



EUROPEAN CENTRAL BANK

EUROSYSTEM

Distribution of wealth in line with National Accounts

Information on ESCB project

G20 DGI-2 Workshop on Household
distributional accounts, 4-5 November 2021



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Overview

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1. Introduction

1. Introduction

Motivation

Improving our understanding of **wealth inequality**

High demand for distributional data

- **Fairness of income and wealth inequality** discussed at political level
- **G20 Data gaps initiative**
- **Monetary policy analysis** and wealth effects

Differences between survey data and National/Financial Accounts

- **Surveys** measure distribution of wealth
- **NA/FA** measure levels & developments
- **Concepts & definitions** differ

Production of timely estimates

- **Surveys** very granular, but low frequency & timeliness
- **Macro statistics** frequent & timely, HHs as one aggregate sector only
- The **best of both worlds** achievable?

1. Introduction

Linking micro and macro data on wealth by the ESCB

Distribution

Household Finance and Consumption Survey (HFCS)

- First survey: ~ 2010
- Frequency: every 3 years
- All 19 euro area countries plus HR/HU/PL, euro area aggregates (2017 survey)
- National surveys carried out by countries
- 2017 survey with a total of 91,000 HHs
- Coordination by ESCB network (HFCN)

Aggregate

Financial Accounts (FA) and non-financial assets

- Quarterly series, starting 1999
- All EU countries, euro area aggregates
- Compilation by NCBs/NSIs
- Complemented by national accounts non-financial assets
- SNA/ESA methodology
- Coordination by ESCB working group (WG FGS)

Distributional Wealth Accounts (DWA)

- **Linking** HFCS and FA by instrument
- **Align** estimate to FA/NA time series
- **Coordinated** by ESCB expert group (EG DFA, ECB/Banca d'Italia co-chair, NCBs, NSIs, Eurostat, OECD)

1. Introduction

Specific features of wealth measurement and ESCB approach

Distribution: more skewed than for income and consumption

Changes over time: as outstanding amounts → more stability

Coverage in data sources:

- Administrative sources more scarce than for income
- Issues of non-response, underreporting and “missing rich” in surveys

ESCB approach

- For all countries the same (micro) household survey source (HFCS)
- Common DWA “baseline” estimation model which may be improved at country level

