

Developing distributional balance sheets

Ilja Kristian Kavonius

European Central Bank

9th IFC Conference on

“Are post-crises statistical initiatives completed?”

Introduction

- Increasing interest in wellbeing and increasing importance of (financial) wealth
- Importance of distributional data on household income, consumption and **wealth**
 - Stiglitz, Sen and Fitoussi (2009)
 - Vienna Memorandum (2016)
 - Importance for monetary policy / central banking (Draghi, Bernanke)
- Practical work on distributional national accounts indicators
 - International level: OECD (income and consumption)
 - US, Canada, Australia (including wealth), France
- Expert Group on Linking Macro and Micro Statistics on Household Wealth (EG-LMM), 2016->
 - ECB initiative, several micro and macro experts from EU (NCB + NSI)
 - First mandate completed in April 2017 and the group continued its work (second mandate)

Most important generic and HFCS/FA-specific differences:

- Valuation
 - Self-assessment vs. ESA valuation concepts
 - Accuracy of self-assessment if prices change rapidly or are difficult to know?
 - Accuracy of ESA valuation if no observed market prices?
- Measurement
 - Unit and item non-response, underreporting in HFCS
 - Counterparty sector reporting, variety of data sources, estimates & balancing adjustments in FA
- Conceptual issues
 - Instrument-specific comparability
 - Delineation of the household sector
- Population definition and reference periods
 - Impact limited and can (to a large extent) be identified and/or adjusted for

The linkage, different concepts and comparison

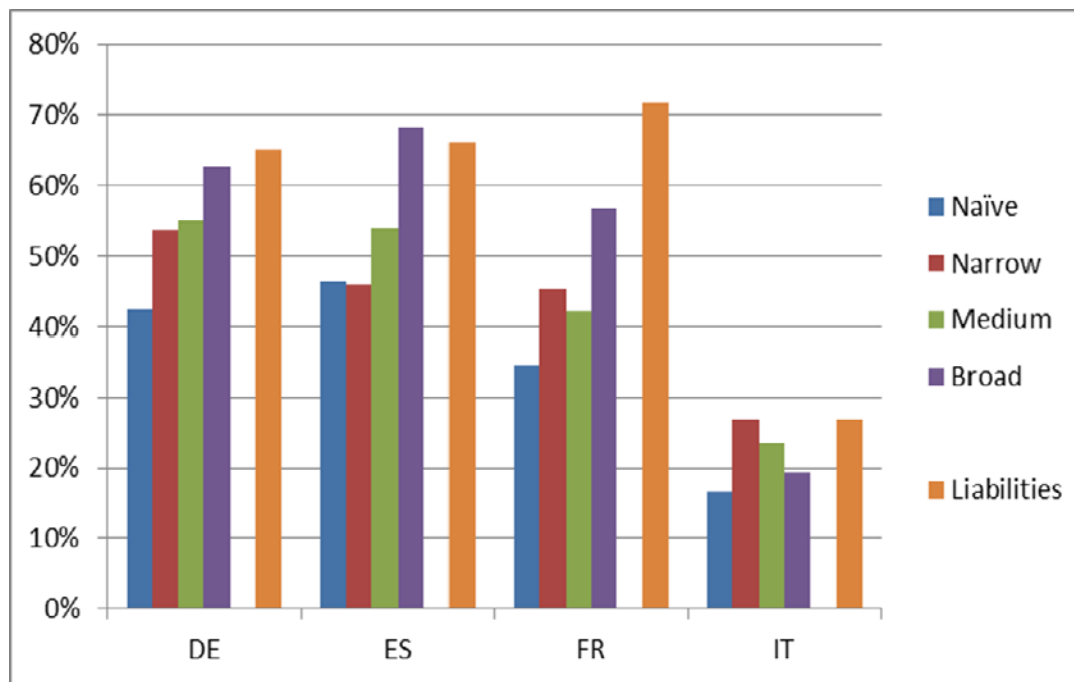
Conceptual comparability of financial instruments

NA/FA (ESA 2010)	HFCS	Conceptual comparability
FINANCIAL ASSETS (+)		
F21 Currency	N/A	N/A
F22+F29 Deposits	Deposits	High
F3 Debt Securities	Bonds and other debt securities	High
F4 Loans	Money owed to household	High
F5 Equity and investment fund shares	Shares, publicly traded	Medium to High
	Investment in non-self-employed business	
	Investment in self-employed business	
	Mutual Funds	
F6 Insurance, pension and standardised guarantee schemes	Voluntary pension/whole life insurance schemes	Medium
	Occupational Pension Plans	Low
F7 Financial derivatives and employee stock options	Other financial assets	Low
F8 Other accounts receivable		
N/A	Managed Accounts	N/A
LIABILITIES (-)		
F4 Loans	Mortgages and loans	High
	Outstanding debts on credit cards, credit lines and overdraft balances	
F8 Other accounts payable	N/A	N/A
FINANCIAL NET WORTH		

- Starting point for differences and linkages: Kavonius and Törmälehto 2010. Kavonius and Honkkila 2013.

