Impact of social transfers in kind on income distribution in the EU countries - methodology and first results – EUROSTAT F4

Meeting of Providers of OECD Income Distribution Data - February 2016

Outline

- Introduction
- Methodology
- Data used
- Impact of STiK on income distributions and poverty indicators in the EU
- 2016 EU-SILC ad hoc module on access to services
- Conclusions

Introduction (1/2)

- Eurostat has developed a **methodology on the imputation of the Social Transfers in Kind*** to the **EU-SILC** micro data base to assess distribution indicators of the monetary and non- monetary (STiK) inequalities for poverty analysis across the EU Member States. Currently it is discussed with DG EMPL for further improvement and possible policy use.

- The preliminary analysis of the distribution of STiK (received from public spending) is limited to **education, health care and child care services**. The year of analysis is **2008**.

- The "individualised" STiK are based on imputation techniques that requires assumptions. The **2016 EU-SILC ad hoc module on access to services** contains additional variables that would potentially make it more accurate.

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Introduction (2/2)

- Our approach is **evaluating STiK in monetary terms** and **assessing them together with monetary income**.
- This study **does not take** into account the **indirect taxes payable by households**. There is also an ongoing project in Eurostat that aims at **better linking the micro data for income, consumption and wealth** to analyse the joint distributions. It is foreseen that the results of this work could be used further to improve the analysis of the STiK.
- The methodology is based on the assumption that **STiK are equally accessible for all members of the society irrespective their monetary income situation.** This assumption is general and limited to the availability of the data.

Methodology (1/2)

The **insurance approach** was chosen **for health STiK**, and **consumption approach** is chosen for **education and child care STiK**.

Health

*The **method based on age and gender variables for health STiK** allocation is used.*

Education

*For education STiK, **the age** variable and **education related** variables are used.*

Child care

*For child care STiK, **the actual consumption of child care services variables** are used.*

More precise STiK allocation from the 2016 EU-SILC ad hoc module.

Methodology (2/2)

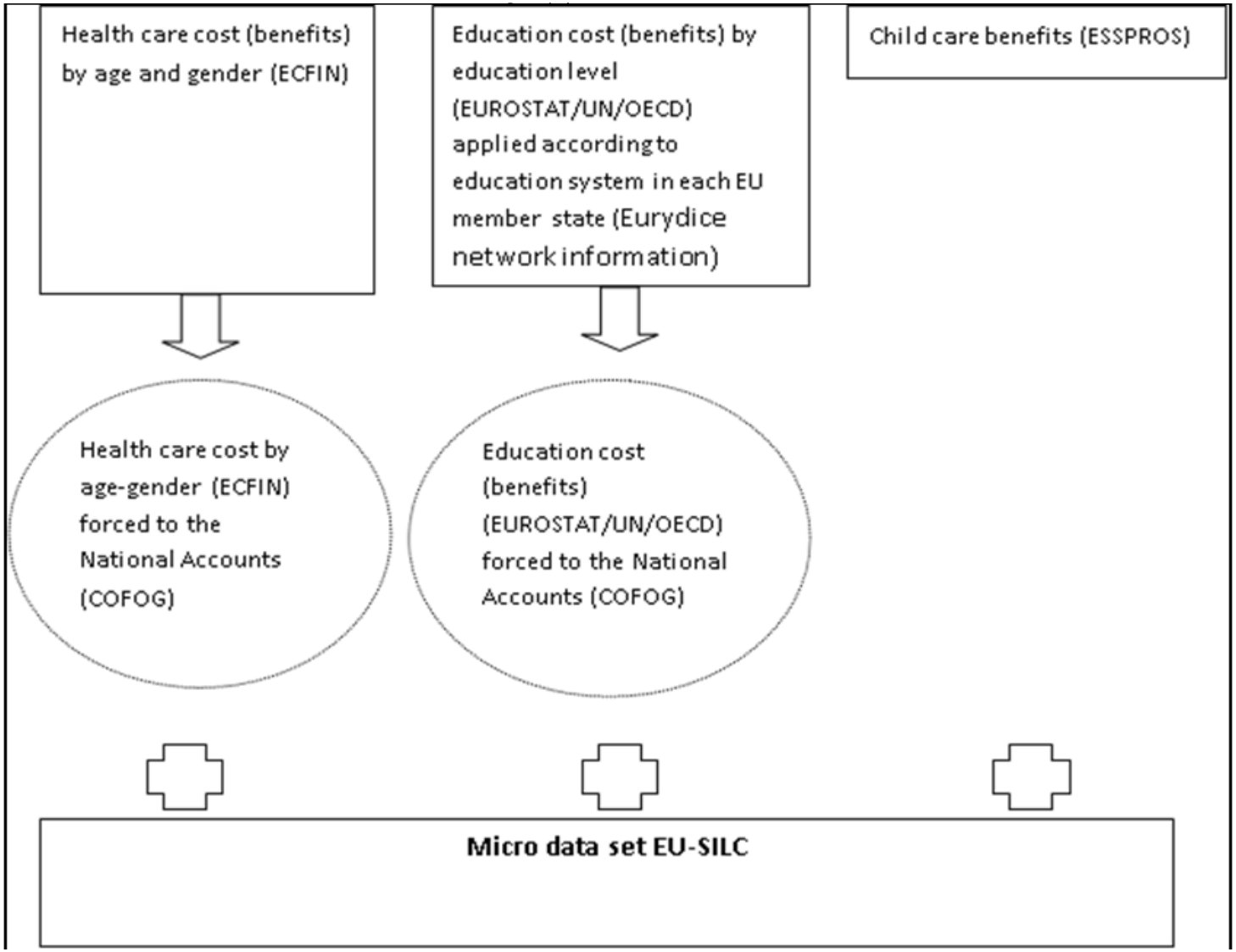
STiK value at household and individual level