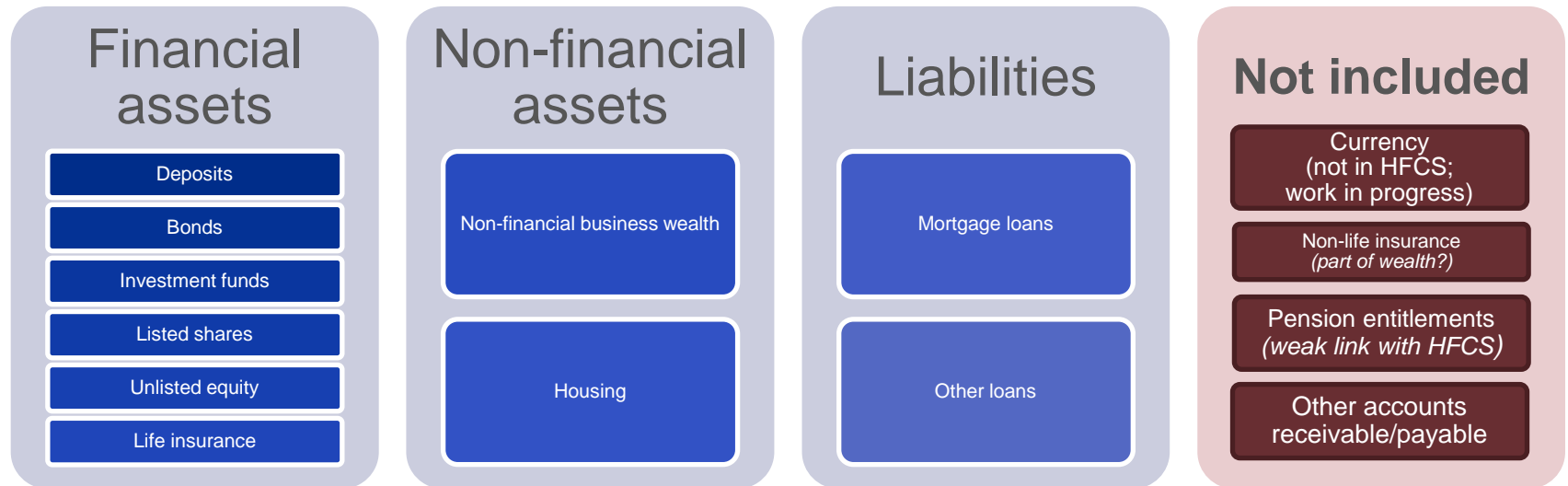
2. Methodology

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Wealth concept for DWA

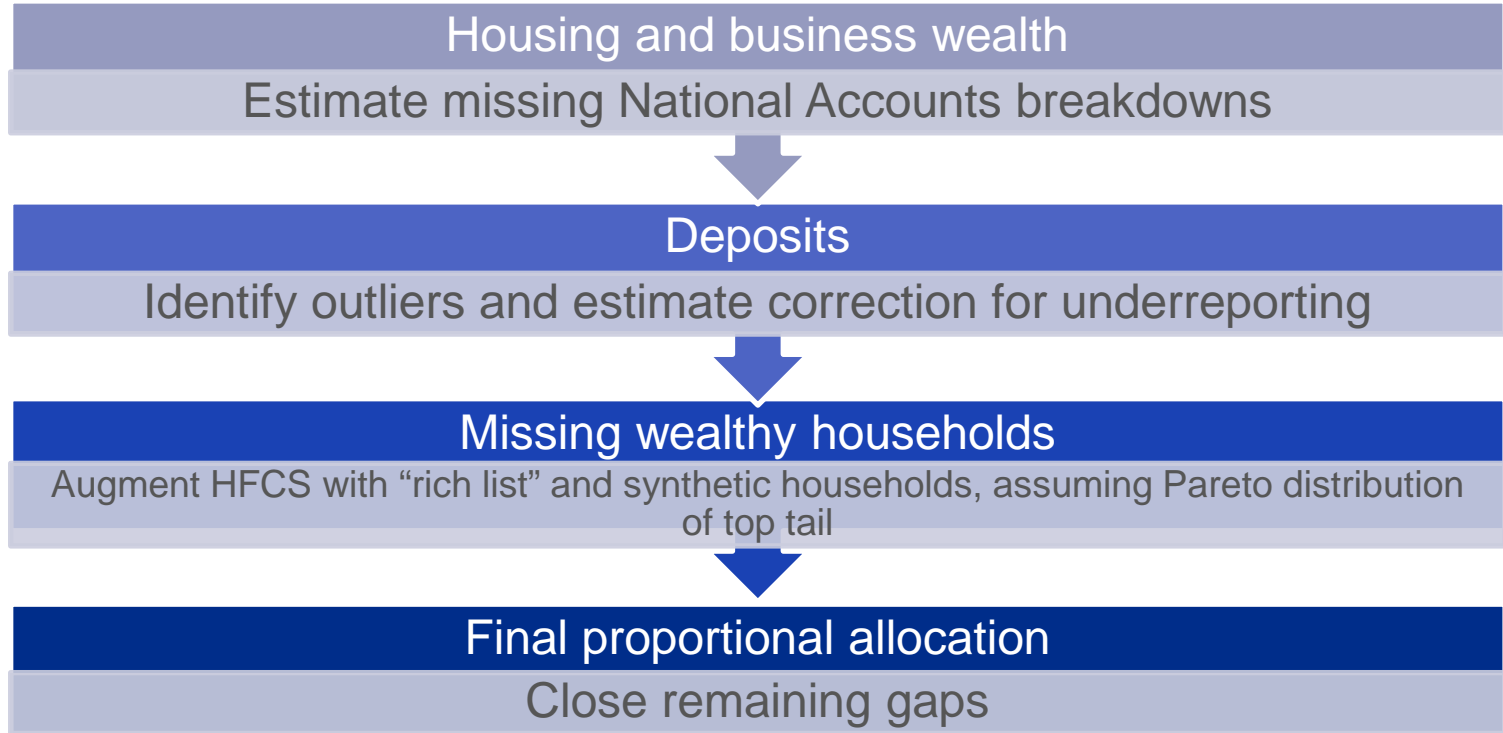
Aim: link items in household net wealth between the HFCS and FA/NA

