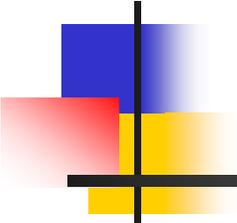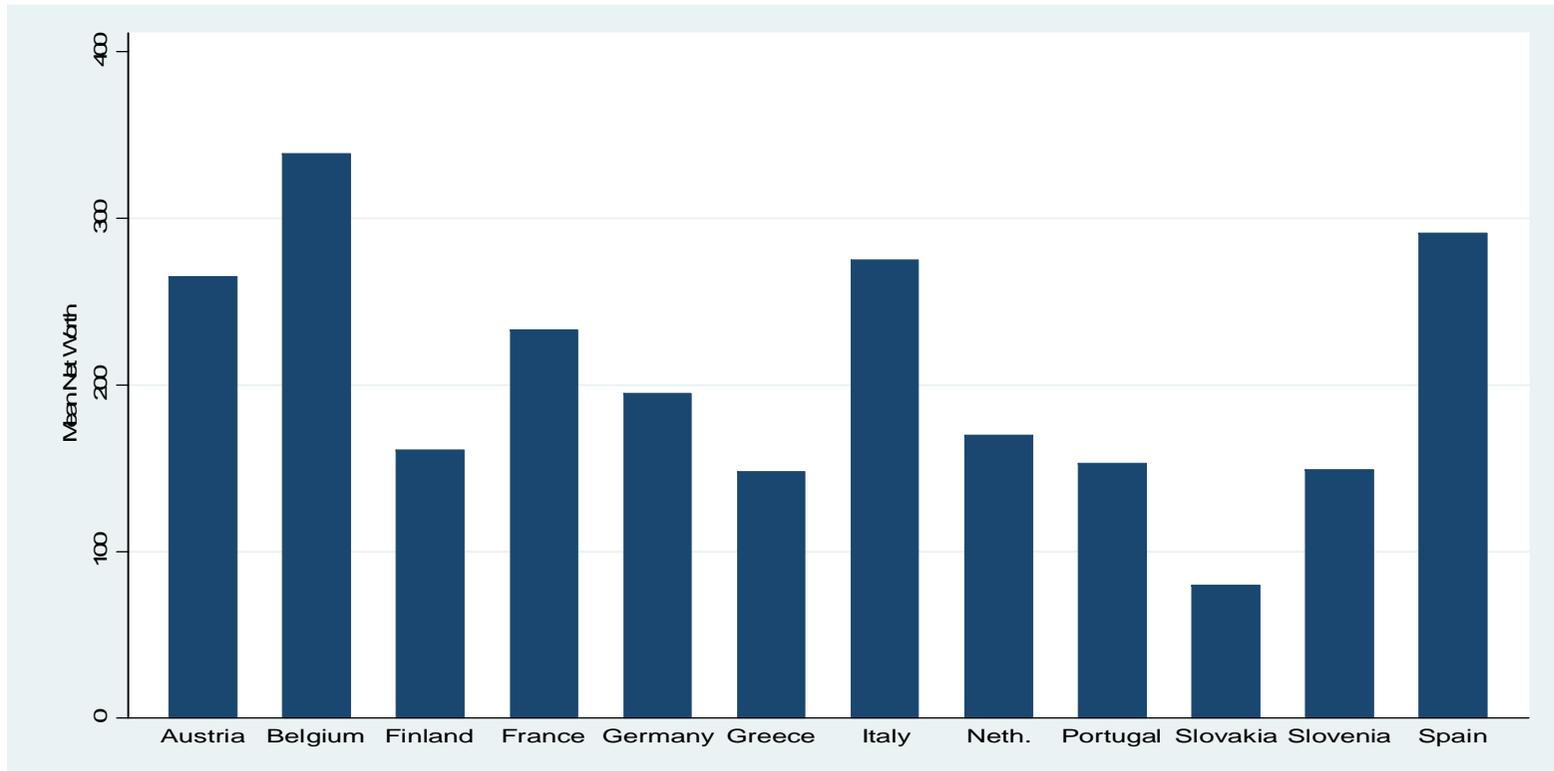# Decomposing Household Wealth across Countries
