ASSESSING THE INFLUENCE OF LABOR MARKET AND SOCIAL SECURITY SYSTEMS ON HOUSEHOLD POVERTY IN RUSSIA

Alexey RUDBERG (HSE)
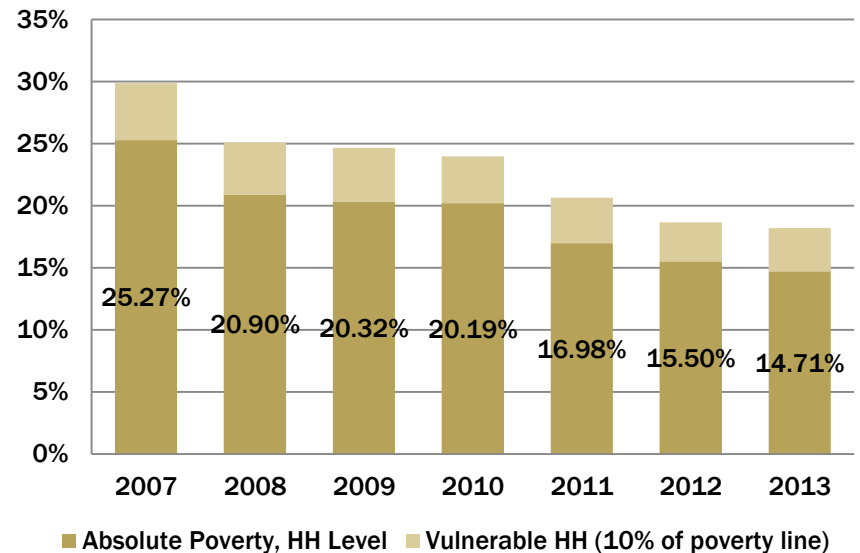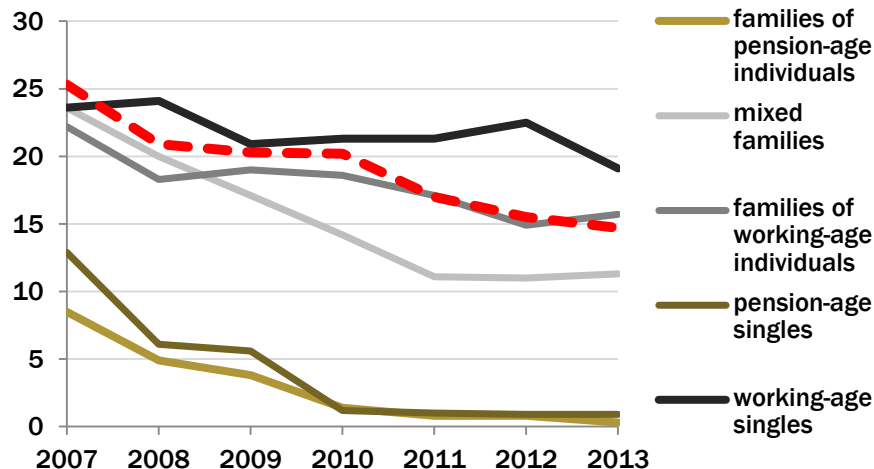
Svetlana BIRYUKOVA (HSE)

PLAN

- Introduction / Research questions

- Descriptive statistics

- Data and Method

- Estimations of poverty reduction under different scenarios

- Estimations of poverty reduction under adjustment of all income components

- Conclusion / Plans for further research

INTRODUCTION

- Absolute poverty as a concept continues to be in use, and is a key issue in many social policy developments;
  - Poverty threshold is calculated as the sum of minimum subsistence levels differentiated by region and socio-demographic groups (children, working-age, and pension-age) of individuals residing in a household;
  - Subsistence levels are indexed every quarter according to price level changes of a minimal regional food basket and of utility prices;
  - Does NOT use equivalence scales;
- Relative poverty measures remain ignored by policy makers; some movement has been made towards non-monetary measures (deprivation) of poverty;

