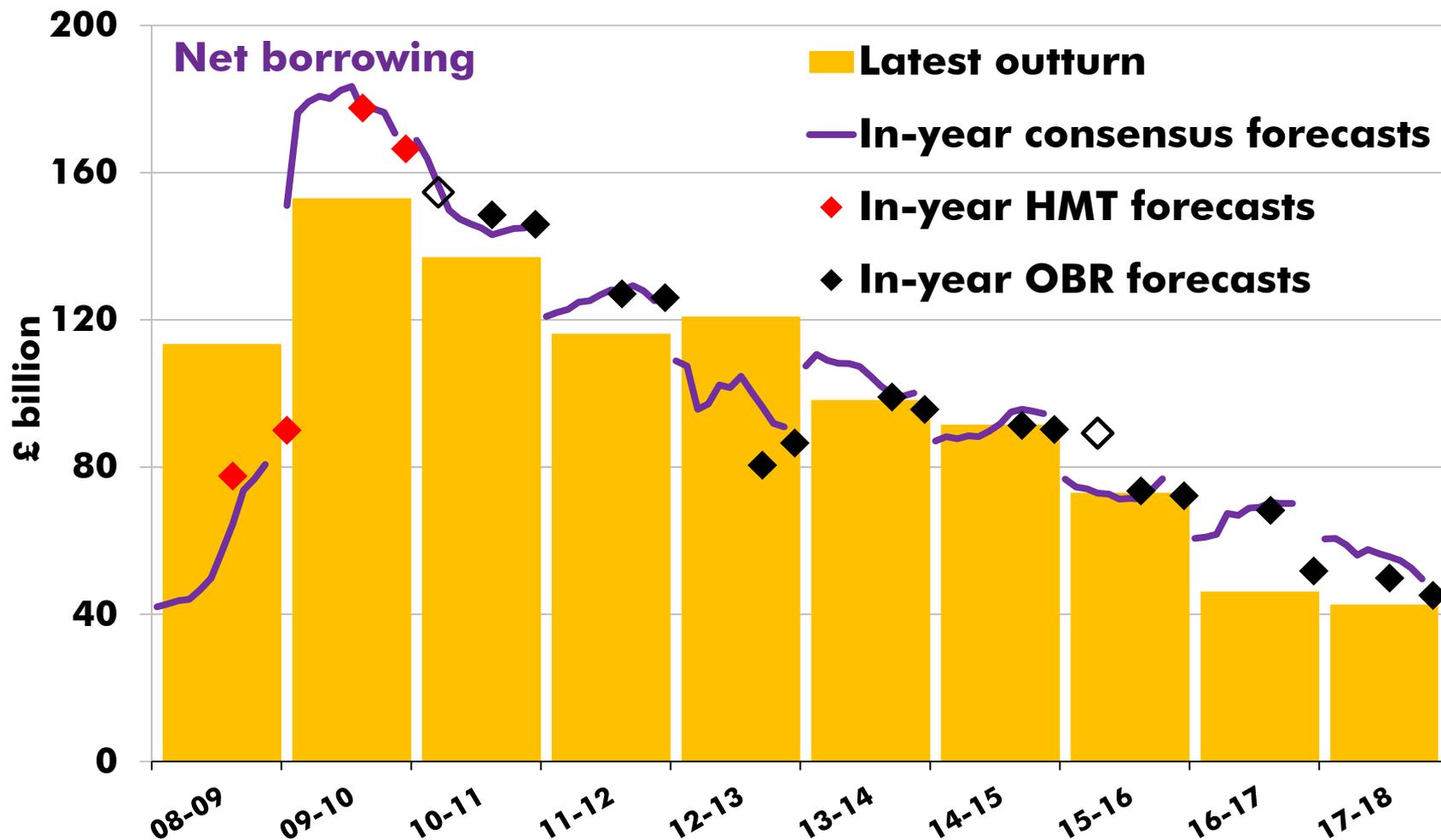
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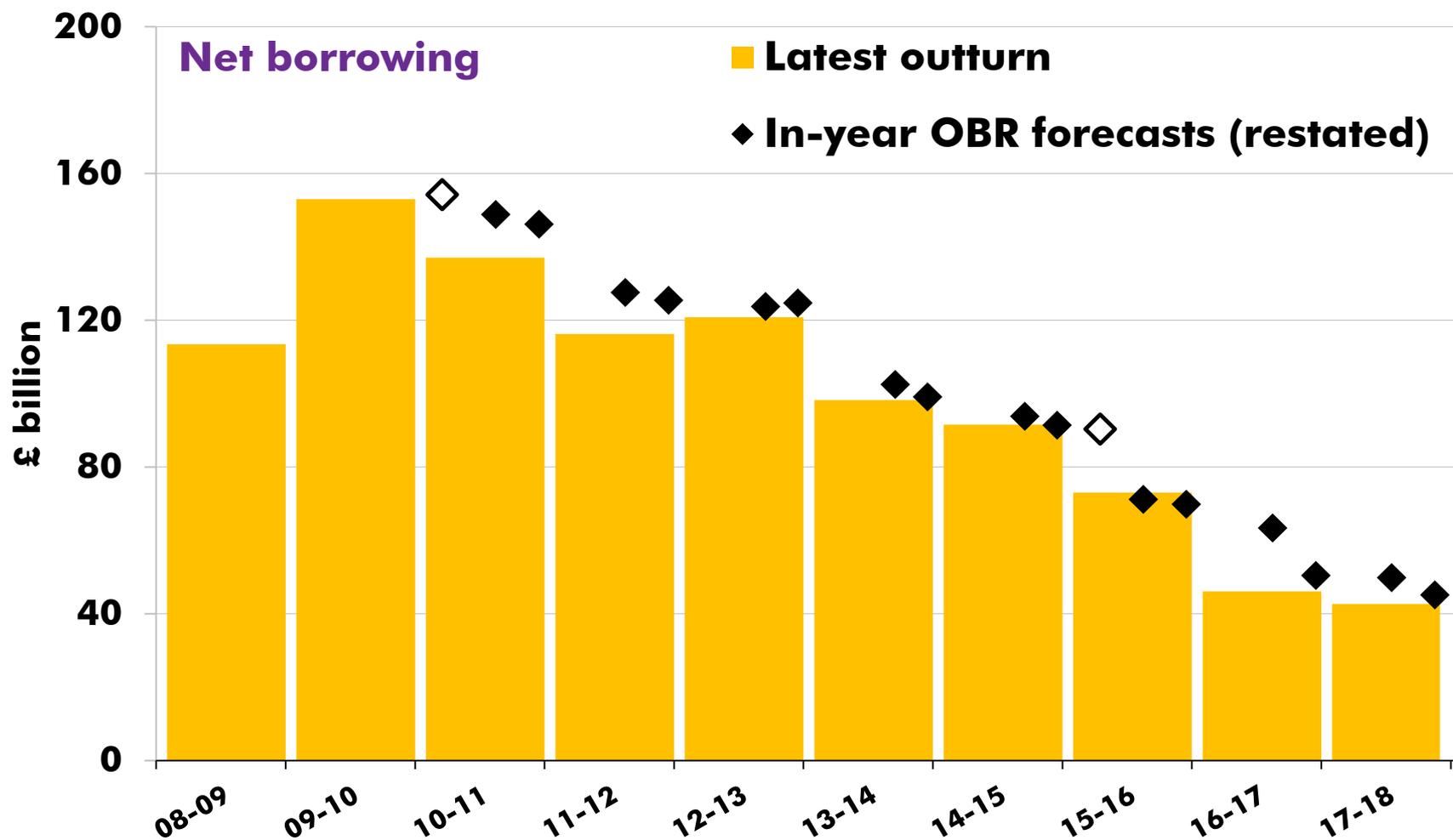
# Forecast performance



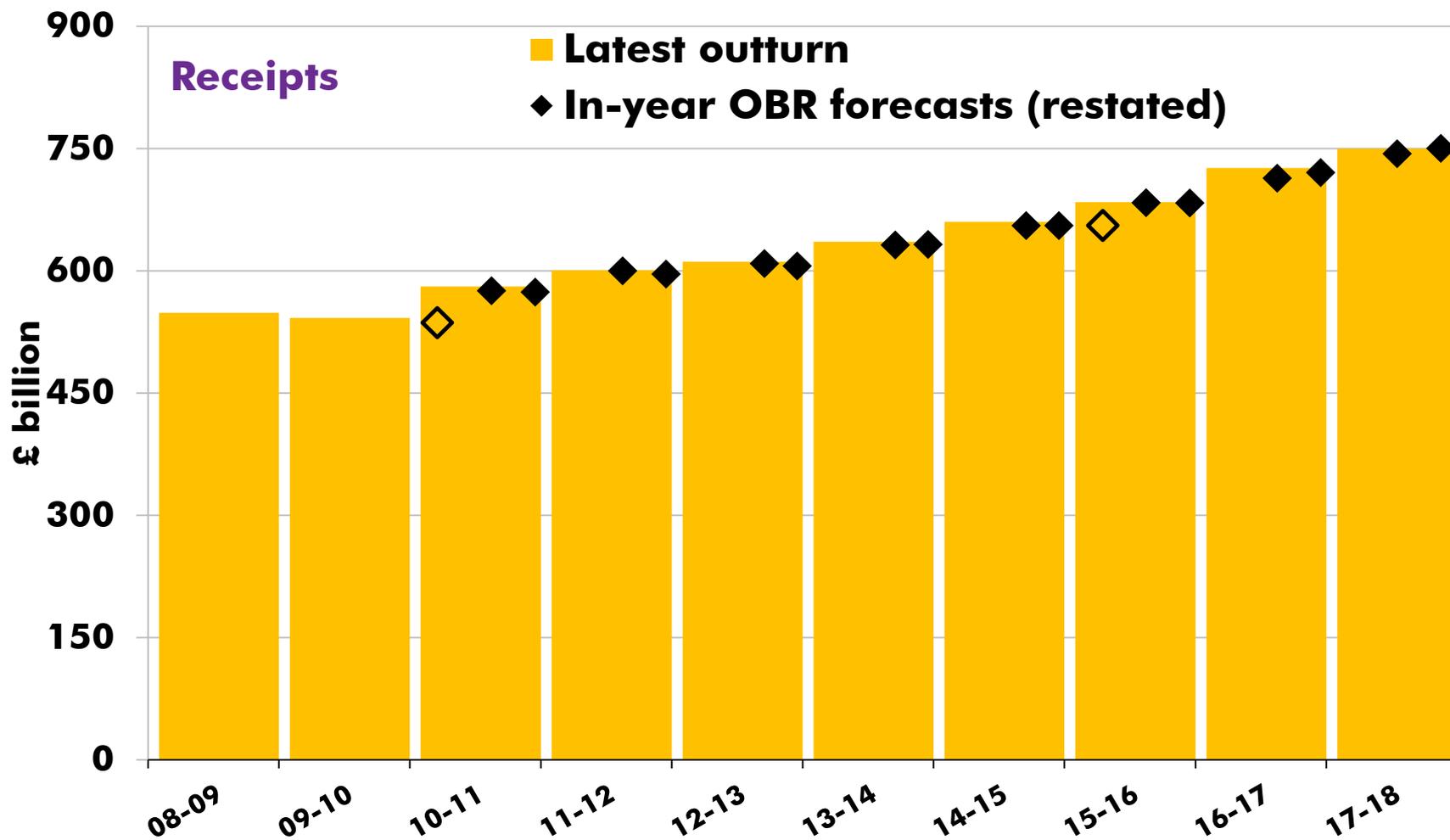
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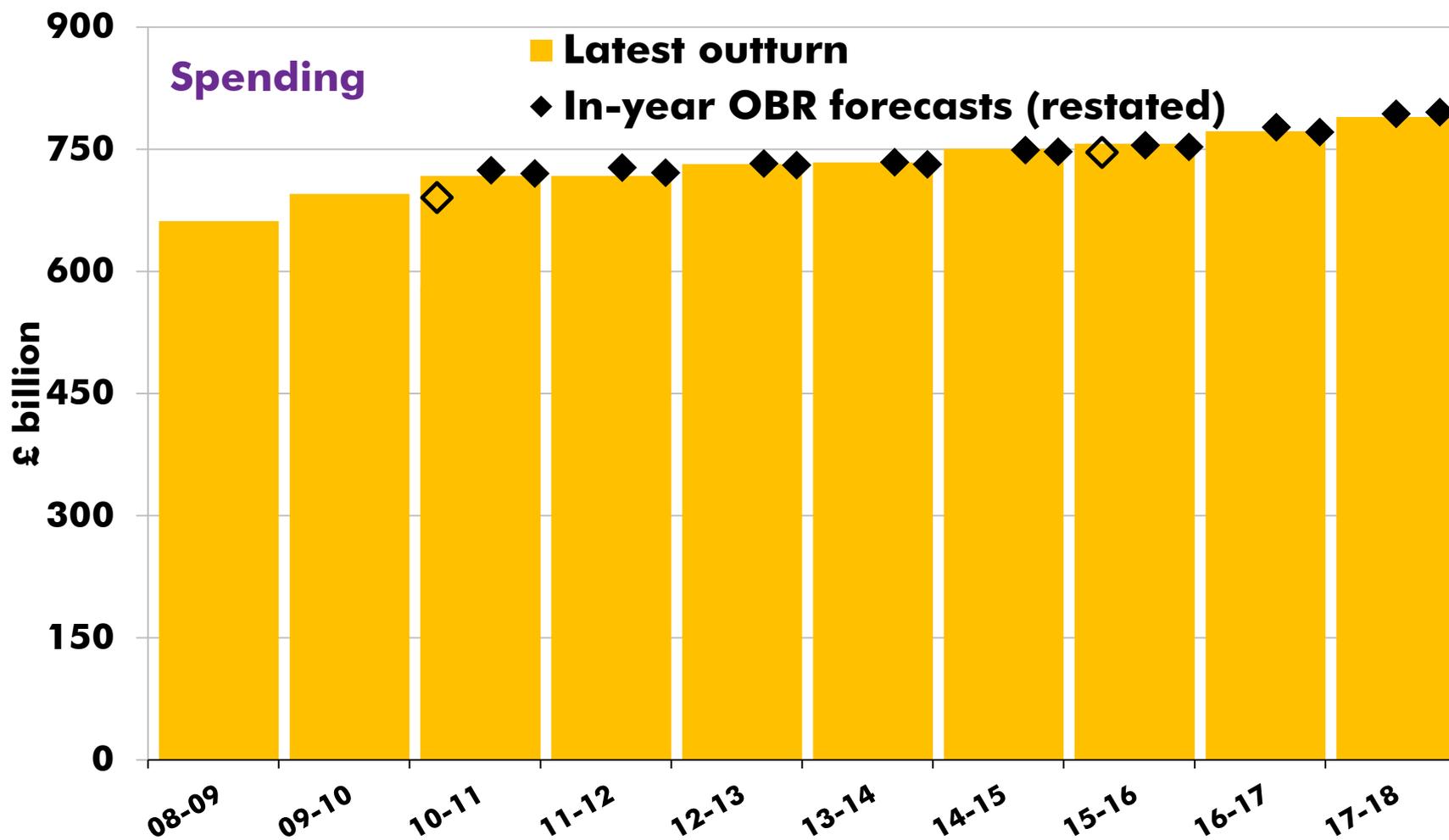