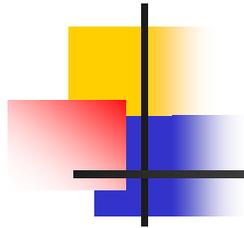
Tullio Jappelli
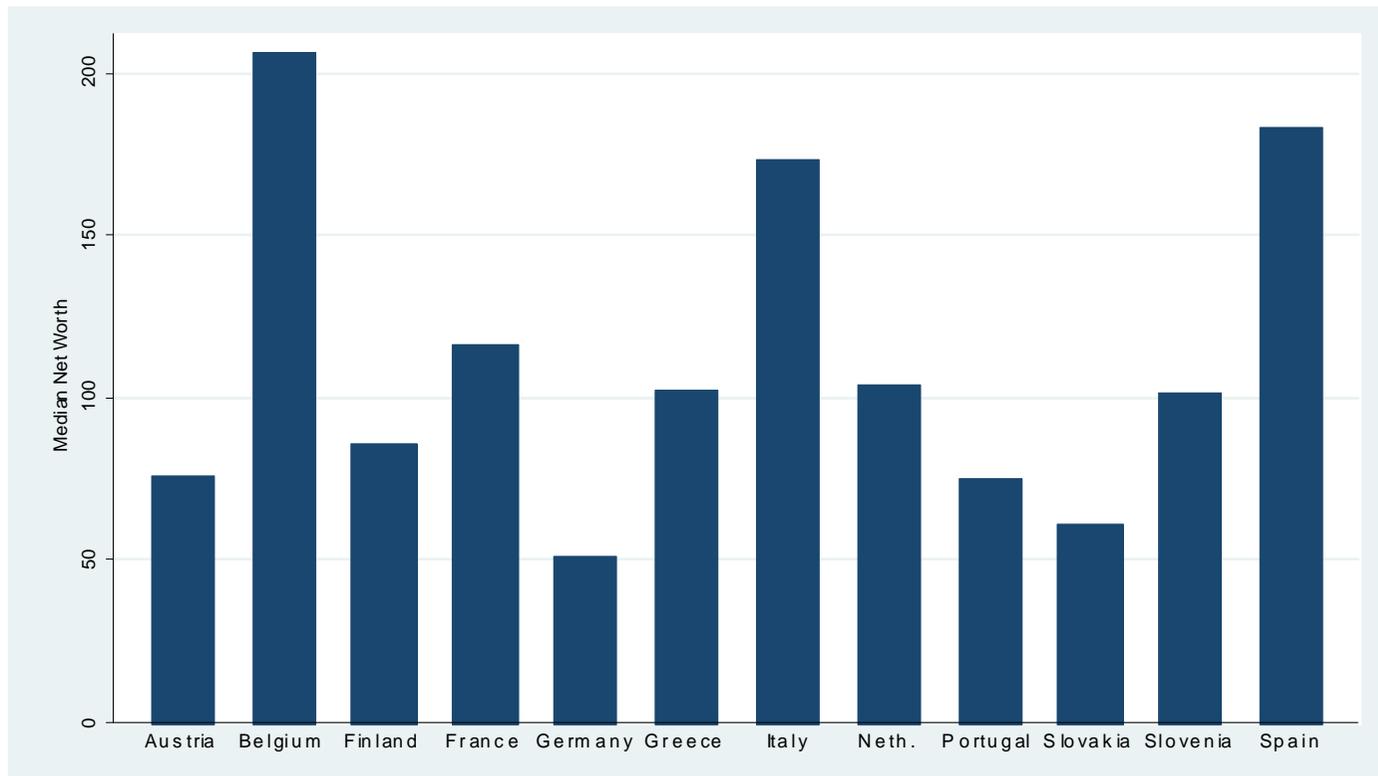### University of Naples Federico II

