DSC-25 Early indicator for GDP based on VAT

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Can company tax (value added tax, VAT) turnover returns be used to provide an early indicator of gross domestic product (GDP) growth?

## Team members

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## The need

* What are we trying to improve? Following the financial downturn in 2008/09 a need was identified for a means of predicting behaviour of economic measures at an earlier point than the official cestimates
* How might this be useful? This indicator may provide advance warning of large change in behaviour of GDP.

## Impact

* What is the impact in terms of public good? This project can allow a more immediate understanding of and reaction to changes in the economy.
* This is to be shared with Office for National Statistics (ONS) National Accounts via delivery of the codebase used in the prototype and a blog will be written for publication on the Campus website.
* Who is using it? This indicator is not currently in use. It may be used by ONS once a full suite of indicators is developed as a separate project.

## Data science

* What’s new, innovative, shiny, difficult, interesting about this? Use of administrative data sources to predict behaviours of official statistics.
* What is the data science **stack** ? Python.

## Stakeholders

* Who are the Partners / stakeholders?
  + ONS
  + HM Treasury
  + HMRC
* Who are we working with?
  + ONS

## Code and outputs

* What are the outputs?
  + Code
  + Blog
* Repository is not currently public

## Related and existing work

* Links to related research, other groups (inside + outside gov)
  + [VAT turnover implementation in National Accounts](https://www.ons.gov.uk/economy/grossdomesticproductgdp/articles/vatturnoverinitialresearchanalysisuk/novemberupdate)
  + [PWC predictor of GDP](https://www.pwc.co.uk/services/economics-policy/insights/uk-economic-outlook.html)

## Delivery

* [x] **May 2018** Project delivered to National Accounts
* [ ] **October 2018** Blog publication

## Further information

Please contact [datasciencecampus@ons.gov.uk](mailto:datasciencecampus.ons.gov.uk) for more information.

## Updates

* No updates yet.