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An impact of social security benefits on income inequality and poverty over life- course in Baltic States

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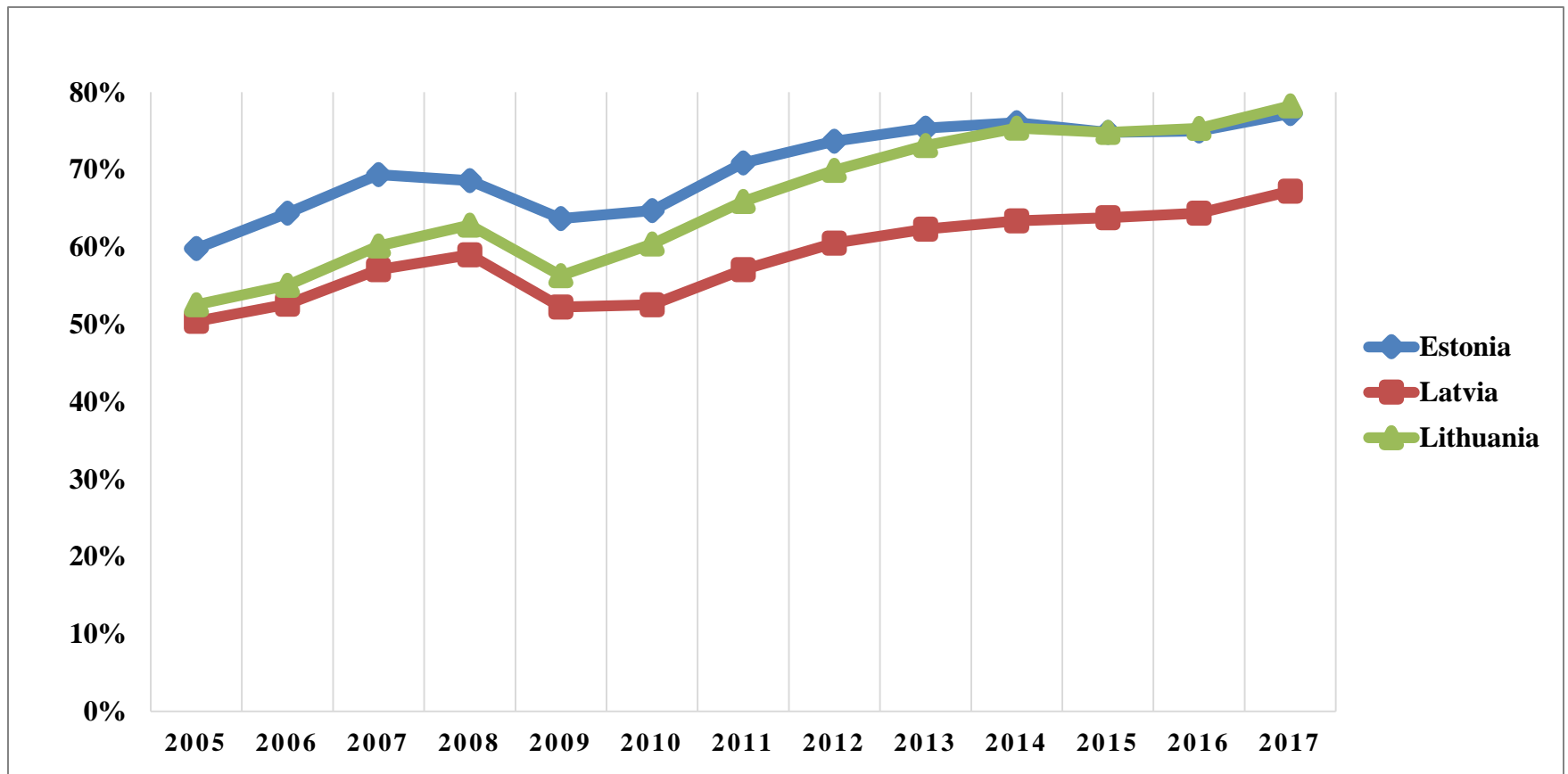
Purpose and main parts

Research purpose - to analyse the impact of social security benefits on income inequality and poverty over age groups in the Baltic States.

Main parts of presentation:

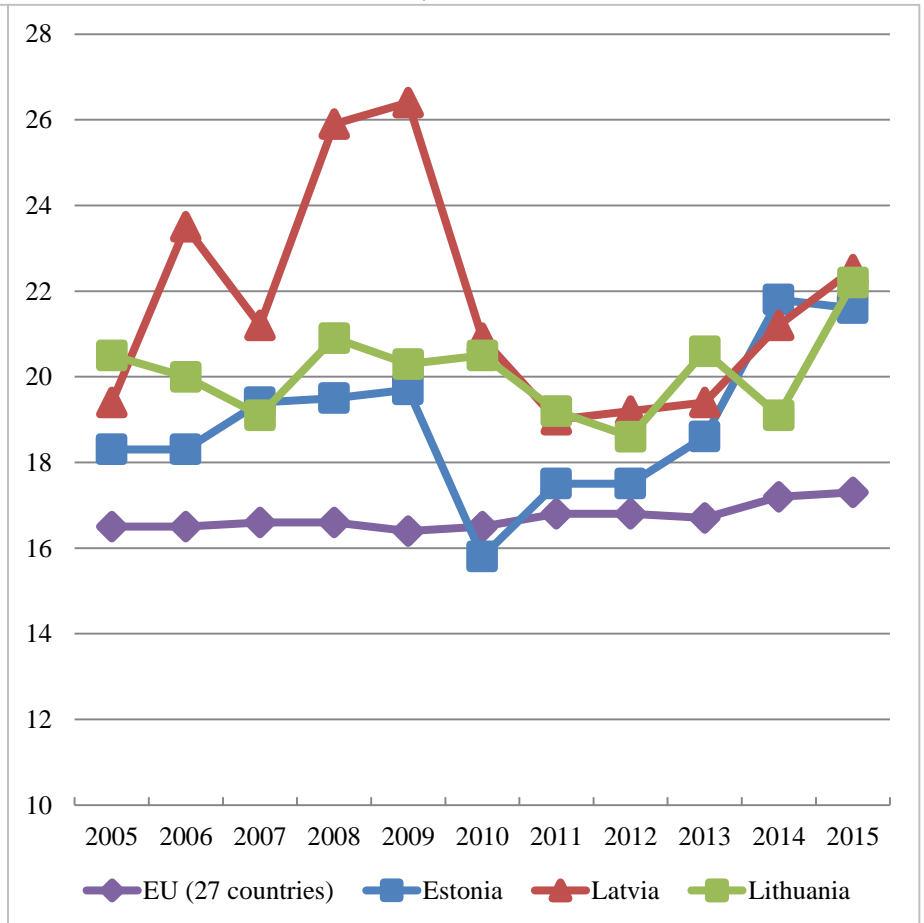
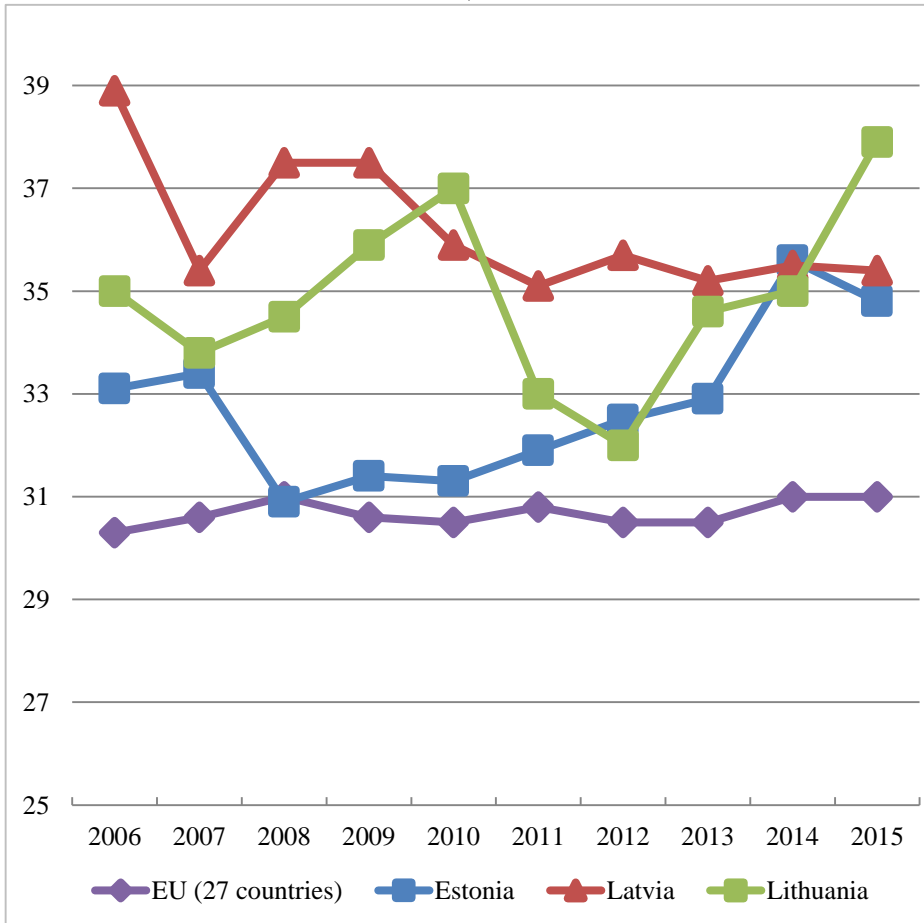
1. Review of socio-economic context;
2. Explanation of research method;
3. Analyses of social benefits provision rules;
4. The impact of social benefits on Gini inequality; poverty level and gap