Conference on Household Finance and Consumption

ECB – 17-18 October 2013

The issue: large differences in mean net worth in the EU

...as well as in median net worth
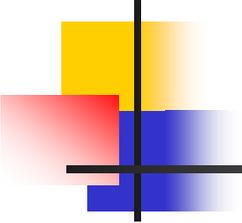
Explanation #1. Measurement issues

- Wealth results from the aggregation of many other variables.

- Variables are not fully comparable across countries and time periods.

- Recall bias and estimation of self-reported asset values might differ across countries.

- Given the quality of the survey, these factors are unlikely to explain large differences in wealth across countries.

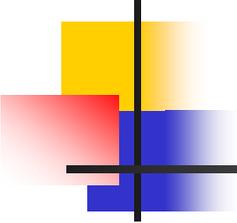# Explanation #2. Composition effects

- Wealth differences might be due to different weights of population groups that have different propensities to save.

- Analysis of wealth propensities: focus of the "counterfactual" distributions of wealth, keeping fixed population shares, using variants of the **Oaxaca decomposition**:

$$\text{Wealth Gap} = (X_{CT}-X_R)b + X_R'(b_{CT} - b_R)$$

$(X_{CT\text{-}}X_R)b$ \qquad\qquad = "explained" part

$X_R'(b_{CT} - b_R)$ \qquad\qquad = "unexplained" part

X_{CT} \qquad = characteristics
X_R \qquad = reference country

- This approach is useful to summarize the regression results, but does not tell us:
(1) why is the response to X different across countries;
(2) what happens to wealth if X changes in some country.
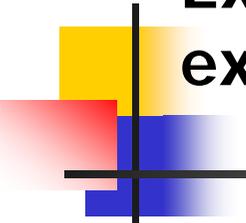
Explanation #3: Wealth is higher in countries who experimented largest increases in house prices

- Idea is that households are passive and increase total Wealth when prices increase. They do not react to house price changes increasing consumption, even for a long period of time.

- But this is not the case if households have a "target wealth-income" ratio, as suggested by virtually all consumption models (LCH, PIH, buffer stock).

- House prices are also correlated with other variables (for instance, economic activity, growth prospect, etc), so interpretation of link is not obvious.

- Reaction to house prices depends very much on the predictability of house prices, and on the long-run predictability of house prices (transitory shocks? permanent shocks?)

- How do people form house price expectations ? Do they also increase consumption ? (large literature)
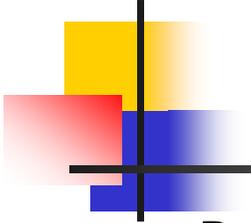
The four papers focus on some of these explanations for the differences

Bezrukovs: The role of housing in wealth inequality in eurozone countries

Finds positive correlation of income, education and homeownership with total wealth. Largest difference between wealth across countries due to country specific factors rather than differences in characteristics.

Fessler, Lindner and Segalla: Net wealth across the euro area: Why household structure matters and how to control for it.

Find that demographic characteristics (household size, age) explain part of the wealth differences.

The larger the family, the larger the stock of wealth. But link between family size and wealth is not obvious.

Is it because family size is related to number of earners and permanent income? Or is it because families accumulate more wealth, given income?
Is the effect different for dependent children and retired members of the household?
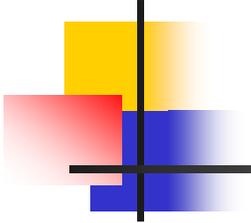
The four papers in the session

Mathä, Porpiglia and Ziegelmeyer: Household wealth in the euro area: The importance of intergenerational transfers, homeownership and house price dynamics.

