

# The Moldovan experience in the measurement of inequalities

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#### **Quick facts about Moldova**



- Population (01.01.2015) 3 555 159
   Urban 42.4%
   Rural 57.6%
- Employment rate (2014) 39.6%
- GDP per capita, PPP (constant 2011 international \$ (2014) \$ 4 753.5
- % Remittances in the GDP 25%
   (2013) top 5 in the World



### Poverty line

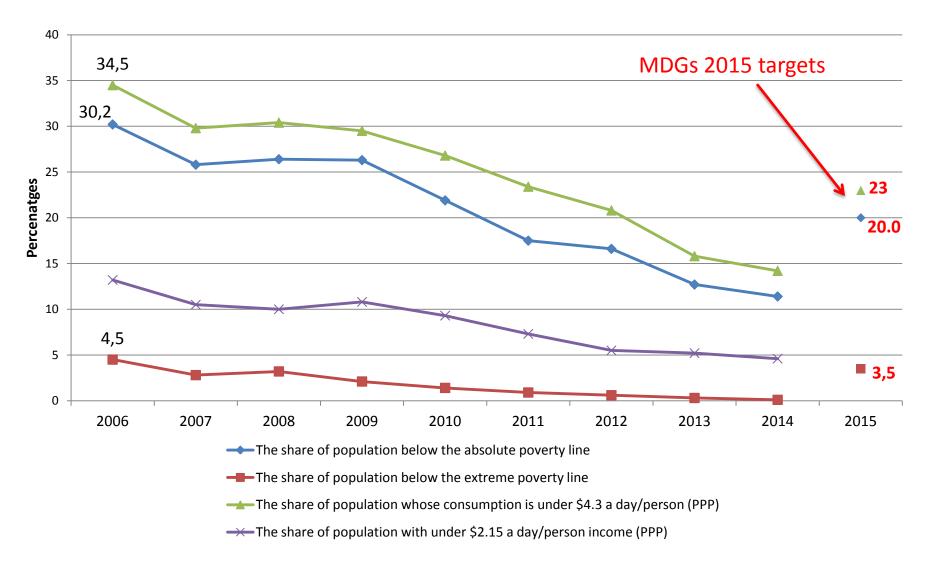
#### **Absolute poverty line:**

- >1993-2000 Minimal consumer budget
- >2000 up to now- Subsistence level
- **≥2004** *first absolute poverty line* approved by Strategy of economic growth and poverty reduction (SCERS)
- **≥2006 up to now** revised absolute poverty line and approved by Government Decision:
- food and non food component total poverty line
- food component extreme poverty line
- ➤ 2009 up to now national threshold used for mean tested social allocation for poor

Source: Household Budget Survey (2006-2014), NBS



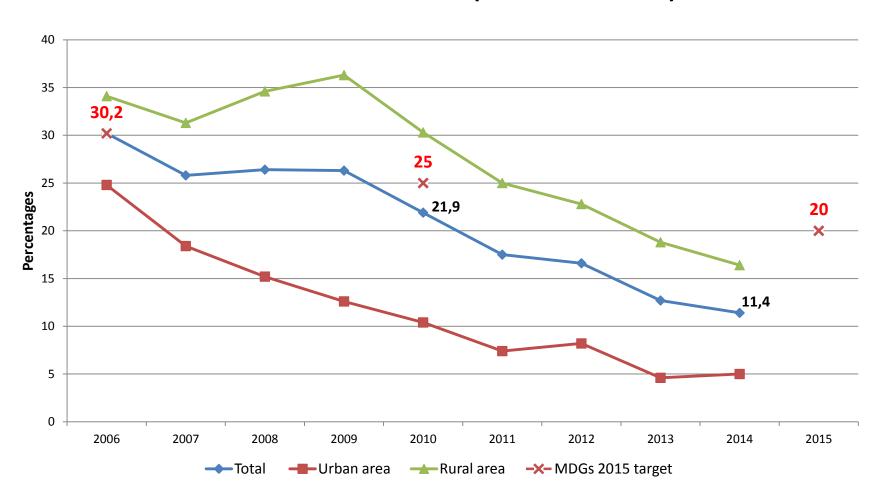
### Poverty rate (MDGs), 2006-2014



Source: Household Budget Survey (2006-2014), NBS



## The absolute poverty rate, Moldova (2006-2014)



Source: Household Budget Survey (2006-2014), NBS



## **Data source** – Household Budget Survey

- i) measures of living standards,
- ii) consumption and income structure,
- iii) weights for consumer price index and
- iv) various estimates for the National Accounts.