NET-SILC2 and Euromod proposed an equivalence scale which is used in the study (and not the modified OECD equivalence scale usually used for EU-SILC data).

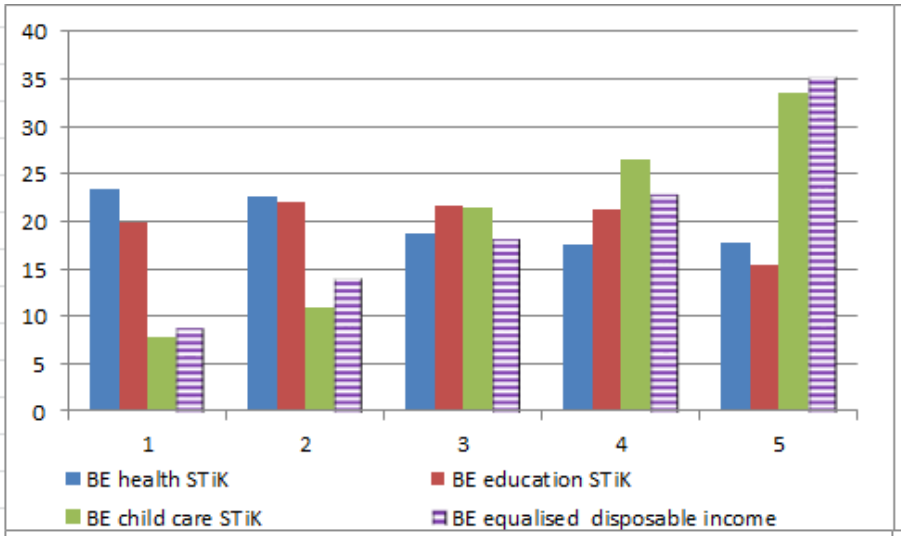
NET-SILC2 scale

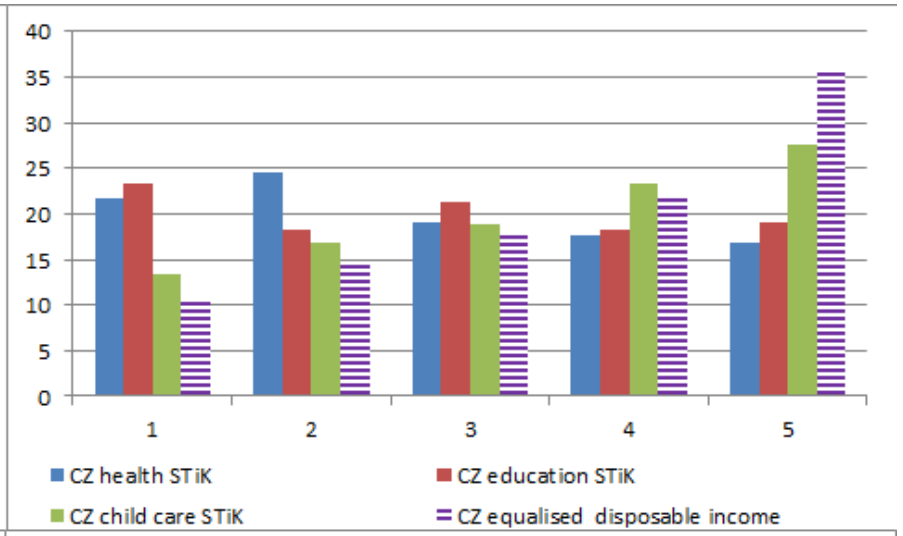
Constant	**0.46**
0-3	**0.41**
3 years to education age	**0.57**
Education age below 14	**0.69**
Education age above 13	**0.95**
Above education age – 54	**0.54**
55-64	**0.6**
65-74	**0.67**
75 and above	**0.75**

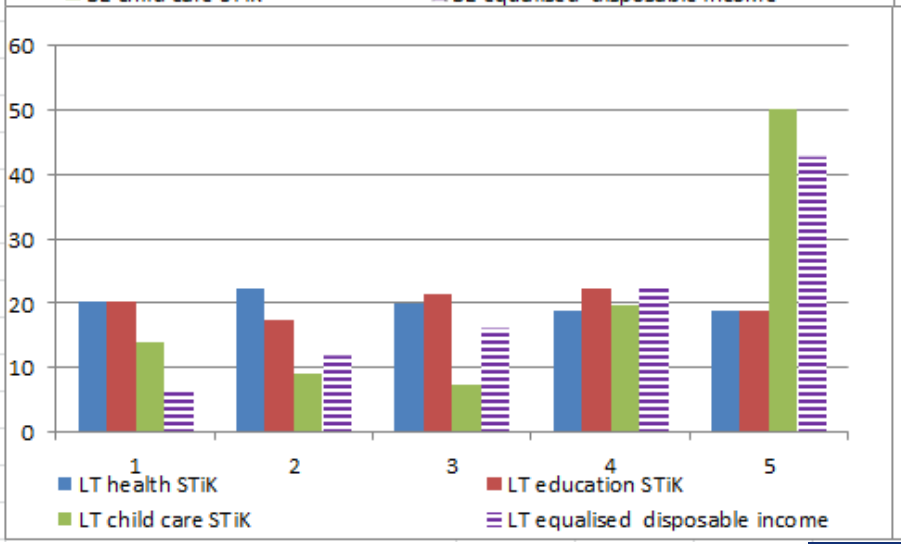
Data used:

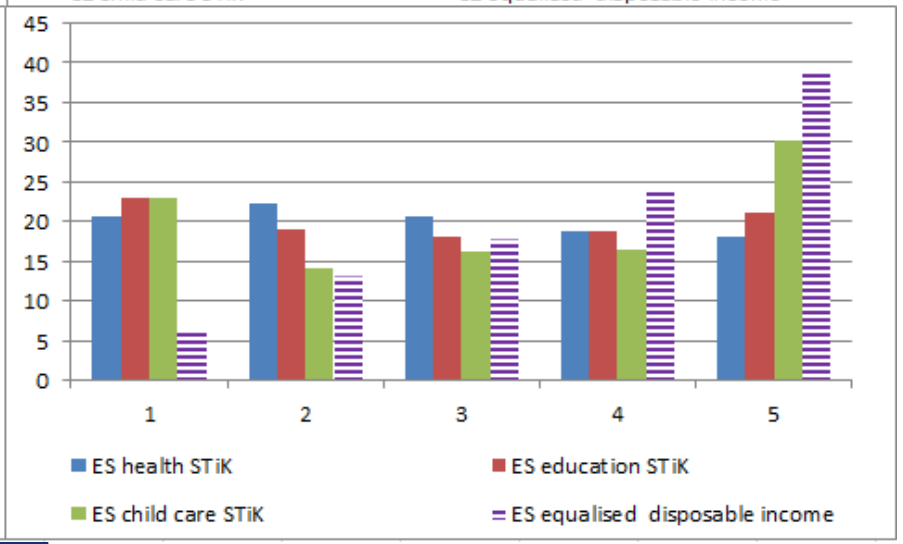

Health care cost (benefits) by age and gender (ECFIN)
Education cost (benefits) by education level (EUROSTAT/UN/OECD) applied according to education system in each EU member state (Eurydice network information)
Child care benefits (ESSPROS)
Health care cost by age-gender (ECFIN) forced to the National Accounts (COFOG)