GDP per capita (in PPS) as percentage of EU (28) average



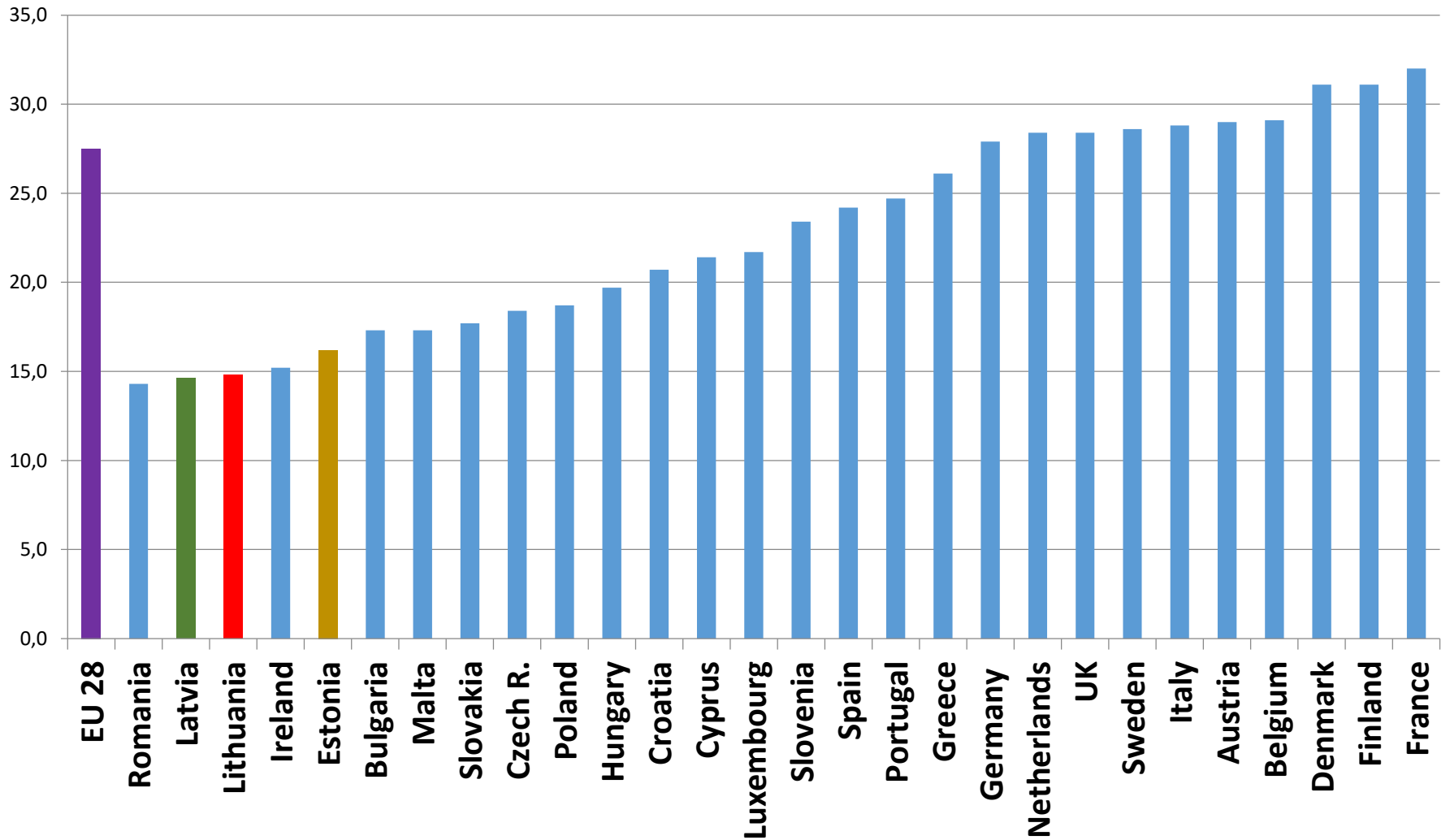
Source: Eurostat

Gini inequality and at-risk-of-poverty rate



Source: Eurostat

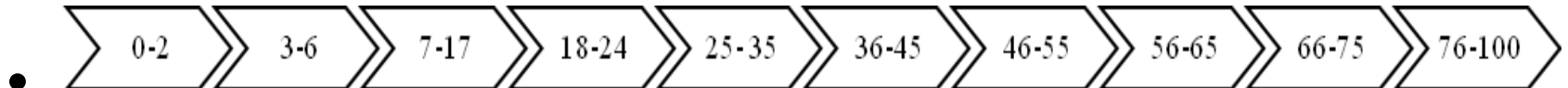
Social protection expenditures (Percentage of gross domestic product (GDP), 2015)



Source: Eurostat

Data and Methods

- EU-SILC 2010 and 2015 data sets.



- Selection age groups were based on the **life-course perspective approach of a made-up stylized individual**, suggested by Hicks (2008);
- **The Gini index, at-risk-of-poverty level and poverty gap** was calculated **using sequential method**, where in each stage of income formation, starting from income from market, each social benefit was added and divided by equivalized household size.
- Social protection spendings, GDP dynamics, unemployment rate were analysed using available **Eurostat data** up to 2015;

Child benefit structures in Baltic countries, 2015

	Coverage	Amount	Period of payment
EE	Universal	45 euro (1 st and 2 nd child) / 100 euro (3 rd and the next children)	16 years (19 years)
LV	Universal	11.38 euro (1 st) / 22.76 euro (2 nd) / 34.14 euro (3 rd and the next)	1-15 years (19 years)
LT	1.5 of SSI	28.5 euro (1 st and 2 nd) or 15.2 euro (3 rd and the next)	0-7 years (2-18 years)

Maternity and paternity benefit structures in Baltic countries, 2015

	Maternity coverage	Amount	Period of payment
EE	Employees Self-employed	100 % of the reference wage	140 calendar days
LV	Employees Self-employed Voluntary basis	80 % of the mother's compensatory wage	112 calendar days (14 additional days)
LT	Employees Certain self-employed and assimilated groups Voluntary basis	100 % the mother's compensatory wage (min – 1/3 of the insured income; max – 3.2 times of the insured income)	126 calendar days (14 additional days)
	Paternity coverage	Amount	Period of payment
EE	Employees Self-employed	100 % of average wage (max 3 times the average monthly salary)	10 working days
LV	Employees Self-employed Voluntary basis	80 % of the father's compensatory wage	10 calendar days
LT	Employees Certain self-employed and assimilated groups Voluntary basis	100 % of the father's compensatory wage	1 month

Source: made by the author based on MISSOC, 2015

Parental benefit structures in Baltic countries, 2015

	Coverage	Amount	Period of payment
EE	Employees and the self-employed, who pay the social tax themselves	100 % of the reference wage (min – 335 euro, max- 2,548.95 euro)	435 days
LV	Employees and self-employed persons	1 year – 60 % of the compensatory wage 1.5 year – 43.75 % of the compensatory wage	1 year or 1.5 year
LT	Employees and certain groups of self-employed persons and assimilated groups	1 year – 100 % of the compensatory wage 2 year – 70 % of the compensatory wage in the 1 st year 40 % - the 2 nd year	1 year of 2 years

Source: made by the author based on MISSOC, 2015

Other child raising allowance structures in the Baltic countries, 2015

	Type of allowance	Coverage	Amount	Period of payment
EE	Child-care	All parents, raising children aged 0-8 years old	0-3 years - $\frac{1}{2}$ x the child-care allowance rate (76.70 euro) 3-8 years - $\frac{1}{4}$ x the child-care allowance rate (76.70 euro)	For children under 8 years of age
LV	Child-care	All parents raising children aged 0-2 years old	0-1.5 years – 171 euro 1.5-2 years – 42.69 euro	For children under 2 years of age
LT	Child-care	-	-	-
EE	Disabled	Moderate or profound disability	270 % or 315% of the SBR (25.57 euro)	For children under 16 years of age
LV	Disabled	Disabled child or child with severe physical and functional disturbance	106.72 euro or 213.43 euro	For children under 18 years of age
LT	Disabled	Light (I), moderate (II) or severe disability (III)	I – 100 % BPA (105 euro) II- 150 % of BPA (105 euro) III – 200 % of BPA (105 euro)	For children under 18 years of age

Source: made by the author based on MISSOC, 2015

Disability benefit structures in Baltic countries, 2015

	Capacity to work	Qualifying period	Formula	Period of payment
EE	Partial incapacity (10 – 90 %) Total incapacity (100 %)	16-24 years – no required period 25-26 years - 1 year Required period increases by 1 year every 2 years 60-62 years - 14 years	Old-age pension calculated on the basis of year + pension insurance coefficient	Until legal retirement age of old-age pension
LV	I – high degree of incapacity and need for care form another II – high degree of incapacity III – medium degree of incapacity	3 years of insurance	(I) 0.45 x reference earnings + (insurance records in years/max possible insurance record) x reference earning x 0.1 (II) 0.40 x reference earnings + (insurance records in years/max possible insurance record) x reference earning x 0.1 (III) fixed amount of the State SSB (64.03 euro)	Until legal retirement age (converted into old-age pension)
LT	75 – 100 % - total loss of capacity to work 60 – 70 % - partial loss of capacity to work 45 – 55 % - partial loss of capacity to work	Under 24 years – 1 year 24-38 years – required period increases by 4 months each year 38 and above – required period increases by 1 year each year	The basic part + the supplementary part + the supplement years of pension insurance	Until the end of validation or until legal retirement age