The linkage, different concepts and comparison

- First: adjust for differences in the household definition and align reference periods
- Similar approach than adopted by Detling et. al:
 - Naïve concept: financial wealth as it is in each source
 - Narrow concept: Deposits + Mutual Funds + Bonds + Quoted shares (good conceptual comparability)
 - Medium concept: Narrow + Voluntary pensions and whole life insurance
 - Broad concept: Medium + Comparable business wealth*



* Incorporated businesses + quasi-corporations

Follow-up topics in the medium term

- First to the distributional measures as well as possible with the given the data the increasing comparability is a longer process...
- Main conceptual issues identified:
 - Business wealth: (1.) valuation of unlisted shares/other equity and (2.) delineation and classification of different corporations (hh vs. nfc)
 - Treatment of the rent deposits (HFCS)
 - Missing rich in the FA: (1.) How are treated – different property arrangement; (2.) where are located – legal and not-legal tax planning; how well non-financial assets abroad are captured? ---> WG-ES/WG-FA workshop on this topic
 - Missing rich in the HFCS: Vermeulen (2018). Chakraborty et. al. (2018) and Chakraborty and Waihl (2018): in particularly countries with problems in oversampling – **the method applicable only on wealth distribution**
 - The impact of estimated Pareto tail above with different thresholds to the coverage of broad concept:

	>2 mil threshold	>1 mil threshold	>500 000 threshold
Austria	+12%	+7%	+5%
Germany	+14%	+14%	+18%
Spain	+3%	+6%	+3%
Finland	+4%	+4%	+1%
France	+4%	+4%	+1%

The second mandate and distributional indicators

- The ongoing work of the EG is divided into two work streams:
- The tasks of the first work stream are:
 - Assess generic and instrument-specific differences on HFCS-FA coverage ratios;
 - Recommendations for improving the link;
 - Assess the availability of administrative sources.
- The tasks of the second work stream are:
 - Define a set of distributional indicator, with focus on items “medium” and “high”;
 - Calculate experimental results for 2010 and 2014 and assess the feasibility of deriving estimates at annual frequency;
 - Extend the comparison to the non-financial assets;
 - Seek the views/priorities of potential ECB/ESCB users.
- Open issues identified in the final report (first mandate), 4 specific task teams

The second mandate and distributional indicators – task teams

- **Distributional indicators and user requirements:**
 - Useful indicators and a selection process to pick up most relevant indicators;
 - Stock-taking will be followed by user consultations.
- **Business wealth:**
 - Comparability issues to be solved - HFCS business wealth identify separately:
 - (1.) items comparable with FA unlisted shares and other equity;
 - (2.) producer household assets;
- **Methods for integrating macro and micro sources:**
 - Stock-taking exercises and reviewed existing experiments;
 - In particular decreasing the gap, response and sampling biases
- **Non-financial assets:**
 - Include non-financial wealth in the analysis
 - Compare housing wealth and business wealth separately;
- **Pension wealth:**
 - Currently included only the pensions included in the national accounts main tables

Future work and epilogue

- This work will be completed by spring 2019 and the report delivered to the STC
- This work is only start – how will be continued?
- Several issues to be tackled: improve linkage/comparability, time series aspect etc.
- This is only the first step but it is necessary – the credibility of statistics requires that we are able to explain the differences and improve the results!

References:

Chakraborty, R.; I. K. Kavonius; S. Pérez-Duarte and P. Vermeulen (2018): “Is the Top Tail of the Wealth Distribution the Missing Link between the Household Finance and Consumption Survey and National Accounts?”, *Journal of Official Statistics*, X/ Volume XX, 2018, pp. XXX–XXX, Statistics Sweden (to be published in autumn 2018).

Chakraborty, R. and S. R. Waihl (2018): “Missing the Wealthy in the HFCS: micro problems with macro implications”. ECB Working Paper Series No. 2163, June 2018.

Dettling, L. J.; S. Devlin-Foltz; J. Krimmel; S. Pack and J.P. Thompson (2015): “Comparing Micro and Macro Sources for Household Accounts in the United States: Evidence from the Survey of Consumer Finances”, FEDS Working Paper No. 2015-086, <http://dx.doi.org/10.17016/FEDS.2015.086>

Kavonius, I. K. and J. Honkkila (2013): “Reconciling Micro and Macro Data on Household Wealth: A Test Based on Three Euro Area Countries”, *Journal of Economic and Social Policy*, Volume 15/2013, Issue 2, Article 3, Southern Cross University/Bepress.

Kavonius, I.K. and V.-M. Törmälehto (2010): “Integrating Micro and Macro Accounts – The Linkages between Euro Area Household Wealth Survey and Aggregate Balance Sheets for Households” . the 31st General Conference of the International Association for Research in Income and Wealth (IARIW) in St. Gallen, Switzerland, August 2010.

Vermeulen, P. (2018): “How Fat is the Top Tail of the Wealth Distribution?”, *Review of Income and Wealth*, Series 63, Number 2, June 2018, pp. 357-387.