The Household Finance and Consumption Survey in Europe

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# What is the Household Finance and Consumption Survey (HFCS)?

- Best source of cross-country micro data on wealth of European households
    - Other sources: aggregate data (Financial Accounts, Household Sector Report)
    - Survey data; subject to checks of consistency, editing, imputation, validation and harmonization
- Household-level data from 22 countries; 90,000+ households
    - Conducted by central banks and statistical institutes, coordinated by ECB, working together in Household Finance and Consumption Network
- Covers euro area + Croatia, Hungary, Poland and now the Czech Republic
- Three waves available: 2010, 2014, 2017 (wave 2020/21 ongoing)

What is the Household Finance and Consumption Survey (HFCS)?

- Household-level data:
    - …are informative about distributional issues
    - …relevant for transmission of monetary policy and for financial stability
- Concept of Net wealth: real (housing) and financial assets minus liabilities
- Does not include: cash and pension entitlements other than voluntary pensions and life insurances; human wealth
- Survey is much richer than wealth:
  Types and characteristics of assets and debts, debt service, credit constraints, (some) consumption, income, expectations, …
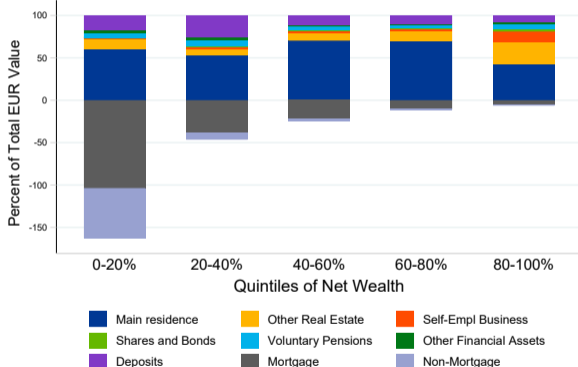
Wealth varies substantially across households

Average Assets and Liabilities by Quintiles, Wave 2017
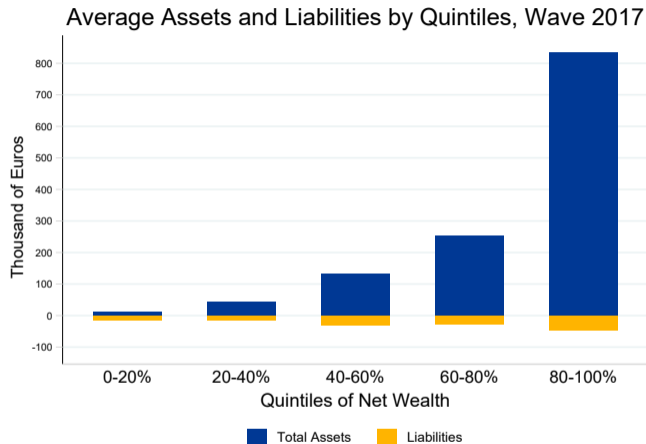
▶ Gini coefficient for net wealth in EA 0.69, while for (gross) income 0.43

# Composition of wealth varies across households

Composition of Total Assets by Quintiles, Wave 2017

- ▶ Housing (**Main Residence** + **ORE**) about 60% of total assets

- ▶ **Deposits** important for lower quintiles

- ▶ **Self-employment business wealth** important for higher quintiles

- ▶ (Direct) **shares and bonds** limited

- ▶ **Mortgage debt** much larger than other debt

Wealth varies by age

Average Assets and Liabilities by Age, Wave 2017
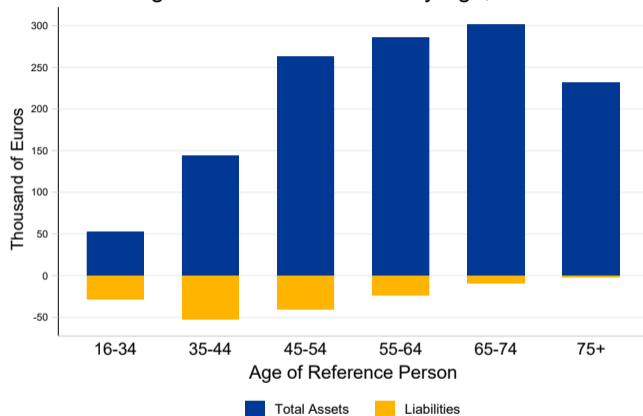
- ▶ Assets (and net wealth) hump-shaped across age
- ▶ Leverage declining with age

Why is the HFCS relevant for central banks?