- Research Questions:
  - How well do the current social security systems in place protect households from poverty? (esp. in crisis)
  - How dependent are households on them?
  - Is there room for improvement in the existing programs?
  - What if existing programs worked properly?
  - Potential for introduction of means-tested benefits
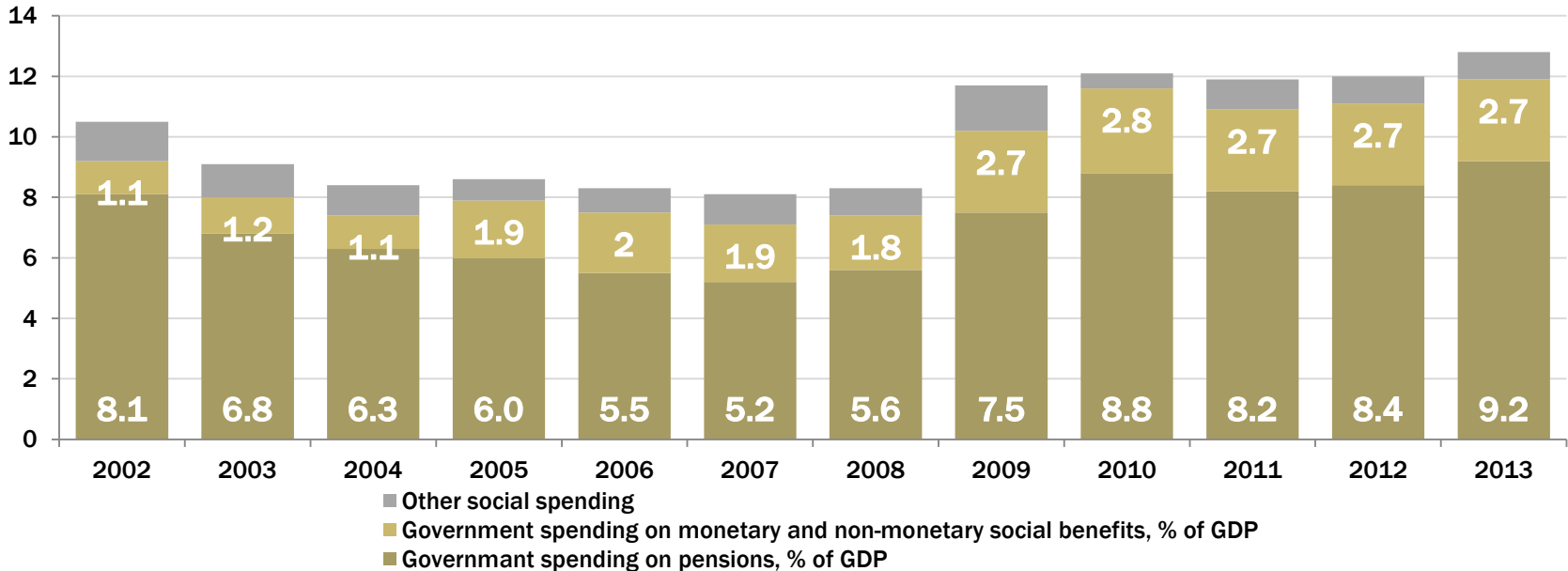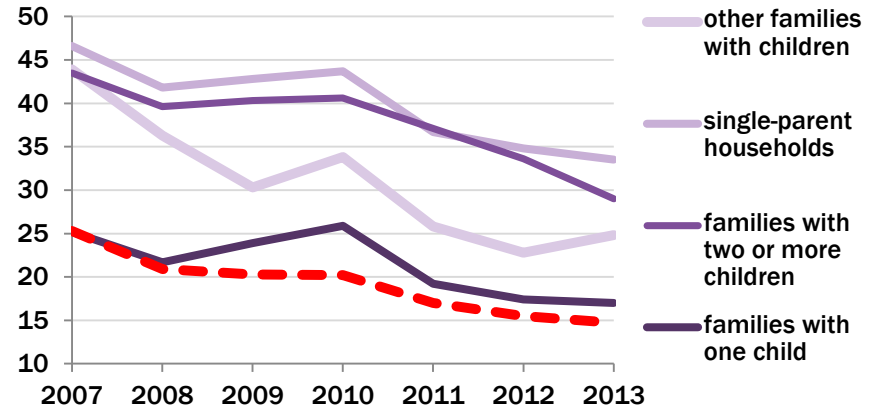
HOUSEHOLD POVERTY AT A GLANCE