- Items with high or medium comparability of concepts, covering about 90% of euro area households assets and liabilities



2. Methodology

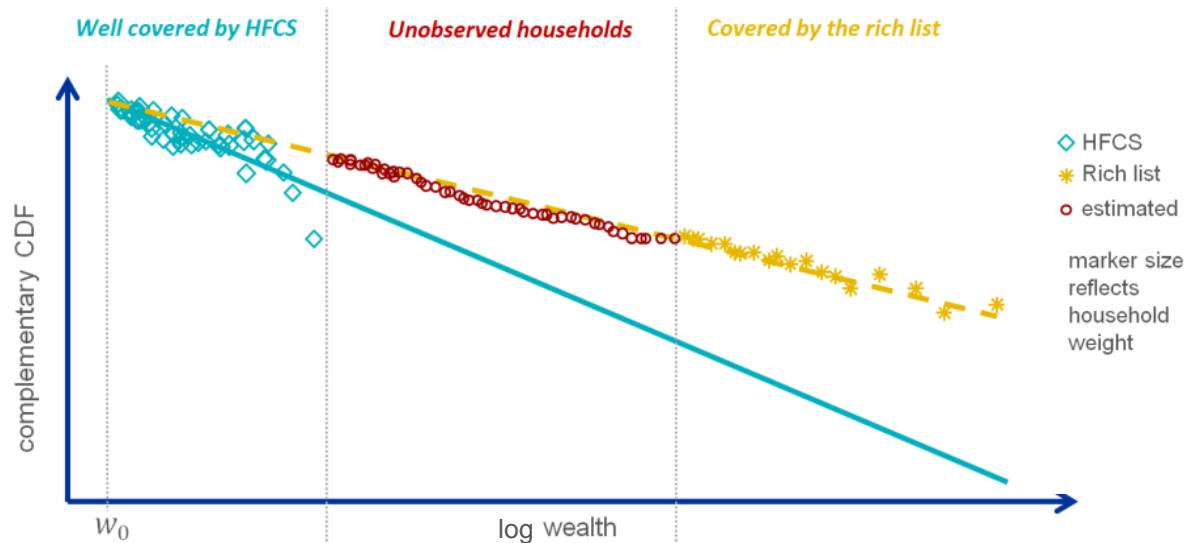
Estimation steps – overview



2. Methodology

Estimation steps – missing wealthiest households

- Wealthy households not fully covered in HFCS
- Complementing HFCS sample with “rich lists” improves estimation
- In most countries, large gap remains between *richest HFCS household* and *poorest in rich list*
 - Synthetic households sampled from the estimated Pareto tail



2. Methodology

Time series and frequency

Annual (if possible quarterly) time series as one major value added

- **Time series**

- Interpolate quantile shares between 3 HFCS periods
- Extrapolate after latest HFCS period using fixed distribution
- Method allows to capture some of the short-term distributional changes (e.g. due to price variations of instruments at given instrument holdings)

- **Frequency:**

- FA users typically focus on quarterly data and recent developments
- Quarterly DWA use the same assumptions as annual DWA would