Three illustrations

1. Distributional effects of monetary policy

2. Household consumption / saving during the pandemic

3. Financial fragility of households

1. Distributional effects of monetary policy

▶ Numerous channels of monetary transmission to consumption   Moll (2019)

  ▶ **Direct:** Effects of changes in int rates on incentives to save and net fin income
  ▶ **Indirect:** Through general equilibrium responses of prices and wages, hence of labor income and employment
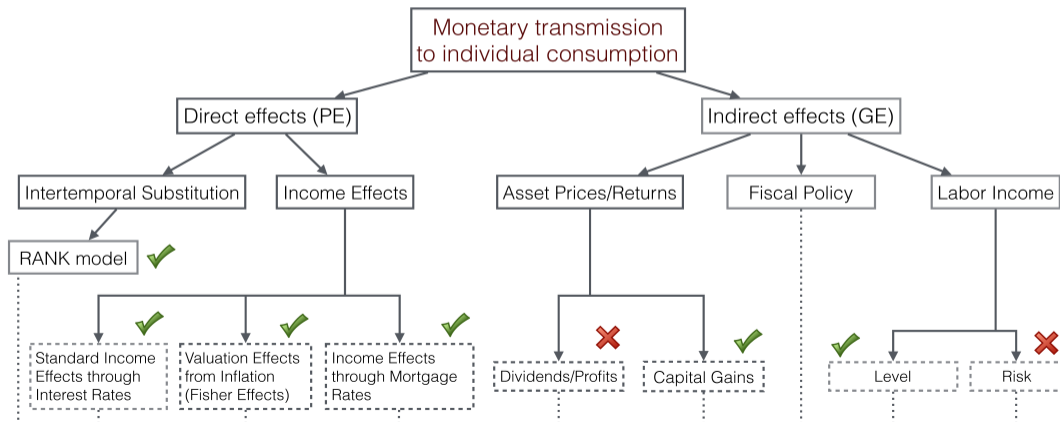
Quantifying heterogeneity in monetary transmission to consumption

based on joint work with Oreste Tristani and Gianluca Violante

- ▶ Micro data needed b/c strength of transmission channels varies across Hhs

- ▶ Quantify channels using simple model (no uncertainty)

- ▶ Reducing household heterogeneity to three 'hand-to-mouth' groups:

  - ▶ Poor & wealthy hand-to-mouth: Few liquid assets (high MPC), may own housing
  - ▶ Non-hand-to-mouth: Adequate liquid assets (low MPC)

- ▶ These groups differ in:

  - ▶ Marginal propensities to consume (MPC) out of income and wealth
  - ▶ Composition of wealth and income
  - ▶ Sensitivity of their own earnings to fluctuations in aggregate labor income

Monetary policy transmission channels to consumption

- Direct, partial equilibrium effects [40%]
  - Intertemporal substitution (IES)—standard New Keynesian representative agent
  - Net interest rate exposure (NIE)—cash-flow effect on mortgagors (Auclert)
- Indirect, general equilibrium effects [60%]
  - Income effect (INC)
  - Net nominal positions (NOM)—Fisher debt channel
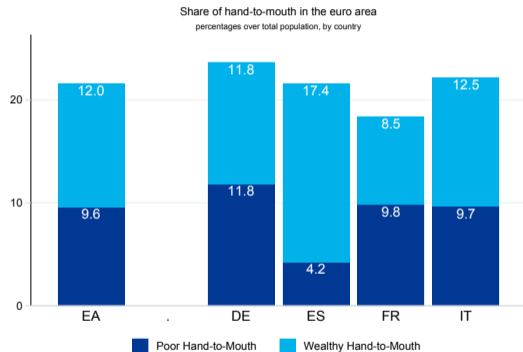 - Housing and Stock wealth effects out of capital gains (CAP)

$$dc^{TOT} = \underbrace{dc^{IES} + dc^{NIE}}_{\text{Direct, PE effects}} + \underbrace{dc^{INC} + dc^{NOM} + dc^{CAP}}_{\text{Indirect, GE effects}}$$

