Experimental statistics

EMOS webinar
16 May 2018

Official statistics are great…

- *Solid institutional environment* (impartiality, objectivity, confidentiality)
- *Quality statistical processes* (sound methodology)

→ *High-quality output*

- **Relevant**
- **Accurate and reliable**
- **Timely and punctual**
- **Coherent and comparable**
- **Clear and accessible**

→ **Evidence you can trust**

– for policymaking, life decisions…

…but sometimes not enough

- *Rapidly emerging phenomena*
- *New data sources*
- *New methods*

…whereas…

- *Long lead times before new official statistics can be rolled out (especially in multi-tier systems) because:*
  - **Consensus needed**
  - **Gaps in data**
  - **Methods may be controversial**
  - **New sources may be unreliable**

Different approaches possible

- *Stick to core business (official statistics):*
  - **Take no risks**
  - **Concentrate resources**
  - **Let others experiment**
- *Study but do not release*
  - **Conduct studies (publish as studies/in journals)**
  - **Discuss internally (and at meetings/conferences)**

…or…

- *Produce & release* ***experimental statistics***

So what is experimental statistics?

- *Statistics produced using*
  - **New data sources**
  - **New methods**

- *Developed rapidly – not full maturity concerning:*
  - **Harmonisation**
  - **Coverage**
  - **Methodology**
  - **Accuracy**

Question 1

For which quality dimensions do you think experimental statistics could score higher than official statistics?
(Tick as many boxes as you think appropriate!)

1. **Relevance?**
2. **Accuracy and reliability?**
3. **Timeliness?**
4. **Coherence and comparability?**
5. **Accessibility and clarity?**

But what do they look like?

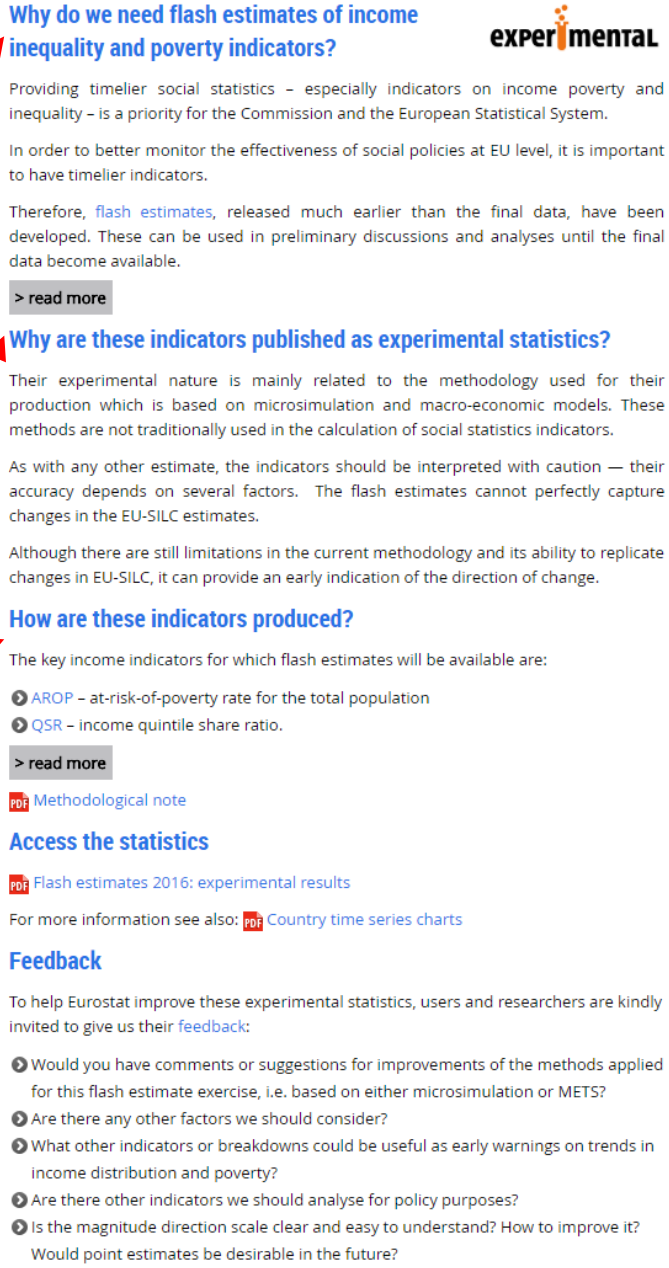
- *See for yourself!*

- *Eurostat rolled out experimental statistics in 2017*
  - **8 products online**

  - **Different formats:**
    - data in Eurobase,
    - standalone but still machine-readable data (e.g. Excel)
    - publications (e.g. Statistics Explained) with diagrams and tables presented but not exportable
    - online tools (Food Price Monitoring Tool).