Find that these factors explain part of the wealth differences. Some are clearly endogenous.
- one should expect that wealth of recipients (including inheritances) is correlated with transfers received.
- and that owners are richer than renters

Arrondel, Roger and Savignac: Earnings, income and wealth in the euro area:

Find that the correlation between W and Y varies across countries.
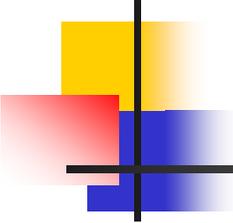
Explanation #4: The effect of institutions

Variety of European policies, constraints, institutions. Their impact can only be understood if we can compare them across time and across countries.

Fully comparable data allow to exploit the natural experiments created by different policy and institutions. Difference in institutions is a big value added with respect to US surveys.
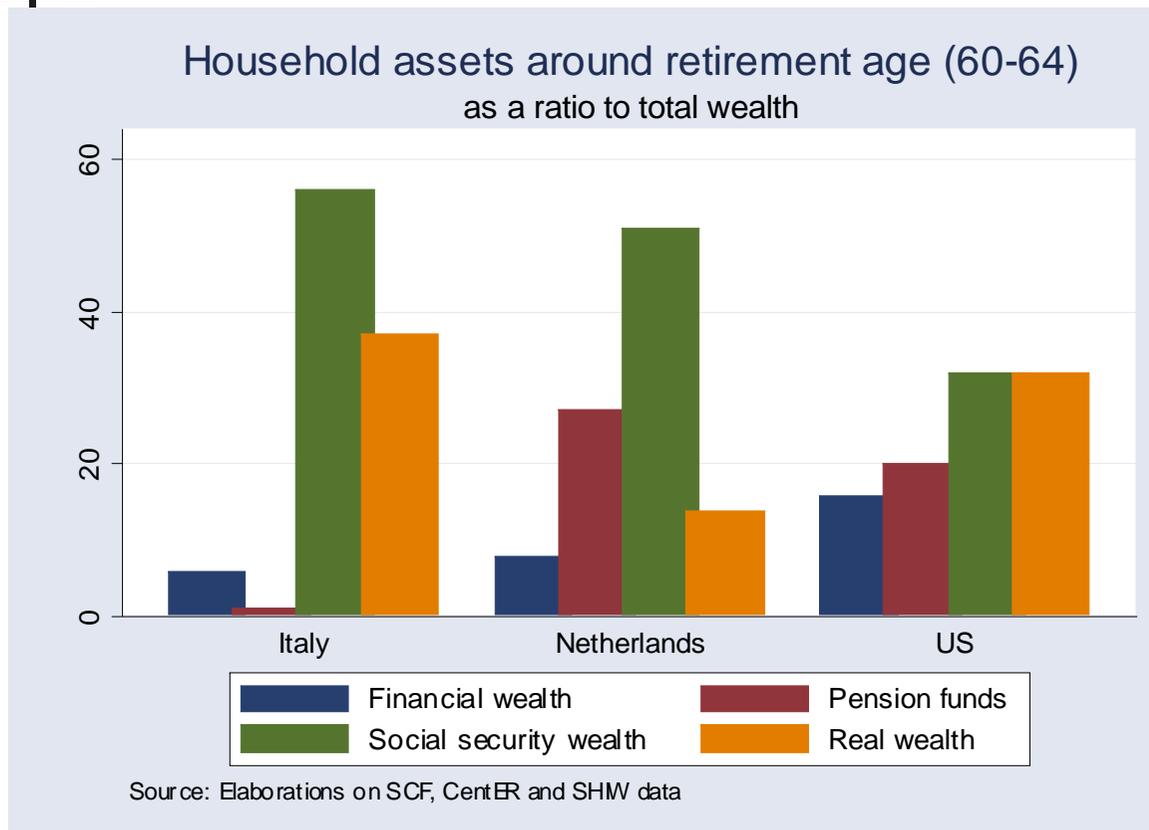
Examples:

- Tax incentives and social security

- Unemployment benefits

- Incentives for housing

- Intergenerational transfers
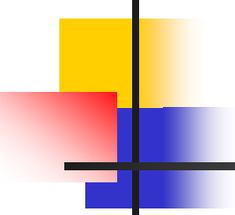
Mandatory saving and tax incentives to saving

- **Mandatory contributions** to pension funds differ widely across countries. They are generally tax deductible, and investment income is tax exempt.

