



EUROPEAN CENTRAL BANK

EUROSYSTEM

ECB - Expert Group on Distributional Financial Accounts

United Nations Network
of Economic Statisticians



Beyond GDP – Sprint Meeting
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Overview

- 1 Motivation and timeline
- 2 Available sources and challenges
- 3 ESCB approach to link household survey with Sector Accounts
- 4 Distributional Wealth Accounts (DWA) results
- 5 Way forward
- 6 Lessons learnt

1. Motivation

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Improving our understanding of **wealth inequality**

High demand for distributional data

- Inequality on **political agenda**
- Household sector **heterogeneity** matters for monetary policy
- **G20 Data gaps initiative**: increasing focus on distributional accounts

Difficulty to put together available sources

- **Household surveys and sector accounts** have **different** aims and concepts
- Accessible **administrative sources** scarce and not always easy to integrate into statistical framework

1. Timeline



Launch of the
Expert Group:
end-2015

First report:
April 2017

Linking
concepts and
main
methodology:
June 2019

Experimental
compilation:
December 2021
(quarterly update)

2. Available sources and challenges

2. Available sources and challenges

Linking micro and macro data on wealth

Distributional data

Household Survey

(in the euro area:
HFCS → Household Finance and
Consumption Survey)

- Every 3 years since 2010
- 91,000 households in euro area (2017)
- Very detailed results
- Micro data for research
- **limitation:** Low frequency and timeliness

Macro-aggregates

Sector accounts: Financial Accounts and non-financial assets

(QSA)

- Quarterly, starting 1999
- Integrated & exhaustive
- ESA/SNA methodology and breakdowns
- Good frequency and timeliness
- **limitation:** No breakdown within household sector

Distributional Wealth Accounts

(DWA)

- **Linking** HFCS and Sector Accounts
- **Challenge:** estimate the distribution of the “gap”
- **Added value:**
Consistent with Sector Accounts
Quarterly time series
Good timeliness

2. Available sources and challenges

Wealth concept for DWA

The DWA cover about **90%** of the euro area households' assets and liabilities

Challenge to link items in household net wealth between the household survey and Sector Accounts

Items with high or medium comparability of concepts

Financial assets

Deposits

Bonds

Investment funds

Listed shares

Unlisted equity

Life insurance

Non-financial assets

Non-financial business wealth

Housing

Liabilities

Mortgage loans

Other loans

Items with low comparability

Not included

Currency
(no data in HFCS)

Pension entitlements
(low comparability with HFCS)

Social security pensions
(outside the QSA)

