

# **Reorganizing Economic Statistical Agencies: Economic Statistics in a Digital Age**

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# The current statistical landscape

- Economic measurement is increasingly difficult in a modern economy
- ...And digital economy brings new challenges, e.g.:
  - Non-rival zero-marginal-cost services with new business models
  - Increased importance of household in generating value added
  - Increased importance of intangible capital
- ...But also new opportunities, e.g.:
  - Enhanced scope to exploit administrative data in constructing official statistics
  - Explosion in private sector 'big data' (web searches, scanner data, smartphone usage, etc)

# Trust in official statistics

- Several dimensions to trust in official statistics:
  - Relevance – do they properly capture salient phenomena?
  - Accuracy – are they reliably constructed (errors v. revisions)?
  - Objectivity – are they free of political interference (c.f. Argentina)?
- Aside on UK:
  - Creation of UKSA/ONS as statutory independent agency in 2007 prompted by doubts about objectivity of some UK official statistics
  - IRES (2016) followed doubts about accuracy (slew of errors) and relevance (role of digital economy in productivity slowdown)
- Consideration of re-organisation should take on board both evolving statistical landscape and the need to maintain trust in official statistics

# Handling new phenomena

- NSIs should be proactive, not reactive, in evaluating importance of new phenomena and in developing new measures
  - Begin with one-off studies of new phenomena to identify quantitative importance (big data potentially valuable here)
  - More use of satellite accounts, etc
  - May need stronger analytical capability
- Stronger engagement between statisticians, academics and users needed in development of statistics (e.g. UK ESCoE)
  - Need NSIs to be more outward-looking...
  - ...And academics to get more interested in measurement issues!

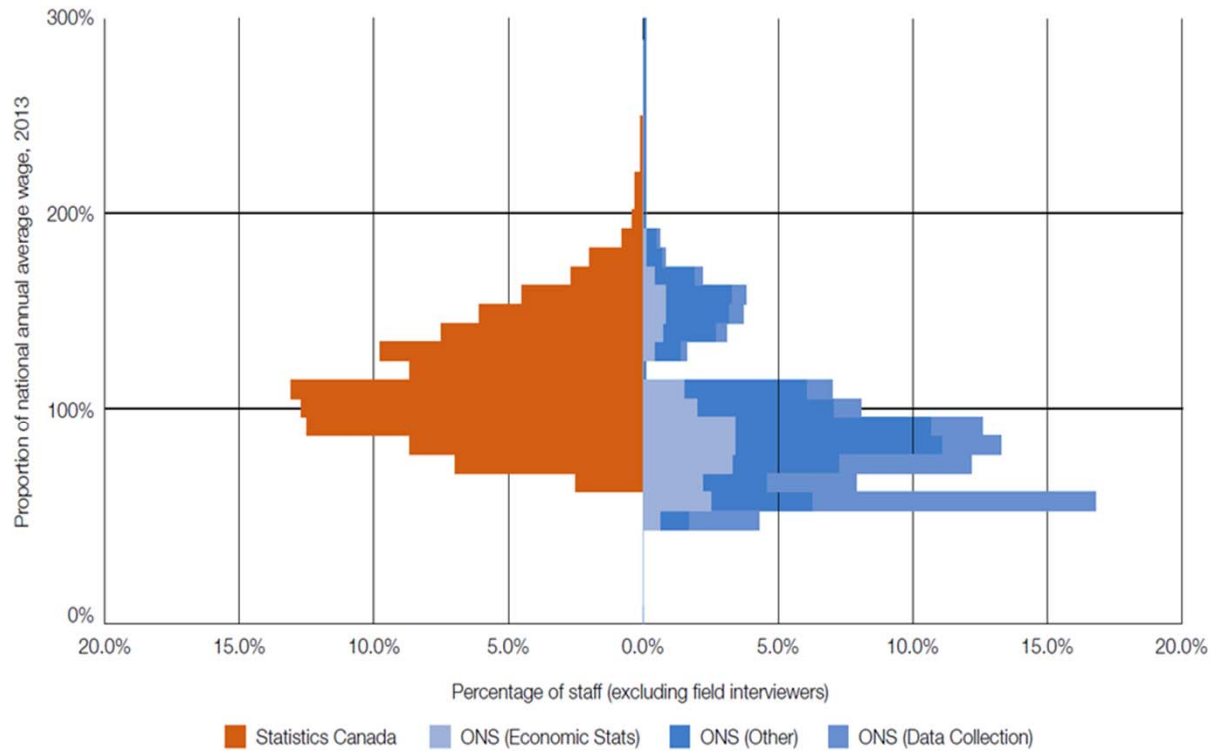
# Data sources

- Public sector administrative data
  - Surveys expensive and response rates falling; admin data offers prospect of more timely and accurate statistics plus lower reporting burdens
  - Some NSIs already rely heavily on admin data (Canada, Nordics, Dutch)
  - Needs right legal framework; should be presumption of access for statistical purposes unless there is a compelling objection
- Private sector 'big' data (e.g. scanner data, payments data)
  - Some NSIs already use scanner data for CPI but questions about access – best for 'nowcasting', exploring new phenomena, not 'core' statistics?
  - Google, etc, very innovative in collecting information – could NSIs do same? (e.g.: web-scraping; measuring transport activity with smartphone data; collecting statistical information alongside tax returns)

# Maximising effectiveness

- To make most of admin & big data want to link disparate data sets
  - Common identifiers better than data-science techniques
  - Registers a key part of data infrastructure (e.g. LEI for firms, social insurance # for individuals, postcode for location?)
  - Registers are a public good!
- Effective utilisation of administrative and big data also require:
  - Strong and robust IT systems
  - Better staff, both to handle and to understand/interrogate data
  - Striking that NSIs relying heavily on admin/big data also have strong reputations and attract highly qualified staff (ranked alongside CB and MoF as places to work) – virtuous circle!

# Staff salary relative to national average wage, ONS and Statistics Canada



Source: Office for National Statistics, Statistics Canada, Organisation for Economic Co-operation and Development.

# The UK set-up

- 1996 Office for National Statistics formed by merging:
  - Central Statistical Office (NA, etc; Business statistics were absorbed in 1989)
  - Office of Population Censuses and Surveys
  - Statistics division of Department of Employment
  - But many official stats still produced elsewhere (housing, health, crime,...)
- 2007 Statistics & Registration Act
  - Set up UK Statistics Authority (ONS is executive arm) as statutory independent agency to regulate production of statistics *across* government
  - Also provided a legal framework for sharing administrative data but in practice framework proved excessively cumbersome
- 2017 Digital Economy Act embodies presumption that information sharing is allowed, leading to a significant increase in use of real-time administrative data



# Administration proposal

- Merge Census, BEA, and BLS within DOC to:
  - Enhance operational efficiency; reduce burden on survey respondents; enhance privacy protection; improve data quality and availability
  - Merger eminently sensible on operational grounds but...
- Putting it under DOC raises the risks of political interference
  - Better to create an independent agency (akin to Fed)
  - What about protecting independence of statistics collected elsewhere?
- Proposal lacks ambition with respect to better use of administrative data
  - Ideal is right of access across government for statistical purposes
  - Is that feasible here given privacy concerns and mistrust of government?