- **Household poverty has been slowly declining;**

- **Poor households have begun to converge in the first two income deciles – a decrease in regional MSL variability;**

- **Poverty among pensioners has all but disappeared;**

Bar chart — Absolute Poverty, HH Level | Vulnerable HH (10% of poverty line)

Year	Value
2007	25.27%
2008	20.90%
2009	20.32%
2010	20.19%
2011	16.98%
2012	15.50%
2013	14.71%

Line chart legend:
- families of pension-age individuals
- mixed families
- families of working-age individuals
- pension-age singles
- working-age singles

Income Decile	Year						
	2007	2008	2009	2010	2011	2012	2013
I	39.5%	49.7%	50.6%	50.1%	58.7%	63.8%	66.7%
II	35.6%	34.1%	34.2%	38.7%	32.9%	30.4%	27.4%
III	16.9%	12.2%	12.0%	9.5%	6.3%	4.7%	4.4%
IV	4.7%	3.2%	2.2%	1.5%	1.6%	0.9%	1.0%
V	2.5%	0.7%	1.0%	0.3%	0.5%	0.2%	0.4%
VI-X	0.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%

GOVERNMENT EXPENDITURE ON SOCIAL PROGRAMS

- Social expenditure is growing. The main driver of the observed growth is the cost of the pension system;

- Poverty risk for households with children remains high;

- Following 2008, there is now less chance of poverty for HH with no adults in the LF than for HH with one adult

Legend:
- other families with children
- single-parent households
- families with two or more children
- families with one child

- Other social spending
- Government spending on monetary and non-monetary social benefits, % of GDP
- Governmant spending on pensions, % of GDP