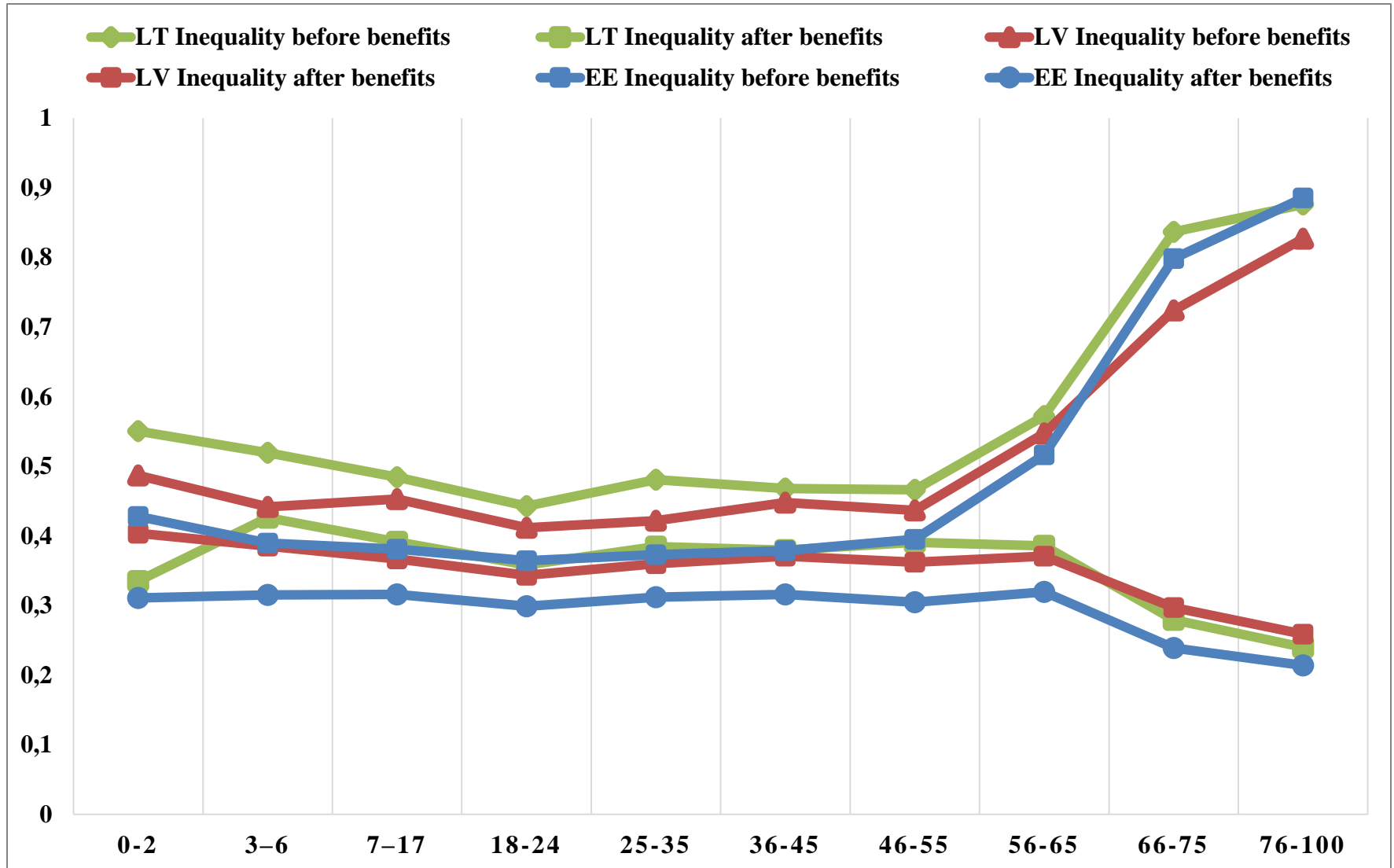
Source: made by the author based on MISSOC, 2015

