

4.3 Quality – the SUT and data confrontation

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Overview

- Key features and quality conflicts
- Estimating GDP: two approaches
- Supply use tables
- Data confrontation
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 - 2 Cassava and sweet potatoes
 - More examples
- Conclusion

Key features

National accounts:

- Are unlike most areas of statistics
- Purport to describe the whole economy
- Can be likened to cookery
 - based on many ingredients (the data)
 - and recipes (compilation methods)
- Should be scientific and transparent, but
- Involves some good judgment (art)

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Quality and quality conflicts

- DQAF-NA covers most elements of quality
- One major issue is the conflict between
 - **timeliness** and **accuracy**
 - leading to **revisions**
- Another is the conflict between
 - **consistency** and **improvement**
 - also leading to **revisions**

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Estimating GDP

Two main approaches:

- The traditional “Anglophone” approach

- Expenditure
- Output
- Income

measured “independently” with a discrepancy

- The “Francophone/European” approach

- Balanced supply-use framework

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Advantages of the SUT

- Integrates all three traditional measures into one comprehensive framework
- Enables data confrontation (more tomorrow) through a common classification of products
- Eliminates statistical discrepancies through a balancing process
- Is essential in the context of full “double deflation”
but
- It is complex and takes time

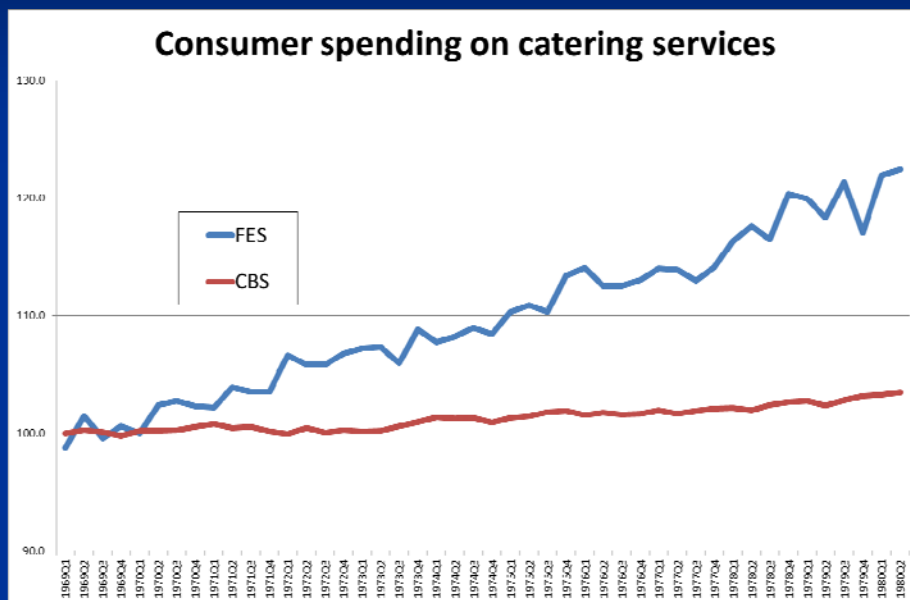
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Example 1

- In the early 1980s, I was responsible for the estimates of “consumers expenditure” in the UK national accounts...
- For catering, the source of information was a quarterly survey of catering businesses (CBS)
- An alternative source was the (continuous) Family Expenditure Survey (FES)
- I compared the two since 1969, when there was a benchmark survey...

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Simulation of comparison



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What do we see?

- FES shows much more growth over the period
- FES is much more variable quarterly

The difference:

- FES: an independent sample every two weeks
- CBS: a panel survey based on an outdated frame

Which source would you choose?

