Experiences with INTEGRATION of households surveys in the Czech Statistical Office

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Content

- System of household surveys in the CZSO
- Statistics on Income and Living Conditions (SILC)
  - EU-SILC survey
- Household Budget Survey (HBS)
  - history of the Czech HBS
  - reasons of the HBS reform
  - integration of the surveys
- Household Finance and Consumption Survey (HFCS)
  - integration of the survey
- Concept of Income, Consumption and Wealth (ICW)
System of household surveys in the CZSO

Two branches (of samples)

Labor Force Survey
- Tourism Survey
- Use of ICT in households

European Health interview survey (EHIS)
- Statistics on Energy consumption in households (ENERGO)
- Adult Education survey (AES)

EU-SILC
- HBS
- HFCS
EU-SILC in the CZSO

- Instrument for timely and comparable cross-sectional and longitudinal microdata on:
  - Income (no entrance to administrative data sources)
  - Poverty ("income poverty")
  - Social exclusion
  - Housing conditions and other living conditions
  - Observed changes over time
  - Persons aged 16+

- Extensive questionnaire (Nucleus: 150 variables + modules)
- 4 waves (1st wave sample: 4850 households)
- Response rate: ~55 % (on 1st wave)
- Field work: February–May
History of the Czech HBS

- Regular annual statistical survey since 1957
- Until 2016:
  - Quota sampling
    - economic status of household’s head
    - municipality size and type of house, net monetary income per household member, number of dependent children, ...
  - Sample size: about 3000 households per year
  - Recording period: 12 months in year
Reasons of the HBS reform

- Transformation from the quota sampling to probability sampling
- Reduction of respondents’ burden
- Financial savings

- 2016: pilot HBS
- from 2017: new model
New HBS methodology – periodicity of the survey

- Eurostat reference year: every 5 years (2010, 2015, ...)
  - about 4000 participated household (in case of the Czech Republic)

**Survey 1x in 5 years**
- costly surveys - reach a large number of households
- reduction of the existing network of interviewers
- need to recruit a large number of external interviewers in the years of survey
- need to substantial increase the budget of the CZSO in the years of survey
- difficult to integrate with other CZSO surveys

**Annual survey**
- regular survey
- stable skilled interviewer network based on the existing systematization jobs
- survey results updated for user annually
- stable budget
New HBS – integration or separate survey

Integration into existing surveys
+ reaching households that have already experienced with statistics
+ identical parts (household composition, expenditure on housing and energy, etc.) are only updated
  – more challenging for respondents
    (participation in two different surveys)
  – there could be a higher non-response even for the current survey

Separate random sample
+ separate survey
  – costly survey
  – high non-response
Integration of the HBS into SILC

- **SILC**
  + greatest overlap of questions (household composition, income, expenditure for housing and energy)
    - limited sample size (LFS sample is higher)
  - addressing of households in the 3\textsuperscript{th} wave of SILC
  - very short introductory interview (updating of household composition, questions about home farming, current income)

- **Reference period:**
  - 8 weeks (2 diaries, starting on Monday, 26 reference weeks)
  - pre-described current payments (housing, telecommunication, transport, education, insurance and other financial products ...)
  - collection of receipts

- Possibility to participate in next year also
Results from the new model of the HBS

- **Response rate**
  - 2017: 1st wave: 39.8 %, 2nd wave: 96.3 %
  - 2018: 1st wave: 45.6 %, 2nd wave: 89.2 %

- every year on smaller sample: ~1900 participated households (3 years averages for Eurostat reference years)

- **Incentives**
  - financial (80 EUR)
  - report of structure of the household expenditure

- **Reduction of respondent’s burden:**
  - shortening the length of the reference period: 2x 4 weeks
  - simplification of diary (chronological recording)
  - collection of receipts
  - electronic diary (in .pdf) – not interest of households
Household Finance and Consumption Survey

- HFCS is survey for ECB for euro area
  - reference year: every 3 years (2014, 2017, 2020, …)
- in cooperation with the Czech National Bank
  - 2000 participated households for ECB reference year
- very extensive questionnaire with very sensitive questions
  (property, savings, valuables, debts of households, …)
- big overlap of questions with SILC and HBS
Integration of the HFCS into HBS and SILC

- reaching of households after 4\textsuperscript{th} wave of SILC (2\textsuperscript{nd} wave of HBS)
- present (coins) from the CNB
- short questionnaire (4 pages):
  - mortgages (on main and other properties)
  - other loans and borrowings
  - ownership of cars, valuables etc.
  - business and financial assets
  - ownership of financial products (bank account, savings etc.)
  - expectations
  - consumption
- 2019: pilot, from 2020 annual survey
Concept of the ICW

- preparation for calculation net wealth of households
Concept of the ICW

- preparation for calculation net wealth of households

Income
Concept of the ICW

- preparation for calculation net wealth of households

- Income

- Expenditure
Concept of the ICW

- preparation for calculation net wealth of households

Diagram:

- Income
- Expenditure
- Assets (real, financial)
Concept of the ICW

- preparation for calculation net wealth of households

Diagram:

- Income
- Expenditure
- Assets (real, financial)
- Debt (mortgage, consumer loan)
Concept of the ICW

- preparation for calculation net wealth of households

**Diagram:**

- **Income**
- **Expenditure**
- **Assets** (real, financial)
- **Debt** (mortgage, consumer loan)

Payment of mortgage decreases debt and increases real assets.
Concept of the ICW

➤ preparation for calculation net wealth of households

- Income
- Expenditure
- Assets (real, financial)
- Debt (mortgage, consumer loan)
- Capital transfers (heritage, big presents)
Concept of the ICW

- preparation for calculation net wealth of households

Income

Expenditure

Assets (real, financial)

Debt (mortgage, consumer loan)

Net debt = assets - debt
Conclusion

- advantage of the **integration**: information about Income (SILC), Consumption (HBS) and Wealth (HFCS) from one households
- not need to do statistical matching of households for ICW
  - SM needs too much preconditions
- preference of annual survey on smaller sample
- for reference years – 3years averages (for enough big sample)
- difficult data processing (SILC income: year-1; HBS expenditure: current time)
- preparation for improvements of poverty measurement
Thank you for your attention

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