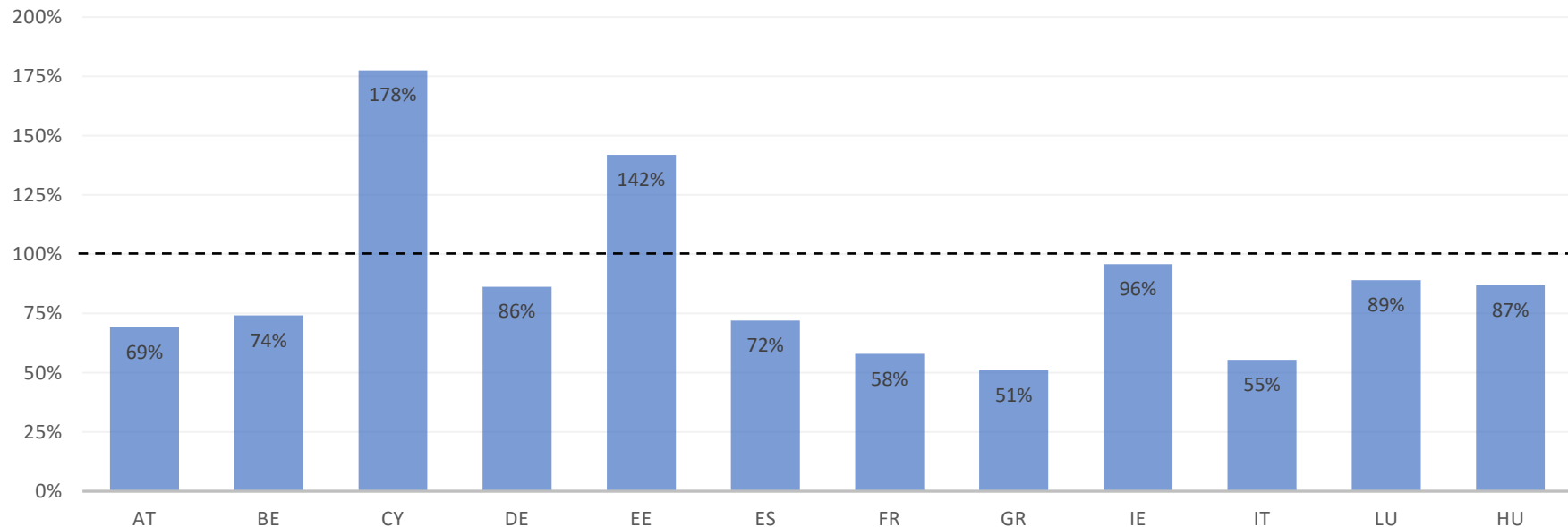
2. Available sources and challenges

Coverage ratio =
total HFCS wealth / QSA counterpart

Comparing micro and macro totals

Challenge: closing the coverage gap

High & varying differences in coverage ratios,
in most cases: household survey < Sector Accounts



Wave 3 (2016-18) of HFCS. Coverage varies from wave to wave.
Data for the 12 original members of the expert group.

3. ESCB approach to link household surveys with Sector Accounts

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Estimation methods – main steps

Housing and business wealth

- Estimate missing National Accounts breakdowns

Deposits

- Identify outliers and estimate correction for underreporting

Missing wealthy households

- Augment household survey results (HFCS) with “rich list” and synthetic households, assuming Pareto distribution of the top tail

Final grossing up

- Proportional allocation of the remaining gap

3. ESCB approach to link household surveys with Sector Accounts

Linking - further (less significant) steps

Timing

- Align HFCS reference periods and Sector Accounts data

Wealth concept

- Match “managed accounts” in the HFCS with Sector Accounts items
- Exclude loans between households from the HFCS

