



ECONOMIC WELL-BEING IN OECD COUNTRIES: CONCEPTUAL AND MEASUREMENT CHALLENGES

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The issue





Going Beyond GDP

➤ **Main conclusion of Sliglitz-Sen-Fitoussi Commission:**

- Focus should be on **people's well-being** rather than on the economy at large (i.e. GDP)

➤ **The current international economic policy environment is characterised by:**

- Low growth, low productivity, significant differences in economic performance across countries
- Persistent inequalities in many countries
- **Need to deliver an inclusive and sustainable growth**



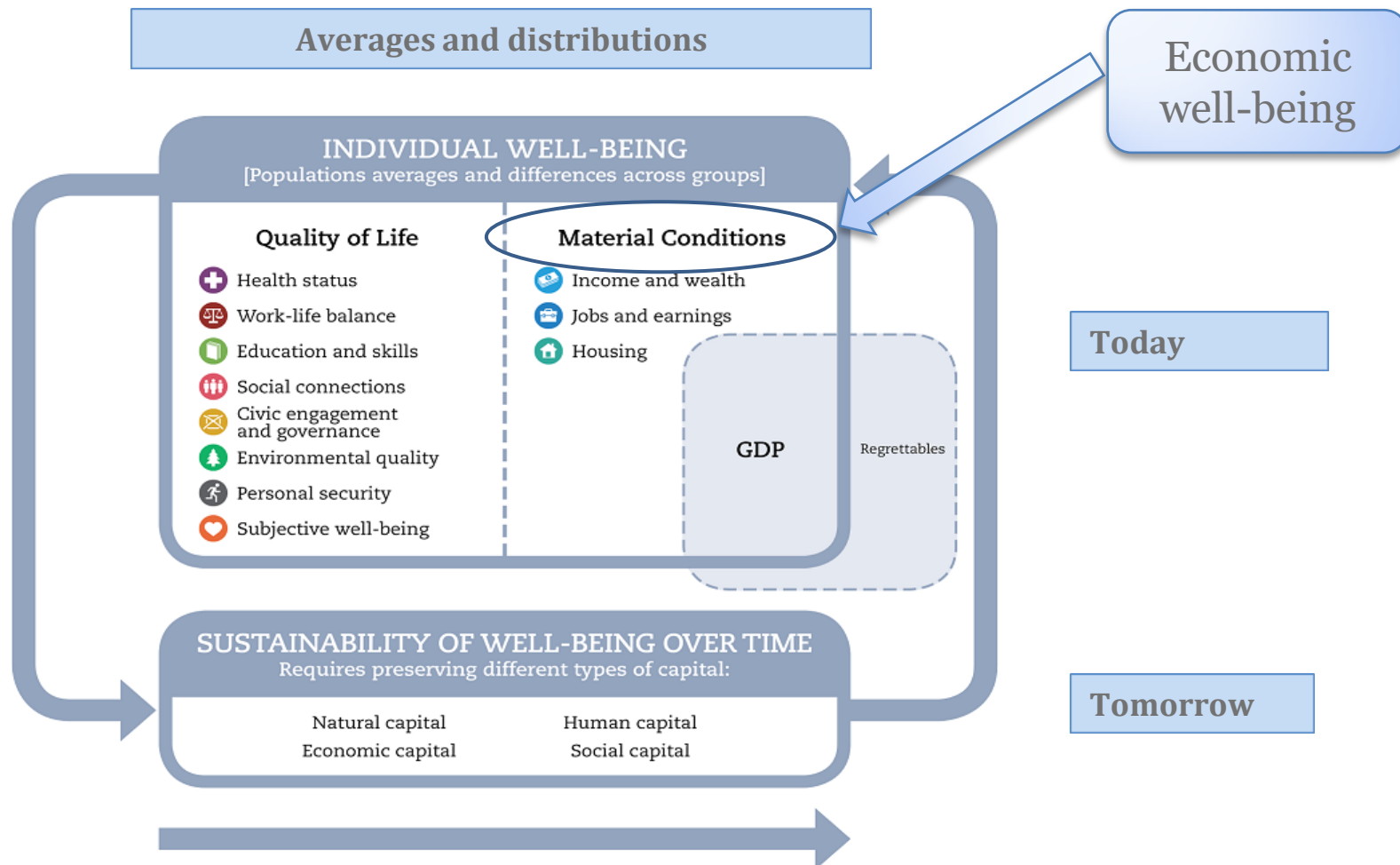
Well-being at the centre of the policy discourse

Not only economic well-being and but also quality of life
→ **well-being is multi-dimensional and inequalities in all dimensions matter**



OECD framework of well-being and societal progress

A multi-dimensional **micro** perspective, **averages and distributions**

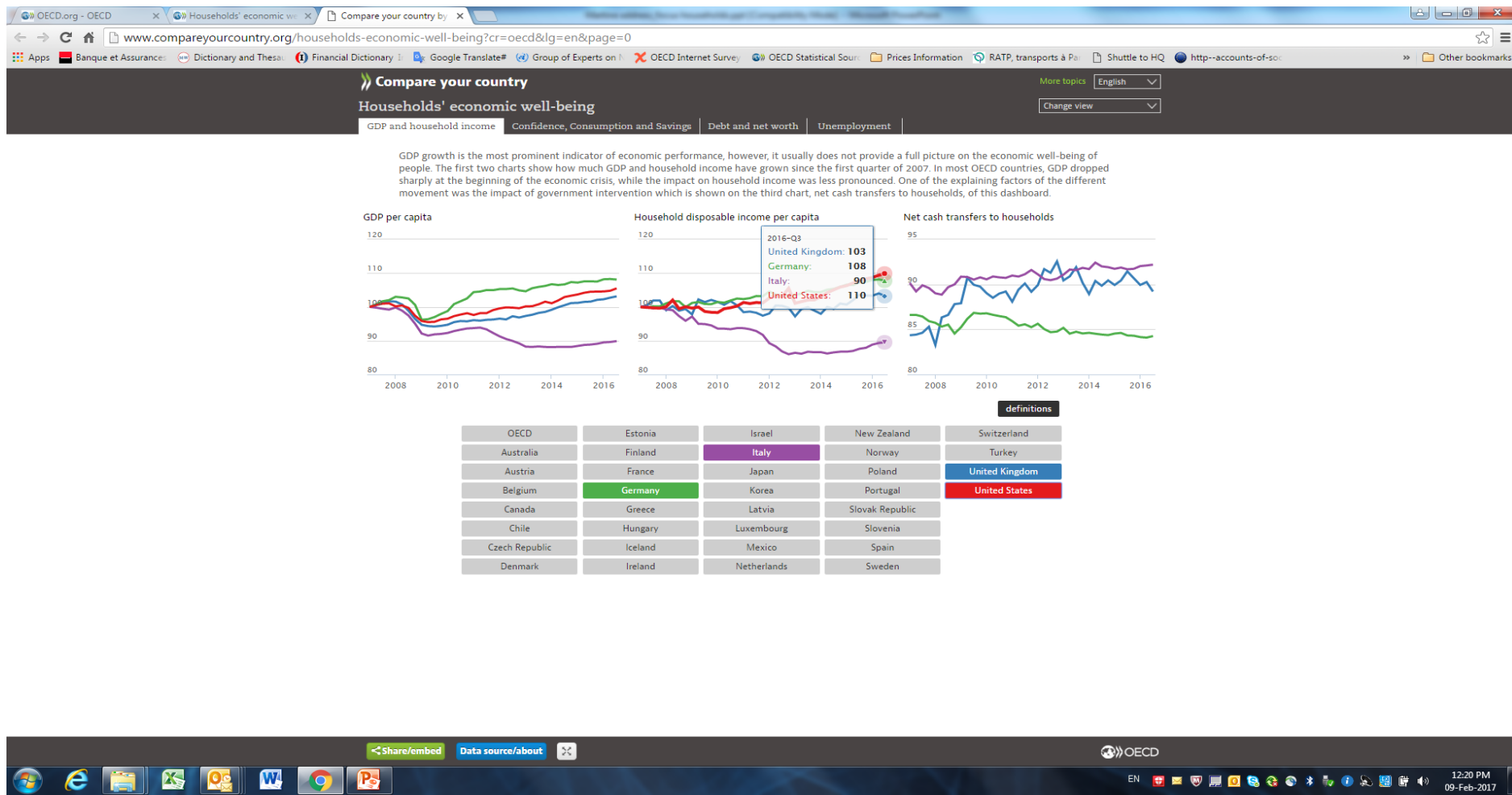




The OECD Household Dashboard of economic well-being

A multidimensional **macro** perspective, **averages only**

- GDP and household income – 3 indicators; Confidence, consumption, and savings – 3 indicators; Debt and net worth – 2 indicators; Unemployment and under-employment – 2 indicators





The statistical agenda for (economic) well-being

- **Conceptual:** *what is economic well-being?*
 - It can be defined as **people's command over resources**
 - As a first step, **economic well-being can be proxied by income, consumption and wealth (ICW)**
 - But should we **adjust existing concepts?**
 - And should we **extend the ICW framework ?**

- **Measurement:** *what is the quality of existing measures?*
 - ICW measures come from different micro data sources: **how to get good measures of ICW levels and inequalities at micro level?**
 - ICW are different across micro and macro sources: **how to bridge the micro-macro gap?**
 - Beyond ICW, **how best to measure other aspects of well-being?**
 - And **how to design policy relevant indicators?**



Outline

- 1. The ICW framework**
- 1. Bridging the micro-macro gap**
- 2. Other selected aspects of well-being**
- 3. Well-being and policy**
- 4. Conclusions**