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A common dilemma

- Economists want to know what is happening now, compared with the previous quarter.
- Not only that, they want to know if the growth is greater or less than in the previous period

This implies estimation using “matched pairs”

- Essentially the method used in the CBS, but in the longer term:
 - Biased because of an inadequate frame
 - “Random walk” tendency to diverge from the truth

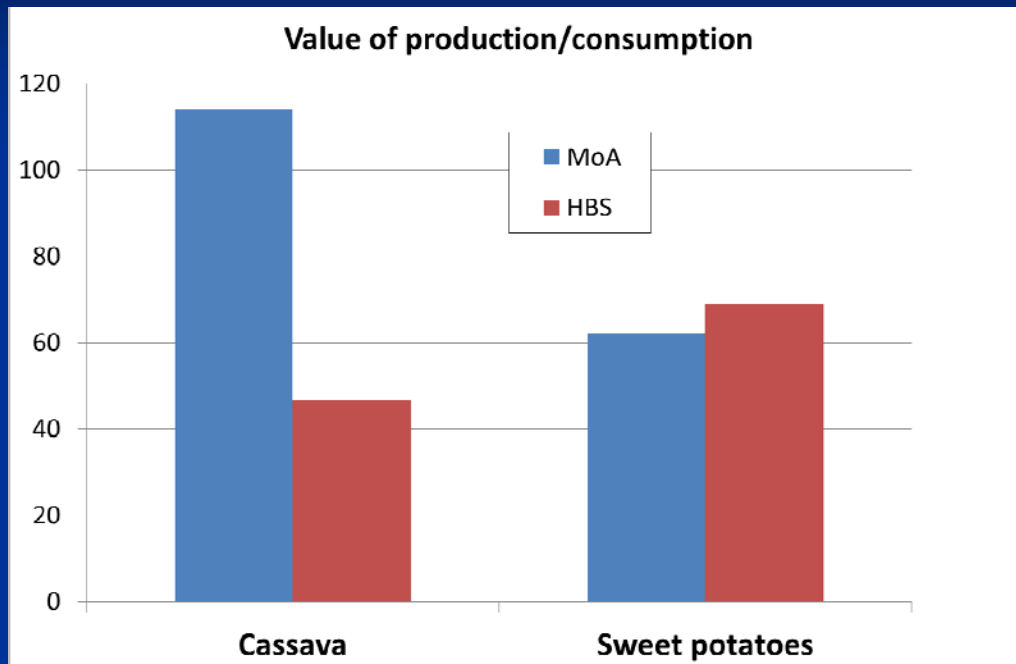
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Example 2

- Since retiring from the UK ONS in 2000, I have been working on and off in East Africa...
- While preparing a supply use table (SUT) in one country we had quite a problem
- Two sources of data for food crops:
 - Regular crop forecasts twice a year by the Ministry of Agriculture (MoA)
 - Detailed consumption data from a household survey
- Balancing problem with cassava

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Cassava and sweet potatoes



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What do we see?

- For cassava, MoA figures showed production about two and a half times that implied by the HBS.
- For sweet potatoes, the figures agree quite well, with consumption a bit higher than production
- HBS shows household consuming much less cassava than sweet potatoes
- MoA crop forecasts shows the reverse

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A conundrum

- Similar starchy root crops, except
 - cassava takes more than a year to mature
 - sweet potatoes less than six months
- I checked the HBS data for outliers – nothing
- External trade negligible
- Ministry methodology: area times expected yield
- It took me a very long time to discover the reason for the discrepancy

Does anyone want to propose a reason?

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More examples

- Some time in a year, petrol prices went up from 800 to 900 currency units per litre – but CPI indicated no change. Why not?
- Aggregated establishment survey returns by a large enterprise were compared to its published accounts, showed some income items as expenditure and vice-versa
- The SUT showed an enterprise was counted twice
- What examples have you seen?

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Conclusion

- Without regular benchmarking, things can go badly off-track
- National Household Budget Surveys are an important data source for many purposes (CPI weights, poverty analysis & estimating GDP)
- Especially where informal activity is significant
 - Either for compiling a benchmark Supply-Use Table
 - Or for specific activities or transactions

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**Thank you for your
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