Old-age pension structures in the Baltic countries, 2015

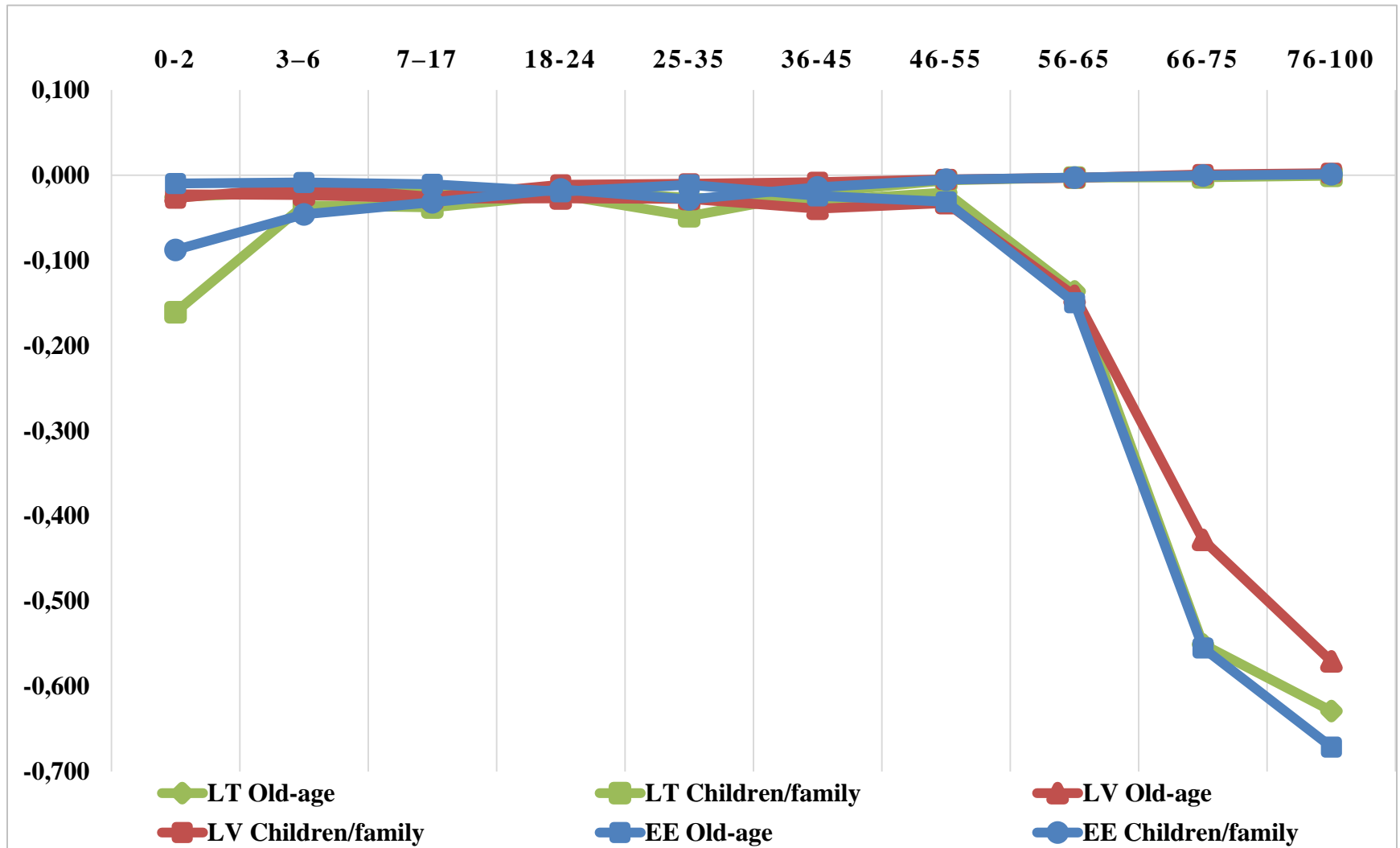
	Coverage	Qualifying period	Minimum pension	Indexation
EE	1 st pillar – all residents 2 nd pillar – compulsory for all residents	1 st pillar – 15 years of contribution 2 nd pillar – no qualifying period	1 st pillar – 100 % of the National Pension Rate (148.98 euro) 2 nd pillar – no minimum pension	1 st pillar – indexation depends on the increase of consumer price and the social tax revenues 2 nd pillar – calculation on lifetime annuities
LV	1 st pillar – all employees and self-employed 2 nd pillar – compulsory for all insured persons Voluntary membership possible	15 years insurance record	Less than 20 years – 1.1 x SSB 21 – 30 years – 1.3 x SSB 31 – 40 years – 1.5 x SSB 41 and more years – 1.7 x SSB	Part of pension not exceeding 50 % of the social insured wage is adjusted to the price index and 25 % of the wage index
LT	1 st pillar – compulsory for all employees and self-employed 2 nd pillar – voluntary basis	15 years of insurance record 30 years of insurance record for full pension	No minimum pension	The basic pension part + current years insured income

Source: made by the author based on MISSOC, 2015

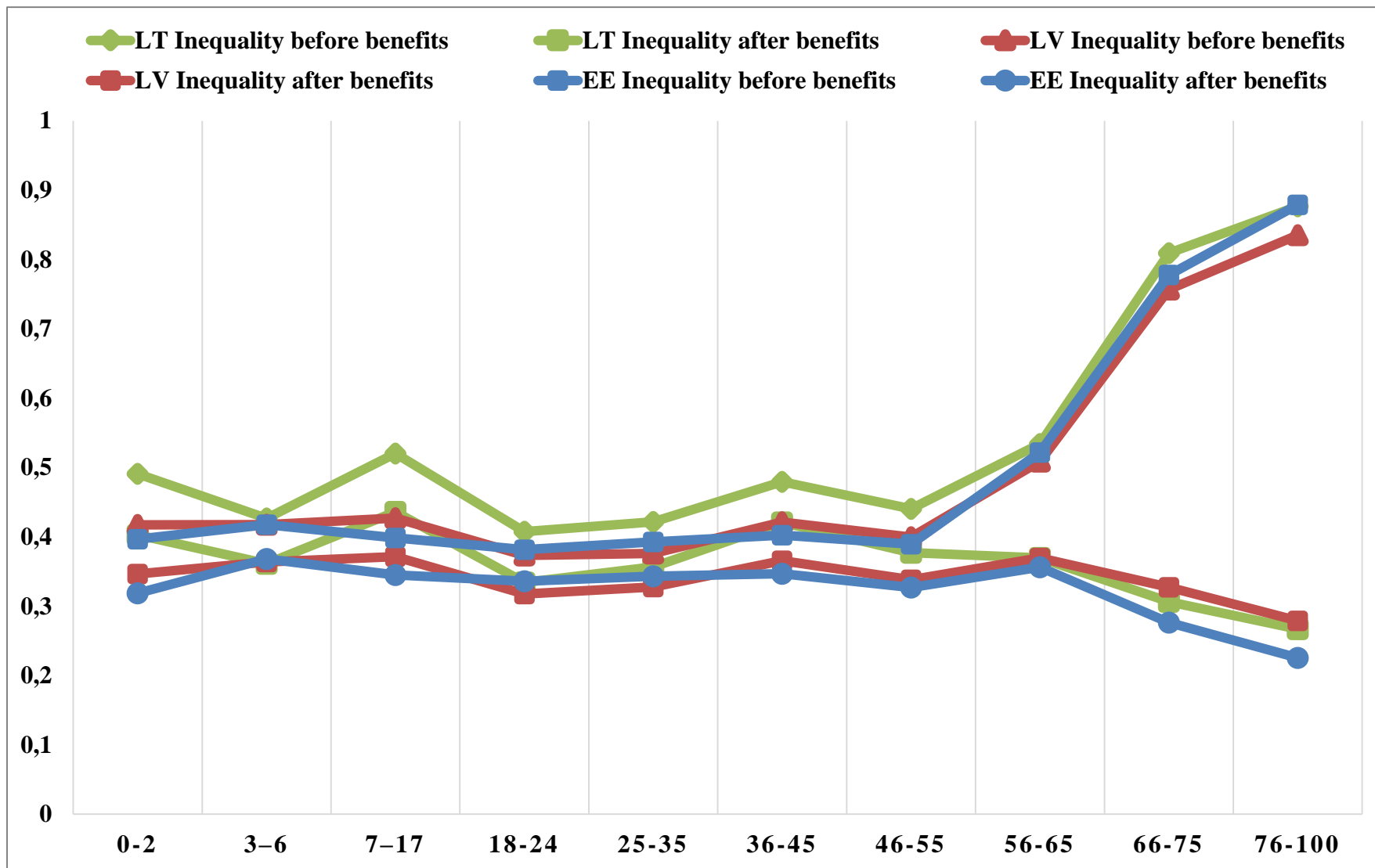
The impact of social benefits on Gini inequality, 2010, (%)



