Work of the EG DNA

Workshop: How to measure inequality in National Accounts:
The NTA, DINA and EGDNA Perspectives
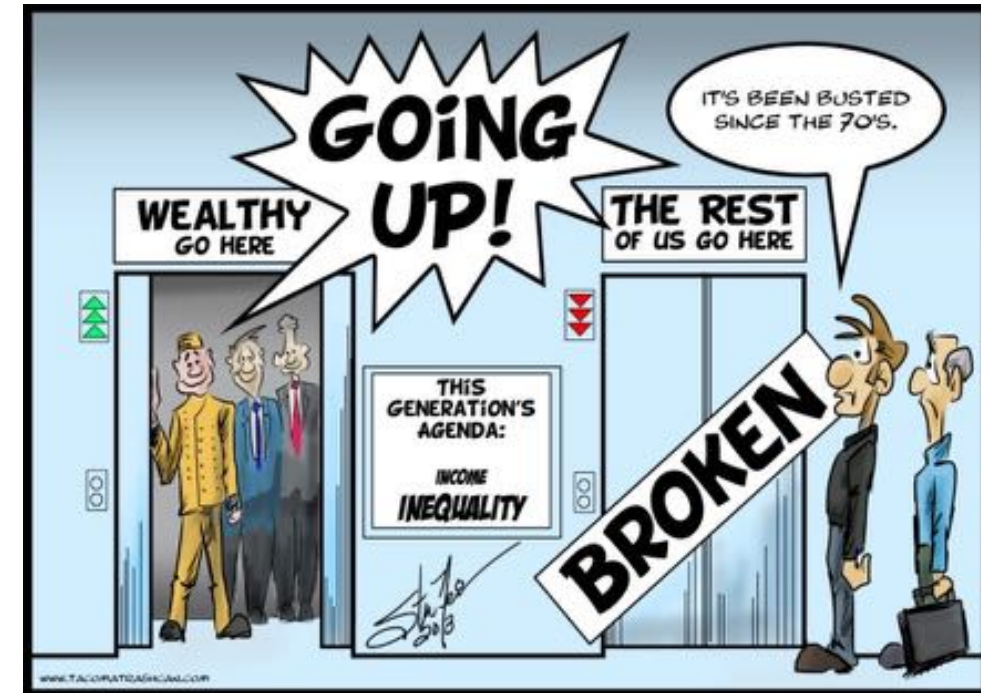
Paris, 17 February 2023

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Introduction

Introduction

- Clear need for systematic, robust and comprehensive data on economic inequality

- Distributional results aligned to national accounts complement micro results in various ways:

  - More comprehensive picture of economic inequality

  - Consistent information on three dimensions of economic well-being

  - In line with important macroeconomic aggregates

  - Capturing households and transactions that are typically underrepresented in micro data

  - A high degree of international comparability

- The OECD and Eurostat launched an Expert Group on Disparities in a National Accounts framework

- The group developed a template and guidelines

- Several countries are publishing results
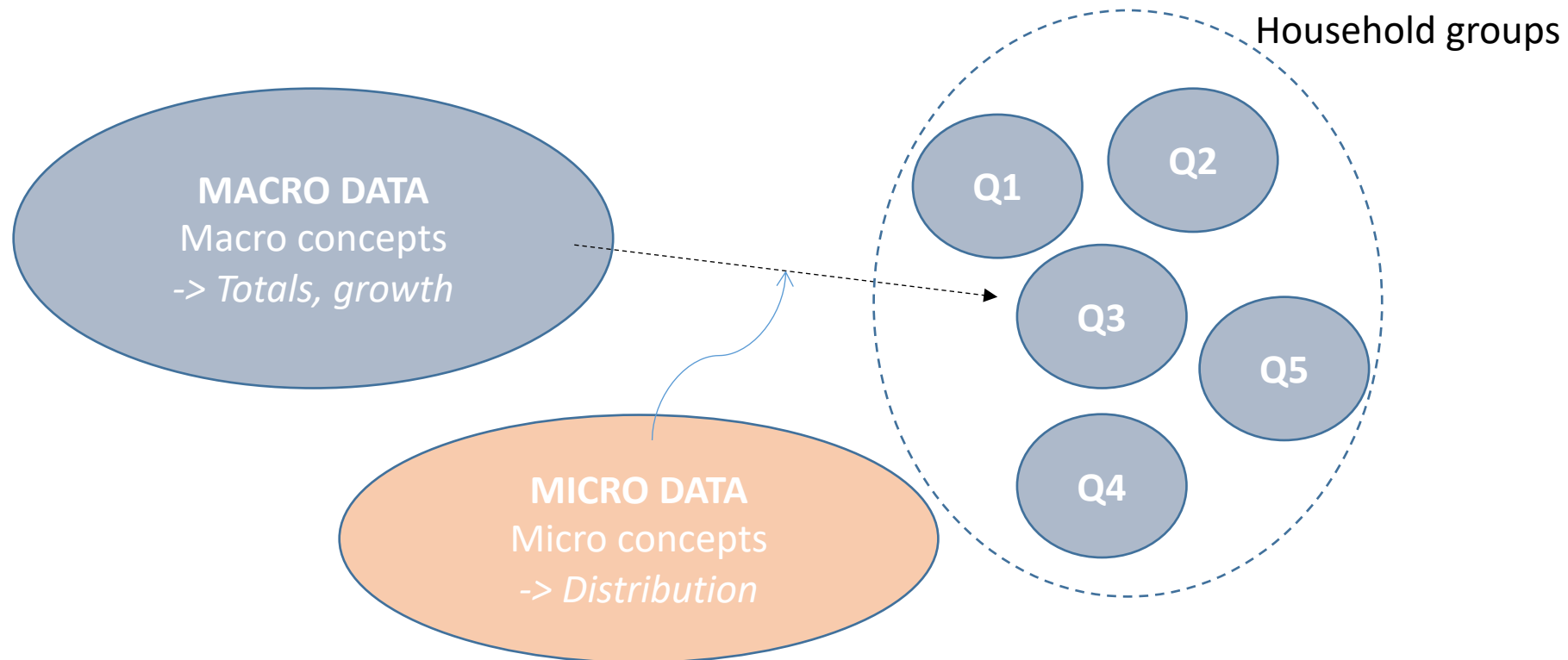
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Aim of the project

