

### Essential phases of register-based survey processing concerning timeliness

EU-SILC workshop on best practices for EU-SILC revision: timeliness

Marie Reijo, Senior Researcher E-mail: marie.reijo@stat.fi



#### The Finnish SILC

- Synergy from integrating with the national <u>IDS/TIDS</u> production processes, expertise involved from Data Collection and Statistical Methods Units of Statistics Finland
- 4-year rotating panel design since 2010
- Efficient sampling and weighting design for output measures: up-to-date and complete sampling frame, 2-phase stratified sampling, 13 socio-economic strata, non-proportional allocation, about 11 000 sample persons
- Advanced and systematised standard production
- Extensive use of registers from the coherent register system
- Interview fieldwork: from the beginning of the survey year
- CATI of the S-R persons with the Blaise questionnaire



#### Timing of the Finnish SILC production

10	11	12 1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
												Publishing Dec–April, disseminating final data in March-A				n-April	
									Early estimates				Preliminary estimates			Final estimates	
							Accepted sample, unit non-response corrected design weights		Early weights			Preliminary weights				Final weights	
			Register data collection, latest registers received in November.Corrections due to regisInterviewed and register data are processed for most C-variables by December, for some C- and L-variables further ahead by Jan-Apr.Corrections due to regis updates are very rare !Preliminary = Final estir														
		CATI-fieldwork Jan–April, automatic editing by pre-filled data and checks, filtering and routing of questions built into the Blaise questionnaire															
		Updated sampling frame, sampling															
testing, Blaise-p	Quality analysis, assessment, testing, training, preparing incl. Blaise-programming etc., pre- setting exact release dates.			М	0	n	i	t	0	r	i	n	g				



# The Finnish SILC: Reliability is prioritised to still earlier data

- Unit non-response corrected design weights by strata, adjusted further by the total HH-number
- Early weights (C-data, ≈ Final weights in L-data):
  + calibrated by total demographic and region distributions
- Preliminary/final weights (C-data): + calibrated by total income component and income receiver sums

The latest registers received in November are used for income variables and for the preliminary/final weights. As output of income calibration, the FI-SILC weights give more accurate C-estimates on income level, structure and distribution being in line with the Total Income Distribution Statistics (TIDS) figures.



#### Severely materially deprived (MD) persons by early and final weights, incl. 95 % cl. of the final estimates



Source: FI-SILC/IDS 2009-2013, early estimates of August are since 2011



# Materially deprived (MD) according to the panels (1-4) by early and final weights, incl. 95 % cl. of the final estimates in the whole sample

Materially deprived, deprived\_3



Severely materially deprived, deprived\_4

Source: FI-SILC/IDS 2013, separate panel weights from IDS are used for the panel estimates



Incapacity to face unexpected financial expenses (HS060) according to the panels (1-4) by early and final weights, incl. 95 % cl. of the final estimates in the whole sample



Persons, aged 65+

Source: FI-SILC/IDS 2013, separate panel weights from IDS are used for the panel estimates

## Statistics Finland

- Figures on MD and other non-monetary variables' level (N,%) based on very early weights are rather reliable (accuracy) compared to final estimates (closer to true values), panel differences exist
- Information about movements is revealed consistently by early and final estimates: e.g. decline of severe MD in 2011–2013 is statistically significant both by early and final weights
- Standard and advanced sampling and weighting methods optimised for the survey design and output (revised, initially Income Distribution Statistics (IDS) 2-year rotating panel design) ensure handling annual changes, e.g. biased unit non-responses
- When (MD) figures are rather stable over consecutive years, different estimates, although close to each other, matter
- Early information on movements might still have relevance



The Finnish SILC: Accessibility and clarity are provided

- Total Income Distribution Statistics (TIDS) is published a little bit earlier than the SILC/IDS preliminary estimates
- Adequate data comparisons are important
- More and more reliable statistical data are safer to release, e.g. improves figures interpretation
- Many updated versions of statistical figures aren't preferred in official statistics
- In addition to timeliness and reliability, quality criteria like accessibility and clarity are followed
- Current timeliness (preliminary estimates in December of the survey year, final estimates in March-April of the subsequent year) is moderate, no reason for acceleration by weakening quality and credibility.



#### Thanks for your attention !