1. The ICW framework



Significant advances in micro statistics on **income**

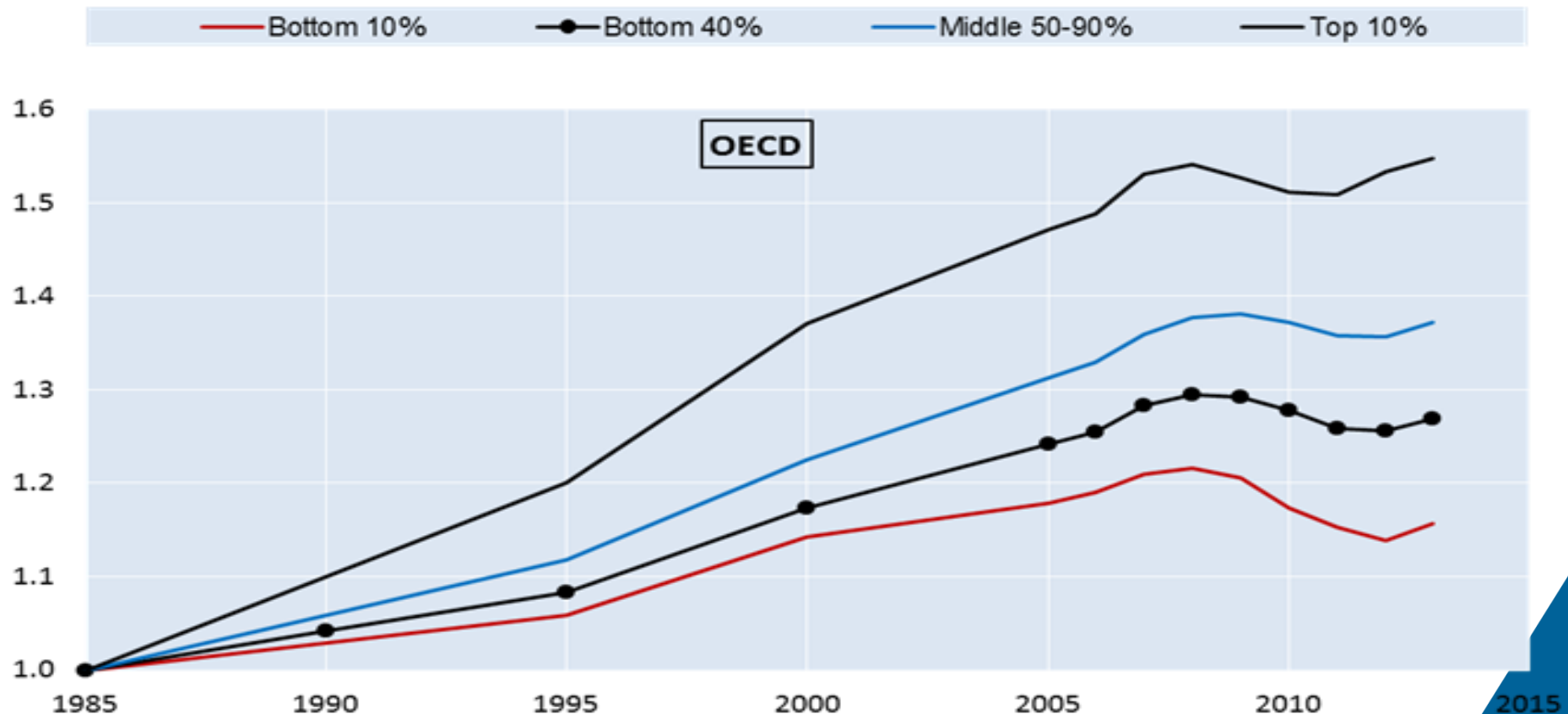
- **Measurement of household income is in a very different place today relative to 20-30 years ago:**
 - International standards (Canberra 2001, ICLS 2003, Canberra 2011)
 - All OECD countries produce income distribution data as part of their official statistics through household surveys; administrative registers or a mix of the two sources

- **OECD data collection since late 1990s focuses on:**
 - Cross-country comparability
 - Over time consistency with same data-source used (differently from LIS)
 - More timely estimates (annual collection + nowcasting experiments)



An illustration: widening income inequality over the medium-term...

Real household disposable income, OECD average
index 1985=1.0

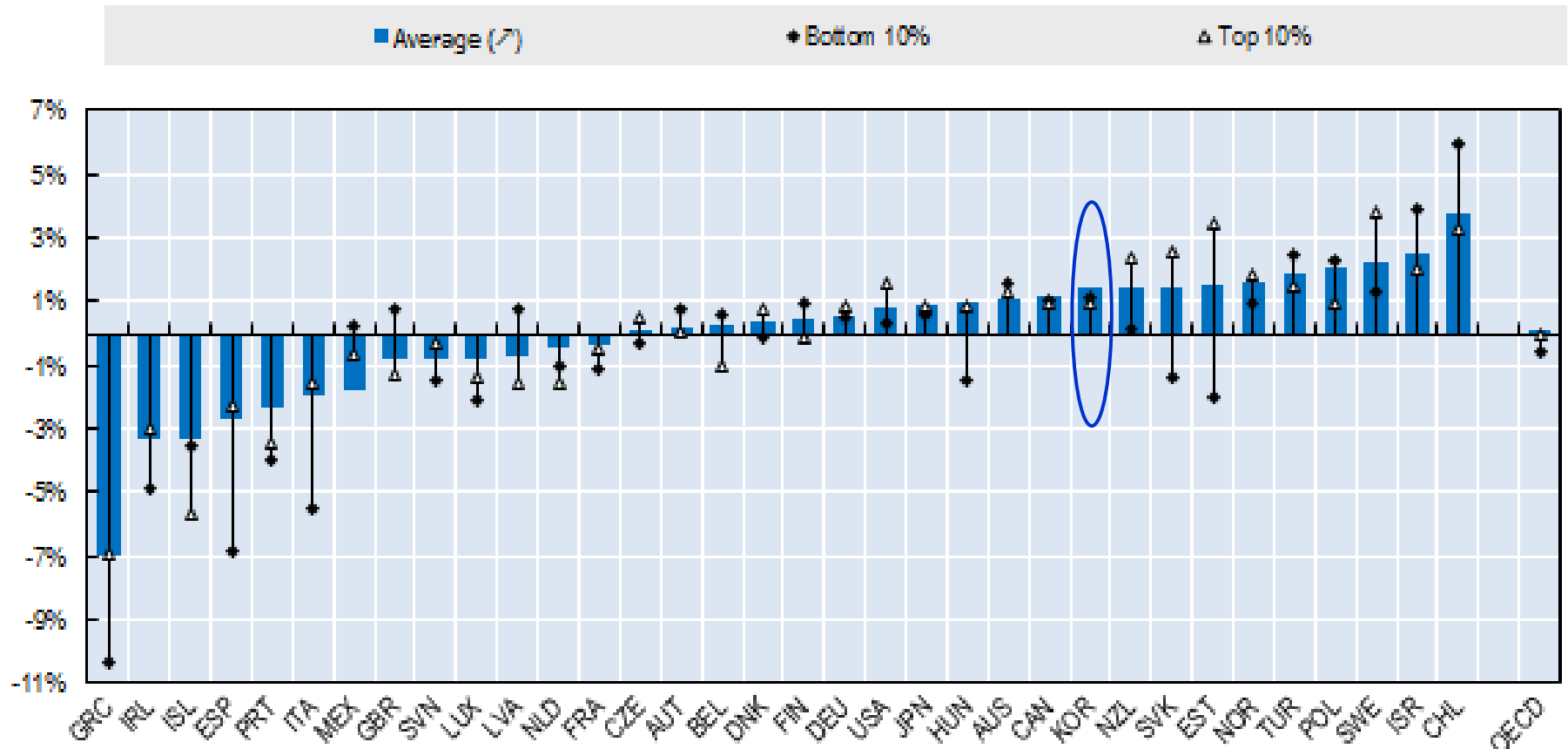


Source: OECD Income Distribution Database; Unweighted average over 17 countries



... and shorter-term developments since the crisis

Growth in real disposable income between 2007 and 2014
by income group, total population



Source: OECD Income Distribution Database



But significant challenges remain (1)

➤ Limits in income concept:

— Income estimates generally exclude

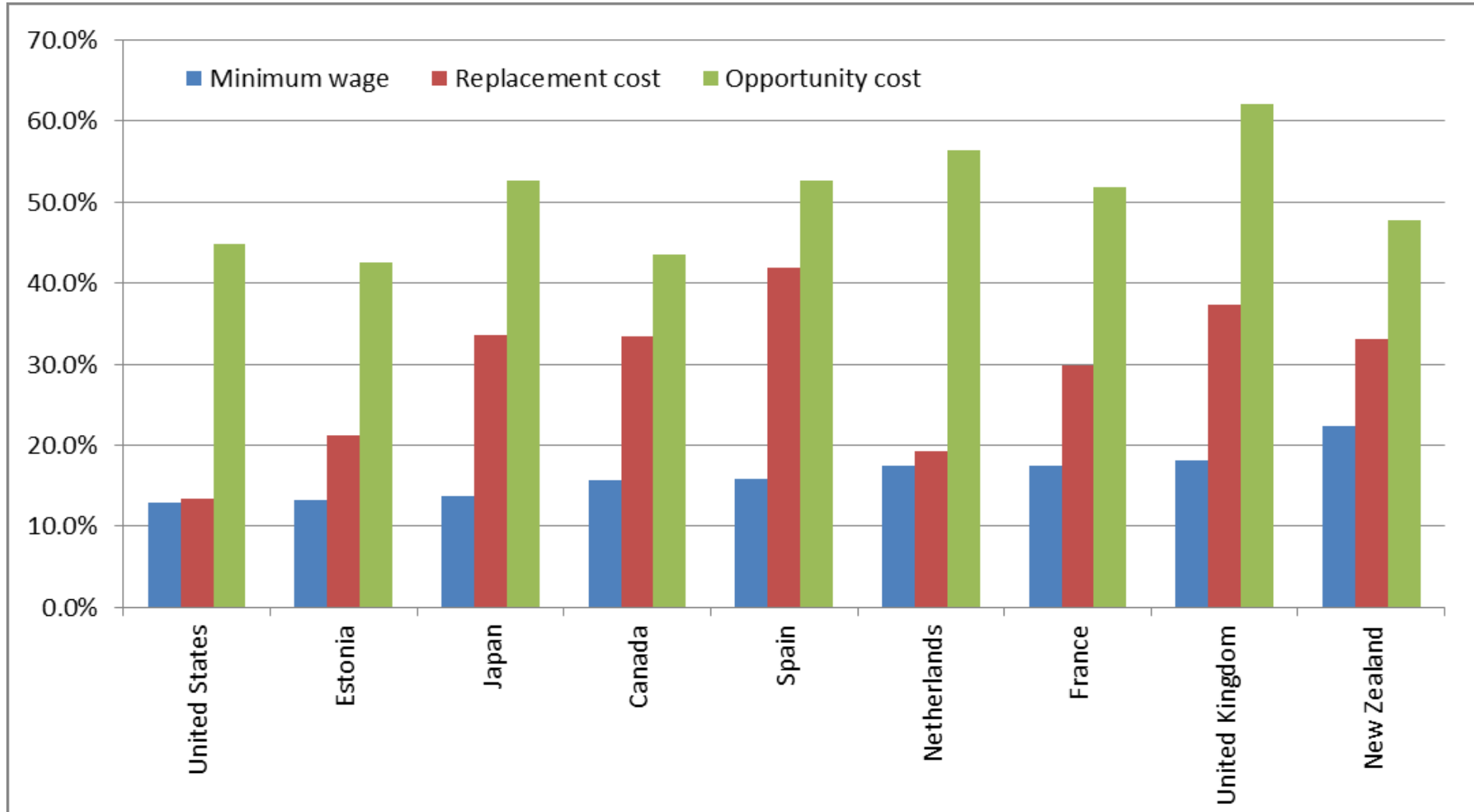
- **Imputed rents** [~12% of hh income on average]
- **Social transfers in kind** [~25% of hh income on average]
→ As unevenly distributed, their omission has an impact on income inequality and poverty estimates
- **Unpaid household activities**
→ Truly important activities for (economic) well-being





An illustration: unpaid household activities are economically significant

as % of GDP





But significant challenges remain (2)

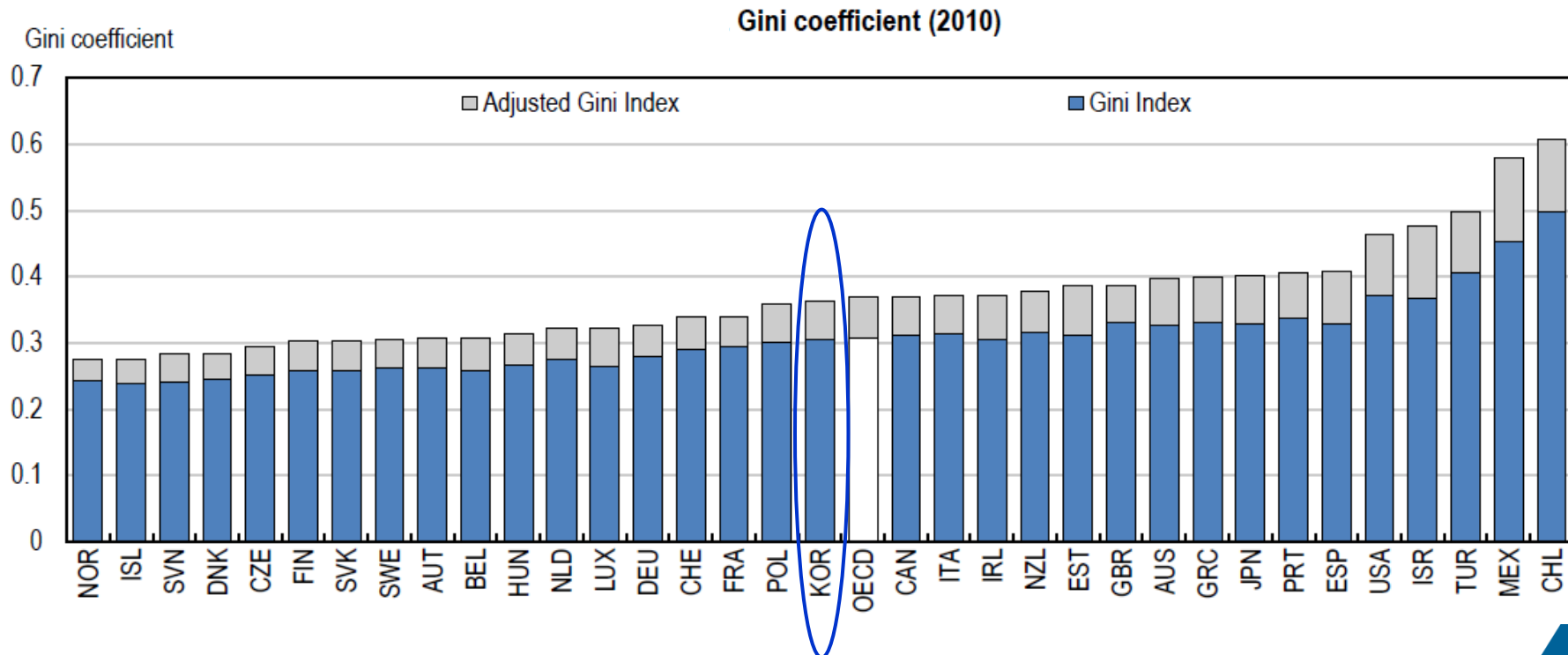
- **Limits in measurement:**
 - **Measuring household unpaid activities:**
 - Valuation of cost of labour; valuing capital used in production
 - Need better and more timely **Time Use Surveys**
 - Combining this information in a satellite account
 - **Low capacity to capture tails of distribution:**
 - **Top end:** most surveys do not cover the very rich due to both under-reporting by respondents and under-coverage
 - **Bottom end:** most surveys limited to non-institutional populations; non-reporting of “illegal” revenues
 - **Metrics**
 - Most distributive analyses are based on ‘static’ summary measures (Gini, S80/S20, Palma ratio) sensitive to various parts of distribution
 - Need for more ‘dynamic’ measures of “who gets what”(e.g. B. Milanovic’s growth incidence curve), requires data consistency over time



An illustration: omitting the top 1%

- OECD estimate based on (crude) assumption that top-end of distribution follows Pareto law, with coefficients compared to those from WTID

OECD Gini rises from 0.31 to 0.37, S100/S10 from 10 to 15



Source: N. Ruiz and N. Wołoszko (2016), “What do Household Surveys Suggest about the top 1% Incomes and Inequality in OECD Countries?”, OECD Econ. Dept. WP



Some recent advances in micro statistics on **wealth**

- **Wealth statistics stand today where income distribution stood 20 or 30 years ago**
 - no international standards
 - but an emerging area for research : *Luxembourg Wealth Study* (2007+, 11 OECD countries); *Credit Suisse Global Wealth Database* (2010); *Eurosystem Household Finance and Consumption Survey* (2012, 13 OECD countries); *World Wealth & Income Database* (2016, 4 countries)
- **Since 2015, OECD data collection**
 - based on 2013 *OECD Guidelines for Micro Statistics on Household Wealth*
 - 18 countries in 2015, 32 in 2017 (but limited time series)



The 2013 OECD Guidelines for Micro Statistics on Household Wealth

➤ **Measurement framework**

- Similar to SNA (opening and closing stocks)
- changes in stocks reflect savings, holding gains/losses, inheritances/ intra vivo transfers
- But specific focus on ‘distribution’ rather than SNA focus on ‘composition’

➤ **Measurement approach**

- Measurement of various types of assets and liabilities, by household types (income, age and education)