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Develop methodology to produce **distributional** results for household **income, consumption and wealth** consistent with national accounts concepts using micro data sources
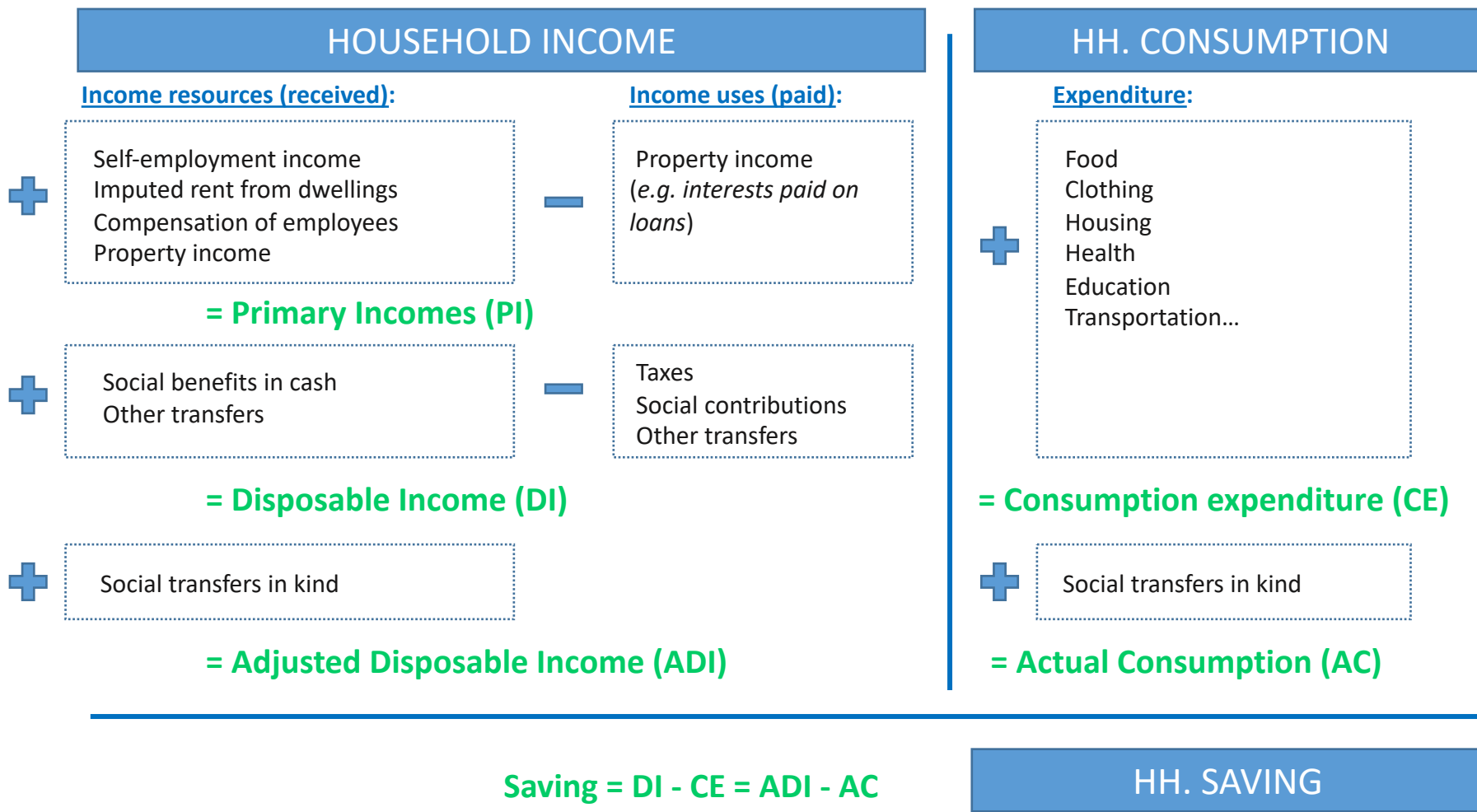
Household groups