Main results

▶ **Aggregate**
Indirect general equilibrium channels account for 60% of the total, direct channels, mostly IES, only for 40%

▶ **Across households**
  ▶ Wealthy and poor HtM (constrained) benefit the most from easing
  ▶ Mostly via indirect income and housing channels

▶ **Across countries**
Spain more sensitive than Germany

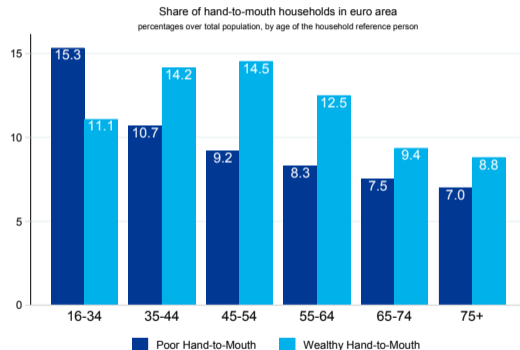# Share of hand-to-mouth households: 20–25%

Across big 4 euro area countries

Share of hand-to-mouth in the euro area
percentages over total population, by country

Source: HFCS wave 2. Countries: DE, ES, FR, IT and Euro area.

By age

Share of hand-to-mouth households in euro area
percentages over total population, by age of the household reference person

Source: HFCS wave 2. Countries: Euro Area countries.

▶ Poor HtM: young　　Wealthy HtM: middle-aged [own a house]

Decomposition: Effects of 100-bp cut on consumption

Source: HFCS 2nd wave. Countries: DE, ES, FR and IT.
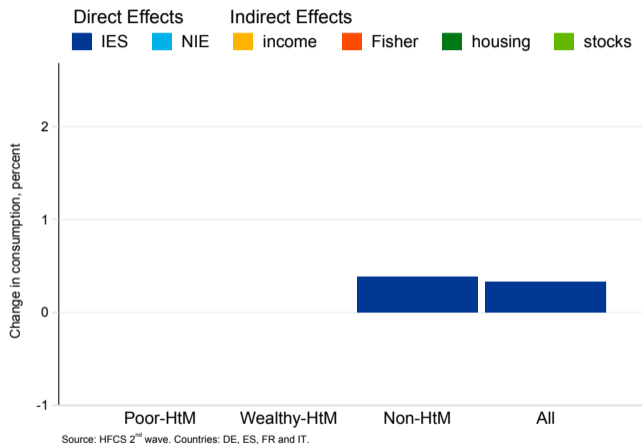
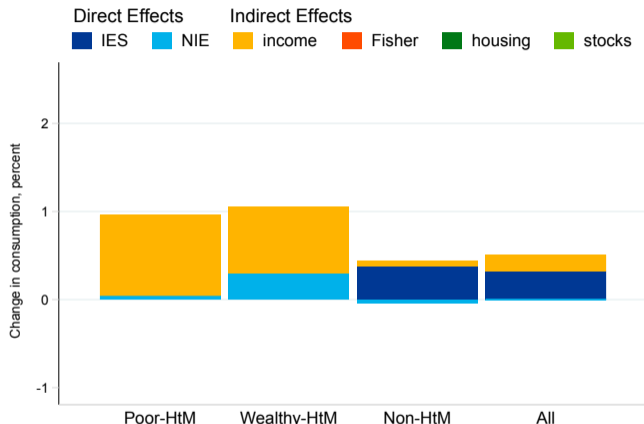► Direct intertemporal substitution (IES) channel relevant for non-HtM

Decomposition: Effects of 100-bp cut on consumption
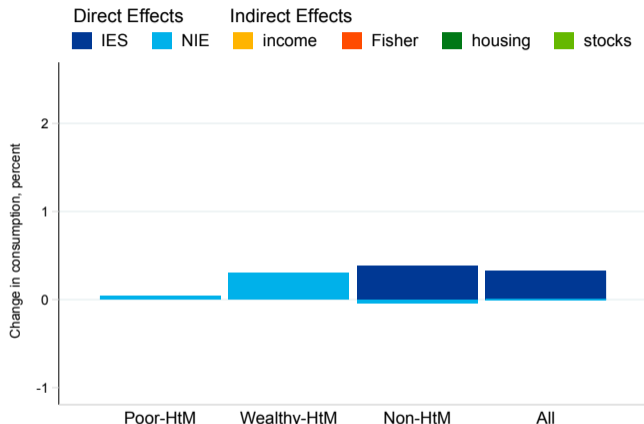
Source: HFCS 2nd wave. Countries: DE, ES, FR and IT.