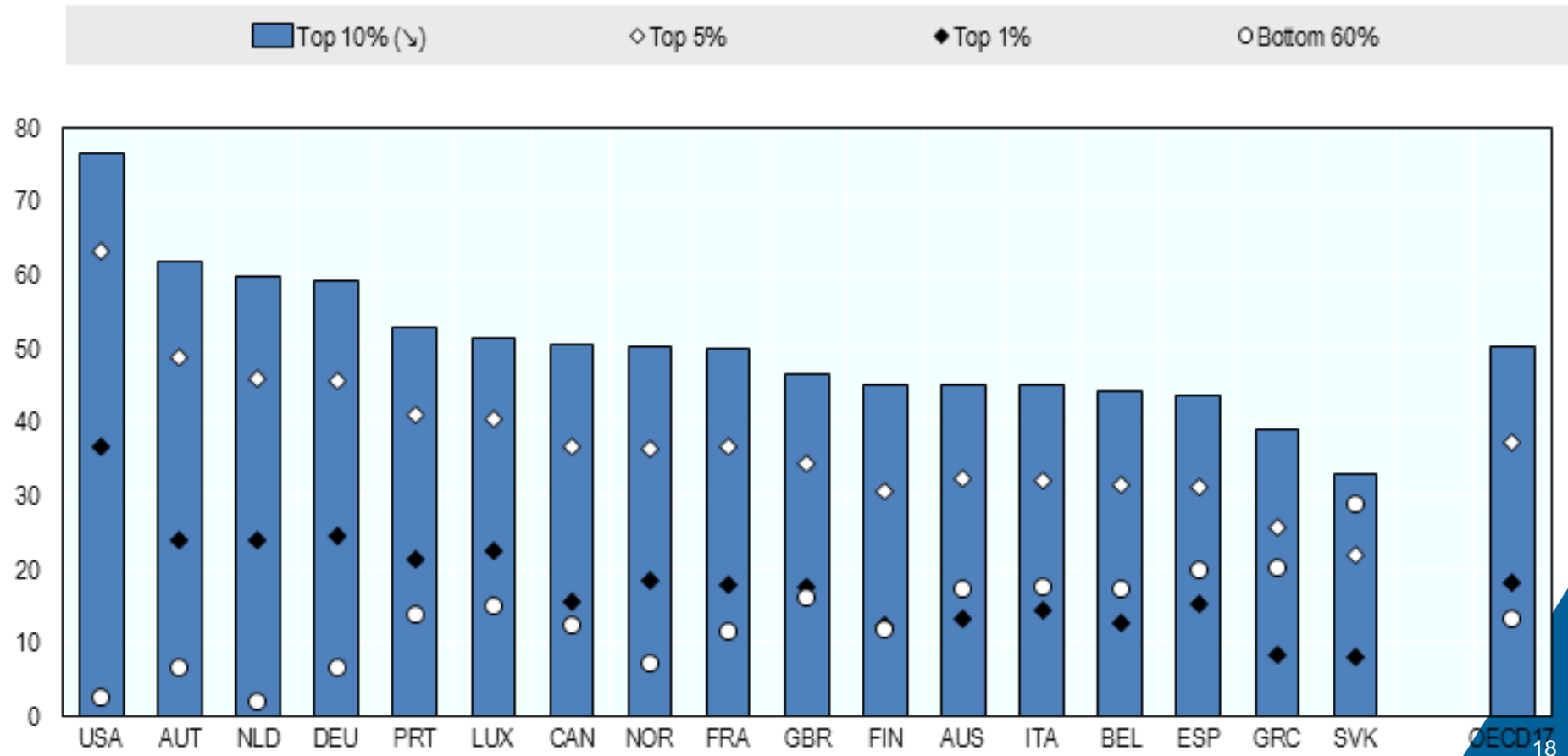
OECD Guidelines
for Micro Statistics
on Household
Wealth





An illustration: there are big differences in wealth inequalities across OECD countries

Share of household wealth held by households in different percentiles of the wealth distribution





But persistent problems remain

- **Limited coverage of some assets:** consumer durables, pension wealth, business assets, stock options, bequests, capital transfers
- **Differences in methods of data collection:** registers in Nordic countries, surveys in most others
- **Differences in country practices** in measuring specific items: e.g. in the case of housing wealth, self-reports, historic costs or market prices



Important to look at joint distribution of ICW

➤ Rationale

- Looking at different types of economic resources jointly (rather than in isolation) allows **better identifying people in distressed or advantaged conditions**, and better targeting of policies
- While income, consumption and wealth are correlated at the micro-level, **the correlation is far from perfect**

➤ First analyses of inequalities in 2D already happening

- Eurostat estimates on income/consumption (2D) in the fall
- OECD estimates of asset-based poverty (2D)

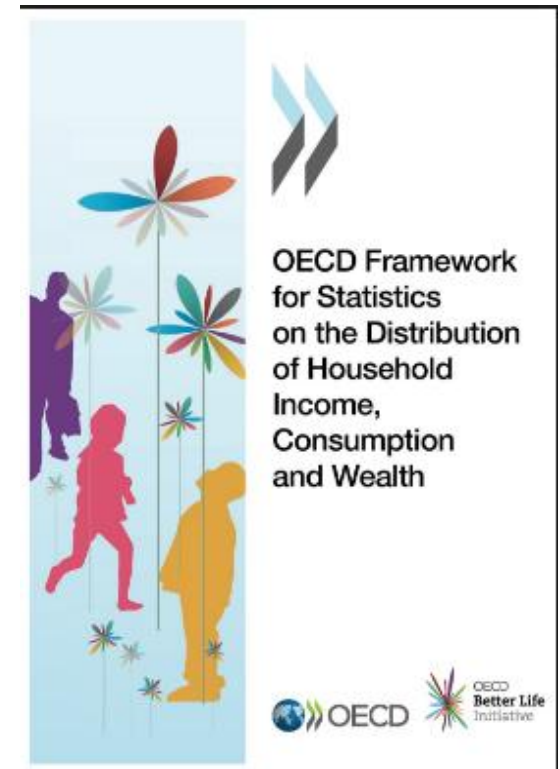
➤ Research starting on inequalities in 3D

- **US analyses** on income/consumption/wealth (3D), Smeeding/Johnson
- **OECD project on inequality in 3D to be launched in fall 2018**
 - based on **2013 OECD Framework for Statistics on Distribution of Household Income, Consumption and wealth**
 - involving country teams

2013 OECD Framework for Statistics on Distribution of Household Income, Consumption and Wealth

Provides guidance on :

- **Accounting framework** linking household income, consumption and wealth at the household level
- **Choices of units of analysis** (persons or households), **measures** (equivalised or not)
- **Collection of quality data on all elements needed** to populate the framework, with either “joint collection” or statistical matching
- **Choice of indicators** in 2D and 3D

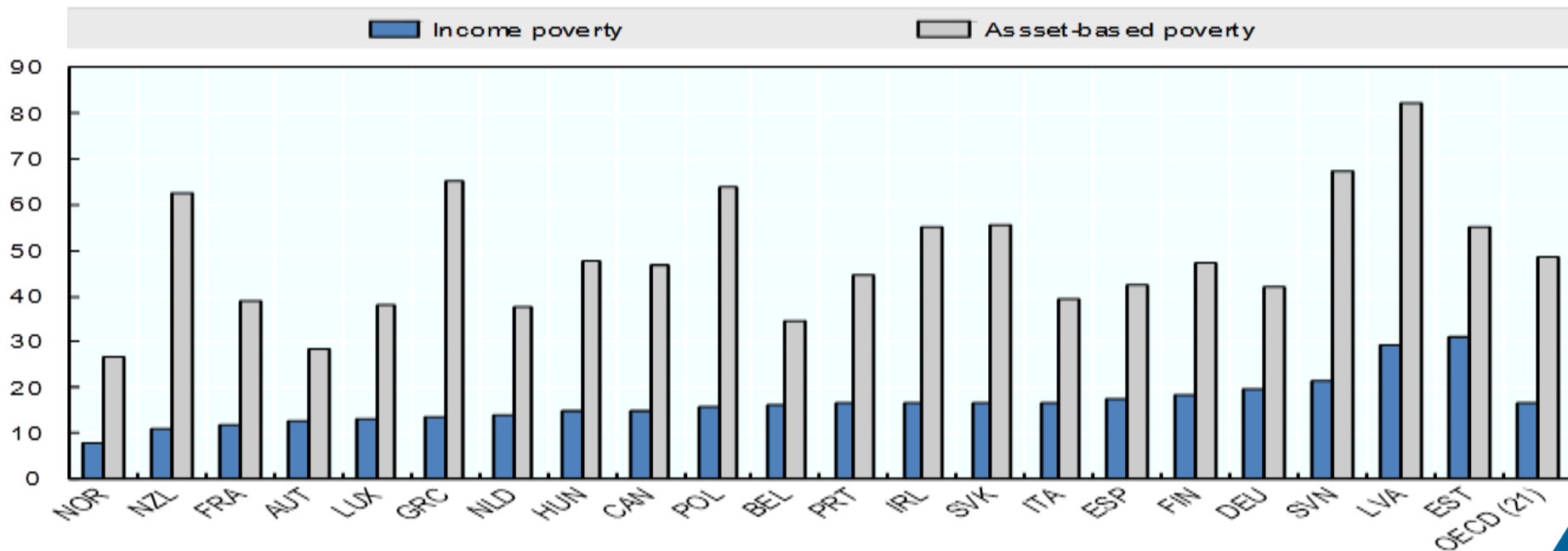




A 2D illustration: 50% of individuals are economically vulnerable in the OECD

On average, across the OECD, almost 1 in 2 individuals holds liquid financial wealth below 25% of the income poverty line

Share of income poor and asset-based poor, latest available year



Note: income poor are those with equivalised gross disposable income below 50% of the median gross income in each country. Asset-based poor are those with liquid financial wealth below 25% of the income poverty line.



A lot remains to be done to improve information on the joint distribution of ICW

➤ **Further improvement of micro-data needed:**

- General lack of micro-data on consumption
 - *Atkinson Commission on Global Poverty* called for a Statistical Working Group on household consumption statistics
- Inconsistencies between income, consumption and wealth data
- Better linking of available data and mutualisation of data strengths
 - Administrative registers and surveys
- Statistical tools should be explored
- Curse of dimensionality:
 - as the number of dimensions of interest increases, the required sample size may explode (very costly to go beyond 3D).