Household sector liabilities

- Split mortgage and other loans using banking balance sheet statistics

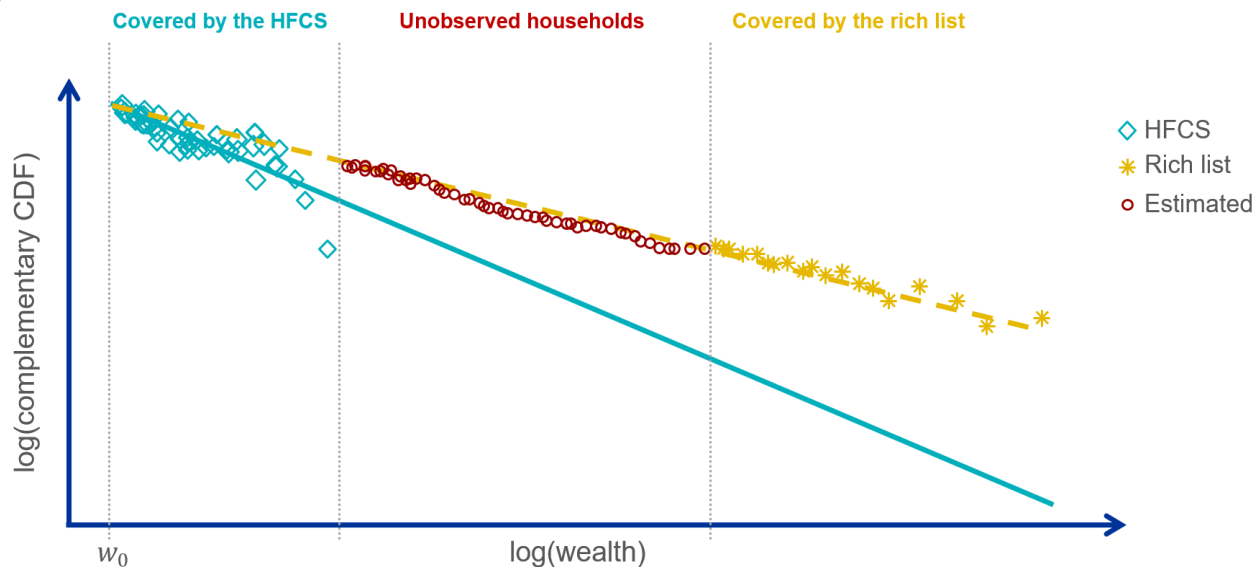
Covering financial lease

- Incorporate available country data on equivalent stock of loans

3. ESCB approach

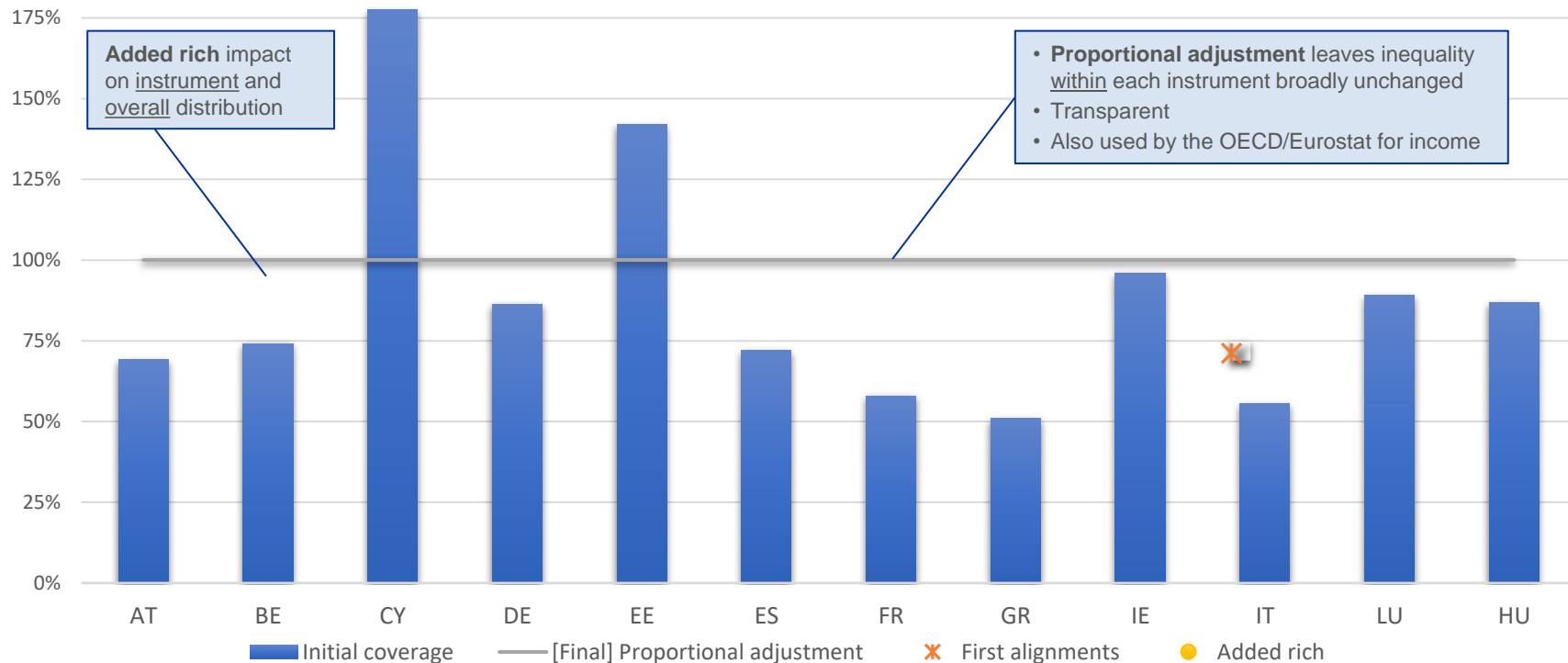
Estimation methods – missing wealthy households