MACRO DATA
Macro concepts
-> *Totals, growth*

MICRO DATA
Micro concepts
-> *Distribution*

Q1 Q2 Q3 Q4 Q5

The work of the EG DNA

- Distributional results for three household groupings:
  - Disposable income quintile (5 groups)
  - Main source of income (4 groups)
  - Household type (8 groups)
- The unit of analysis is the household
- OECD-modified equivalence scale is used to allocate households to quintile groups
- Also collection of socio-demographic information (age, gender, education level, housing status, etc.) accompanying the distributional results
- Calculations performed by members of the group: AUS, AUT, BEL, CAN, CHE, CZE, FRA, GBR, IRL, ISR, ITA, JPN, KOR, MEX, NLD, NZL, PRT, SVN, SWE, USA, …
- Centralized approach to compile results for countries not engaging in work
- Results have been included in online databases of OECD and Eurostat
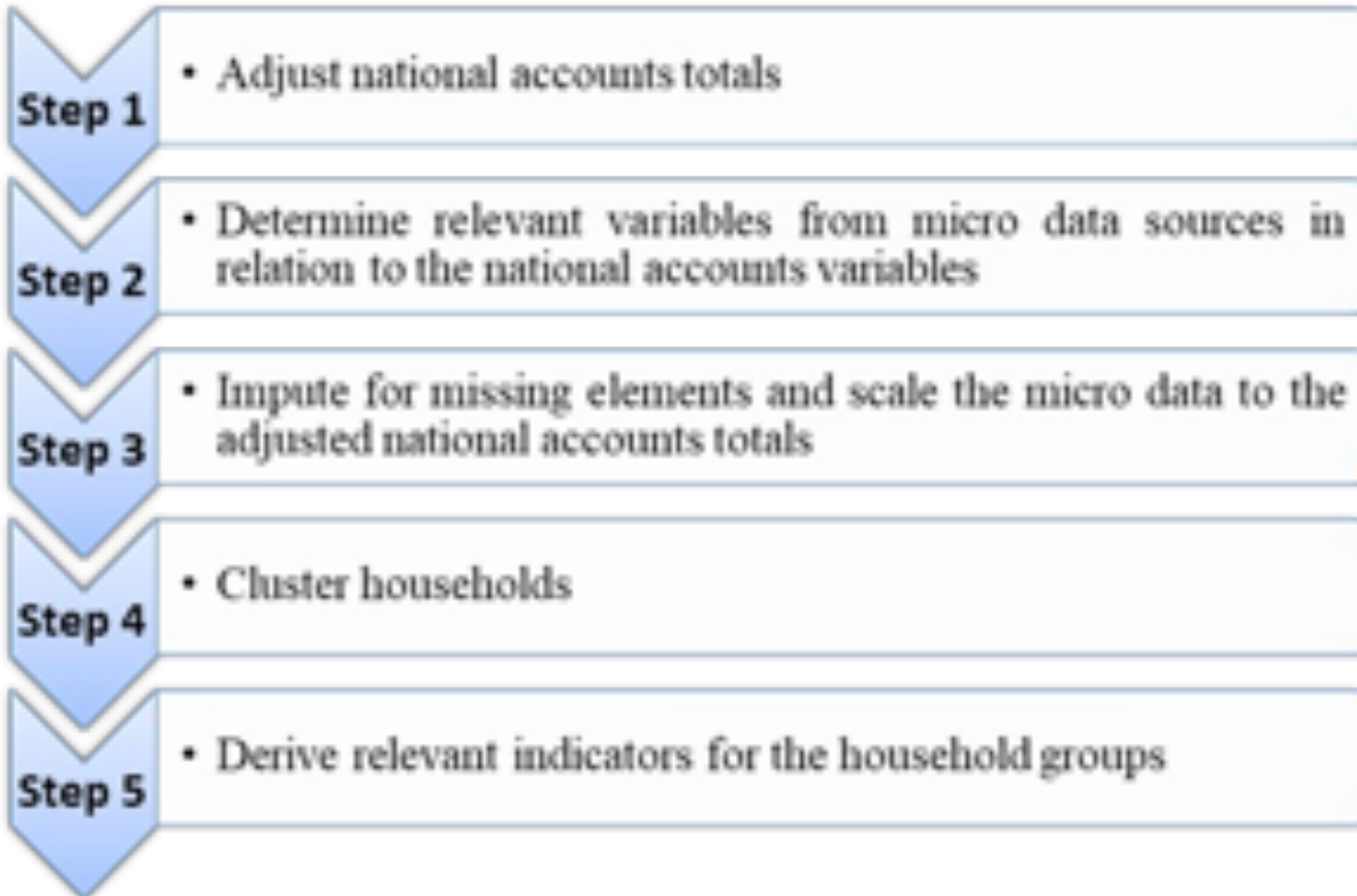
Income and consumption concepts