2. Bridging the micro-macro gap



Linking GDP and Income Inequality

➤ Rationale

- Assessing trade-offs between GDP growth and inequality requires consistent metrics...
- ...But levels and trends of average disposable household income are different across micro and macro sources

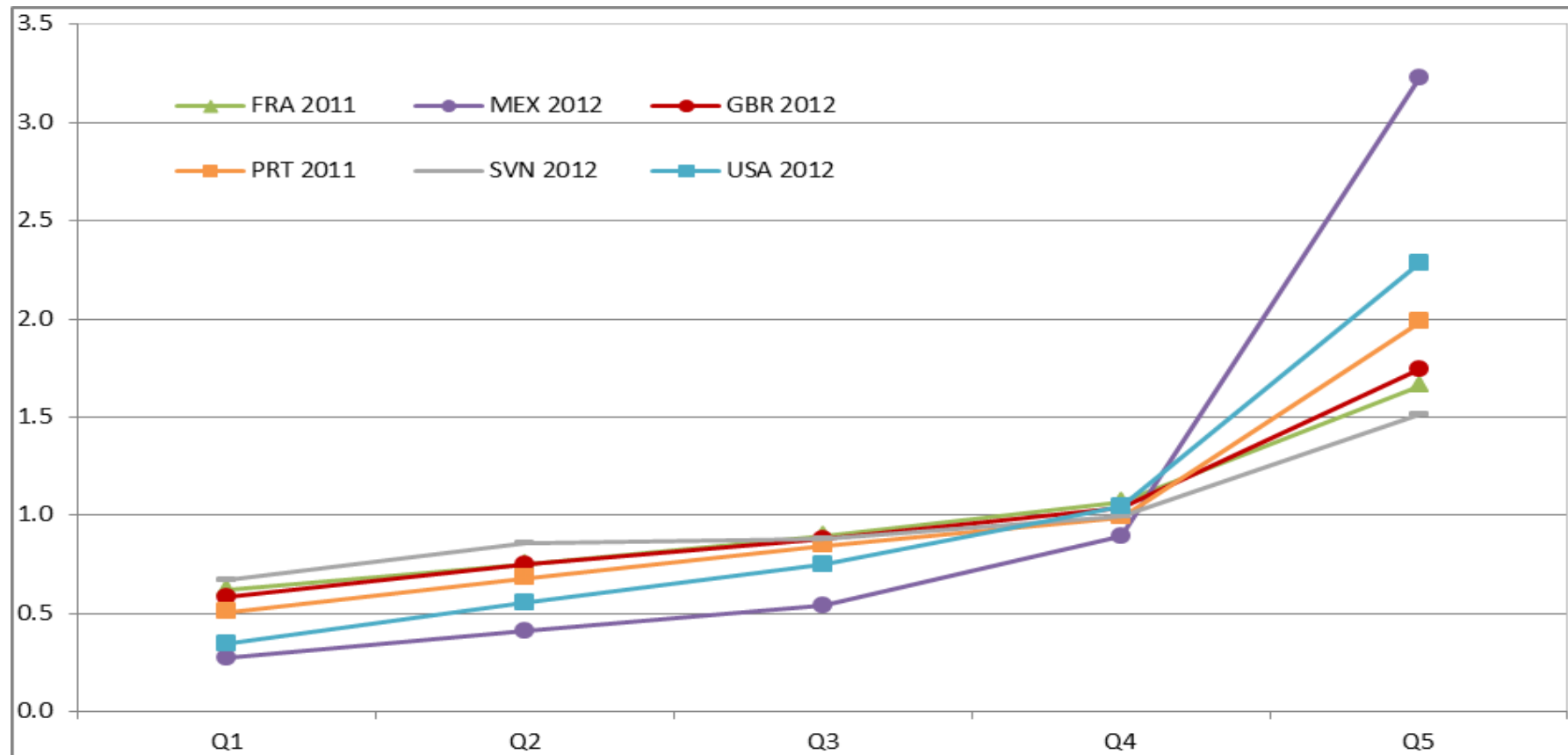
➤ Work on-going to build SNA-consistent income distributions

- By researchers (Piketty, Atkinson and Alvaredo DINA Guidelines, <http://wid.world/document/dinaguidelines-v1/>..
- and at the OECD
 - 2011, OECD/Eurostat Expert Group and 2017 OECD Expert Group on Disparities :
 - Develop methodology to produce distributional results for household income, consumption and saving consistent with national accounts concepts using micro data sources



An illustration: some empirical results for income distribution

Relative position of each household group compared to the average, for adjusted disposable income





... But not a simple task

- Many assumptions involved
- On average, micro totals are smaller than macro ones
- Wages, taxes and benefits are better captured than capital income

Micro totals relative to amounts reported in SNA, average /max/min of 13 OECD countries





A number of issues remain



Open issues

- Do **totals** of household income, consumption (and wealth) reported in **SNA** provide more accurate information on households economic resources than **micro sources**?
- Assuming they do, how can we build credible statistics on SNA distribution without making potentially **arbitrary assumptions** on **who has received what**?



What is needed?

- Further **methodological improvements**
- More guidance on **how to deal with micro-macro gaps**
- Exploring best practices to **link data from various sources**
- More **regular data collection** and greater **country coverage**
- **Timeliness**: further explore **nowcasting** methodologies



3. Other selected aspects of (economic) well-being



Other aspects of inequalities matter for (economic) well-being

➤ Some are being addressed:

- **Horizontal inequalities** (i.e. inequalities of well-being between population groups)
- **Intergenerational inequalities; inequality of opportunities**
- **Inequalities over time; economic insecurity**
- Special chapter on **multi-dimensional inequalities** in How's Life? 2017
- Work by **High-Level Expert Group on the Measurement of Economic Performance and Social Progress**



➤ But much remains to be done:

- Better data to assess the **joint distribution of well-being outcomes at the individual level**
- Most economic well-being outcomes measured at household level (-> **intra-household inequalities is missed**)
- Need **long-run panels** to study inequality of opportunities and over life course



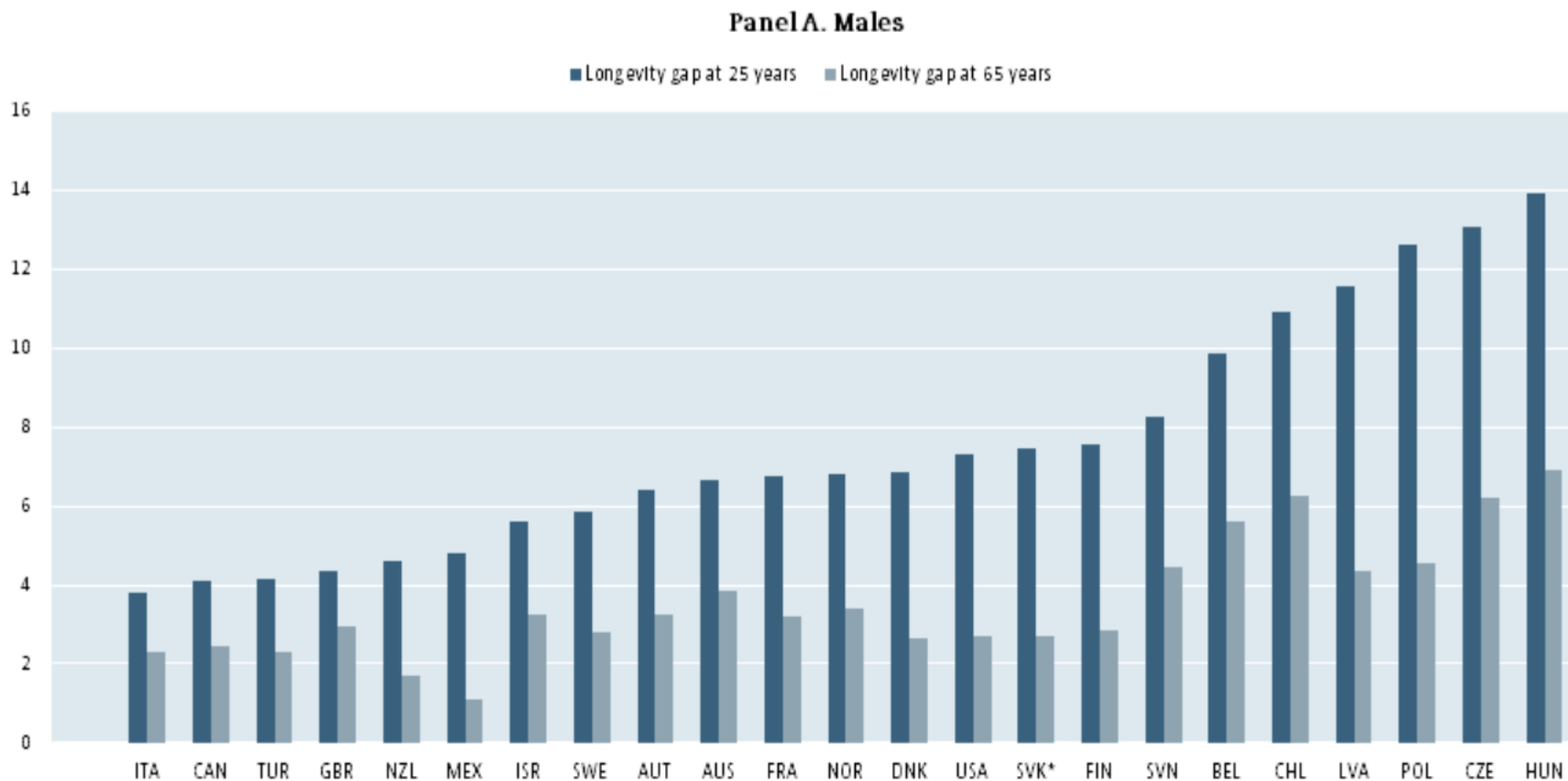
Example of horizontal inequality: longevity by educational levels

➤ OECD (2017) analysis of longevity by education shows:

- A gap in life expectancy between more and less educated men at age 25 of **8 years** (5 years for women)
- Longevity inequalities by education are even **larger at age 65** when expressed as ratio of remaining life
- ... But education accounts for only **10% of all differences in people's ages of death**, i.e. eliminating them does not imply that all people will die at the same age



There are large inequalities in longevity by education...