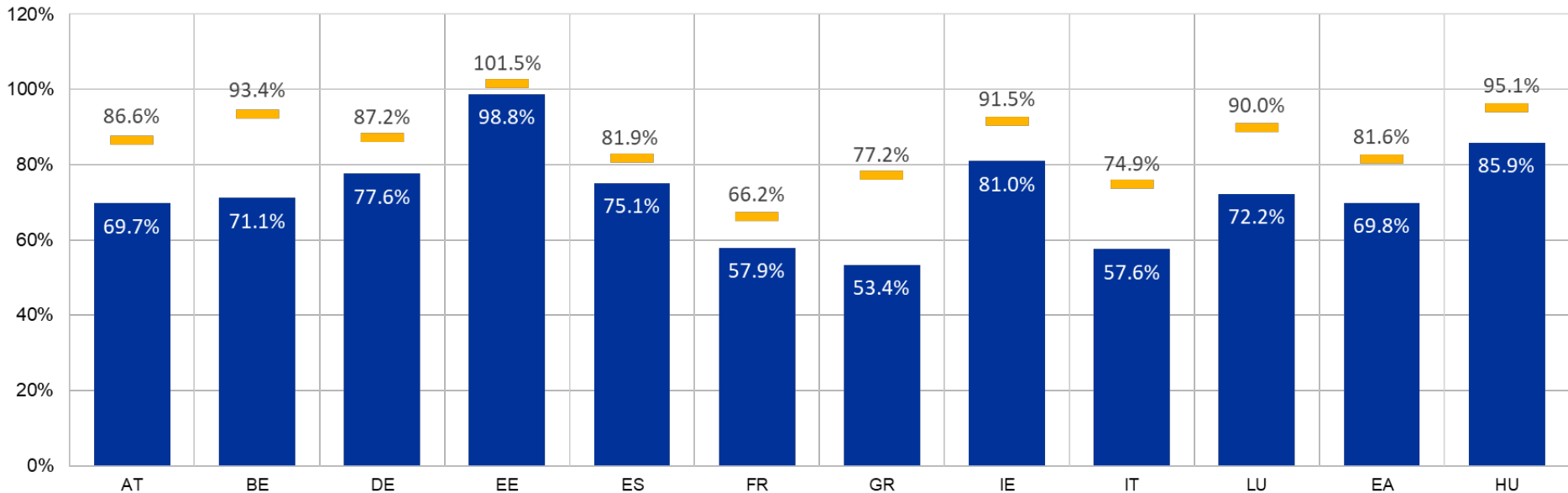
3. DWA results

3. Results

Improvement in coverage ratios

DWA adjustments close a significant part of the **coverage gap** in most countries

■ Raw HFCS
● Post add rich



Coverage ratios compare raw and adjusted HFCS aggregate values for net household wealth with their FA/NA counterparts. All data for HFCS wave 3 and FA/NA from 2018.