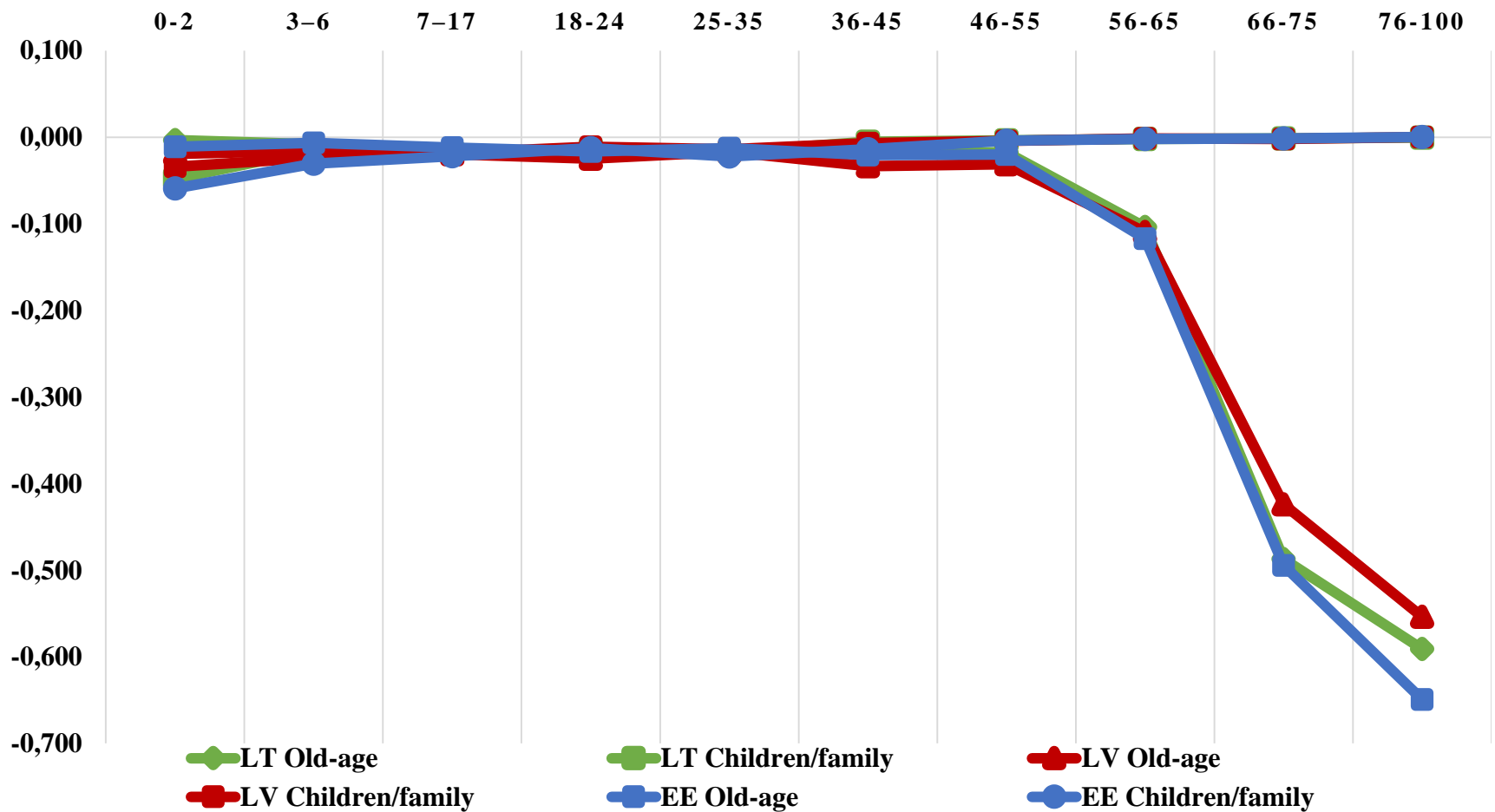
The most significant benefits for inequality reduction in 2010



The impact of social benefits on Gini inequality, 2015, (%)