Education cost (benefits) (EUROSTAT/UN/OECD) forced to the National Accounts (COFOG)
Micro data set EU-SILC

Results1: STiK and monetary income by equivalised monetary income quintiles , 2008, %







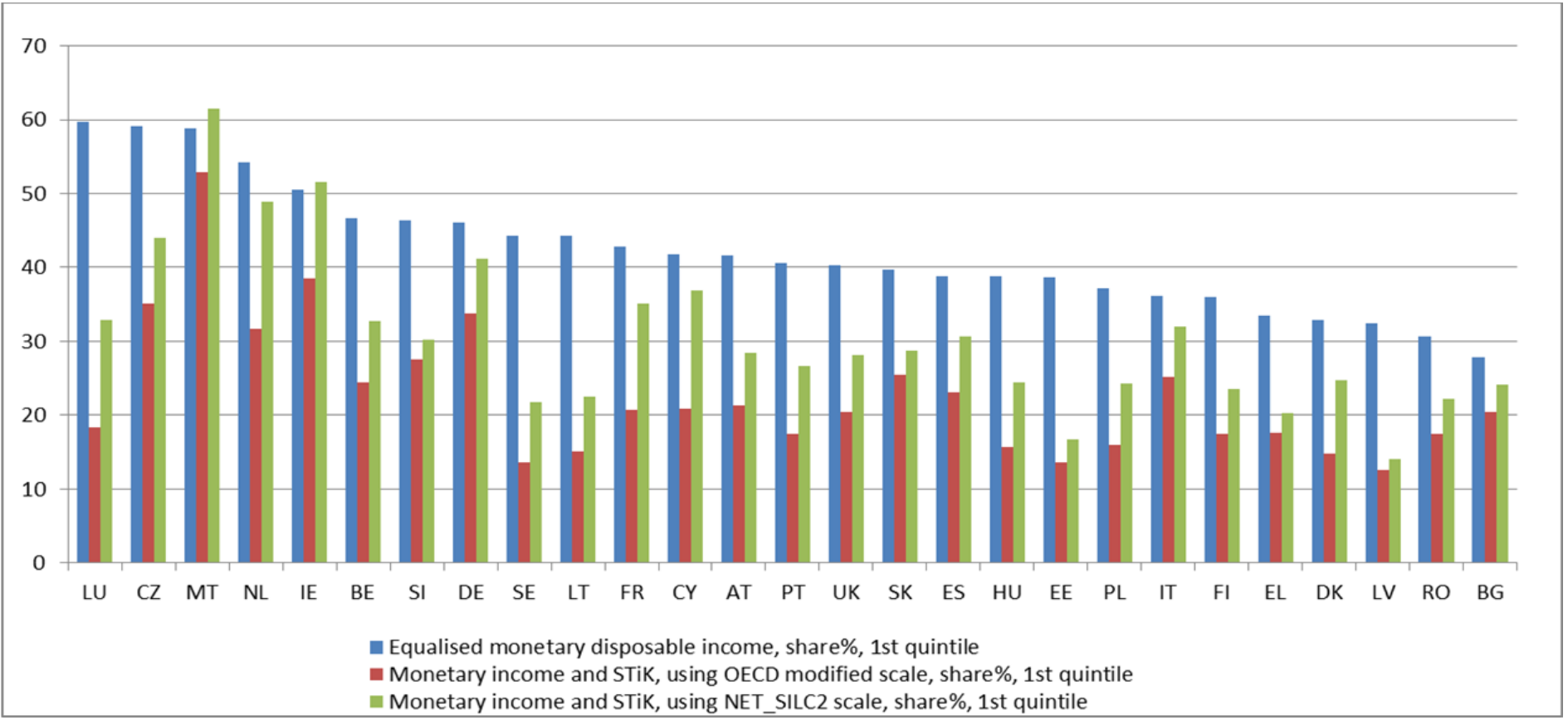


Results2: STiK and monetary income by equivalised total income (STiK & monetary income) quintiles