HOUSEHOLD POVERTY COMPOSITION BY HOUSEHOLD TYPE

other families with children

single-parent households

families with two or more children

families with one child

families of pension-age individuals

mixed families

families of working-age individuals

pension-age singles

working-age singles
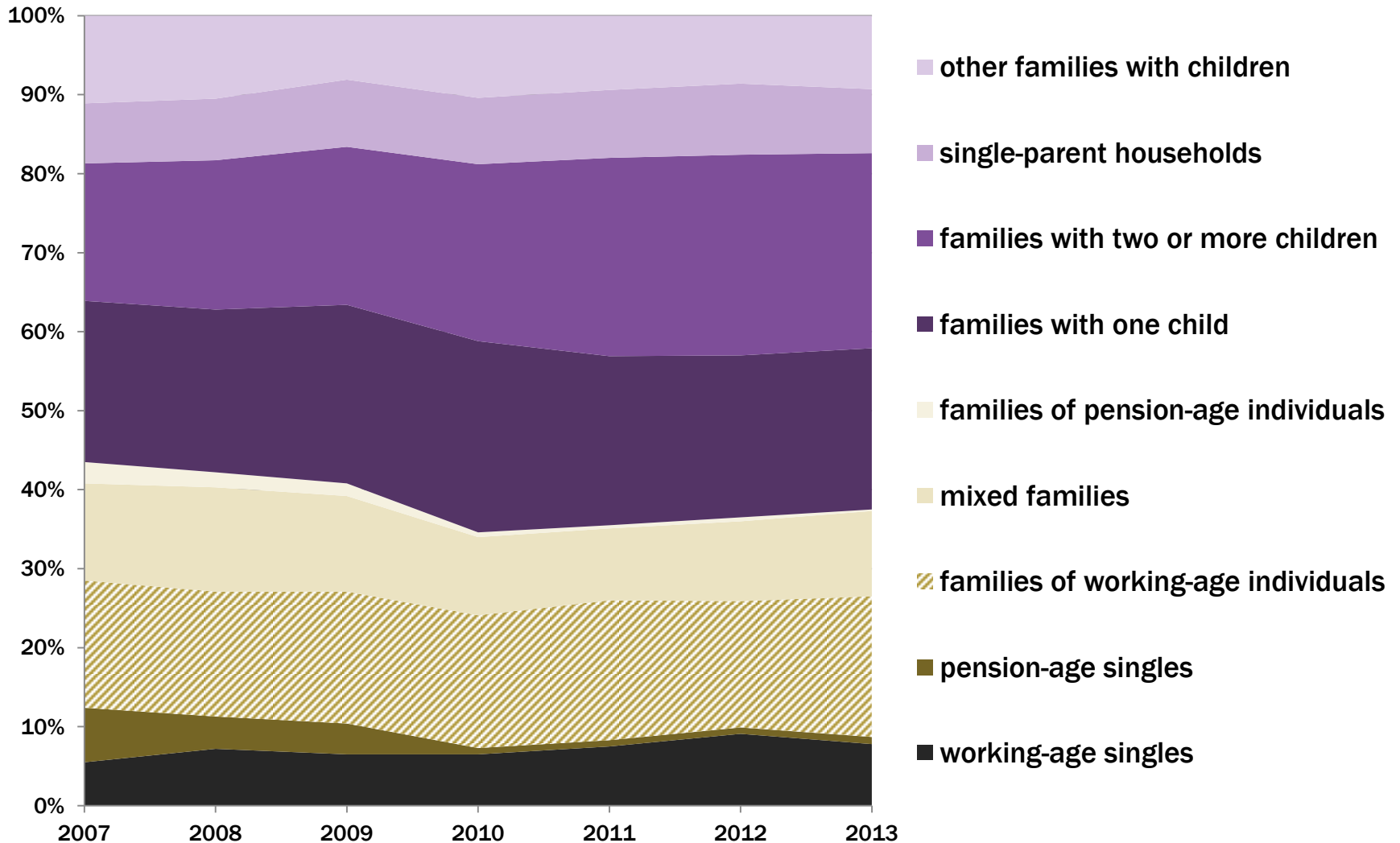
DATA AND METHODOLOGY

- RLMS-HSE (Russian Longitudinal Monitoring Survey), cross-sectional data 2007-2013;
  - Poverty analysis at the household level;
  - Baseline income definition set on basis of 2007 questionnaire;

- Internally developed Microsimulation model (Excel, VBA, SPSS) built for RLMS-HSE datasets;

- Model household incomes under different scenarios of changes in social protection systems and the labor market;
  - Introduce effective "floors" into current programs, which either exist altogether or are set too low;
- No behavioral changes;
- Model the combined effect of these measures if introduced at the same time;
- Examine possible past performance of such measures, especially under pressure of 2008/09 financial crisis;

HOUSEHOLD INCOME STRUCTURE

- **Social income – child benefits & disability benefits ("social" pensions);**

- **Labour income incl. income receipts from UE benefits;**

Year	Average share of income receipts in total income (%)				
	social income	retirement pensions	labour income	private farming	other income
2007	4.5	11.4	71.3	2.5	10.3
2008	4.7	11.6	66.6	3.7	13.4
2009	6.5	13.5	67.7	2.8	9.5
2010	5.7	16.5	64.5	2.1	11.2
2011	6.4	16.5	64.7	2.2	10.3
2012	5.7	16.1	64.2	2.1	12.0
2013	5.5	17.0	64.5	1.9	11.1