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



3. ESCB approach

Estimation methods (net wealth)




3. ESCB approach

Time series and frequency

General request to use distributional data together with other regular statistics

→ quarterly frequency, and **timeliness** as close as possible to Sector Accounts.

Wealth + outstanding amounts: changes much slower than transactions/flows



- Interpolate decile shares between HFCS periods
 - Extrapolate after latest HFCS period using fixed distribution
- 

Allows to capture some of the short-term changes impacting on distribution (e.g. price variations)

4. DWA results

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ESCB internal dissemination provides the following information:

Deciles based on net wealth for:

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

Working status:

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

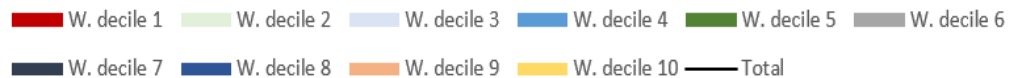
Housing status:

- Owner / Partial owner
- Rental / Free use

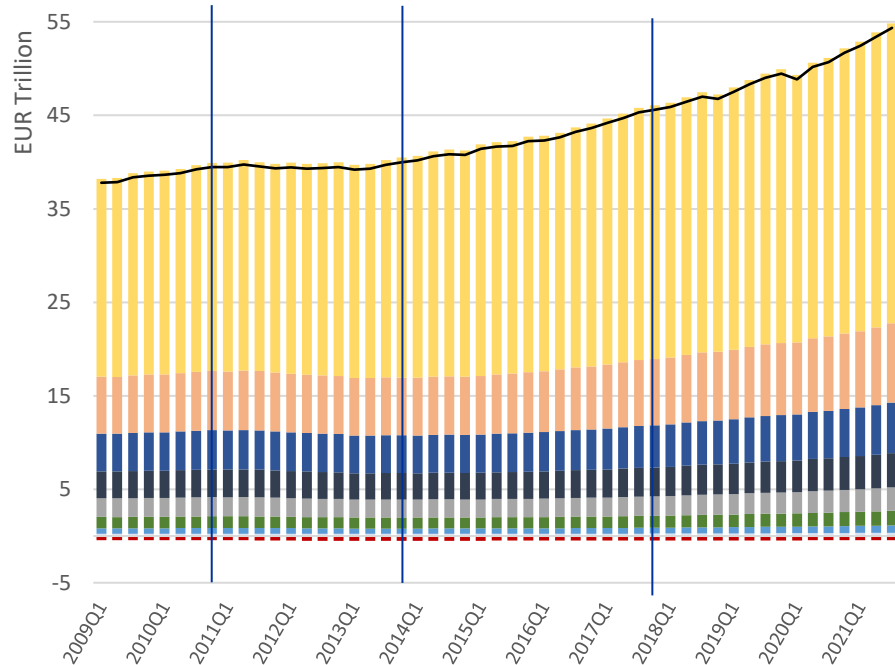
- Number/proportion of household with wealth > EUR 1mln
- Share of wealth of top 5%, 10% and bottom 50%
- Gini (net wealth)
- Median and mean wealth
- Debt-to-assets ratios