▶ Direct net interest rate exposure (NIE) stimulates wealthy HtM, mostly via adjustable rate mortgages ('ARMs')

Decomposition: Effects of 100-bp cut on consumption

Direct Effects
- IES (dark blue)
- NIE (light blue)

Indirect Effects
- income (orange)
- Fisher (red)
- housing (dark green)
- stocks (green)

Change in consumption, percent

Poor-HtM | Wealthy-HtM | Non-HtM | All

Source: HFCS 2nd wave. Countries: DE, ES, FR and IT.

▶ Indirect income channel stimulates poor and wealthy HtM, mostly via higher employment + higher MPC

Decomposition: Effects of 100-bp cut on consumption

Direct Effects: IES, NIE
Indirect Effects: income, Fisher, housing, stocks
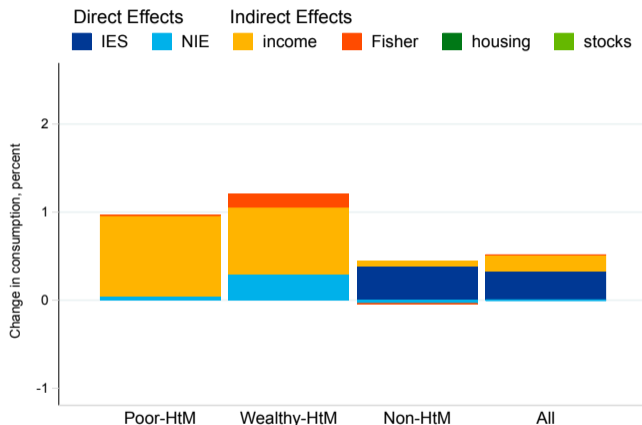
Source: HFCS 2nd wave. Countries: DE, ES, FR and IT.

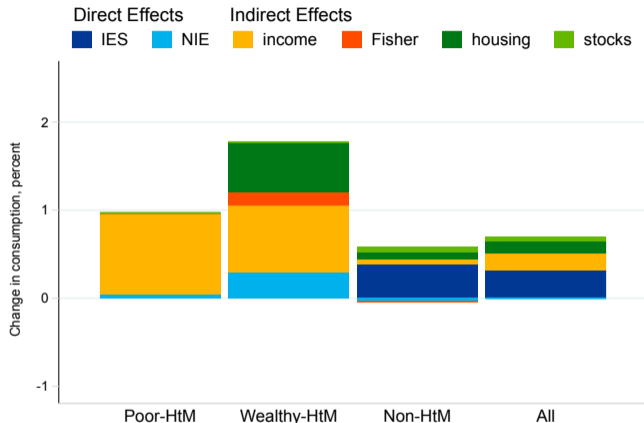▶ Indirect Fisher channel small, matters a bit for wealthy HtM

Decomposition: Effects of 100-bp cut on consumption
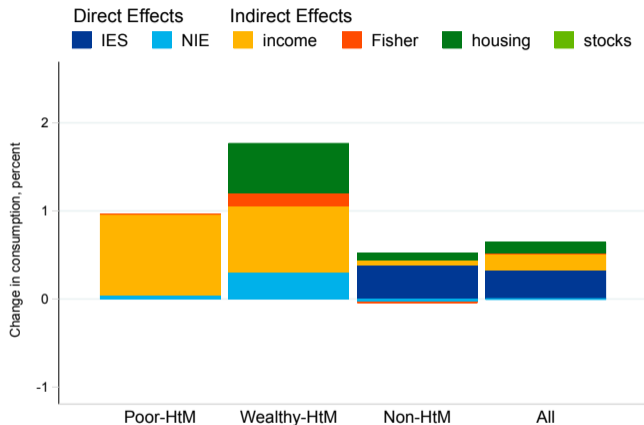
Source: HFCS 2nd wave. Countries: DE, ES, FR and IT.

► Indirect housing channel matters for wealthy HtM and non-HtM (collateral wealth effects)

Decomposition: Effects of 100-bp cut on consumption

Source: HFCS 2ⁿᵈ wave. Countries: DE, ES, FR and IT.