Year	Proportion of households with income receipts from different sources (in comments – income share, excluding households without receipts)				
	social income	retirement pensions	labour income	private farming	other income
2007	51.1 (12.1)	46.4 (38.4)	75.7 (77.9)	9.0 (28.9)	30.7 (22.5)
2008	51.2 (12.6)	46.6 (39.7)	73.6 (77.7)	9.0 (35.7)	30.4 (23.4)
2009	52.2 (13.2)	46.5 (40.8)	76.7 (75.9)	9.3 (26.3)	29.7 (21.7)
2010	51.8 (13.7)	46.0 (44.3)	76.6 (74.6)	7.3 (25.2)	29.2 (21.9)
2011	51.9 (13.9)	46.3 (44.9)	76.0 (74.3)	7.6 (23.8)	29.7 (21.7)
2012	51.1 (13.6)	47.3 (44.2)	75.5 (75.2)	7.9 (22.0)	29.2 (20.6)
2013	49.4 (13.2)	49.0 (44.8)	74.8 (75.5)	7.4 (23.9)	29.1 (20.1)

MODELING EFFECTS OF INCOME COMPONENT MODIFICATION

SOCIAL SECURITY BENEFITS. DESIGN

- Minimum disability benefits ("social" pensions) are set to the regional minimum subsistence levels for pensioners;

- Childcare allowances for children under 1.5 years of age should not fall below 0.5 of the MSL for children;

- Child-Poverty benefits not less than 0.7 of the MSL for children;

- Removal of misallocated Child-Poverty benefits;

SOCIAL SECURITY BENEFITS. RESULTS

- Assume full take-up of benefits;

- Only the means-tested benefit is skewed towards income-poor HH recipients;

- Reduction of poverty among HH with children almost by half;

Year	Share of poor benefit recipients		
	Social pensions	Childcare benefits	Child-poverty benefits
2007	31.6	39.3	98.8
2008	26.9	37.0	97.8
2009	25.7	37.8	97.4
2010	28.7	40.7	97.5
2011	23.1	37.8	97.5
2012	17.5	34.7	96.8
2013	24.8	32.9	97.3

Household type	Poverty reduction in percent from initial HH poverty rate						
	2007	2008	2009	2010	2011	2012	2013
households with children	36.7	40.6	41.9	41.9	47.8	46.0	46.9
families with one child	32.3	38.4	33.5	34.6	37.5	34.9	39.6
families with two or more children	36.6	41.9	49.3	47.5	52.2	54.8	55.1
single-parent households	55.8	58.6	53.3	50.4	58.0	52.5	50.5
with one child	58.4	62.9	49.3	49.4	59.8	52.9	50.8
with two or more children	48.2	48.0	65.2	52.1	53.1	51.6	50.0
other families w/ children	31.8	28.7	35.2	39.9	50.0	39.8	37.8

RETIREMENT PENSIONS. DESIGN

- Introduce a minimum "retirement" pension, equal to the regional minimum subsistence levels for the pensioners;

- Model one potential aspect of future pension reform: denial of basic pension component for pensioners continuing employment;
  - Two-pillar system (
  - First pillar: basic pension, indexed to inflation, and an insurance component – based on earnings and employment duration)
  - Second pillar: State or Non-state Pension Fund
  - Basic pension amounts to ~30% of average retirement pension;

RETIREMENT PENSIONS. RESULTS

- Poverty remains almost unchanged;

- Savings from removing basic pension component is enough to cover previous social security reforms;

- Combined effect of both policy reforms reduces overall HH poverty by ~25-27%;

Year	Policy measure recipients (% of all pensioners)	
	Introduction of minimum pension	Removal of basic component for employed pensioners
2007	34.1	22.9
2008	20.7	22.6
2009	16.3	26.0
2010	4.7	24.0
2011	3.9	23.8
2012	2.9	24.3
2013	4.4	23.5

Household type	Increase in HH poverty (ppt.)						
	2007	2008	2009	2010	2011	2012	2013
All households	-2.3	-1.0	-0.6	0.1	0.1	0.2	0.0
Single-pensioner	-11.8	-5.1	-3.8	-0.4	-0.5	-0.3	-0.3
Pensioner-family	-6.4	-3.5	-2.9	-0.3	-0.1	0.0	0.0
Single parent HH with one child	-1.1	-0.6	0.6	0.0	0.8	0.4	1.3
other families with children	0.3	0.9	0.7	1.0	1.2	0.6	0.4