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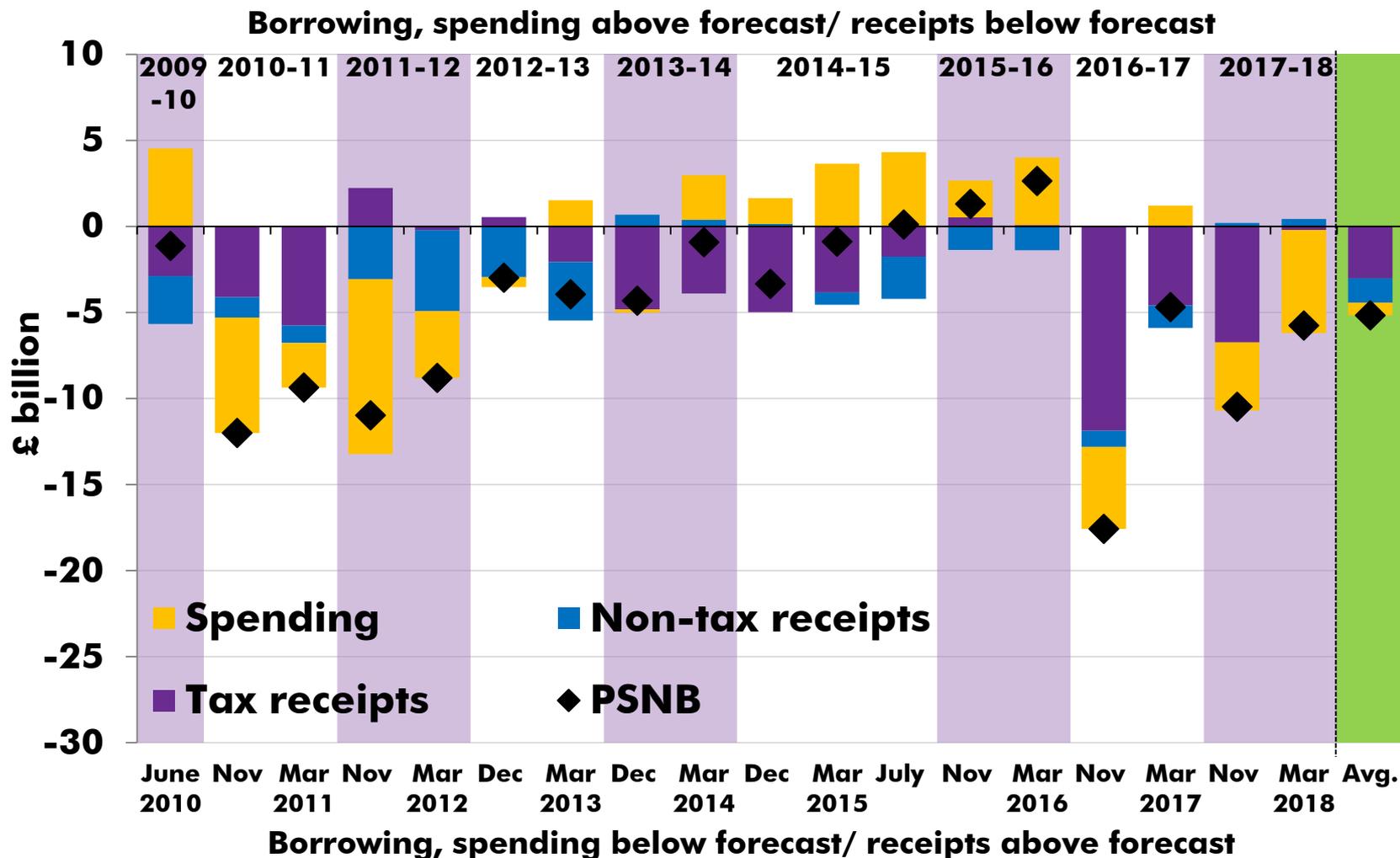
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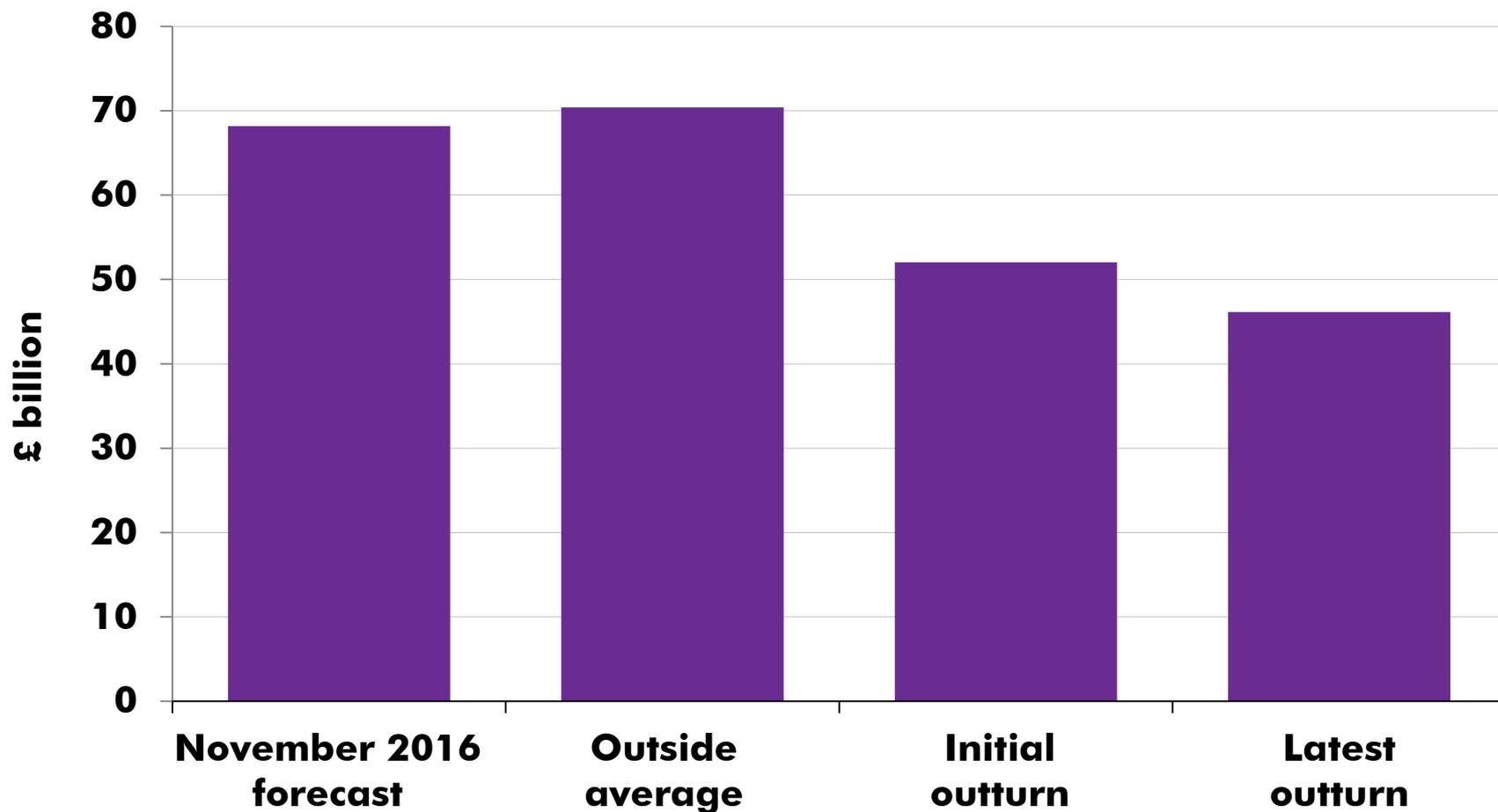
# Forecast performance



# Forecast v outturn: net borrowing



# What happened in 2016-17?



# What happened in 2016-17?

- **Raw difference forecast vs outturn £22.4 billion**
  - Adjusted for methodology changes £17.6 billion, of which
    - Receipts under-estimated by £12.8 billion
    - Spending over-estimated £4.8 billions
  - Fed into one-year ahead forecast for 2017-18
- **First post-referendum forecast, but that not the reason**
  - Big revisions to in-year data (PSNB down £7bn in 6 months)
  - Unexpectedly strong bonuses boosted IT
  - CT and VAT unusually end-loaded
  - CG departments underspent more than expected
  - Unusual timing of EU expenditure transfers
  - Strong capital gains tax receipts

# Conclusions: approach

- Use different arithmetic approaches
- Adjust for known timing and one-off effects
- But be ready for significant revisions

# Conclusions: performance

- Our in-year forecasts have over-predicted deficits
- Partly because of methodology and data revisions
- Our forecasts somewhat better than outside average
  
- Lessons for us
  - Look carefully at bonus payment assumptions
  - Refreshed approach to CT forecast
  - Investigate bias in gross operating surplus data
  - Beware challenge of universal credit