- ▶ Indirect GE channels account for 60% of the total
- ▶ Wealthy and poor HtM with high MPCs benefit the most from easing …
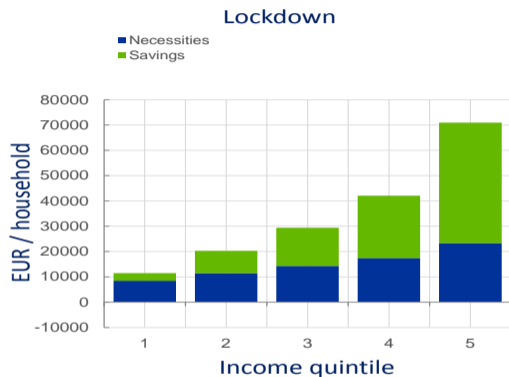 …via indirect channels, mostly income and housing
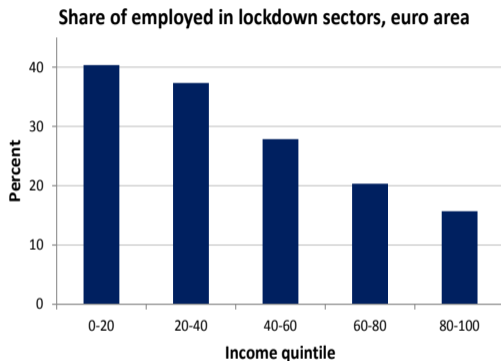
2. Consumption / saving during the 2020 pandemic
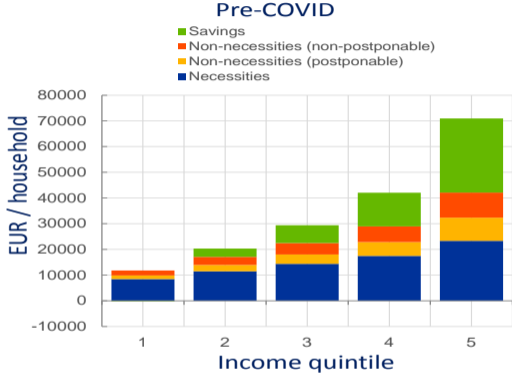
Dossche, Kolndrekaj, Slacalek (2021), using HBS and EU SILC consumption and income data

▶ Savings and non-necessities skewed toward high-income

▶

▶

2. Consumption / saving during the 2020 pandemic

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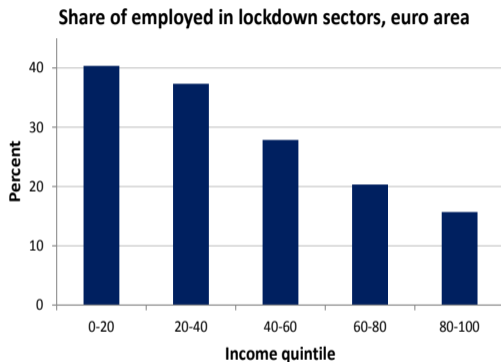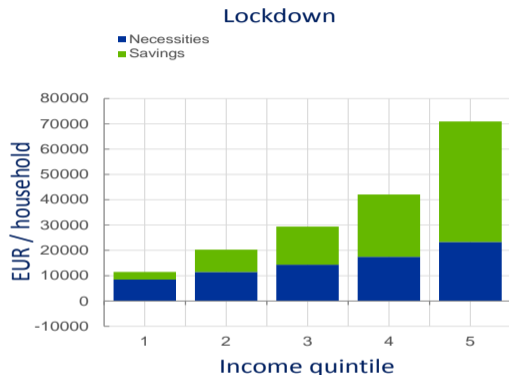
►

2. Consumption / saving during the 2020 pandemic

Share of employed in lockdown sectors, euro area

Dossche, Kolndrekaj, Slacalek (2021), using HBS and EU SILC consumption and income data

▶

▶ Labor income risk skewed toward low-income

▶

2. Consumption / saving during the 2020 pandemic

Dossche, Kolndrekaj, Slacalek (2021), using HBS and EU SILC consumption and income data

- ▶ Savings and non-necessities skewed toward high-income
- ▶ Labor income risk skewed toward low-income
- ▶ Importance of disaster relief; redistributional policies

