



Improving the incorporation of wealth data in policy modelling. Converting the Eurosystem Household Finance and Consumption Survey for microsimulation purposes

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1. Introduction

- Various studies have pointed towards increased income and wealth inequality over the past decades in many OECD countries (e.g. OECD, 2015; Piketty, 2014; Piketty and Saez, 2013; Jäntti et al., 2008).
- In this context the need for comprehensive and integrated data on individual well-being is widely recognised, as e.g. highlighted in the Report by the Commission on the Measurement of Economic Performance and Social Progress (Stiglitz et al., 2009).
- New surveys such as The Luxembourg Wealth Study (Jäntti et al., 2008) and the Eurosystem Household Finance and Consumption Network (HFCN, 2013a) represent a milestone.

2. Scope of the paper

- Exploring the prospects for using the Eurosystem Household Finance and Consumption Survey (HFCS) as an underlying database for EUROMOD.
- Creating a new EUROMOD input dataset based on the HFCS. As the HFCS contains only gross income amounts which are not suitable for distributive analysis, we derive net incomes by simulating the gross-to-net transition with EUROMOD.
- Expanding the policy domains currently simulated in EUROMOD with dimensions like wealth taxation and asset building incentives.

3. New EUROMOD input dataset

- Based on HFCS. It Covers detailed household wealth, gross income and consumption information. It is the result of a joint effort of all Euro zone National Banks, three National Statistical Institutes and the European Central Bank (ECB). Interesting features are oversampling of the wealthy and multiple imputation (see HFCN, 2013a & 2013b).
- 6 EU countries: Belgium, Finland, France, Germany, Italy and Spain. They provide a good representation of different tax-benefit systems and existing wealth policies.
- Income reference period mostly 2009 (2007 for ES, 2010 for IT), wealth either time of interview (BE, FR, DE, ES) or 31st of December of income reference year (FI, IT).
- Sample size range between 5,506 individuals (BE) and 35,729 individuals (FR)
- Important shortcoming: missing regional information
- HFCS fulfils most requirements to be incorporated in EUROMOD (see Kuypers et al., 2015).
- Overall, same variables with same content as for EU-SILC are constructed, with similar imputations if necessary. Social benefits (except pensions and unemployment benefits) require a different approach.
- In addition new wealth-related variables.
- Missing information on cadastral values needed for property taxes; a coefficient is applied to market values, which is approximated considering HFCS market values against SILC cadastral values (BE), SILC property taxes (DE) or aggregate cadastral values (IT). Coefficients not available yet for FI, FR, ES

4. Expansion policies in EUROMOD

- Overview of existing wealth policies and their coverage in EUROMOD, HFCS reference period

Tax/policy	Belgium		Finland		France		Germany		Italy		Spain	
	Exist.	Cov. EM	Exist.	Cov. EM	Exist.	Cov. EM	Exist.	Cov. EM	Exist.	Cov. EM	Exist.	Cov. EM
Inheritance tax/provision	Y	A	Y	N	Y	A	Y	A	Y	N	Y	A
Gift tax/provision	Y	A	Y	N	Y	A	Y	A	Y	N	Y	A
Real estate tax/provision	Y	R	Y	A	Y	A	Y	A	Y	S/R	Y	A
Real estate transfer tax/provision	Y	A	Y	N	Y	A	Y	A	Y	A	Y	A
General net wealth tax/provision	N		N		Y	A	N		Y	N	Y	A
Specific net wealth tax	Y(*)	A	N		N		N		Y	A	N	
Taxation of income from financial assets	Y	R	Y	R	Y	R	Y	S	Y	S	Y	R
Taxation of rental income	Y	R	Y	S	Y	R	Y	S	Y	S	Y	R
Tax deduction for mortgage repayment	Y	R	Y	S	Y	R	Y	R	Y	S	Y	R
Tax deduction for contributions to private pension funds	Y	R	Y	S	Y	S	Y	N	Y	S	Y	R
Wealth test for social benefits	Y(**)	S	Y(***)	R	N		Y(****)	R	(N)		Y(****)	R(N)

Source: Ernst & Young (2014)

- Important assumptions necessary regarding inheritances and gifts; net wealth calculated back to income reference period.