3. Results

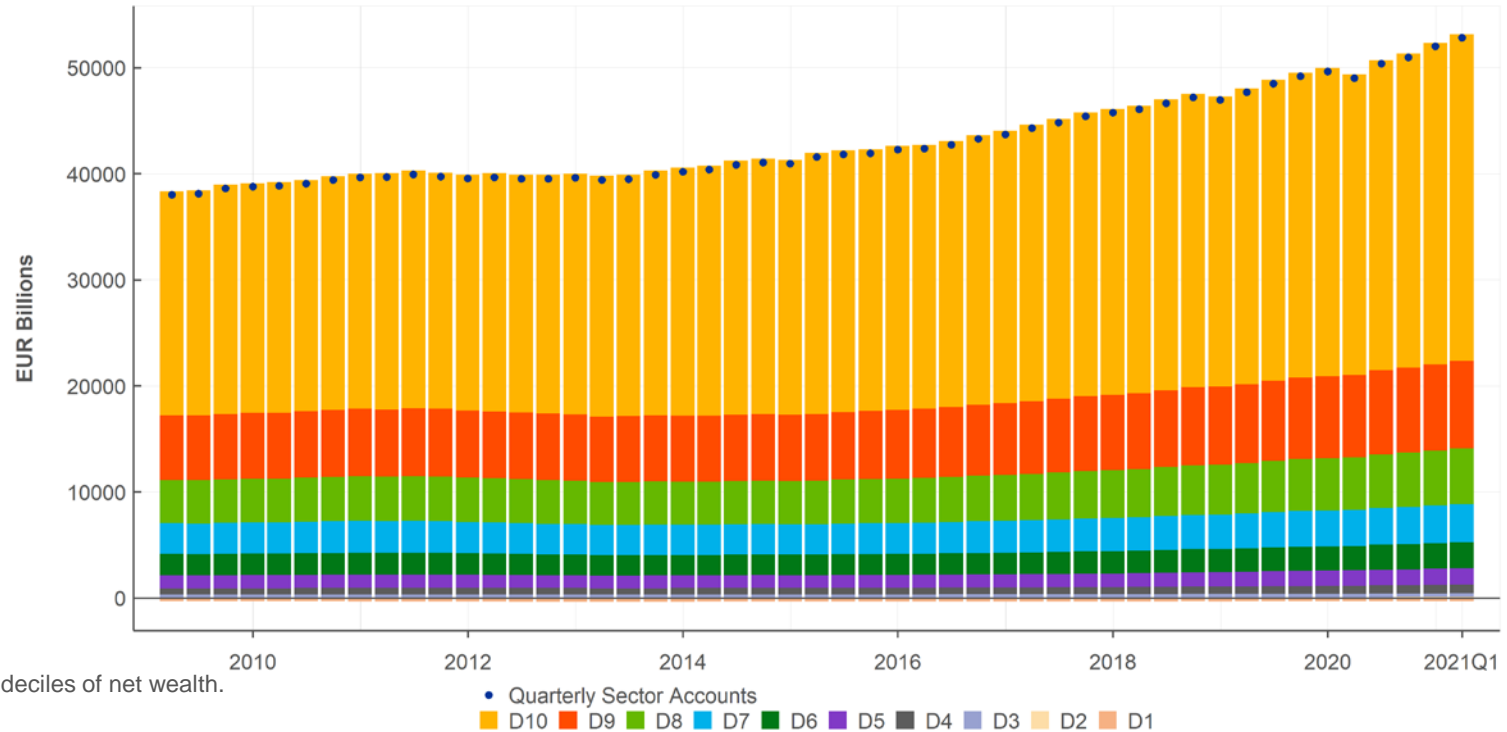
Changes in distributional indicators

Euro area	HFCS (raw data)	After add rich	DWA (after final grossing up)
Share of net wealth			
Top 1%	19%	27%	28%
Top 10%	53%	58%	59%
Bottom 50%	4.2%	4.2%	4.3%
Gini coefficient	0.712	0.737	0.743
Median wealth	88 946	91 449	109 807
Mean wealth	214 263	246 551	302 033