# 3. Financial fragility of households based on Ampudia, van Vlokhoven, Żochowski (2016)

- ▶ Simulating prob of default, banks' exposure at default, loss given default under stress scenarios (adverse shocks to interest rates, unemployment, asset prices)

- ▶ PD, EAD, LGD depend on
  - ▶ Financial margin = net income − debt payments − basic living costs
  - ▶ Liquid assets (needed to cover negative financial margin)

- ▶ Requires micro data on income, assets, debt service

- ▶ Financially vulnerable household:
  - ▶ Negative financial margin AND
  - ▶ Not enough liquid assets to cover negative cash flow (for some months)

Financial fragility of households

10.1 Percentage of indebted households with a positive probability of default
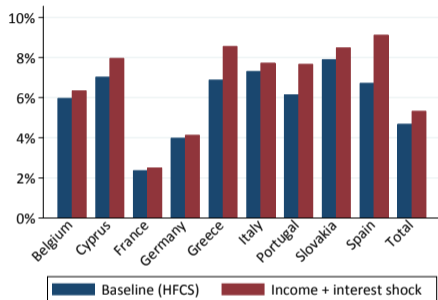
10.2 Expected exposure at default

Baseline (HFCS) — Income + interest shock
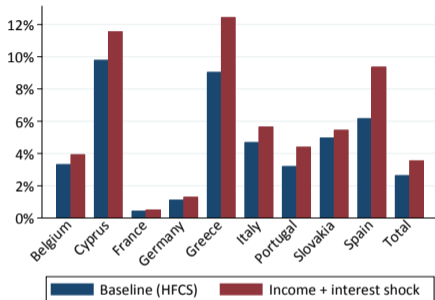
- ▶ Baseline calibrated to aggregate data on nonperforming loans
- ▶ Quantifies increases in PD and EAD under stress scenario
  (eg 300 bp increase in int rates & 5 pp increase in unemployment)
- ▶ Can do more on which households are vulnerable
- ▶ Extends Galuščák et al. (2014)

Summary

- HFCS is best source of cross-country micro data on wealth of European households

- Wealth distribution and structure are heterogeneous along many characteristics, including age, home ownership status, …

- Household-level info is important to provide comprehensive account of:

    - Monetary transmission channels to households

    - Heterogenous impact of shocks on households (eg the pandemic)

   - Distribution of financial fragility across households

Thank you!

Composition of wealth varies by age

Composition of Total Assets by Age, Wave 2017
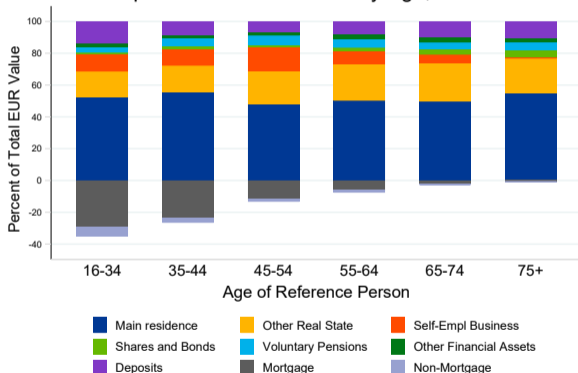
- ▶ **Hump-shaped pattern**: housing and mortgages

- ▶ Younger households more leveraged

- ▶ Older households pay back debt & hold deposits

- ▶ Young and middle-aged hold more business wealth
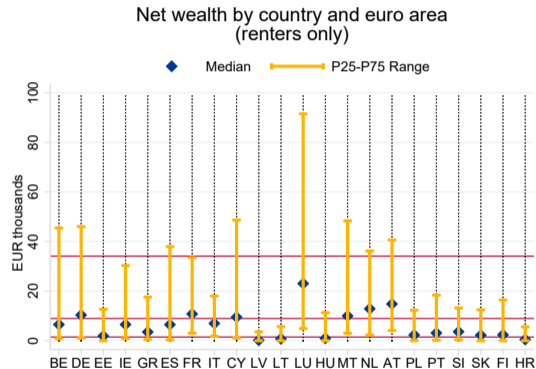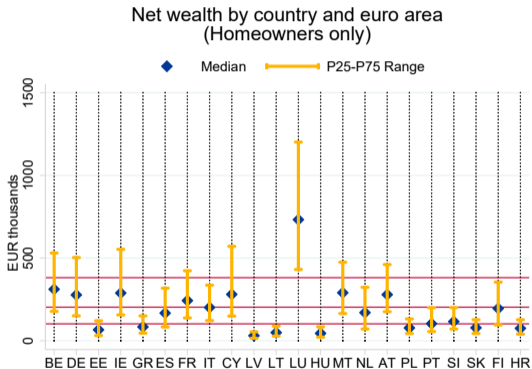
Composition of income varies across households