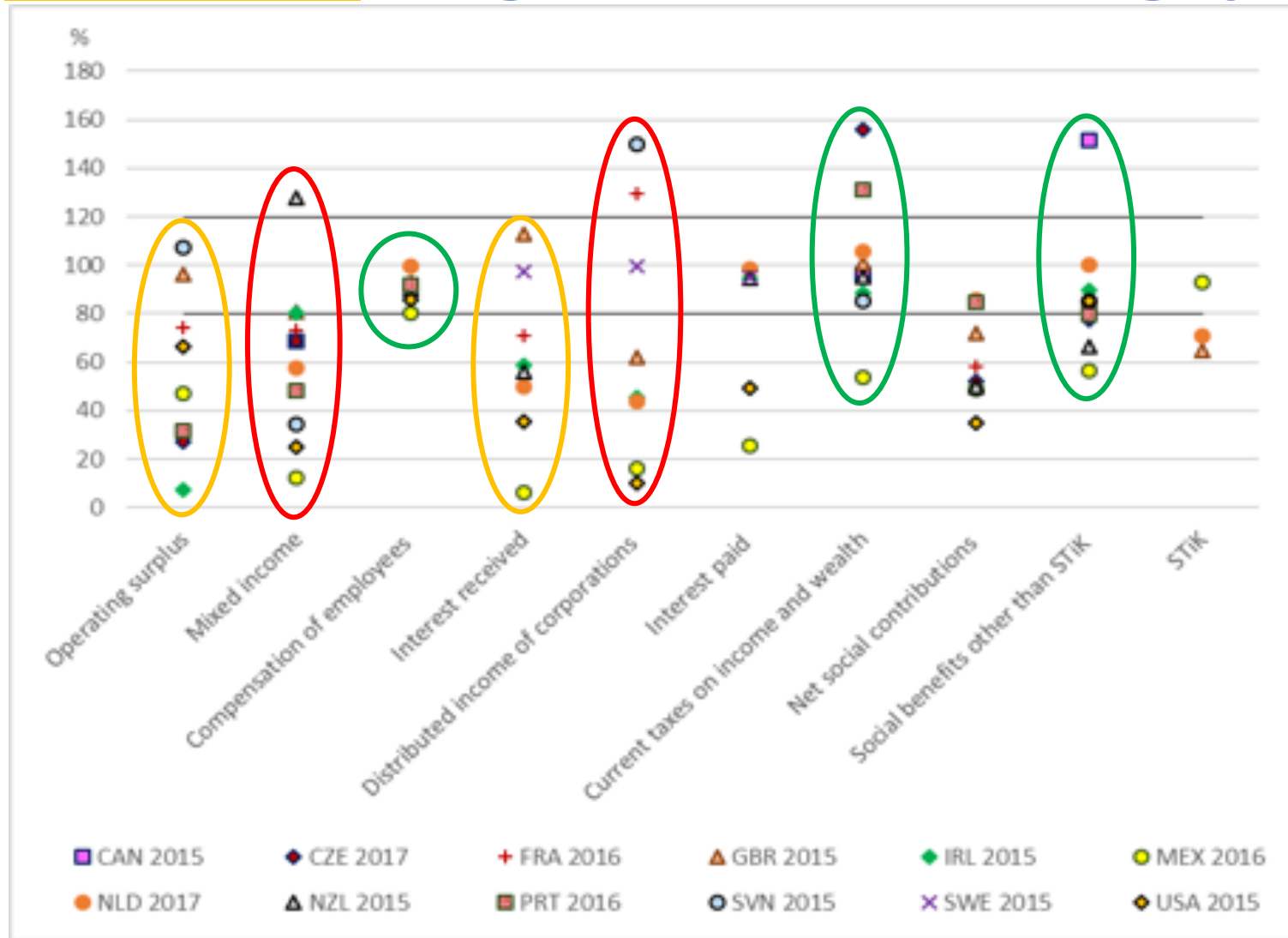| HOUSEHOLD INCOME		HH. CONSUMPTION

Income resources (received):

+ Self-employment income
  Imputed rent from dwellings
  Compensation of employees
  Property income

− Property income
  (*e.g. interests paid on loans*)

Income uses (paid):

= Primary Incomes (PI)

+ Social benefits in cash
  Other transfers

− Taxes
  Social contributions
  Other transfers

= Disposable Income (DI)

+ Social transfers in kind

= Adjusted Disposable Income (ADI)

Expenditure:

+ Food
  Clothing
  Housing
  Health
  Education
  Transportation...