#### Sample size – 9 768 households;

#### Data collection method:

paper based interview (face to face interview and self recording of diary)

#### Survey tools:

- Household roster: socio and demographic characteristics, education, employment, housing, land, etc.
- Diary: income, expenditure (cash, in-kind)
- Non-response sheet: reasons of non-responses and key variables about non-respondent



#### Computation of welfare aggregate

**Consumption expenditures** - used as indicator of well-being.

The following adjustment are made:

- for items, whose purchase is infrequent, but still more frequent than once a year, expenditure are captured through appropriate recall periods (6 and 12 months);
- items, which generally are purchased within intervals longer than one year (namely durable items) are excluded from consumption aggregate;
- correction for price differences over time and across different areas of the country (namely urban and rural areas);
- adjustment of expenditure measured at the household level to identify individual consumption levels (1:0,7:0,5).
- no imputation.



By 2030 progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average

### **Goal 10.**

Reduce inequality within and among countries

#### **Target 10.2**

By 2030 empower and promote the social, economic and political inclusion of all irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

#### **Target 10.3**

Ensure equal opportunity and reduce inequalities of outcome, including through eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and actions in this regard

#### **Target 10.4**

Adopt policies especially fiscal, wage, and social protection policies and progressively achieve greater equality



#### **Indicators:**

1.1. Growth rates of **household expenditure** among the bottom 40 percent of the population and the total population.

#### <u>Disaggregated</u> by:

> Area of residence:

Big cities
Small cities
Villages

Type of the household:
Single mother households

#### <u>Variables</u> needed:

- Consumption expenditure per capita
- Per capita expenditure quintile

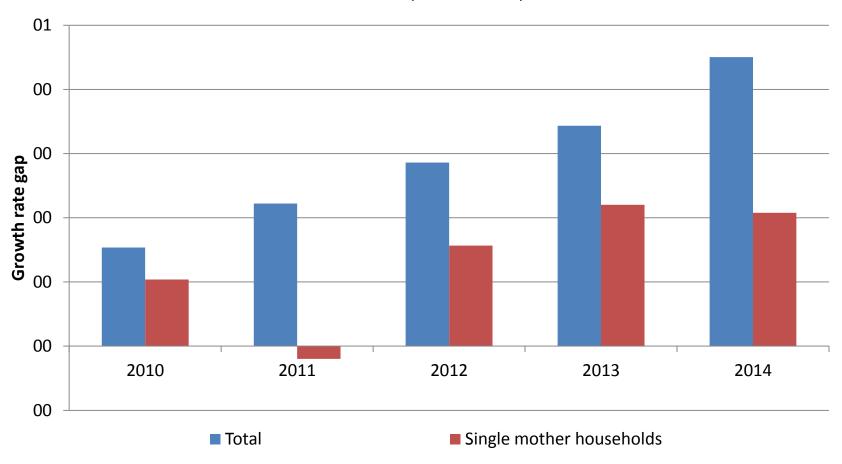
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Growth rate of household expenditure per capita among the bottom 40% of the population compared to total population, by area of residence, Moldova, 2010-2014





Growth rate of household expenditure per capita among the bottom 40% of the population compared to total population, by type of the household, Moldova, 2010-2014





#### **Indicators:**

1.2. Growth rates of **income per capita** among the bottom 40 percent of the population and the total population.

#### <u>Disaggregated</u> by:

> Area of residence:

Big cities Small cities Villages

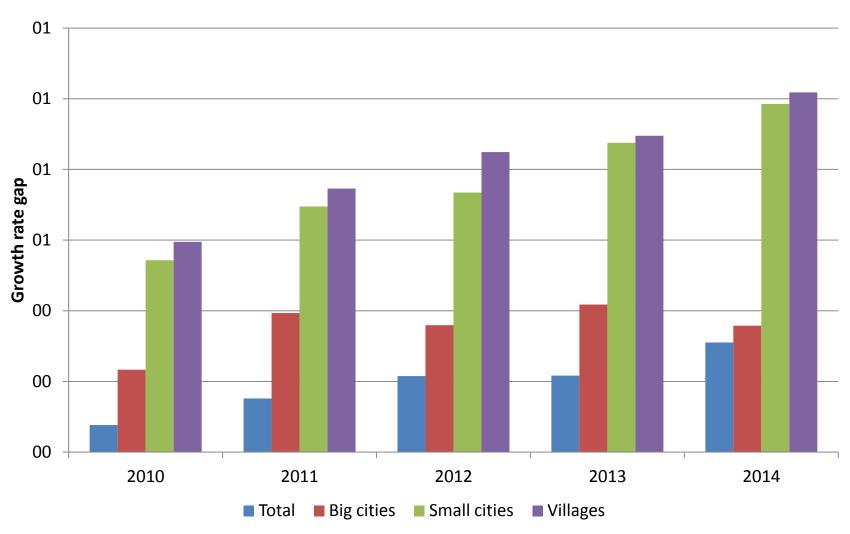
> Type of the household: Single mother households

#### <u>Variables</u> needed:

- Income per capita
- Per capita income quintile

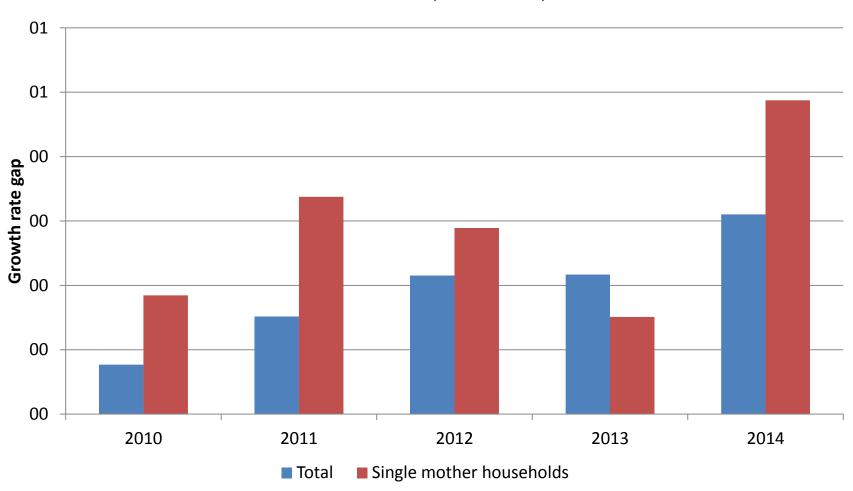


Growth rate of income per capita among the bottom 40% of the population compared to total population, by area of residence, Moldova, 2010-2014





Growth rate of income per capita among the bottom 40% of the population compared to total population, by type of the household, Moldova, 2010-2014





#### **Indicators:**

2.1. Inequality gap (ratio of disadvantaged/advantaged groups)

#### Examples:

- 1. Wage gap ratio between women and men (total)
- 2. Literacy rate gap ratio between women and men
- 3. Early school-leavers rate for youth aged 18-24 years, by sex,

#### **Disaggregated by:**

Total/Urban/Rural

Variables needed:

Sex

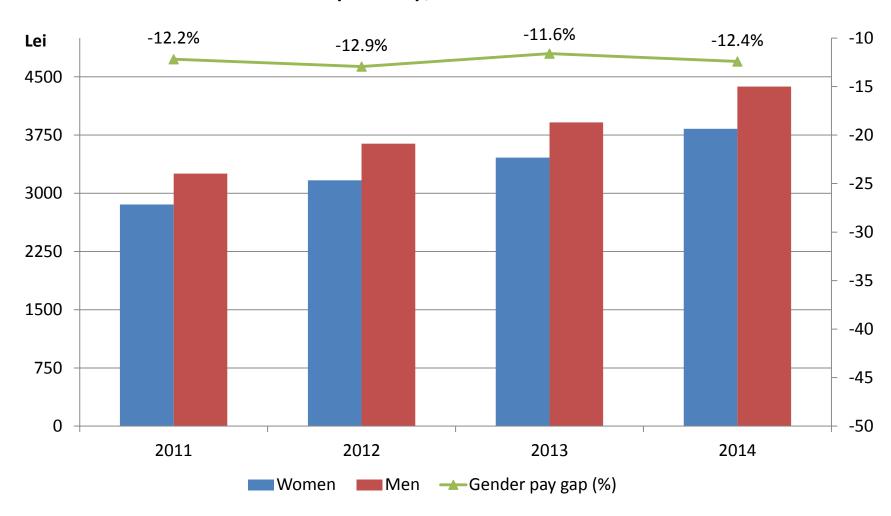
Wage

Literacy rate

Early school-leavers rate



## Wage gap ratio between women and men (total), 2011-2014



Source: Labour Force Survey (NBS, 2011-2014)