Standardised structure

- *Why do we need them?*
- *Why are they experimental?*
  …and not official?
- *How are they produced?*
  Methodological note!
- *Access the statistics*
  This is where you find them!
- *Feedback*
  ***<u>Your</u>** questions and suggestions!*



Why do we need flash estimates of income inequality and poverty indicators?

experimental

Providing timelier social statistics – especially indicators on income poverty and inequality – is a priority for the Commission and the European Statistical System.

In order to better monitor the effectiveness of social policies at EU level, it is important to have timelier indicators.

Therefore, flash estimates, released much earlier than the final data, have been developed. These can be used in preliminary discussions and analyses until the final data become available.

> read more

Why are these indicators published as experimental statistics?

Their experimental nature is mainly related to the methodology used for their production which is based on microsimulation and macro-economic models. These methods are not traditionally used in the calculation of social statistics indicators.

As with any other estimate, the indicators should be interpreted with caution — their accuracy depends on several factors. The flash estimates cannot perfectly capture changes in the EU-SILC estimates.

Although there are still limitations in the current methodology and its ability to replicate changes in EU-SILC, it can provide an early indication of the direction of change.

How are these indicators produced?

The key income indicators for which flash estimates will be available are:

- AROP – at-risk-of-poverty rate for the total population
- QSR – income quintile share ratio.

> read more

Methodological note

Access the statistics

Flash estimates 2016: experimental results

For more information see also: Country time series charts

Feedback

To help Eurostat improve these experimental statistics, users and researchers are kindly invited to give us their feedback:

- Would you have comments or suggestions for improvements of the methods applied for this flash estimate exercise, i.e. based on either microsimulation or METS?
- Are there any other factors we should consider?
- What other indicators or breakdowns could be useful as early warnings on trends in income distribution and poverty?
- Are there other indicators we should analyse for policy purposes?
- Is the magnitude direction scale clear and easy to understand? How to improve it? Would point estimates be desirable in the future?

What are they about?

Culture	World heritage sites
Labour market	Labour market transitions
	Skills mismatch indicators
Income & living conditions	Income, Consumption and wealth
	Income inequality and poverty indicators
Prices	Food price monitoring tool
Enterprises	Structure of multinational enterprise groups in the EU
Global accounts	Full international and global accounts for research in input-output analysis (FIGARO)

What are they good for? *One example:*

- *Providing **timelier social statistics** is a priority for the Commission and the European Statistical System, in order to better monitor the effectiveness of social policies at EU level.*

- *Therefore, **flash estimates of income inequality and poverty indicators**, released much earlier than the final data, have been developed.*

- *These can be used in preliminary discussions and analyses until the final data become available.*

Question 2

*For which quality dimensions do you think the **flash estimates of income inequality and poverty indicators** could score higher than the official indicators?*
(Tick as many boxes as you think appropriate!)

1. **Relevance?**
2. **Accuracy and reliability?**
3. **Timeliness?**
4. **Coherence and comparability?**
5. **Accessibility and clarity?**

What are they good for? *In general:*

- *Can use new sources to capture new phenomena*

- *Can try out new methods to deliver:*
  - **faster statistics**
  - **more granular statistics (**subgroups; municipalities**)**
- *New statistics can be tried out **years** before official statistics go online*
- *Impartial provision of evidence to all stakeholders*
- *Allows for a discussion with & feedback from users before official statistics are developed*

Did you say “before” official statistics?

- *Experimental statistics can be used as a means for staging new candidates for official statistics.*

- *But:*
  - **Not mandatory**
  - **Not a “fast track”**

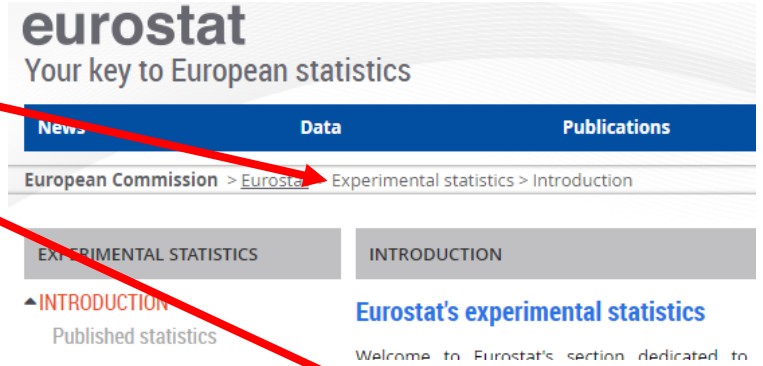
- *Some experimental statistics might never become official statistics*
  - **Continuous supply of data not possible**
  - **Reliable methodology not possible to develop**
  - **Methodology/assumptions too controversial**
  - **Topic not worth the investment (”nice to have”)**