4. DWA results

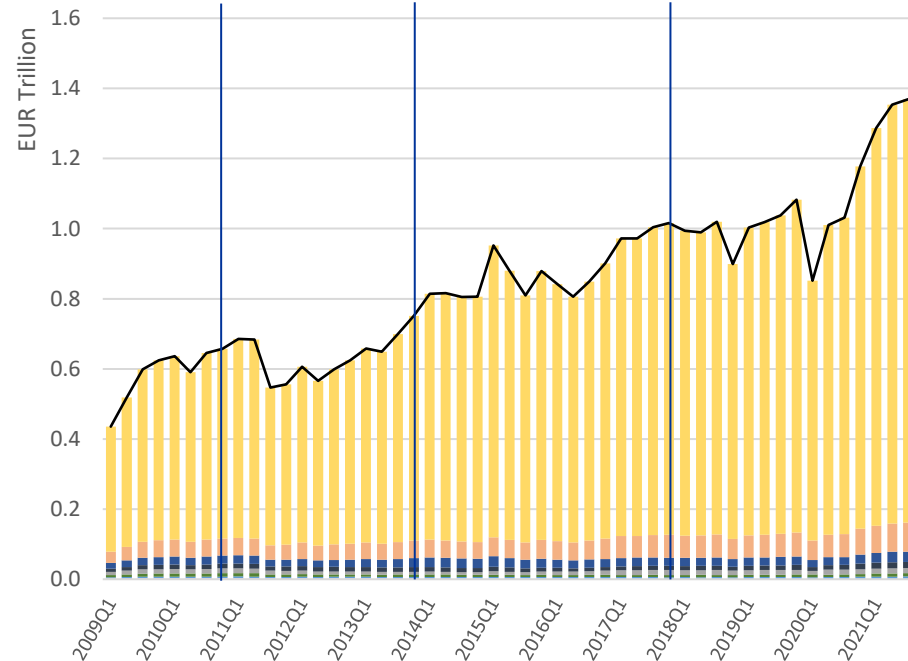
Euro area aggregate | Decomposition of Sector Accounts total