The results for each type of income are shown in three steps :

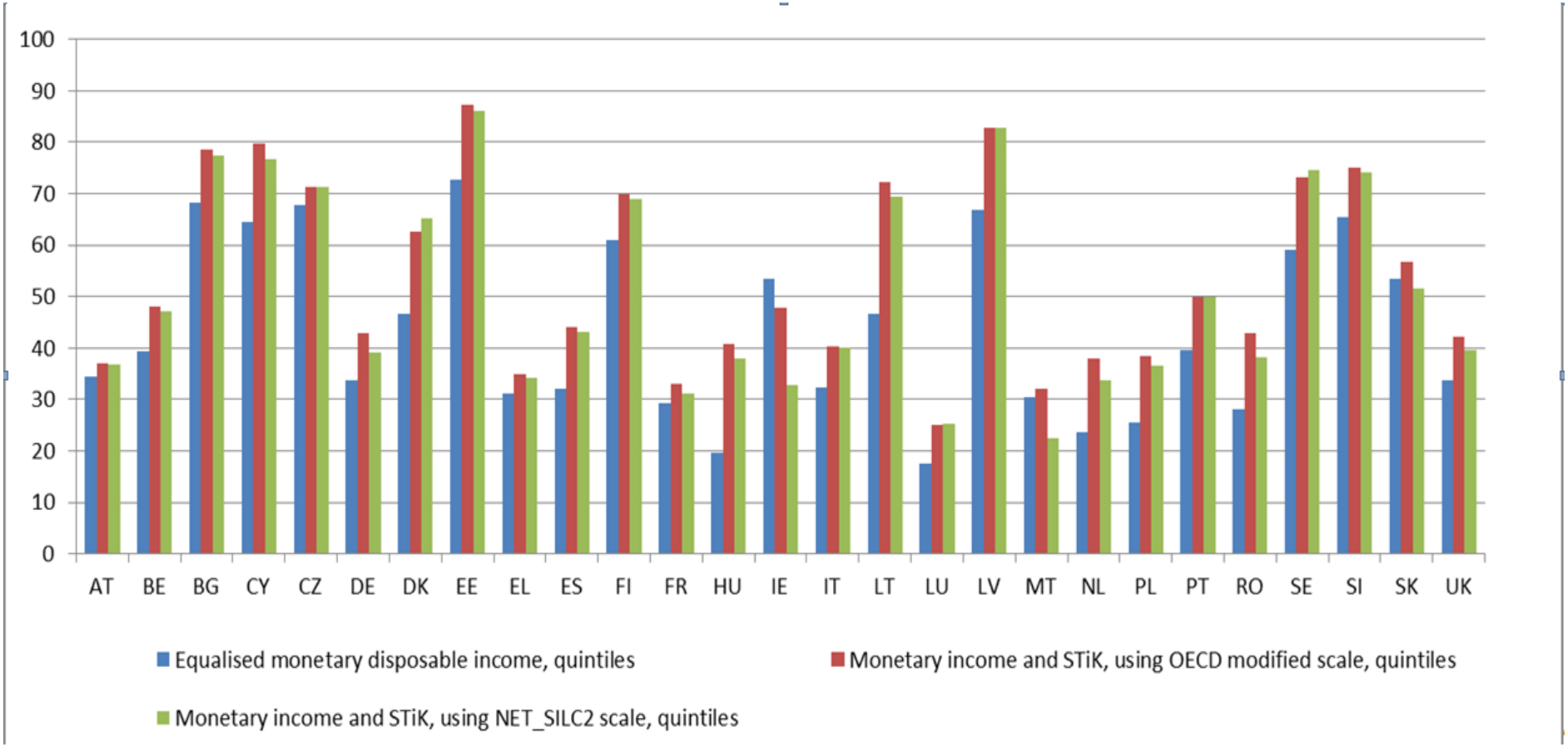
- the first step is distribution of equivalised monetary income into quintiles and calculation of the share of different type of households allocated in each quintile;
- the second step is distribution of total income (monetary income and STiK), using the OECD modified scale, to assess solely the impact of income distribution by adding STiK to monetary income;
- the third step is distribution of total income (monetary income and STiK), using the NET-SILC2 equivalised scale.