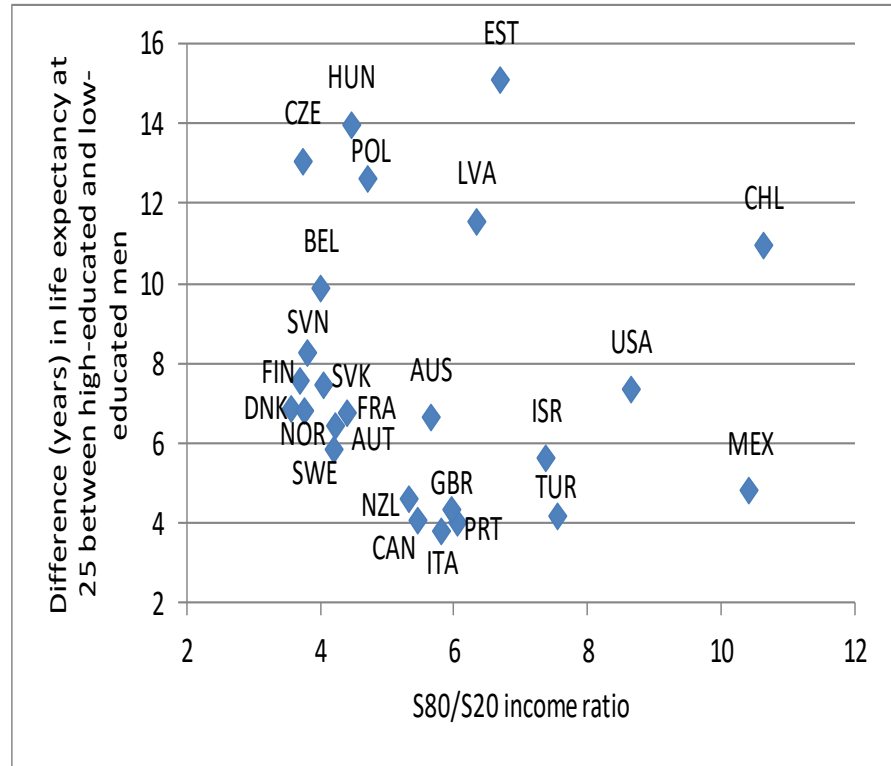
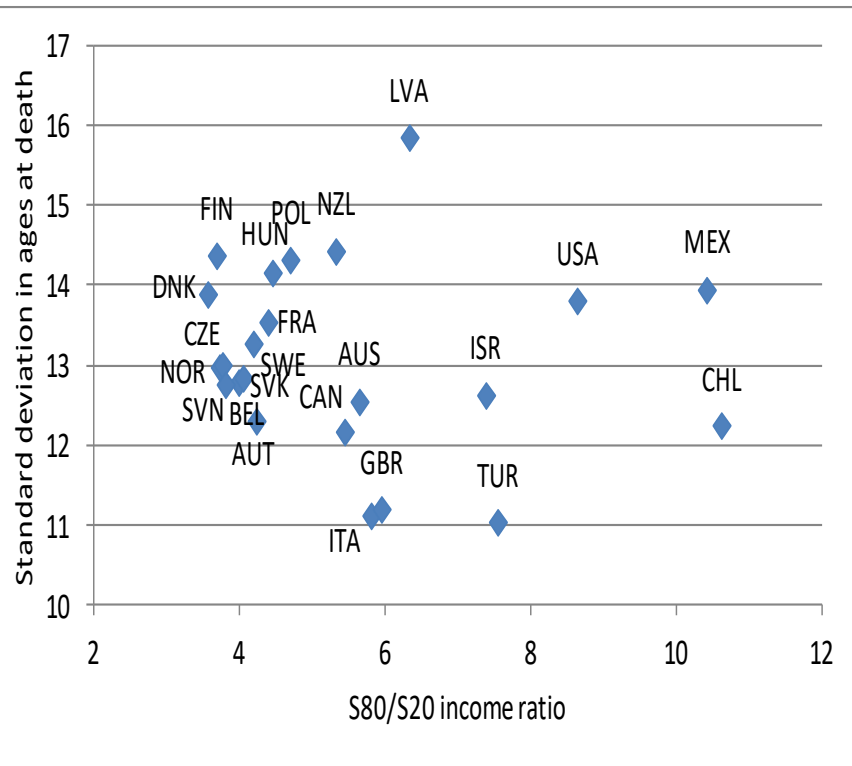


Murtin, F., Mackenbach, J.P., Jasilionis, D. and M. Mira d'Ercole (2017), "[Inequalities in Longevity by Education in OECD Countries: Insights from New OECD Estimates](#)", OECD Statistics Working Papers, 2017/2, OECD Publishing, Paris



...and longevity and income inequalities are not correlated

- Longevity and income are correlated within and between countries
- But, **there is no cross-country correlation between income inequalities** (horizontal axis) **and longevity inequalities**, either conditional on education (right-hand panel) or unconditional (left-hand panel): “**no country has-it-all**”!

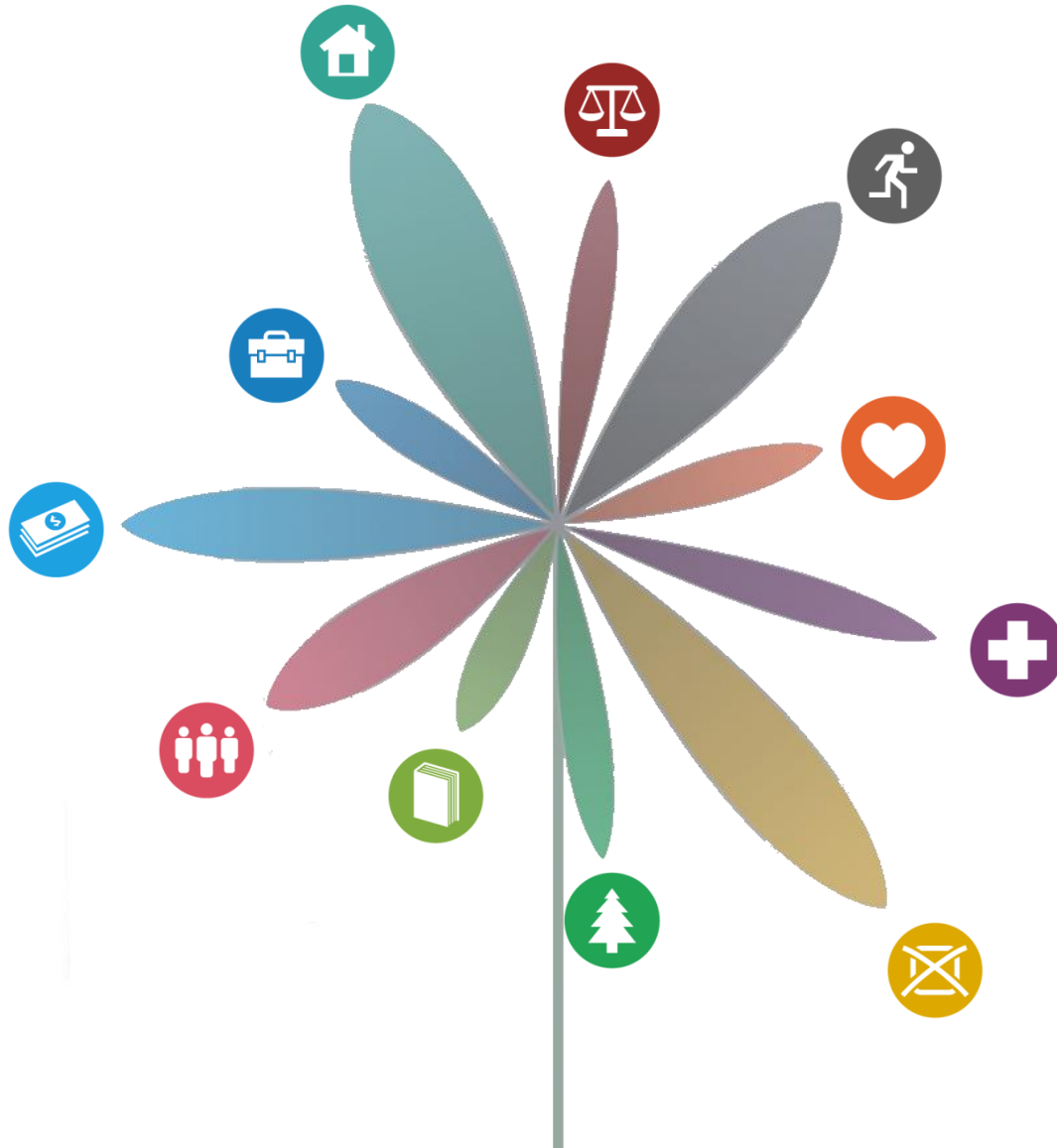




4. From well-being to policy



What about trade-offs?



