

DSC-25 Early indicator for GDP based on VAT

2018-04-12

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

Team members

- Louisa Nolan
- Gareth Clews
- Steven Hopkins
- Bernard Peat
- Cerys Hopkins
- Ben Aspey
- Rhydian Page
- Caitlin Johnson
- Tom Smith

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 estimates
- 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
 - PWC predictor of GDP

Delivery

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

Further information

Please contact datasciencecampus@ons.gov.uk for more information.

Updates

- No updates yet.