= Consumption expenditure (CE)

+ Social transfers in kind

= Actual Consumption (AC)

Saving = DI - CE = ADI - AC

HH. SAVING

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Basic methodology

Basic methodology

Step 1
- Adjust national accounts totals

Step 2
- Determine relevant variables from micro data sources in relation to the national accounts variables

Step 3
- Impute for missing elements and scale the micro data to the adjusted national accounts totals

Step 4
- Cluster households

Step 5
- Derive relevant indicators for the household groups

Main challenge: Micro-macro gaps

Relatively good alignment for
- Compensation of employees
- Current taxes
- Social benefits in cash

Poor alignment for
- Mixed income
- Distributed income of corp's

Also relatively large gaps for
- Operating surplus
- Interest received

A close collaboration is needed between social statistics' experts and national accountants to understand and close the gaps!!
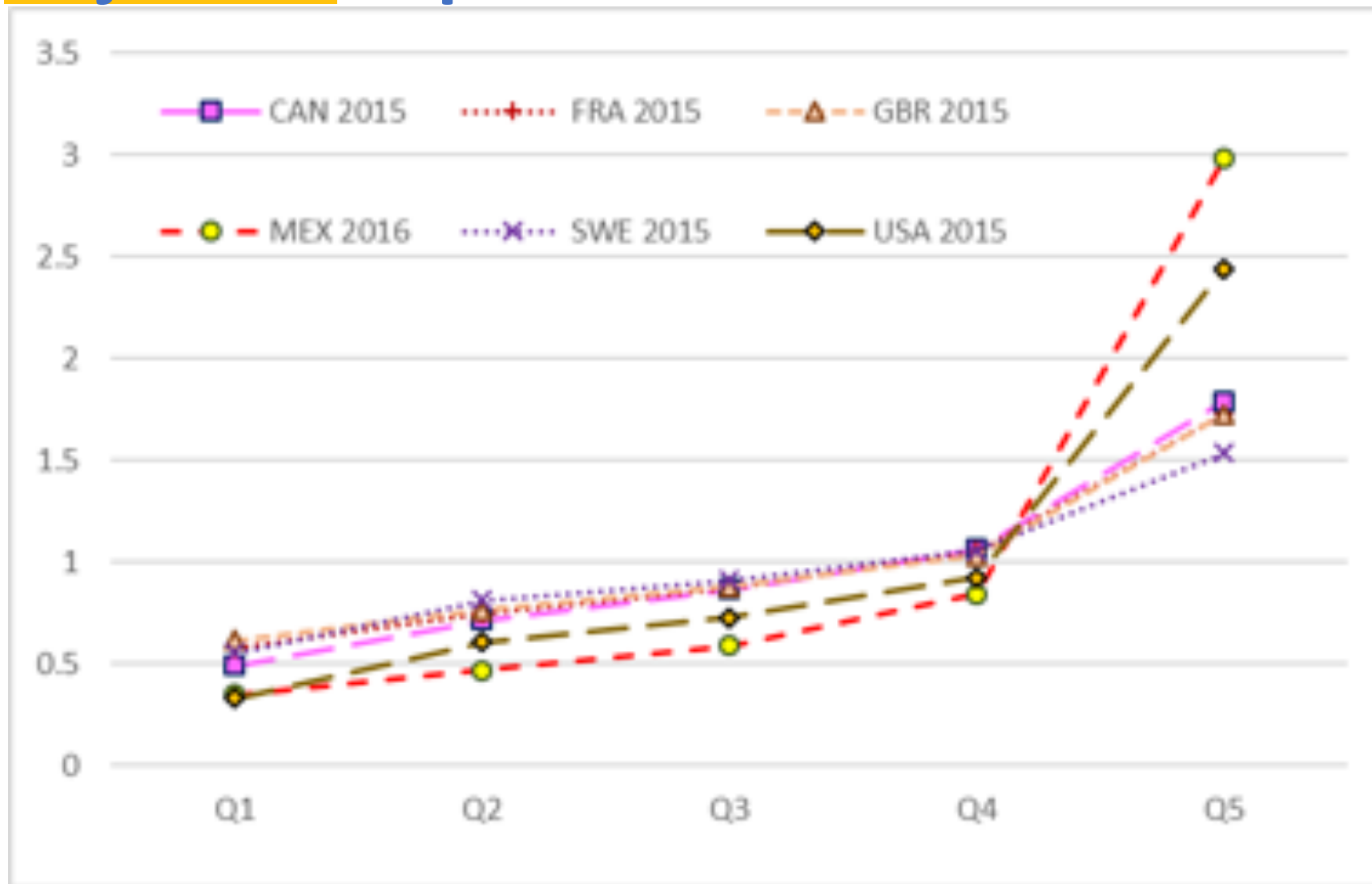
Chart categories (x-axis): Operating surplus, Mixed income, Compensation of employees, Interest received, Distributed income of corporations, Interest paid, Current taxes on income and wealth, Net social contributions, Social benefits other than STiK, STiK

Legend:
- CAN 2015
- CZE 2017
- FRA 2016
- GBR 2015
- IRL 2015
- MEX 2016
- NLD 2017
- NZL 2015
- PRT 2016
- SVN 2015
- SWE 2015
- USA 2015