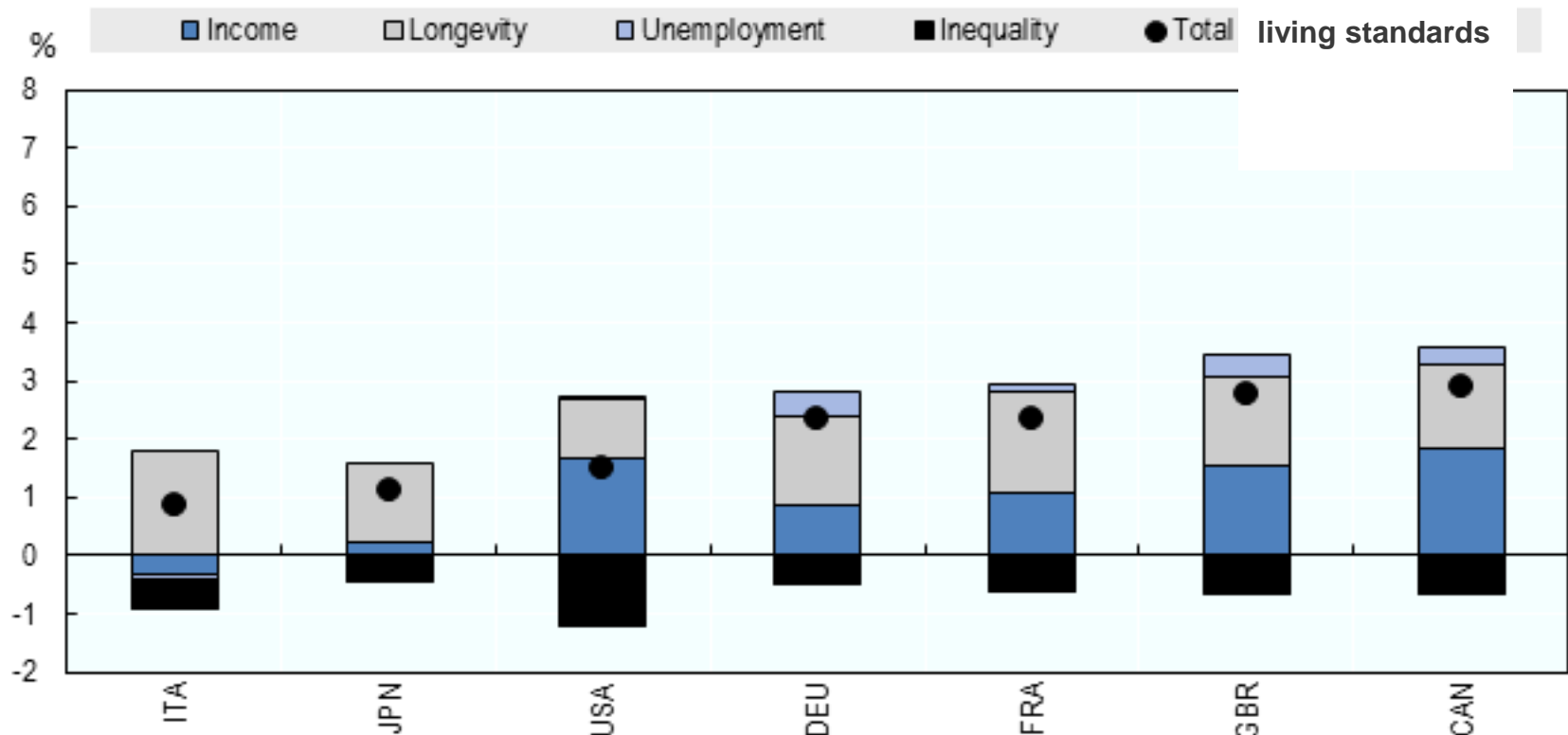


Well-being and policy making

- **Policy trade-offs** are unavoidable whenever scarce resources need to be re-allocated across well-being dimensions (e.g. health vs income) or across groups (e.g. the poor vs the rich):
 - **How to make these trade-offs more explicit for policy-makers?**
 - **OECD approach**: convert selected dimensions into money-metric (using “exchange rates” that reflect **people’s preferences**) and use a **social welfare function** with a given degree of “inequality aversion” (à la Fleurbaey)
- ➔ **OECD Multi-Dimensional Living Standards (MDLS)** allow focusing on the median household or the poor (cf. Murin et al., 2015, Boarini et al., 2016)

An illustration: significant gap between income growth and growth of living standards (MDLS)

Components of MDLS of the 10% poorest households
G7 countries, changes 1995-2015



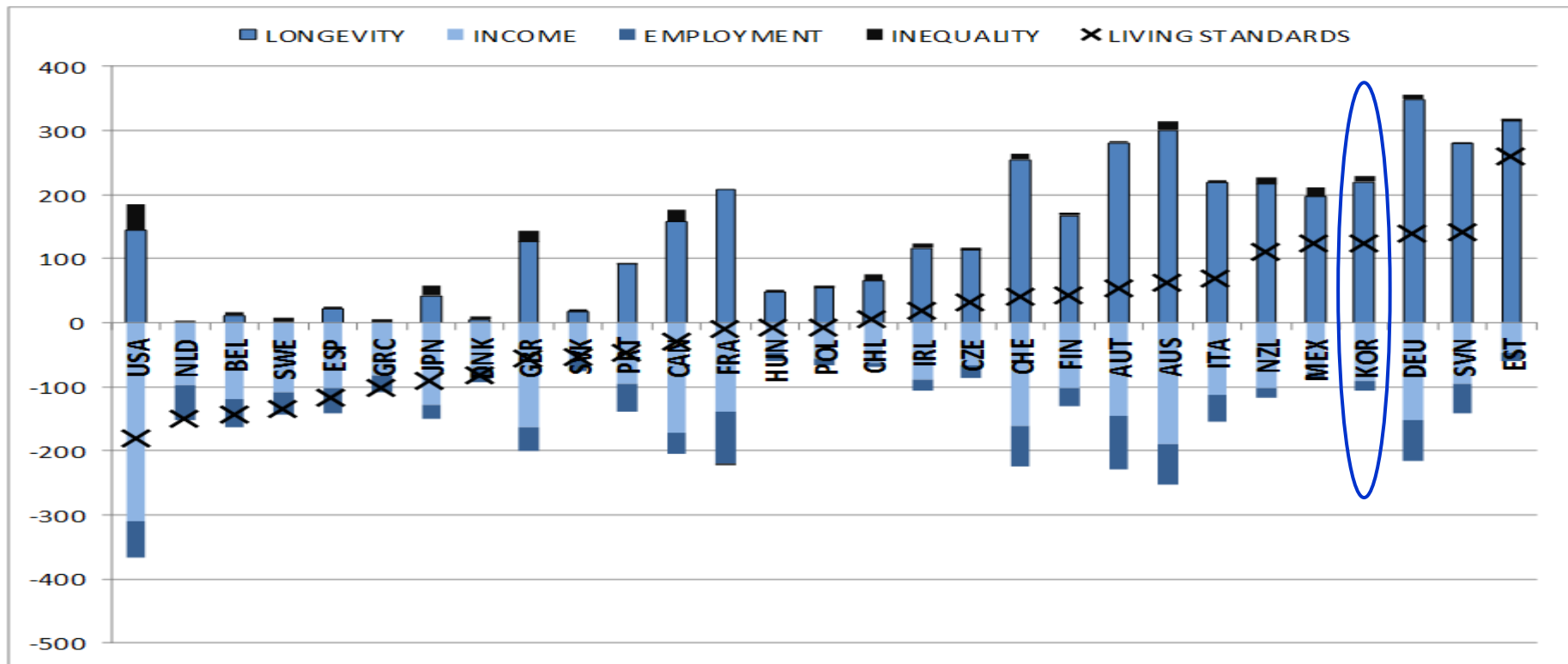
- the contribution of longevity to MDLS is on average as important as that of income: 1 year of longevity is worth 5% of income, and **longevity progress represents 1.2% pp of income growth annually**



Assessing well-being policy trade-offs

- **Using MDLS for assessing policy reforms (e.g. revenue-neutral increase in health spending financed by a tax hike on labour)**
 - No 'one-size-fits-all', net impact on MDLS depends on health systems efficiency and labour market functioning (i.e. impact of labour taxes on unemployment)

Effect of a revenue-neutral increase in health spending on MDLS





5. Conclusions



Some conclusions

- 1. Much progress made in improving quality of income statistics but challenges remain in terms of income concept and measurement**
- 2. Progress also happening on wealth statistics, but we stand today where micro statistics on income stood 20 years ago**
- 3. The next big challenge is developing data and metrics of the joint distribution of household income consumption and wealth**
- 4. Bridging micro and macro statistics on household economic resources important to assess the relationship between (GDP) growth and (income) inequality within a coherent framework but not an easy task**
- 5. Some progress made at looking at other types of inequalities affecting (economic) well-being but much remains to be done**
- 6. Metrics such as OECD MDLS can help policy-makers when dealing with trade-offs across well-being dimensions or across groups**



Thank you!

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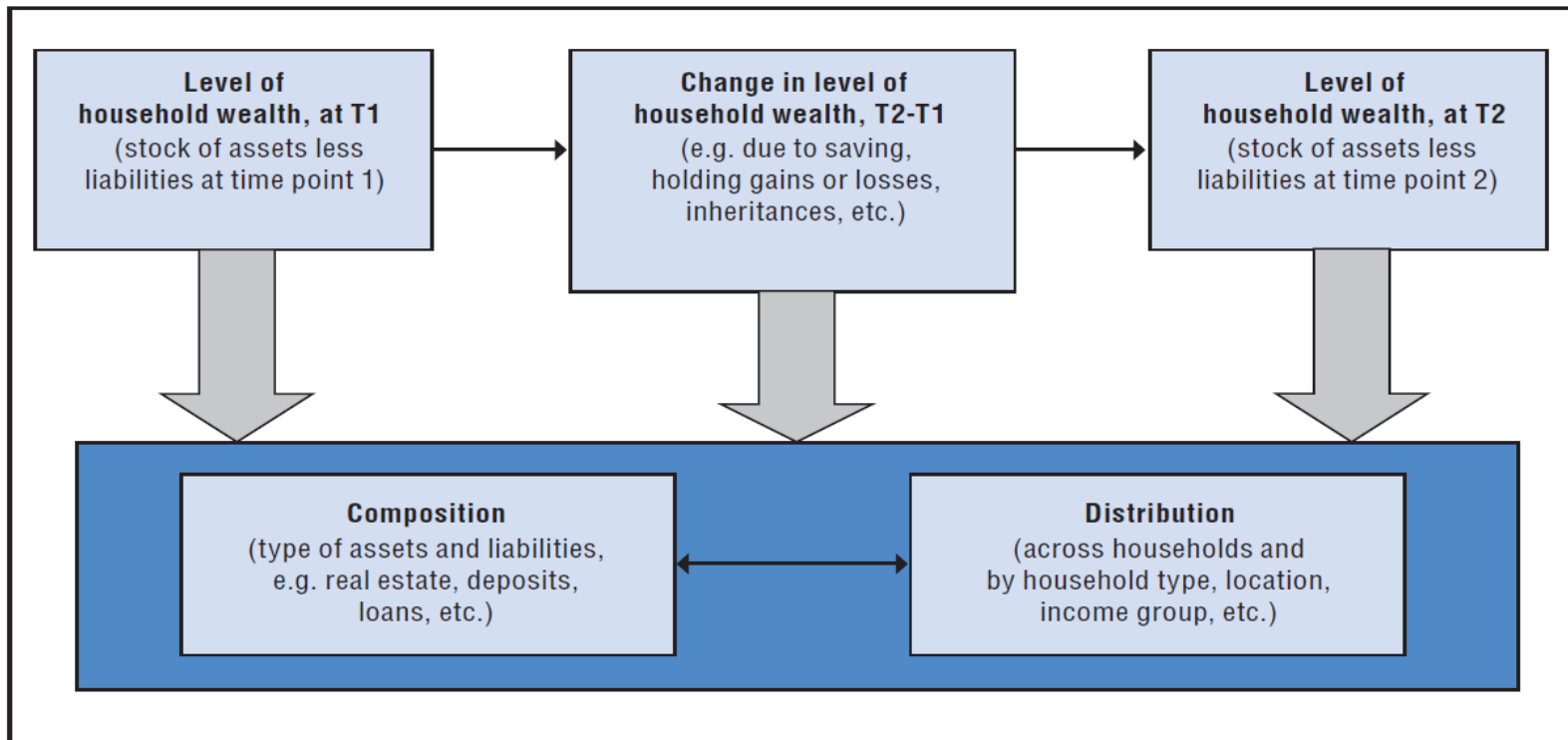
Additional background material