- In the absence of tax deductions mandatory saving is a "plain" substitute for discretionary saving. With tax incentives mandatory saving is associated with higher national saving and wealth.

- **Generosity of social security** is also quite different across the EU, and reduces private wealth.

- These policies affect the **level and composition** of wealth.

- Analyzing wealth in isolation can be highly misleading.

Different social security and pension arrangements impact the composition of household assets around retirement age

Household assets around retirement age (60-64)
as a ratio to total wealth

Source: Elaborations on SCF, CentER and SHW data

- **Italy**: limited pension funds and generous Social Security system.

- **Netherlands**: importance of second pillar pension system.

- **US**: higher investment in financial wealth.
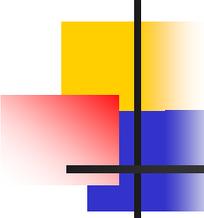
Tax incentives, human capital and life protection

Further examples

- Education saving schemes, tax deductible tuition fees (Germany, Italy, etc.).
- Health expenses and long-term health insurance premia deductible in many countries.
- Life insurance investment income is not taxed, and contributions are tax-deductible

Portfolio effect (**offset** by reduction in other saving components), but might also be associated with higher wealth accumulation

Unemployment benefits might impact on precautionary saving: lowest benefits in Southern Europe.

|	Unadjusted UB	Population covered	Adjusted UB
Denmark	0.85	0.50	0.43
France	0.74	0.43	0.32
Germany	0.83	0.29	0.25
Italy	0.18	0.34	0.06
Netherlands	0.54	0.52	0.29
Spain	0.48	0.36	0.17

Boeri van Ours (2011): average of replacement rates in the first two years of unemployment for worker with seniority sufficiently long to yield maximum duration of UB.

Medical insurance and protection from health risks (higher in Northern Europe) might have similar effects for the elderly.
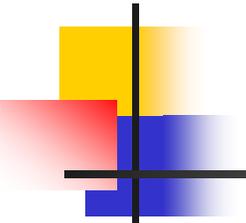
Incentives for housing can affect wealth accumulation

- **Direct** (subsidies for construction, social housing etc.) and **indirect** intervention in housing markets.

- **Many schemes**: contractual saving for housing, subsidies to financial intermediaries, mortgage interest rate relief schemes, mandatory contributions.

- Regulation of mortgage markets differ widely across countries.

- Impact on decision to own vs. rent, how much to borrow, length of the mortgage, etc. and eventually wealth accumulation.
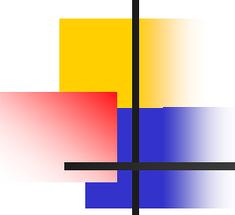
Intergenerational transfers

- We know very little about size and motives for transfers between generations.

- We don't know how bequests react to **changes in social security**, redistribution through long-term care, changes in bequest taxation.

- Question on "gifts or inheritances received" used in Matha et al is not informative about bequest motive (involuntary, altruistic, strategic, joy of giving).

- Each motive has different impact on wealth accumulation. Does not tell us about the "causal" link between bequest motives of donors and wealth accumulation of recipients.

- Tax considerations and financial market constraints matter, and differ across countries.
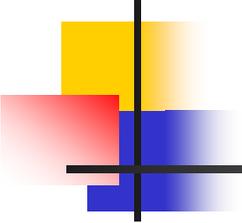
Summary

- Harmonized HFC rules out that large differences in wealth arise from statistical issues.

- Useful set of descriptive papers.

- Clearly wealth differences cannot be explained entirely by differences in demographic factors (age and cohort effects), as predicted by the standard LCH model.

- **Future research with HFC data should exploit variety of European policies, constraints and institutions to understand and sort out different motives for wralth accumulation.**