- Ongoing validation of tax revenues of the new implemented wealth tax policies:

Country	Policy	Millions of Euro		EM-HFCS/External source (%)	
		EM-HFCS	External source (*)		
Belgium	Real estate tax	1,709	2,981	57.3%	
	Real estate transfer tax	1,708	2,820.1 (**)	60.6%	
	Registration duties on mortgage creation	198.1	74.4	266.2%	
	Inheritance tax	1,359	1,779.9	76.4%	
	Gift tax	127.5	269.9	47.2%	
	Tax on long-term saving	134.6	184.9	72.8%	
Finland	Real estate tax		462		
	Real estate transfer tax		13,647		
France	Real estate tax		6,300		
	Real estate transfer tax		7,188 (**)	87.6%	
	Inheritance & gift tax		5,303	72.1%	
	Net wealth tax		5,883	164.3%	
Germany	Real estate tax		6,282	143.6%	
	Real estate transfer tax		3,728	4,857 (**)	76.8%
	Inheritance & gift tax		1,356	4,550	29.8%
Italy	Real estate tax		5,751	9,663 (***)	59.5%
	Real estate tax			7,274	
Spain	Real estate tax				
	Real estate transfer tax		6,268	17,399 (**)	36.0%
	Inheritance & gift tax		3,242	2,905	111.6%
	Net wealth tax		3,858	2,059	187.3%

Notes: (*) OECD Tax Revenue Database (2016); (**) can also include registration duties on financial transactions and/or transactions by businesses; (***) includes the tax paid by firms on commercial properties and lands; recurrent real estate tax for Finland, France and Spain not yet included because there is not yet information available on cadastral values.

Source: Own calculations based on EM-HFCS and EM-SILC

- Overall good reasons for discrepancies and difficulty to identifying the corresponding amounts in the external statistics

5. Conclusion

Integrating the HFCS data into EUROMOD allows many new research possibilities:

- Analysis of the joint distribution of disposable income and net wealth based on information from the same survey, potentially comparable across countries and time.
- Analysis of the budgetary and distributional impact of recurrent and event-based wealth taxes, such as real property taxes, net wealth taxes and inheritance and gift taxes.
- Tackling challenging issues such as those faced by 'asset rich/income poor' households by enabling an integrated assessment of direct taxes on both income and wealth.
- Analysis of policies which encourage asset accumulation, such as tax deductions for mortgage interest repayment or for contributions made to private pensions funds.
- Finally, in all these domains we will be able to estimate the impact of (potential) reforms, also in interaction with other tax-benefit policies.

➤ Comparison disposable income EM-HFCS vs. EM-SILC

	Belgium			Finland			France		
	EM-HFCS	EM-SILC	EM-HFCS/EM-SILC (%)	EM-HFCS	EM-SILC	EM-HFCS/EM-SILC (%)	EM-HFCS	EM-SILC	EM-HFCS/EM-SILC (%)
Median	18,847	19,067	98.8%	20,566	20,755	99.1%	16,358	19,731	82.9%
Mean	21,636	20,177	107.2%	22,541	22,701	99.3%	18,449	23,032	80.1%
Gini	0.32	0.23	139.1%	0.25	0.24	104.2%	0.34	0.30	113.3%

	Germany			Italy			Spain		
	EM-HFCS	EM-SILC	EM-HFCS/EM-SILC (%)	EM-HFCS	EM-SILC	EM-HFCS/EM-SILC (%)	EM-HFCS	EM-SILC	EM-HFCS/EM-SILC (%)
Median	17,940	18,081	99.2%	13,235	14,899	88.8%	12,543	12,980	96.6%
Mean	21,724	20,528	105.8%	15,269	16,906	90.3%	15,347	14,340	107.0%
Gini	0.30	0.27	111.1%	0.33	0.33	100.0%	0.36	0.29	124.1%

- Countries with oversampling (all but FI and IT) show higher Gini of (original and) disposable income.

- What about coverage and representativeness of the tails of the distributions in both dataset?

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