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Results

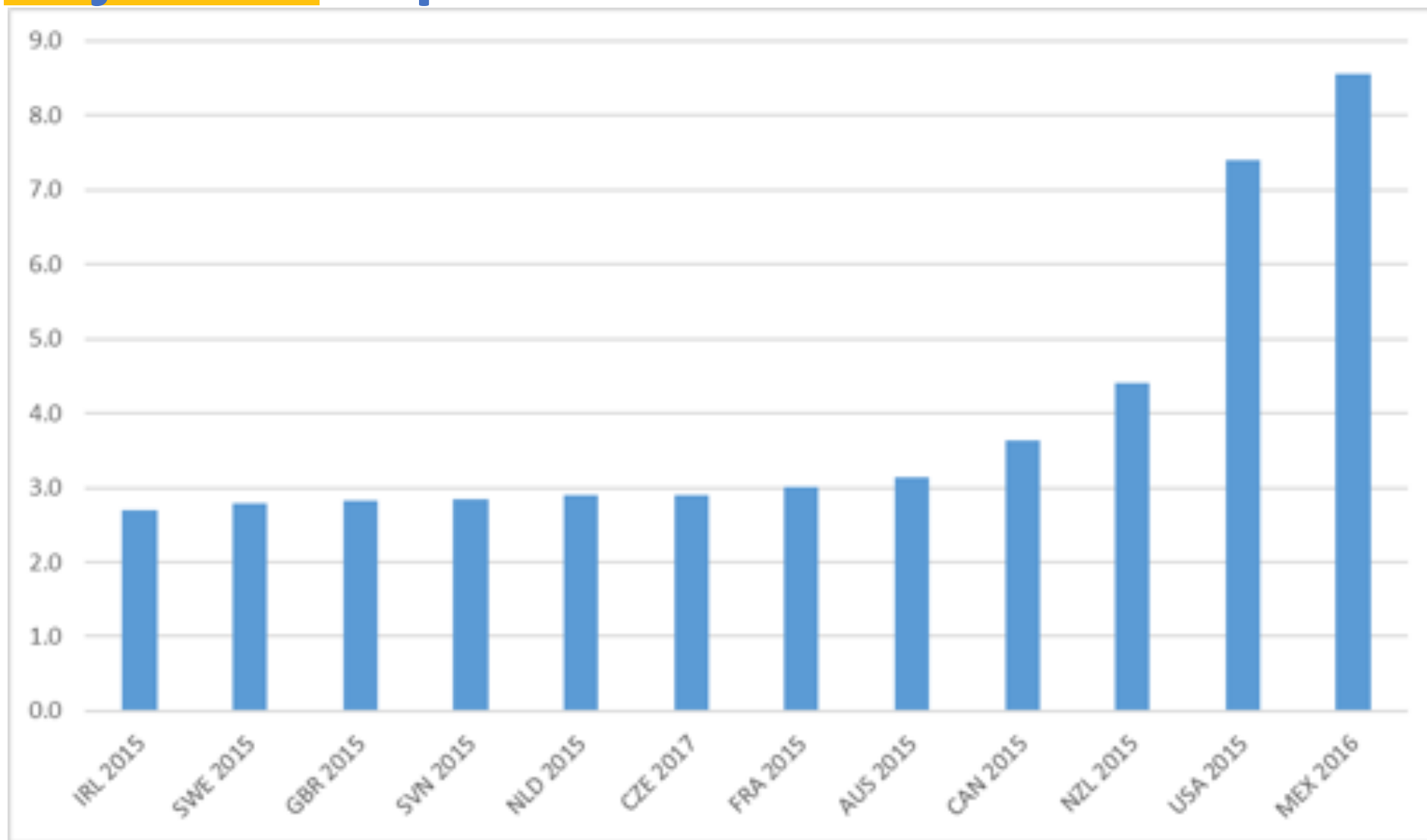https://doi.org/10.1787/615c9eec-en

Results: Ratio to the average Adjusted disposable income