Composition of Income by Quintile, Wave 2017
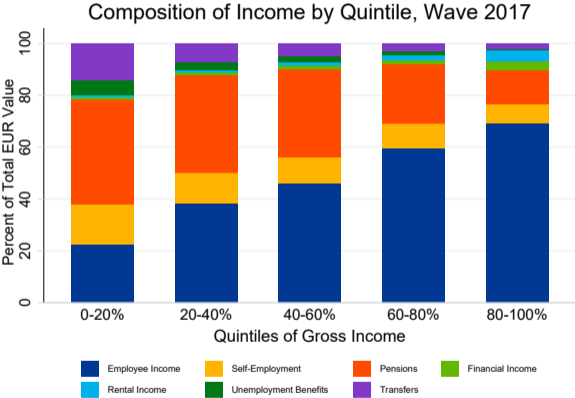
- ▶ Share of employee & self-empl income rising

- ▶ Share of unempl benefits, pensions & transfers falling

- ▶ Share of fin & rental income rising

Distribution of wealth across and within countries


Net wealth by country and euro area
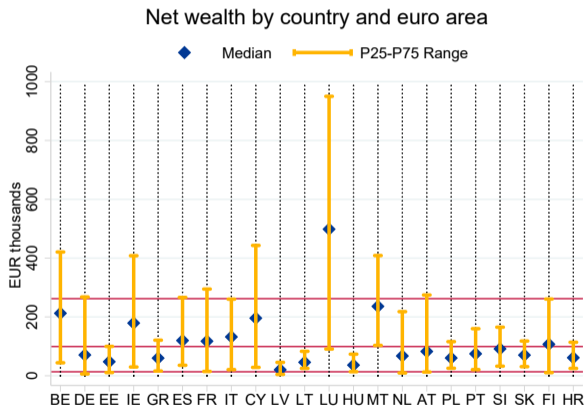
- ▶ Heterogeneity across households exceeds heterogeneity across countries

- ▶ Much overlap in the middle ranges (P25–P75)

Net wealth by housing status

Net wealth by country and euro area
(Homeowners only)

◆ Median ━━ P25-P75 Range

Net wealth by country and euro area
(renters only)

◆ Median ━━ P25-P75 Range

► Housing status strongly determines position in net wealth distribution
► Renters everywhere poorer than owners

Way to home ownership

Home ownership rate

Way to acquire household main residence
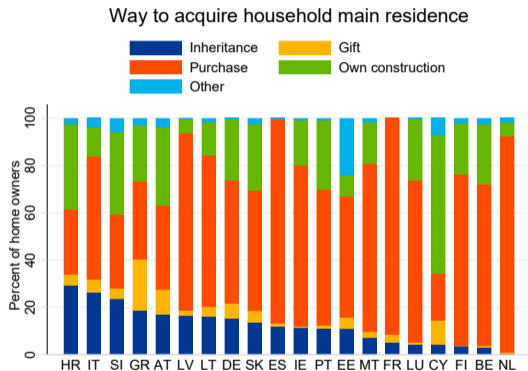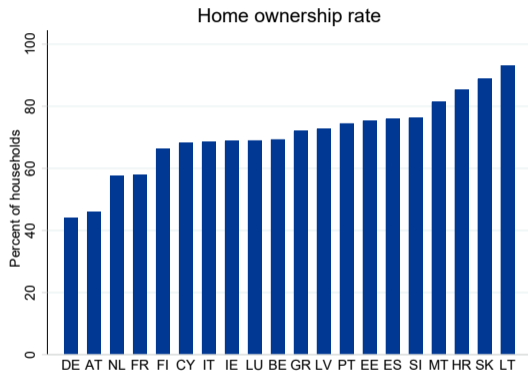
- ▶ Large variation in home ownership rates across countries
- ▶ Purchase and own construction most important ways to acquire residence