LABOR MARKET. DESIGN

- Without any professional education = MSL of working-age;

- With vocational education = MSL working-age & 0.5 MSL children;

- With higher education and 0-4 years of work experience = MSL working-age & MSL children;

- With higher education and 5 or more years of work experience = 2 MSL working-age & MSL children;

- Unemployed individuals actively searching for a job and ready to start work within a week = MSL working-age;

LABOR MARKET. RESULTS

- Single-most powerful measure in reducing working-age poverty;

Year	Benefits provided for individuals who are:				
	Higher education & 5+ years of experience	Higher education & less than 5 years	Vocational education	No vocational education	UE individuals
2007	12.1	17.7	33.4	49.5	53.6
2008	11.7	12.9	27.0	42.5	49.1
2009	12.0	12.3	25.5	45.5	47.1
2010	12.4	20.1	26.5	43.3	47.0
2011	9.8	12.9	20.6	38.0	43.6
2012	7.6	12.7	21.2	35.8	38.2
2013	9.6	13.6	21.9	32.6	39.8

Household type	Poverty reduction, % from initial HH poverty levels						
	2007	2008	2009	2010	2011	2012	2013
All households	26.8	26.5	30.9	31.5	30.7	28.3	25.4
working-age	56.6	41.3	62.9	58.7	49.0	46.2	48.9
all working-age families	45.0	36.4	44.8	46.5	40.0	36.4	34.3
families with one child	25.1	33.6	33.1	32.8	34.5	27.1	27.8

COMBINING MODELING FOR ALL THREE INCOME COMPONENTS

HOUSEHOLD POVERTY REDUCTION AFTER ADJUSTMENT OF ALL THREE INCOME COMPONENTS-I

Household type	Year						
	2007	2008	2009	2010	2011	2012	2013
All households	58.3	52.5	59.3	57	56.9	54	52.7
households without children	56.7	45.5	52.6	48.6	42.9	42	37.3
single-person households	77.8	57.9	69.6	56.9	49.6	45	47.6
working-age	57.9	43.7	62.9	58.7	49	46.2	48.9
pension-age	93.7	82.6	81	41.7	54.5	30	36.4
families	48.2	41	46.8	46.5	40.8	40.9	34.2
all working-age	45.9	36.9	44.8	47.2	40.4	37.3	35.7
mixed	42.9	40.8	45	45.9	42.9	47.7	32.3
all pension-age	86.5	76.2	82.4	33.3	16.7	16.7	0
households with children	59.5	57.6	63.9	61.4	64.5	60.8	61.9
families with one child	58.1	59.8	63.3	60.2	62.8	52	58
families with two or more children	55.9	55.7	64.5	61.7	63.3	67.5	67.2
single-parent households	66.3	70.1	65.2	62.2	70.6	65.3	63.9
with one child	71.4	74.2	63.8	63.2	72.4	67.8	65.1
with two or more children	51.9	60	69.6	60.4	65.6	58.1	61.8
other families w/ children	63	47	62.5	62.5	66.2	57.5	55

HOUSEHOLD POVERTY REDUCTION AFTER ADJUSTMENT OF ALL THREE INCOME COMPONENTS-II

	Initial household poverty rate	Household poverty rate with all three types of incomes adjusted (RP-1)
2007	25.3	10.5
2008	20.9	9.9
2009	20.3	8.3
2010	20.2	8.7
2011	17.0	7.3
2012	15.5	7.1
2013	14.7	7.0

- Effectively, our policies end up increasing mean income by 8%-9%;

- However, none of the policies were means-tested, and eligibility rules were more lax than in the real world;

CONCLUSION

- Greatest poverty-reduction effect seen from social income adjustment;
  - Not surprising, due to current poverty composition;

- Poverty reduction potential of Labour income is surprisingly low for its cost;
  - Due to limited participation of both partners in the labour market;
  - Pre-crisis, labour income adjustments had the highest net effect of household poverty;

- Pension system can be seen as "working-as-intended", but there are still reasons for introducing legislatively a "minimum pension";

THANK YOU