3. Results

Time series

Net wealth, euro area aggregate | Decomposition of FA total

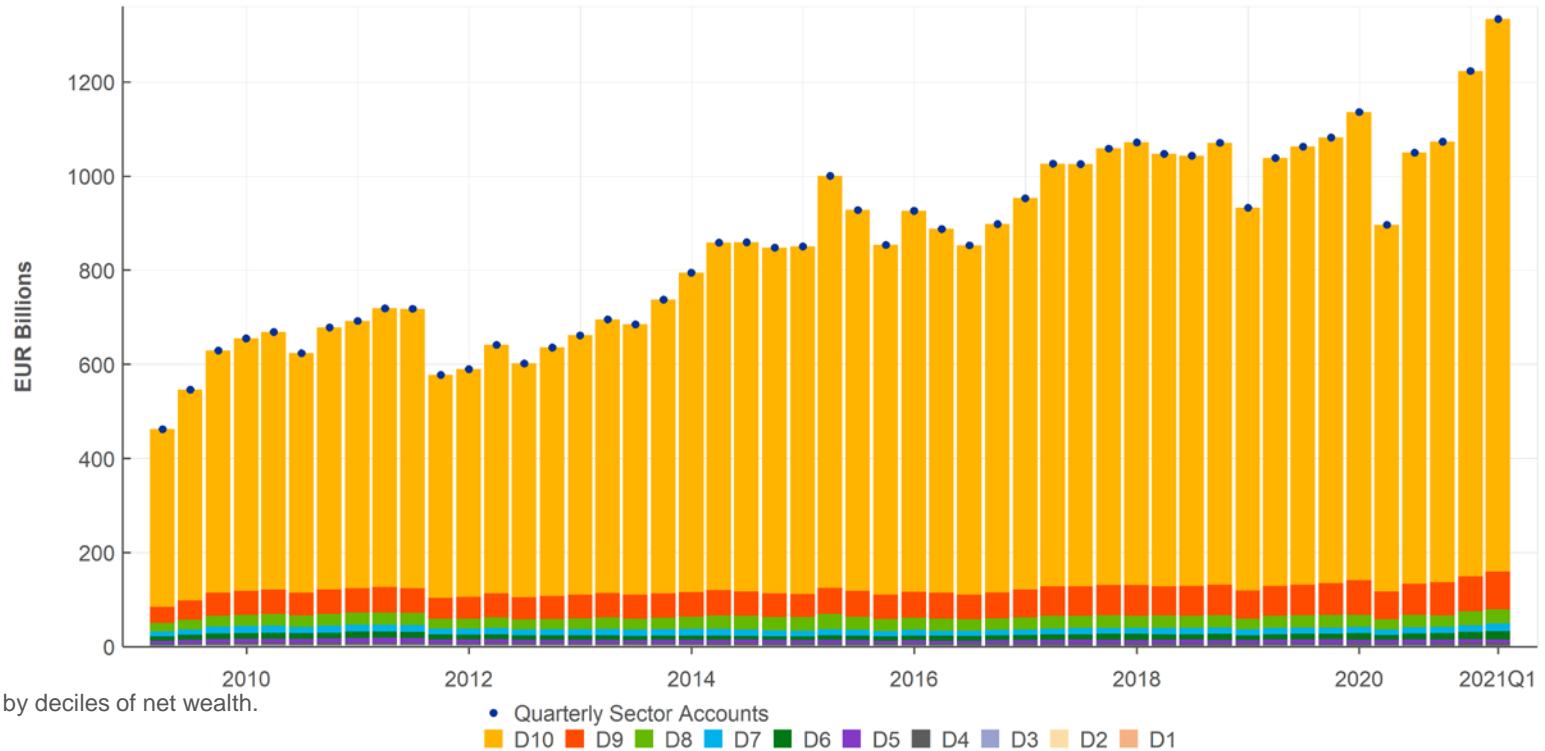


Distribution by deciles of net wealth.

3. Results

Time series

Listed shares, euro area aggregate | Decomposition of FA total



Distribution by deciles of net wealth.

4. Way forward

4. Way forward

- Release experimental results to ESCB users
- Later decision on regular publication
- Involve more EU countries and refine methods
- Collaborate internationally (G-20 recommendation)

Thank you. Questions
welcome!

Further questions may also be sent to henning.ahnert@ecb.europa.eu

Annex

Annex: DWA breakdowns by instrument

- Net wealth
- Total assets
- Total liabilities
- Deposits
- Debt securities
- Listed shares
- Investment fund shares
- Life insurance
- Unlisted shares and other equity
- Non-financial business wealth
- Housing wealth
- Mortgage debt
- Other debt

Annex: Breakdowns by working and housing status

Working status

- Employee
- Self-employed
- Retired
- Unemployed
- Undefined/other

Housing status

- Owners/Tenants

Annex: Additional DWA indicators

Number/proportion of households with wealth over 1 million euro

Top 5% share of wealth

Top 10% share of wealth

Bottom 50% share of wealth

GINI (wealth concept)

Median Wealth

Mean Wealth

Debt to assets ratio