**Why is it important?**

1. **Agriculture in National Accounts**
   - Agriculture only accounts for 0.7% of UK’s GDP (2012)
   - However...
     - ONS data on agriculture is provided by the Department for Rural Affairs (Defra)
     - No reliable short-term output indicator (STOI)
     - Estimation based on previous aggregate series

2. **Alternative indicators**
   - Value Added Tax (VAT)
   - Export revenues
   - Commodity gross outputs
   - Retail sales

GDP estimates for agriculture are often revised, Agricultural activities could be estimated better!

**Testing indicators: first results**

3. **VAT, an excellent indicator, not without its flaws**
   - VAT abandoned, 3 other options are considered
   - Expectations: All businesses have to fill in a VAT form
     - Trusted source: HMRC*
     - VAT reported on a monthly basis: good for short-term indicator
   - Limitations: Small structures: lots of turnover
     - Time lapse between production & sales
     - 90% of VAT reported on an annual basis

*HMRC: Her Majesty’s Revenues and Customs

4. **Retail Sales**
   - Considered a good alternative. Statistics released every month, few data lost in this process as most UK households buy their groceries in a supermarket.
   - However, UK retail sales do not provide separated figures for foreign and domestic production: not a clear indicator.

5. **Commodity gross outputs**
   - Crops and livestock data taken as indicators for agriculture.
   - Graph created based on specific commodity time-series: barley and cattle gross outputs fitted the GDP agricultural curve. They can be considered to improve short-term estimates of GDP.

6. **Export revenues**
   - Trade data converted to fit ONS standards of classification. Graph created based on export revenues: close fit with the GDP agricultural curve. It can be considered as a short-term indicator.

**Professional skills and personal development**

7. **Enhancing statistical skills**
   - Microsoft Excel
     - Identifying and cleaning outliers, creating categories and time-series, comparing datasets using charts.
     - Selecting variables
     - Creation of tables and graphs to evaluate what variable fits the model better.
   - Finding indicators
     - Checking for compatible datasets before merging, to convert to a similar standard.

8. **Developing transferable skills**
   - Teamwork and communication
     - Team coordination is essential to working efficiently, creating qualitative reports and adapting quickly to the work environment.
   - Problem-solving
     - Finding solutions to problems encountered during statistical research and discuss alternative solutions with the line manager.
   - Time management
     - Creating mind maps to improve productivity and multitasking, without losing track of the research process.

9. **Areas for improvement**
   - SAS and Python R
     - Learn new statistical and computing skills to meet new professional needs.
   - Publication standard
     - Learn how to write a statistical report that meets publication standards.

**Special thanks to:**

Q-Step

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