Net wealth



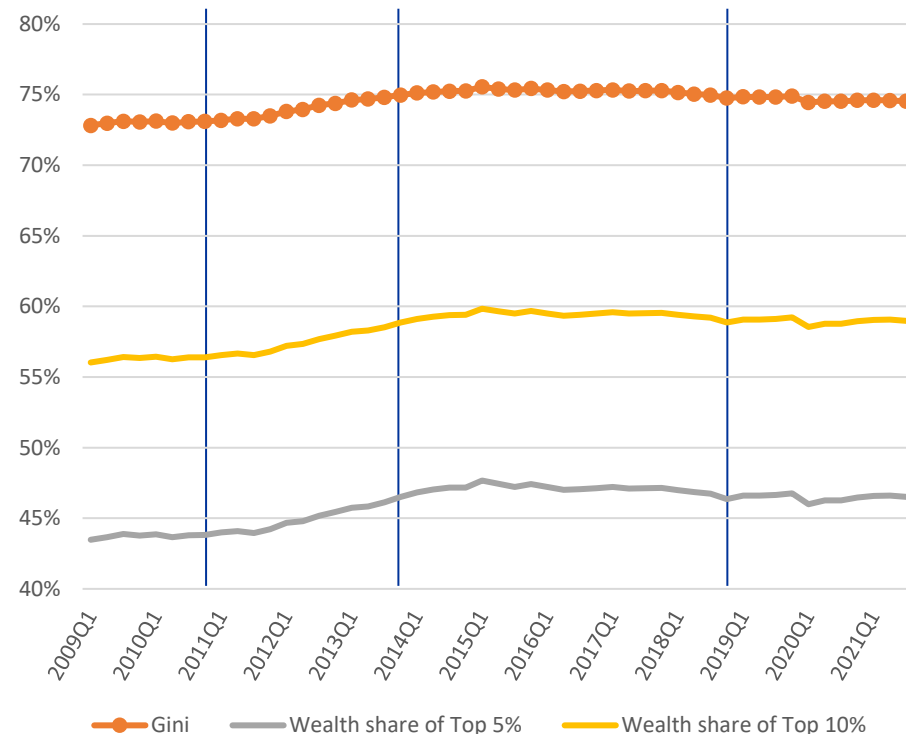
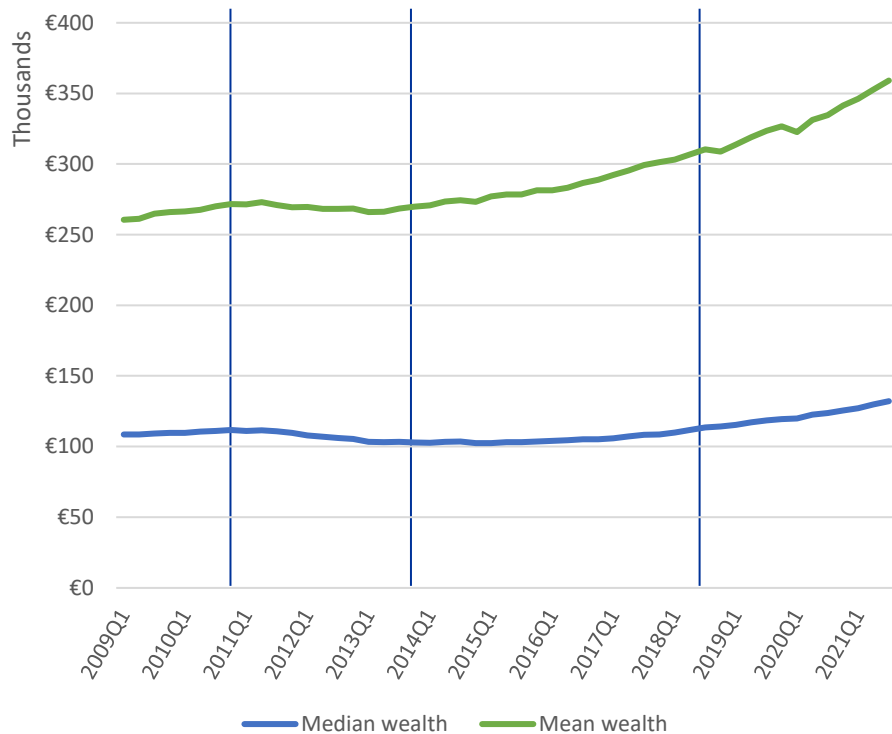
Listed shares



The vertical lines represent the period of the available household survey (HFCS waves 1 to 3)

4. DWA results

Euro area aggregate | Inequality indicators



The vertical lines represent the period of the available household survey (HFCS waves 1 to 3)

5. Way forward (and prospects for the future)

5. Way forward



Already in progress → extension of the data to all euro area countries + potentially other European Union countries.



Consider making the results publicly available after the experimental phase (possibly 2023)



Include additional information from other datasets to improve the distributional information (especially the extrapolation process).
E.g. consider using a recently developed annual internet survey.



Try adding more breakdowns (e.g., age, income, ...).

6. Lessons learnt

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Successful strategies

- Challenging but fruitful communication between micro and macro statisticians → develop acceptable bridging / estimates.
- Understand the impact of each step of the model, and not only focus on the final values.
- Harmonised approach across euro area countries.
- Clear interest from users → collecting their feedback.

6. Lessons learnt



Opportunities

- Some national compilers have taken steps to get access to more **administrative data**.
- The incorporation of **additional data sources** (e.g. online surveys, credit card information, ...) might improve estimates of recent quarters.
- Some countries **consider asking reporting institutions** (e.g., banks) for more distributional information on households.

Challenges

- Users would like to reconcile the data also with **income and consumption and savings**.
- Uncertainty/**margin of error** on the recording of housing wealth and land in Sector Accounts for some countries, and individual replies to surveys.
- The treatment of certain items (e.g. **durable goods** or **social security pensions**) in SNA/ESA has a significant impact on net wealth comparisons.

Thank you.
Comments welcome!