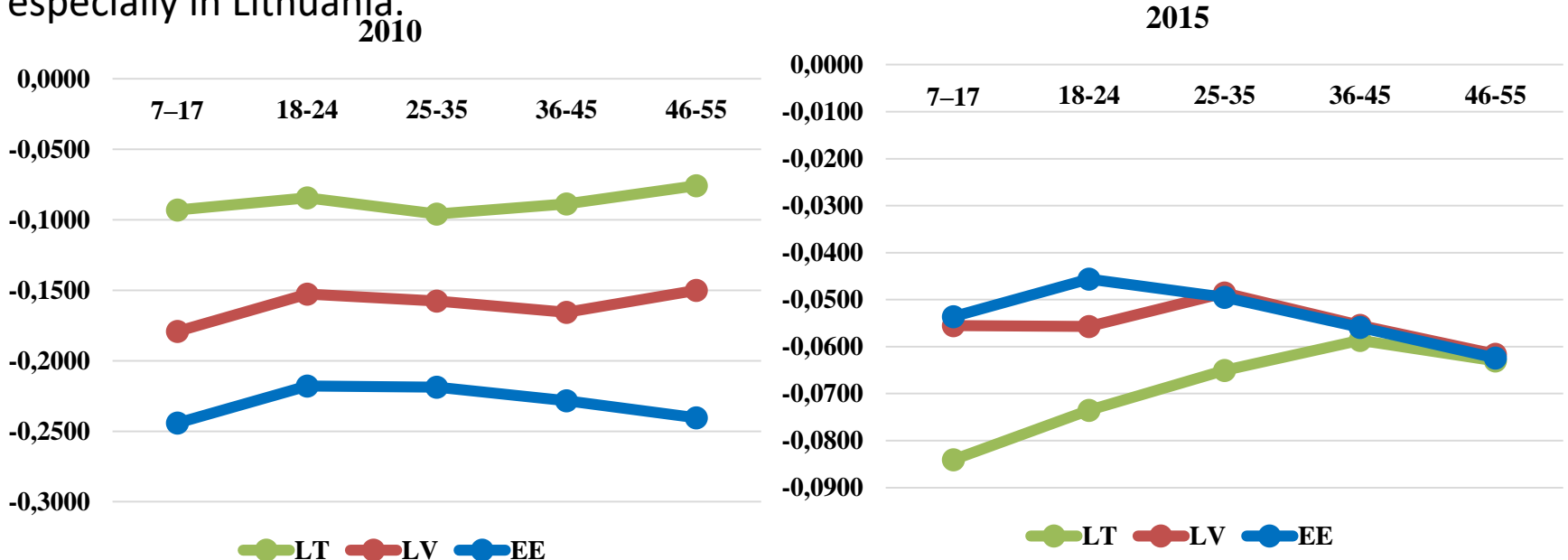


The most significant benefits for inequality reduction in 2015

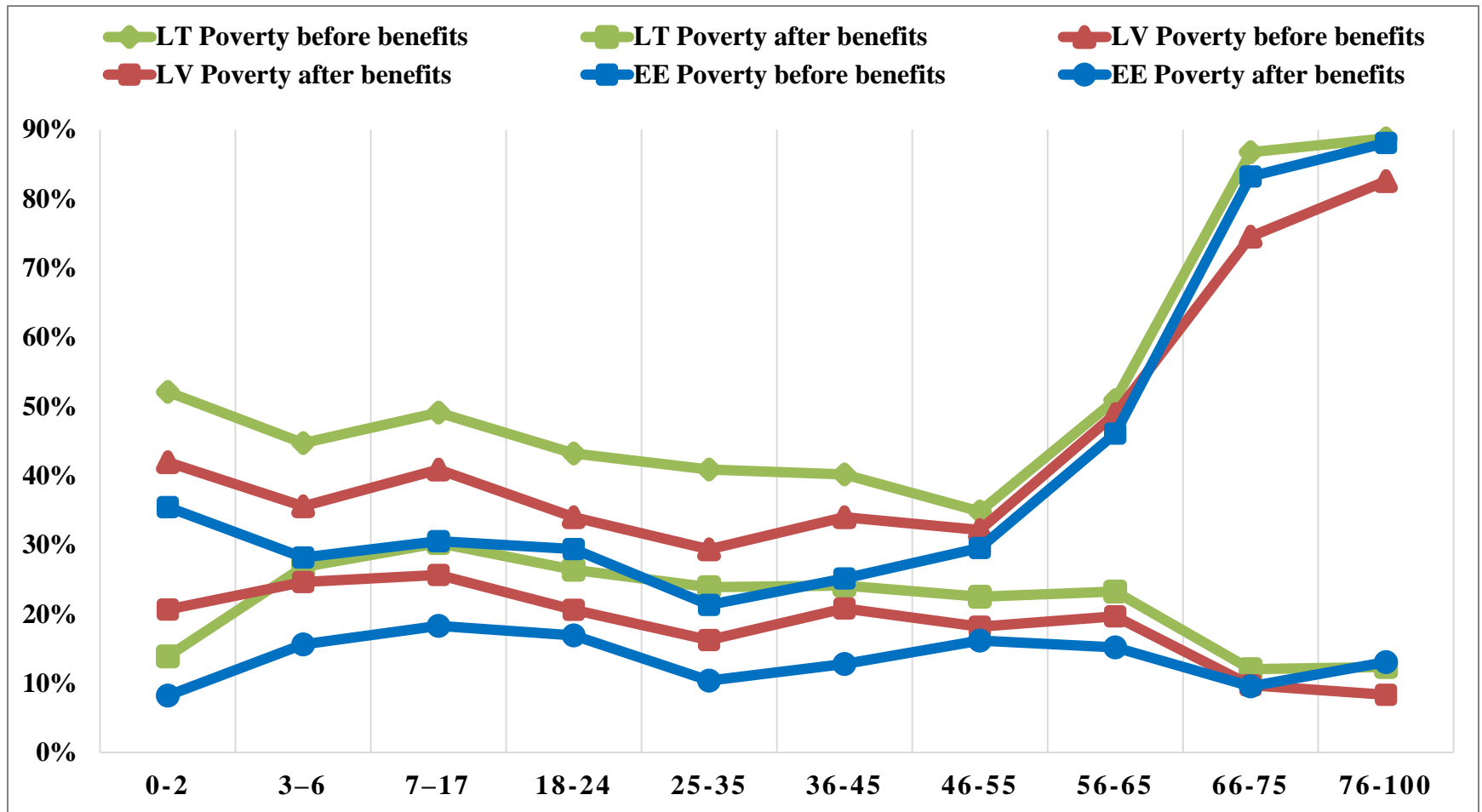


Sum of all benefits, 2010 and 2015

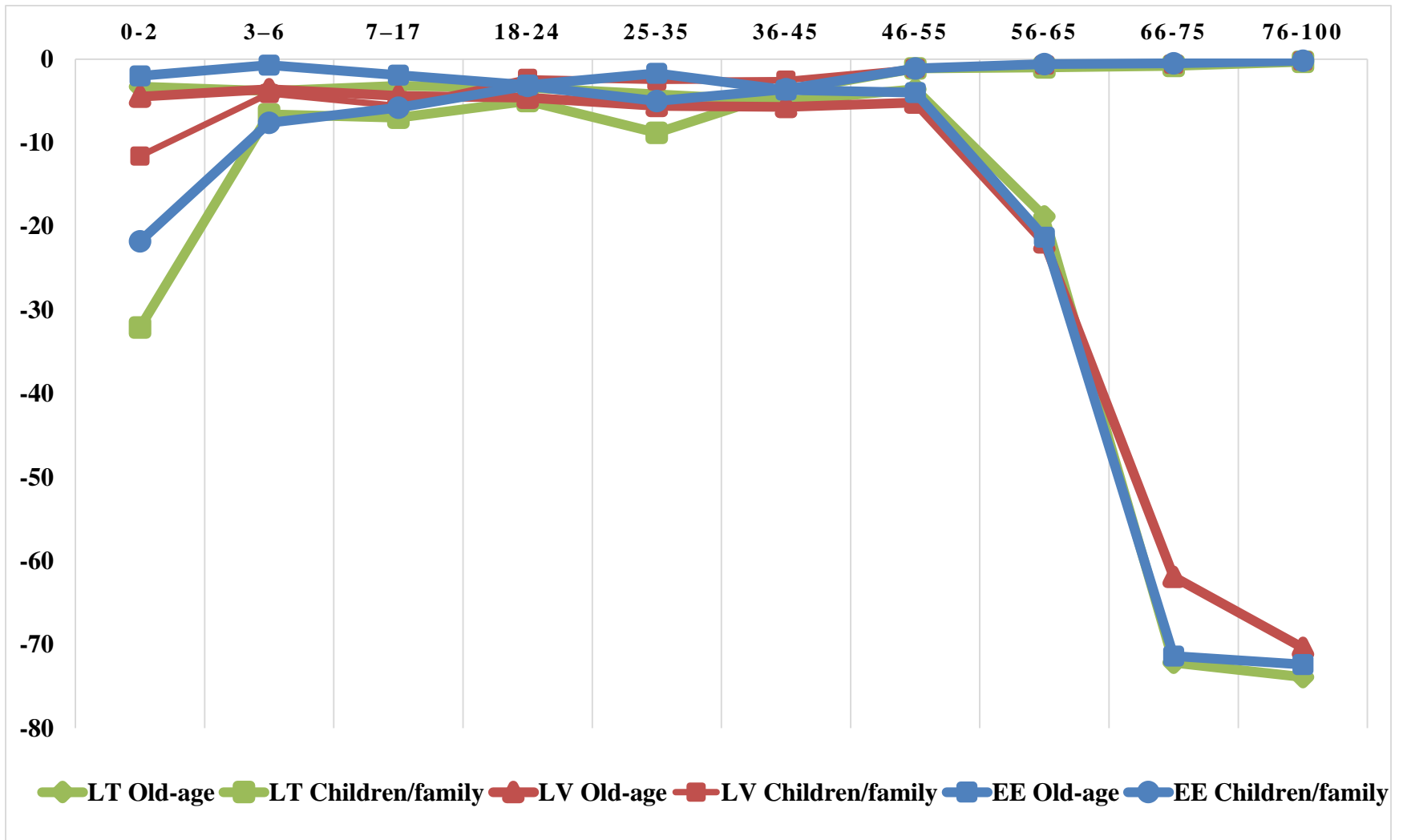
- Social benefits reduced income inequality less for 3-6 age group in Lithuania in 2015 in comparison with 2010;
- The impact of children/family benefits on income inequality remained the same in Latvia and Estonia for 3-6 age group in 2015, compared with 2010;