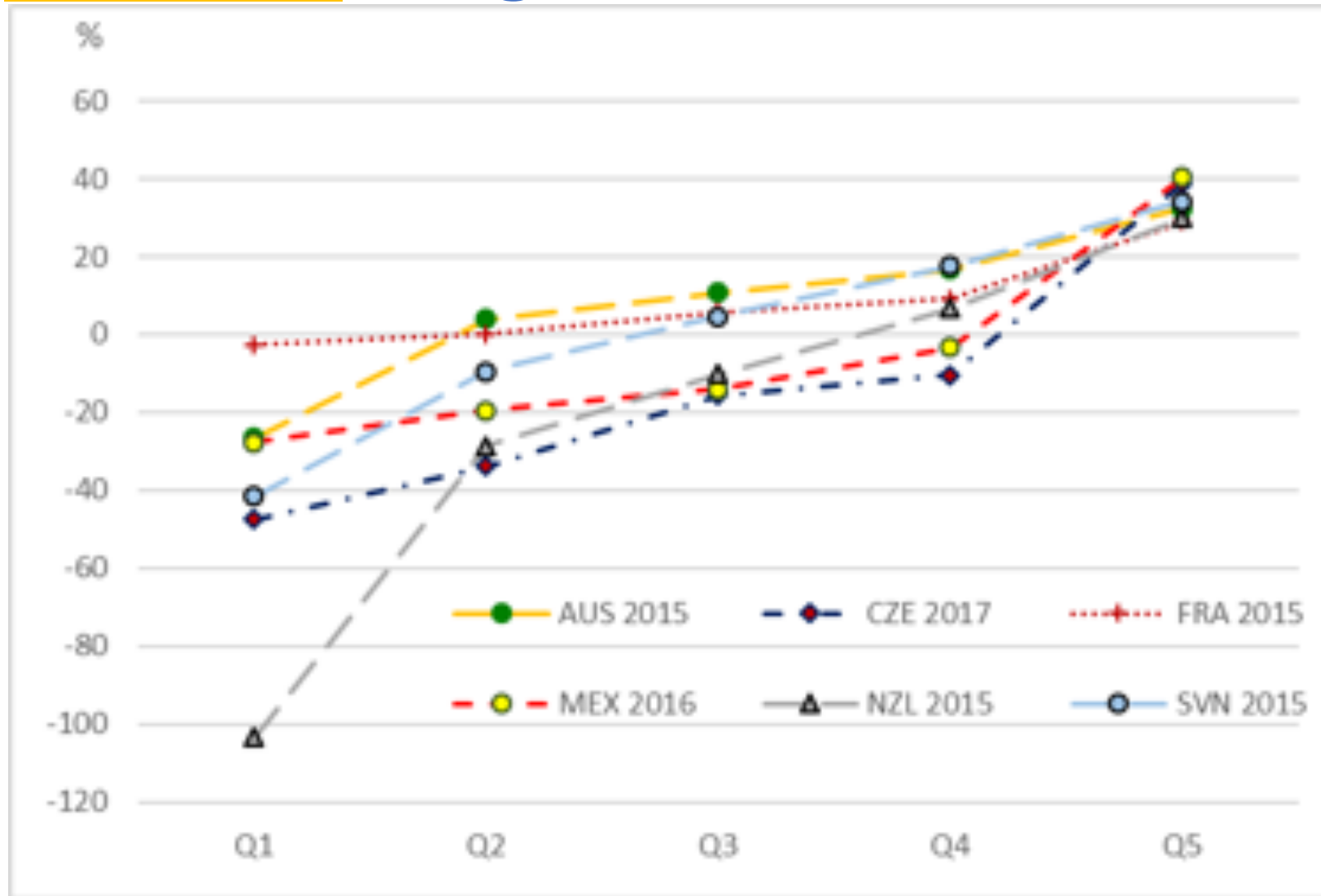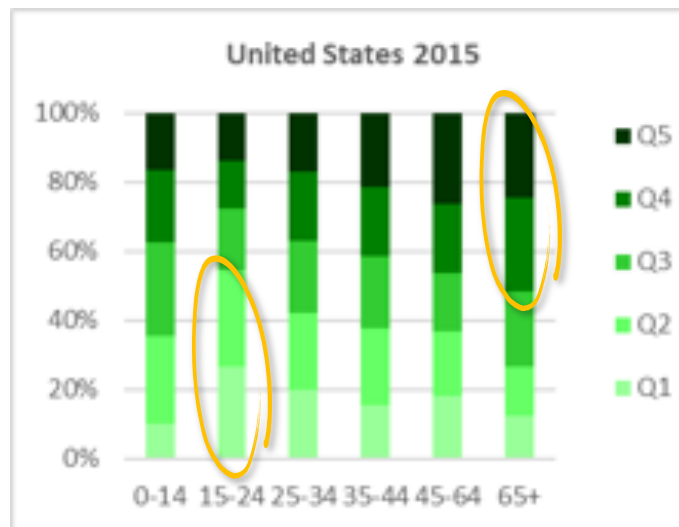# Results: Ratio highest to lowest (Q5/Q1) Adjusted disposable income