Results2: STiK and monetary income by equivalised total income (STiK and monetary income) quintiles



Share of single adult with dependent children population allocated in the 1st income quintile, 2008, %

Results2: STiK and monetary income by equivalised total income (STiK and monetary income) quintiles



Share from total population of single adults over 65 in the 1st income quintile, 2008, %

2016 EU-SILC ad hoc module (ahm) on access to services

COMMISSION REGULATION (EU) 2015/245

Provide information on:

- What services are used
- How services provided are funded
- Are there any unmet needs

Focus on:

- Accessibility (social inclusion)
- "Hook" variables - allocation of *STiK* by types of households

2016 EU-SILC ahm: access to services - Childcare

- Payment for the cost of formal childcare services: Y/N
- Proportion of the cost of formal childcare services paid: full / reduced (subsidised) price
- Who pays/contributes to the cost of formal childcare services: government, employer, other institution, private
- Affordability of childcare services: 6 levels from great difficulty to very easily
- Unmet needs for formal childcare services: Y/N
- Main reason for not making (more) use of formal childcare: cannot afford, no places, not nearby, hours, quality, other

2016 EU-SILC ahm: access to services - Formal education and training

- Payment for tuition fees: Y/N
- Part of tuition fees paid: full / reduced (subsidised) price
- Who pays/contributes to the cost of tuition fees: government, employer, other institution, private person
- Affordability of formal education: 6 levels from great difficulty to very easily
- Unmet needs for formal education: Y/N
- Main reason for non-participation in formal education: cannot afford, not admitted, time constraints, no suitable course, other

2016 EU-SILC ahm: access to services - Lifelong learning

- Participation in training related to hobbies: Y/N
- Participation in training related to professional activity: Y/N
- Main reason for non-participation in in training related to professional activity: cannot afford, not interested, time constraints, not suitable courses, not provided by employer, other

2016 EU-SILC ahm: access to services - Healthcare

- Use of healthcare services: Y/N
- Payment for healthcare services: Y/N
- Affordability of healthcare services: 5 levels from great difficulty to very easily

2016 EU-SILC ahm: access to services - Home care (1)

- Presence in the household of people who need help due to long-term physical or mental ill-health, infirmity or because of old age: Y/N
- Professional home care received: Y/N
- Number of hours per week of professional home care received: <10h , 10h-<20h, 20h+ / week
- Payment for professional home care: Y/N
- Affordability of professional home care services: 6 levels from great difficulty to very easily

2016 EU-SILC ahm: access to services - Home care (2)

- Unmet needs for professional home care: Y/N
- Main reason for not receiving (more) professional home care services: cannot afford, refused by person needing such services, services not available, quality of the services available not satisfactory, other
- Care or assistance provided: Yes only to household members, Yes only to non-household members, Yes to both
- Number of hours per week of care or assistance provided: <10h , 10h-<20h, 20h+ / week

Conclusions

- *The distribution of the monetary income and STiK showed relevant and interpretable results. In particular the distribution of STiK over monetary disposable income quintiles is an intuitive and transparent measure to show the changes in the distribution of total income (monetary and STiK) as compared with the distribution of the monetary disposable income.*
- *The distribution of total income (monetary and STiK), based on new thresholds (quintiles) is more complex and involves new methodological solutions for equivalence scales. However should be investigated further to add additional aspects to inequality analyses.*
- *As regards the AROP rates for the total income (monetary and STiK), the results (not presented) are hardly interpretable, as a fraction of people who moved out of poverty due to adding STiK to the monetary income are materially deprived. Hence* ***the total income (monetary and STiK) should not be used in the poverty analysis****.*

Thank you!

For any further suggestions/recommendations please contact:

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