Measuring the UK Economy During Lockdown: Challenges and Opportunities

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“The shutting down of large parts of the economy was not anticipated in the construction of our economic statistics”

Professor Tara Sinclair, George Washington University
Objectives

- Protect quality of core statistics
- Provide new economic indicators
- Support wider ONS work (e.g. Covid Infection Study)
The challenges…

Conceptual challenges  Data issues  Methods
The opportunities...

New data sources?

Accelerate transformation?

Collaboration
## Effects on core economic statistics

<table>
<thead>
<tr>
<th>Category</th>
<th>Impact Level</th>
<th>Issues</th>
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<tbody>
<tr>
<td>Consumer prices</td>
<td>High</td>
<td>• Previous collection method not viable</td>
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<tr>
<td></td>
<td></td>
<td>• Smaller sample size</td>
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<tr>
<td></td>
<td></td>
<td>• Some goods/service unavailable</td>
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<tr>
<td>Labour market</td>
<td>High</td>
<td>• Correctly capturing furloughed workers</td>
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<tr>
<td></td>
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<td>• Low response rates (household surveys)</td>
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<tr>
<td>GDP</td>
<td>High</td>
<td>• Conceptual challenges e.g. job retention scheme (pays 80% wages of furloughed workers)</td>
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<td></td>
<td></td>
<td>• Low response rates (business surveys)</td>
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<tr>
<td></td>
<td></td>
<td>• Imputation</td>
</tr>
<tr>
<td>Public sector</td>
<td>High</td>
<td>• Govt output (education &amp; health)</td>
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<td>• Classifying c30 new Govt schemes</td>
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<td>• Correctly accruing receipts data</td>
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<tr>
<td>Trade</td>
<td>Low/medium</td>
<td>• Travel and tourism difficult to measure</td>
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Conceptual issues

Job Retention Scheme/ Furloughed Workers
- Transfer or Subsidy?
- Not employed or employed?
- GDP(O) & GDP(I)

CPI
- Fixed basket, but…
- Missing goods & services

Education output
- Output = pupils hours in school
- But most schools closed
Data & methods

• Low response rates:
  • Business surveys (e.g. construction)
  • Household surveys (e.g. Labour Force Survey)

• Changed mode:
  • No ‘in shop’ price collection
  • No face-to-face interviews

• Risk of mode effects or non-response bias?
New data sources

- **Possibilities**
  - Transaction data
  - Business births & deaths

- **In development / Prototypes**
  - Scanner/EPOS data
  - Real-time income tax data
  - On-line vacancy data

- **In use**
  - VAT
Accelerate transformation

• Since March, new surveys launched:
  • New business survey
  • New individual/household survey
  • Launched on-line Labour Market Survey
• Developed new indicators
• Had to stop or pause some outputs
• Go back or go forward?
Where does all this leave us?

- Increased demand for high-frequency data
- Cannot just go back: so transition effects
- Rapid economic shifts
- Conceptual issues of ‘new normal’
- Existing methods (e.g. imputation) under pressure
Questions?
Coronavirus Job Retention Scheme

CJRS:

- GOVERNMENT
  - D39 Subsidy on Production ↓
  - BUSINESS
  - D11 Wages & Salaries ↑
  - EMPLOYEES
  - D12 Employers Social Contributions ↑
  - NET GDP IMPACT = 0

SEISS:

- GOVERNMENT
  - D39 Subsidy on Production ↓
  - B3G Mixed Income ↑
  - SELF-EMPLOYED
  - NET GDP IMPACT = 0
Missing goods/services in CPI/CPIH

• What is CPI/CPIH trying to measure/what is its value?
  • Consistency over time
  • Measuring prices ‘here and now’

• Normally met with one index, but now less clear
• Keep CPI/CPIH focused on long-term & consistency
• Innovate with supplementary indices?
Figure 2: Question two: “Over the past week, how much more or less did you work compared to an ordinary week in school? (Please exclude any commuting time and include all teaching, planning, marking and meeting time)”

Number of hours worked compared with an ordinary week in school, state-funded primary and secondary schools, UK, week commencing 20 April 2020.