OECD Guidelines for Micro Statistics on Household Wealth

A broad **conceptual framework** for micro-statistics on household wealth linking stocks and flow

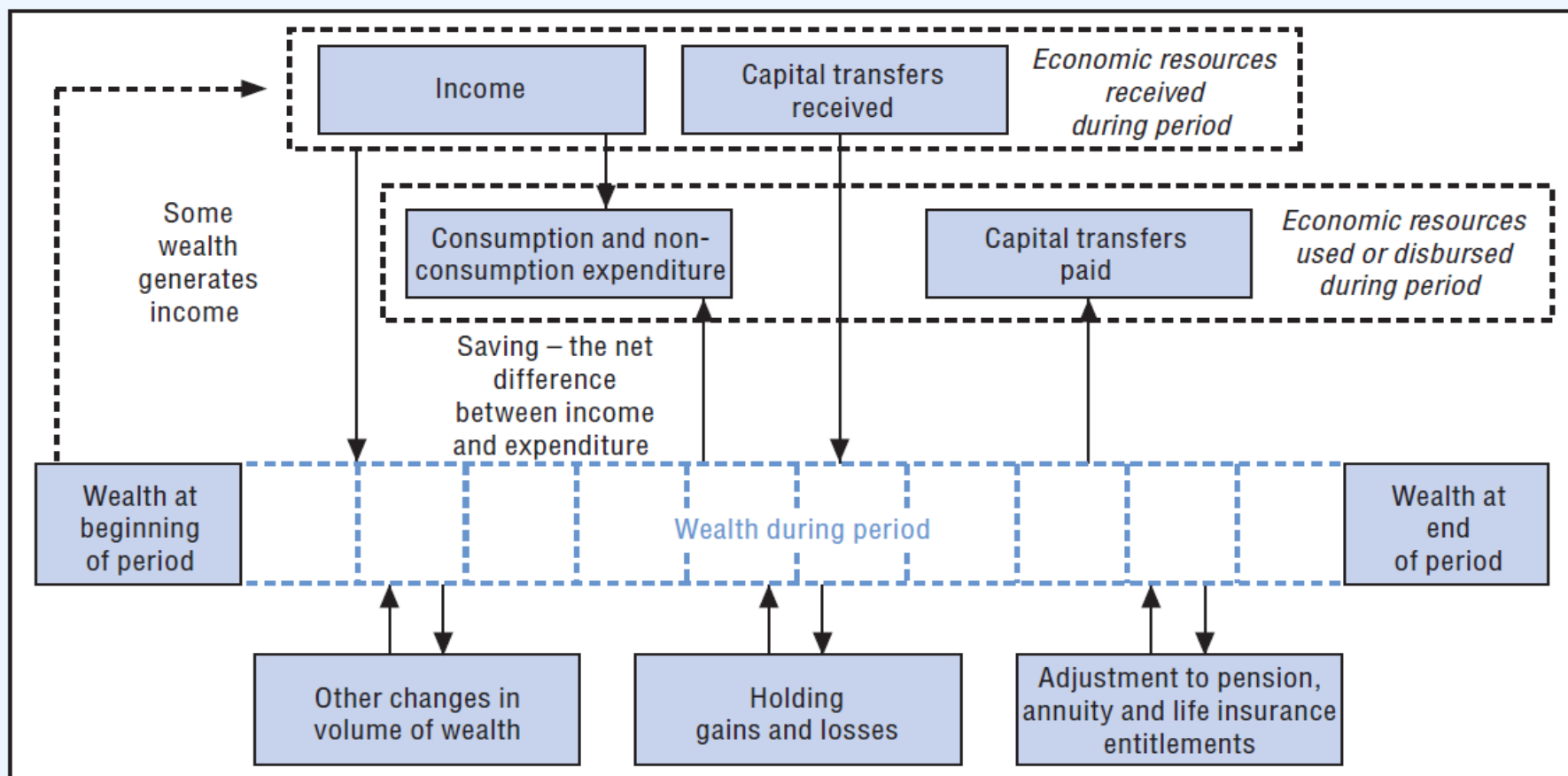
Broad conceptual framework for micro statistics on household wealth





How does the OECD ICW Integrated Framework looks like?

Integrated framework of income, consumption and wealth

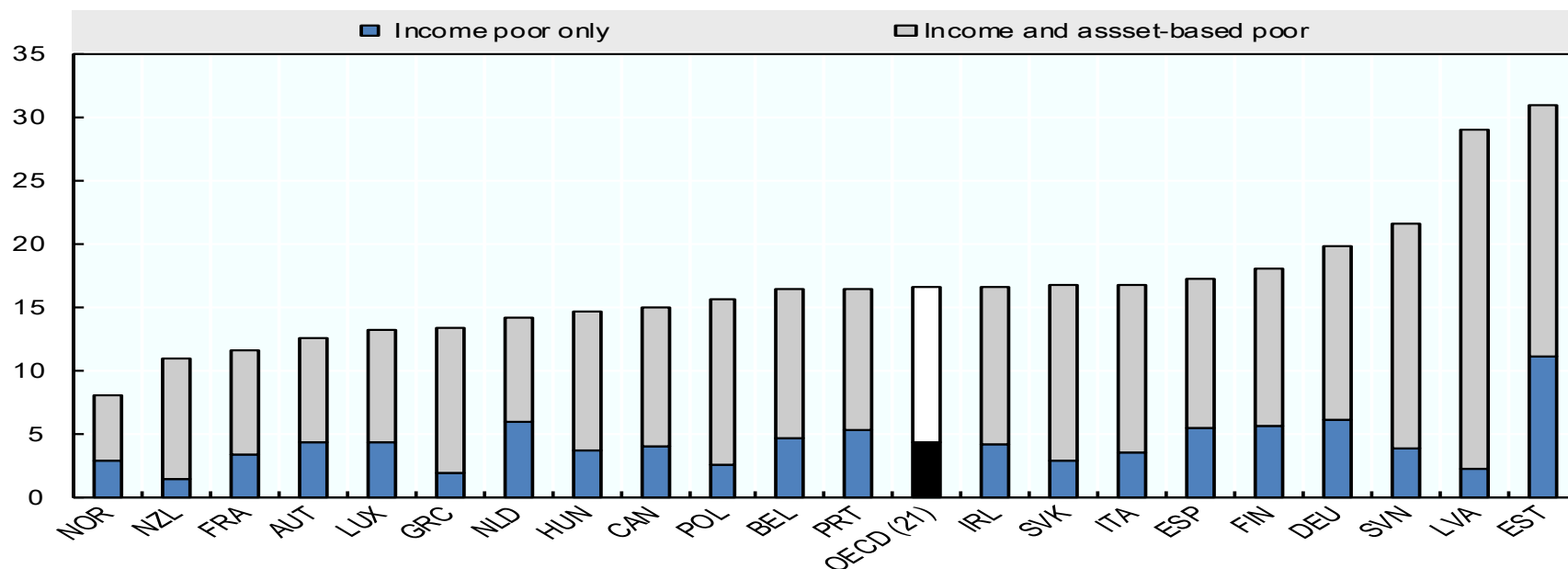




A 2D illustration: share of individuals who are both income and asset-based poor

On average across the OECD $\frac{3}{4}$ of those who are income poor are also asset-based poor (i.e. with liquid financial wealth below 25% of the income poverty line)

Share of individuals who are poor, by country, latest available year



Note: income poor are those with equivalised gross disposable income below 50% of the median gross income in each country. Asset-based poor are those with liquid financial wealth below 25% of the income poverty line.

Source: OECD Wealth Distribution Database



A step-by-step methodology to bridge the micro-macro gap

Step 1 – Adjust national accounts totals

(exclude NPISHs, expenditures of non-resident hh's and people living in non-private dwellings)

Step 2 – Identify relevant variables from micro data sources that could be matched to NA variables

(different data sources may be used; concepts and classifications may deviate from national accounts)

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

(e.g. imputation for STiK, FISIM, income attributable to policy holders)

Step 4 – Cluster households into groups

(e.g. on the basis of equivalized disposable income)

Step 5 – Derive relevant indicators for household groups

(e.g. ratio to the average, highest to lowest)



An illustration: compounding inequalities in income, health and employment by education

- the **“welfare return to education” is 3 times larger than the “income premium”** when comparing people with secondary education to people with only primary education.
- It is almost double when comparing tertiary with secondary education

Living standards premium when moving from primary to secondary, 2010