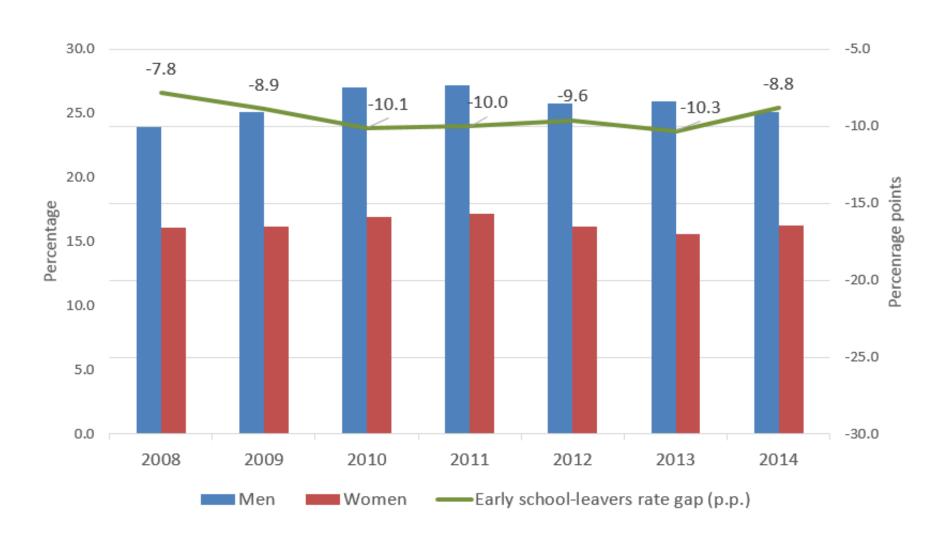
INDICATOR 2.1.2. Literacy rate gap ratio between women and men, aged 15-24 years

Area of residence	Sex	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total	Men	99.6	99.4	99.5	99.3	99.4	99.5	99.3	99.4	99.5
	Women	99.6	99.8	99.6	99.7	99.6	99.5	99.6	99.8	99.6
	Ratio of female to male Literacy rate gap	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	(p.p.)	0.0	0.4	0.1	0.4	0.2	0.0	0.3	0.4	0.1
Urban area	Men	99.8	99.7	99.8	99.6	99.6	99.7	99.5	99.5	99.9
	Women	99.7	99.9	99.8	99.9	99.7	99.4	99.7	99.9	99.4
	Ratio of female to male Literacy rate gap	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	(p.p.)	0.0	0.3	0.1	0.3	0.1	-0.3	0.1	0.5	-0.5
Rural area	Men	99.5	99.1	99.3	99.1	99.3	99.3	99.2	99.4	99.3
	Women	99.6	99.6	99.4	99.6	99.6	99.6	99.5	99.7	99.7
	Ratio of female to male Literacy rate gap	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	(p.p.)	0.1	0.5	0.1	0.5	0.3	0.3	0.3	0.4	0.4

Source: Labour Force Survey, NBS (2006 – 2014)



## Early school-leavers rate for youth aged 18-24 years, by sex, 2008-2014





#### **Indicators:**

2.2. Proportion of people living below 60% of median income

<u>Disaggregated</u> by:

> Area of residence:

**Urban/Rural** 

> Sex

> Before/after social transfers

Variables needed:

Urban/Rural

Sex

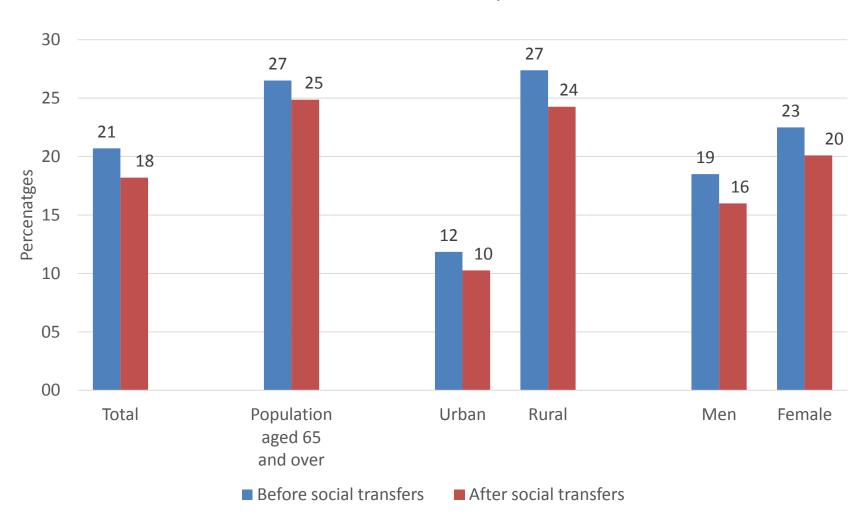
Income per equivalent

Social transfers

Pensions



## Proportion of people living below 60% of median income (at risk of poverty), before/after social transfers, Moldova, 2014





#### **Indicators:**

3.1. Gini coefficients on real disposable incomes, before/after social transfers

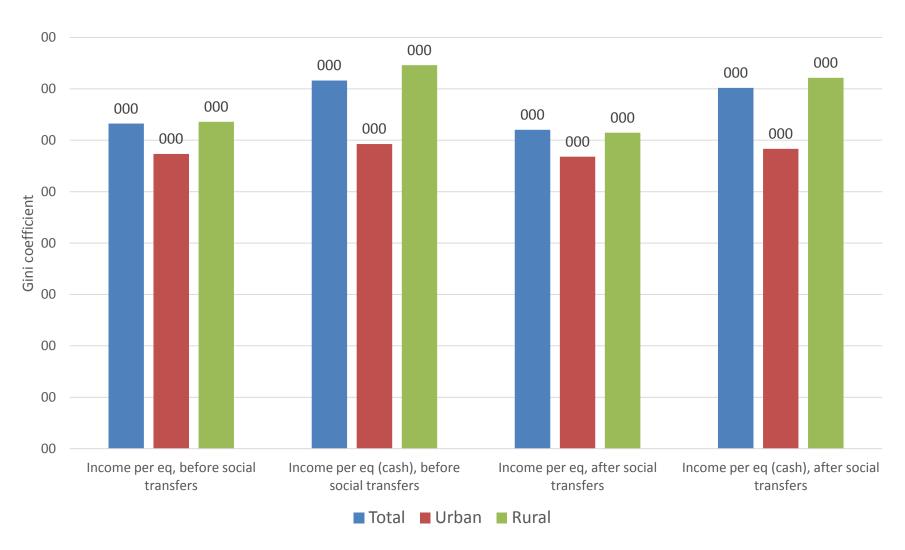
#### **Disaggregated** by:

Urban/Rural
Before/after social transfers

Calculated with ADEPT

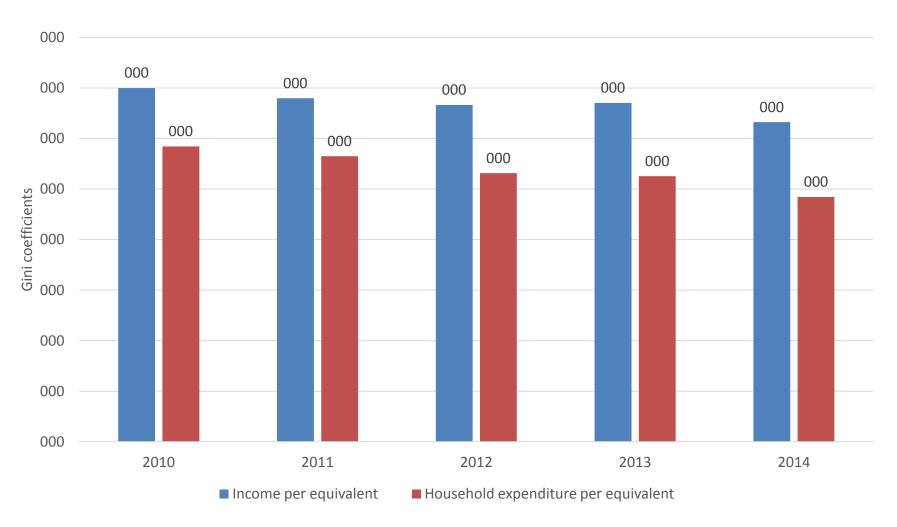


## Gini coefficients on disposable income per equivalent, before/after social transfers, by area of residence, 2014





## Gini coefficients on disposable income and household expenditure per equivalent, 2010-2014





#### **Indicators:**

#### Palma ratios:

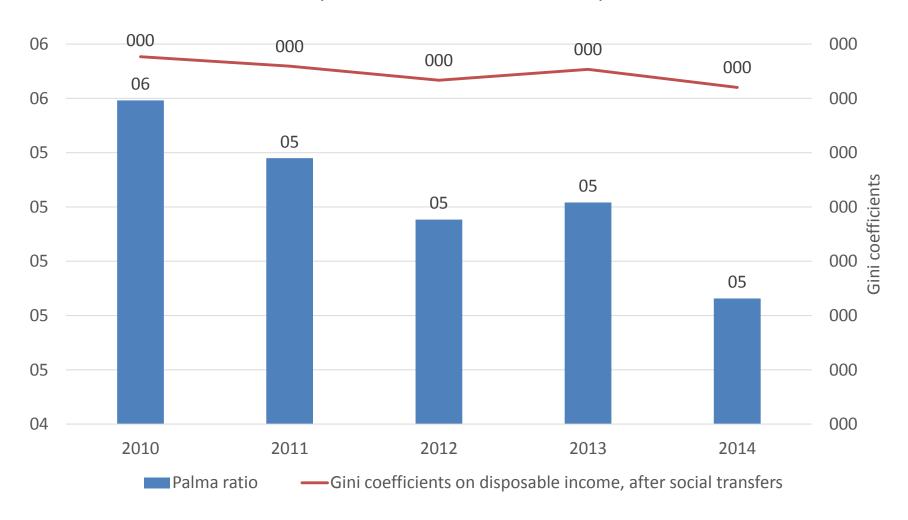
- 4.1. Ratio of average income of the richest 10% to the poorest 40%, before and after social transfers
- 4.2. Ratio of average household expenditure of the richest 10% to the poorest 40%, before and after social transfers

#### **Disaggregated** by:

Urban/Rural
Before/after social transfers

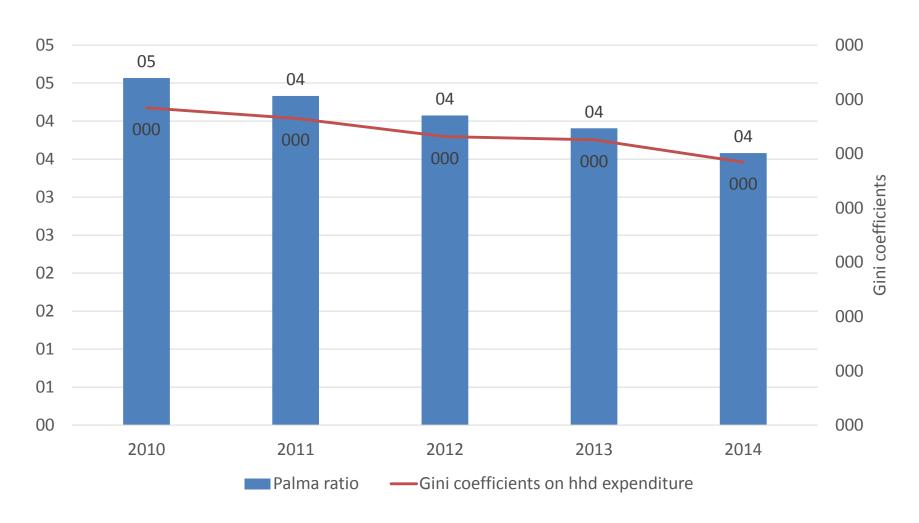
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## Palma ratio, and the Gini coefficients on disposable income, after social transfers, 2010-2014





## Palma ratio, and the Gini coefficients on hhd expenditure, after social transfers, 2010-2014





## Challenges

#### Data collection:

- High non-response rate in urban area
- Respondent burden and how to manage data quality
- Treatment of outliers in consumption aggregate, such as out of pocket health expenditures, expenditures for utilities, etc.

#### **Poverty measurement:**

- Revision of national absolute poverty line/data comparability issues;
- To complement monetary measurement with non-monetary approach.

#### SDGs – Inequality measurement:

- What type of INCOME to use? (cash?, cash + kind?)
- No information about taxes, only social transfers
- Income quintile or Household expenditure quintile, or both?
- No possibility to disaggregate by age, sex etc...