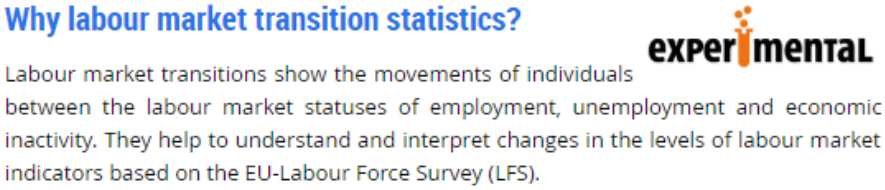
Are experimental statistics all good?

- *Protect the brand*
  - **Separate webpage**
  - **Clearly labelled**
  - **Methodological notes**

- *Still: reputational risk*
  - **Quality not guaranteed**
  - **On Eurostat website**
  - **Ripped out of context**

  → *"Eurostat said it!"*



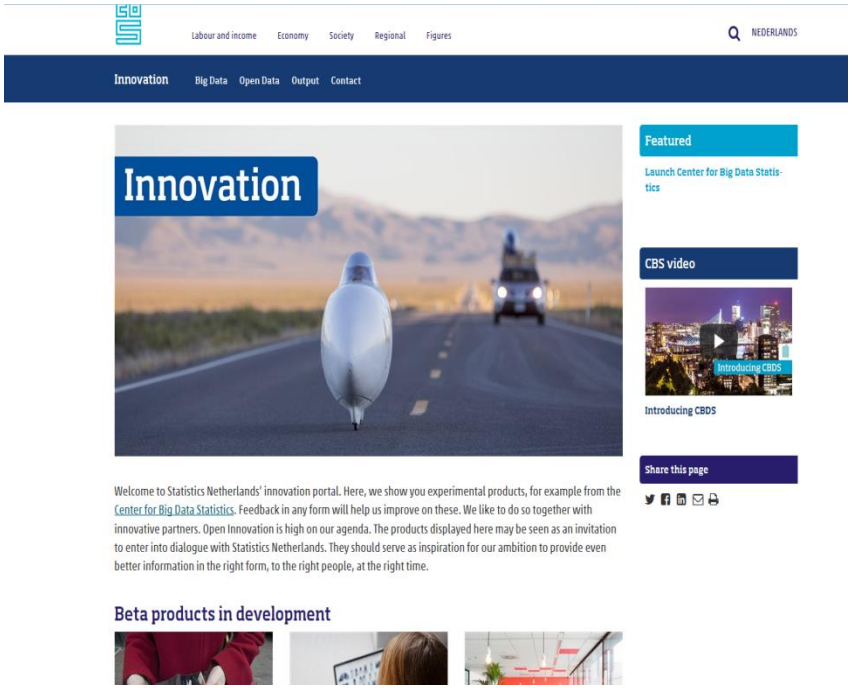


… but no incidents reported so far!

European Commission

Is Eurostat in it alone?

- *Statistics Netherlands*
- *Stats NZ*
- *Latvia*
- *ONS UK*
- ⋮



A European experimental statistics hub is in the making

Homework: make your voice heard!

- *Go to your favourite experimental statistics*

Income & living conditions	Income, Consumption and wealth
Prices	Food price monitoring tool
Enterprises	Structure of multinational enterprise groups in the EU
Global accounts	Full international and global accounts for research in input-output analysis (FIGARO)

- *Check them for clarity etc.:*
  - **Do they make sense?**
  - **Do we explain the methods used in an understandable way?**
  - **Are there any other issues?**
  - **Could they be done differently (better)?**

… if any questions, issues or suggestions…

… go to the European Statistics User Forum to give your feedback!

Feedback

- **Please explain how you did these statistics!**
- **Is it really true that…?**
- **It would be better if…**

European Commission

Now, let's learn more about ICW:

Culture	World heritage sites
Labour market	Labour market transitions
	Skills mismatch indicators
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