Results: Saving ratio
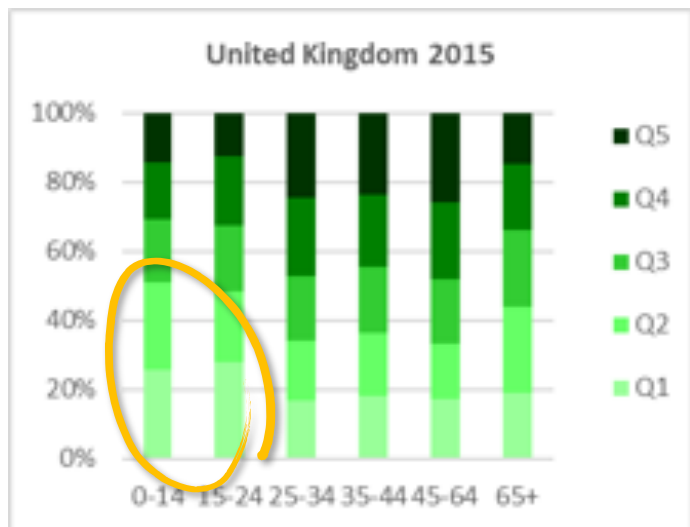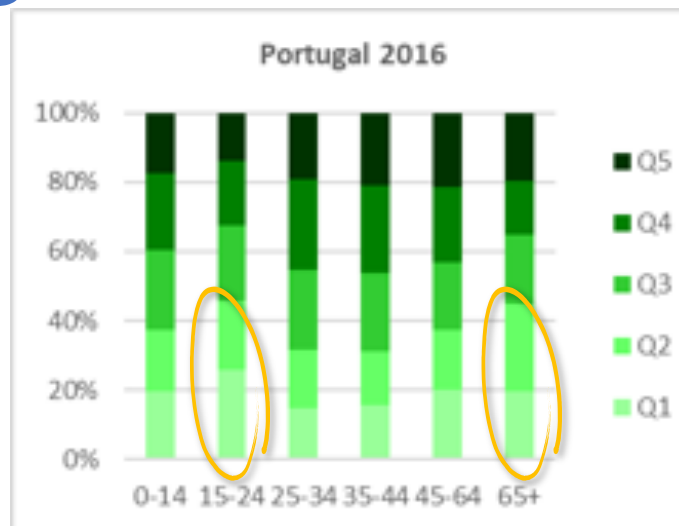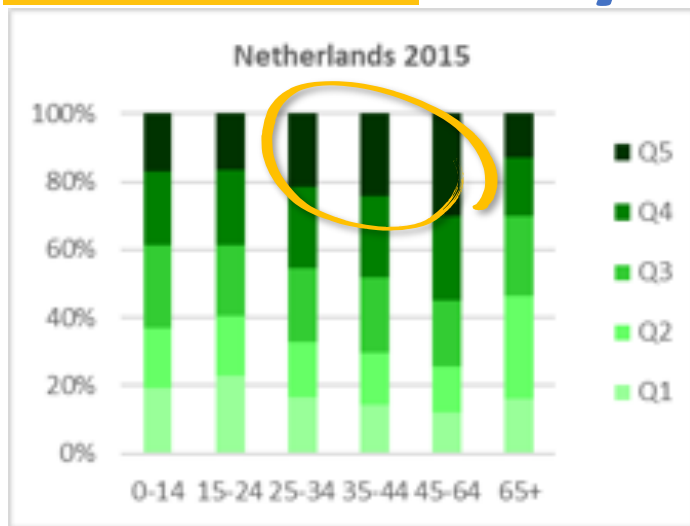
Results: Socio-demographic information Breakdown by age

Netherlands 2015 / Portugal 2016 / United Kingdom 2015 / United States 2015 — stacked bar charts showing income quintile (Q1–Q5) breakdown by age group (0-14, 15-24, 25-34, 35-44, 45-64, 65+)

Younger persons more concentrated in lower income quintiles in GBR

In US group 15-24 tends to be in lowest income quintiles

Relatively strong concentration of 65+ in higher income quintiles in US

Persons in middle age groups have highest income in NLD

Homogenous composition in PRT, with slightly larger concentration of 15-24 and 65+ in lower quintiles

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Comparison with WID.world

Comparison with WID.world

- Both projects target distributional data in line with national accounts

- However, they use slightly different concepts and methods, e.g.:

  - Income concept: EG DNA focuses on adjusted household disposable income, WID.world on national income, i.e., also including income of other sectors in the economy

  - Target population: EG DNA targets private households, WID.world adult individuals

  - Methodology: Different data sources and assumptions may be applied with regard to micro-macro gaps and imputations

- Differences may give rise to different outcomes

- Good understanding is key to assist users in assessing which measure best suits their purpose

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Main differences on income side

Comparable SNA measure	Pre-tax factor income	Pre-tax national income	Post-tax disposable income	Post-tax national income
Primary income of HH sector	X	X		
HH disposable income			X	
HH adjusted disposable income				X
Differences with SNA measure				
Taxes less subsidies on production	+	+		
Primary income of corporations	+	+	+*	+*
Primary income of government (net of taxes less subsidies on production)	+	+	+	+
Gap between pension contributions and benefits		+	+	+
Net other current transfers			-	-
Collective consumption				+
Government surplus				+

* Net of current taxes paid

Next steps

Next steps

- Next steps for EG DNA:

  - Broaden the range of countries, amongst other via a centralized approach

  - Explore possibilities to increase granularity, timeliness and frequency

  - Further improve methodology, particularly in areas of micro-macro gaps and imputations

- Next steps in the area of wealth distribution:

  - Launch of an Expert Group on Distribution of Household Wealth (EG DHW): Development of distributional results on wealth for a large range of countries, leveraging of the work of the ECB Expert Group on Distributional Financial Accounts

THANK YOU

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