- The impact of children/family benefits on inequality reduction decreased for 7-17 age groups in 2015 in Baltic States compared with 2010;
- The impact of total social benefits on income inequality was lower also for 18-24 age groups in 2015 in Baltic States, compared with 2010. The impact of social benefits was slightly lower for 25-35 age group income inequality reduction all three Baltic States, especially in Lithuania.



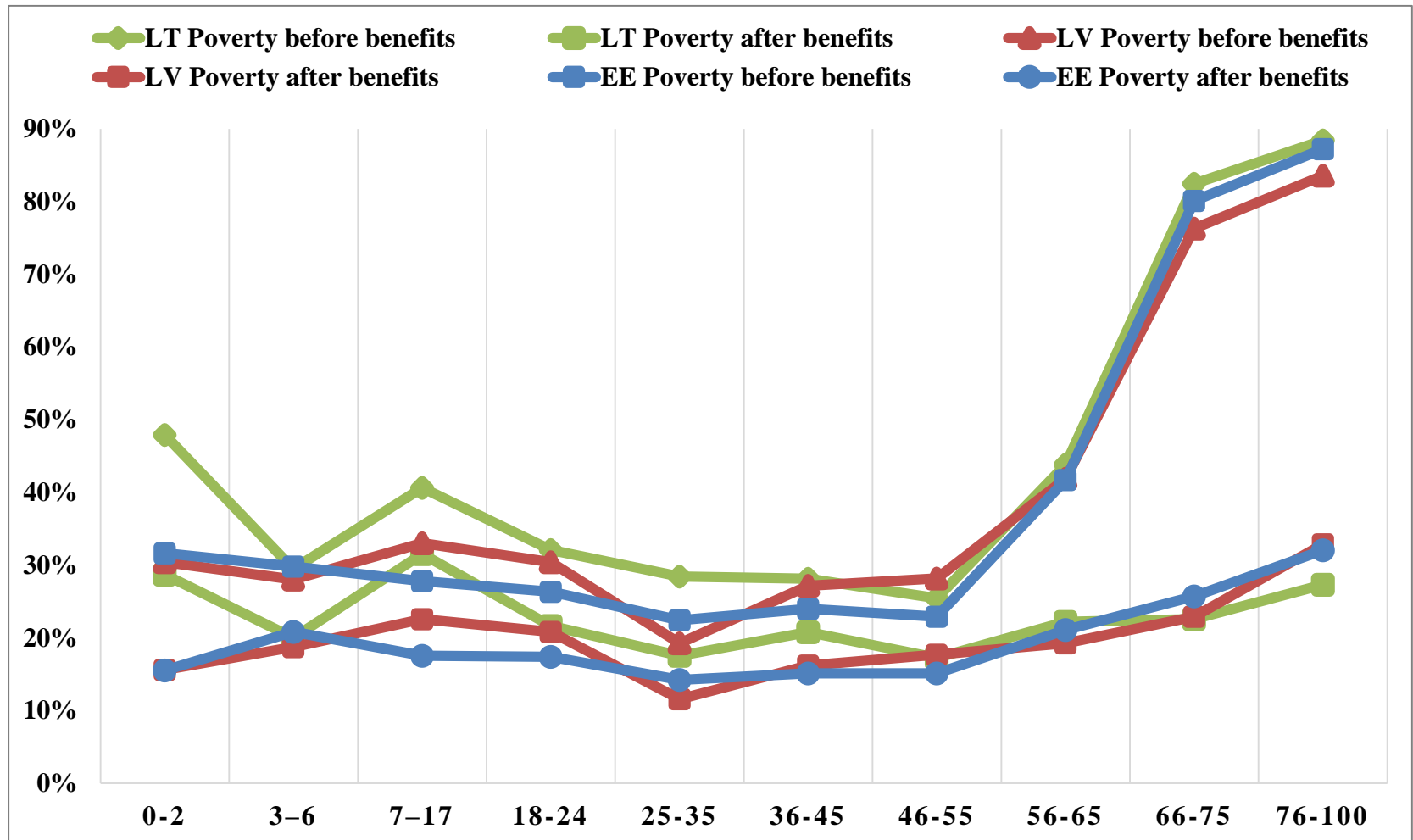
At-risk-of-poverty levels before and after social benefits, (%), 2010



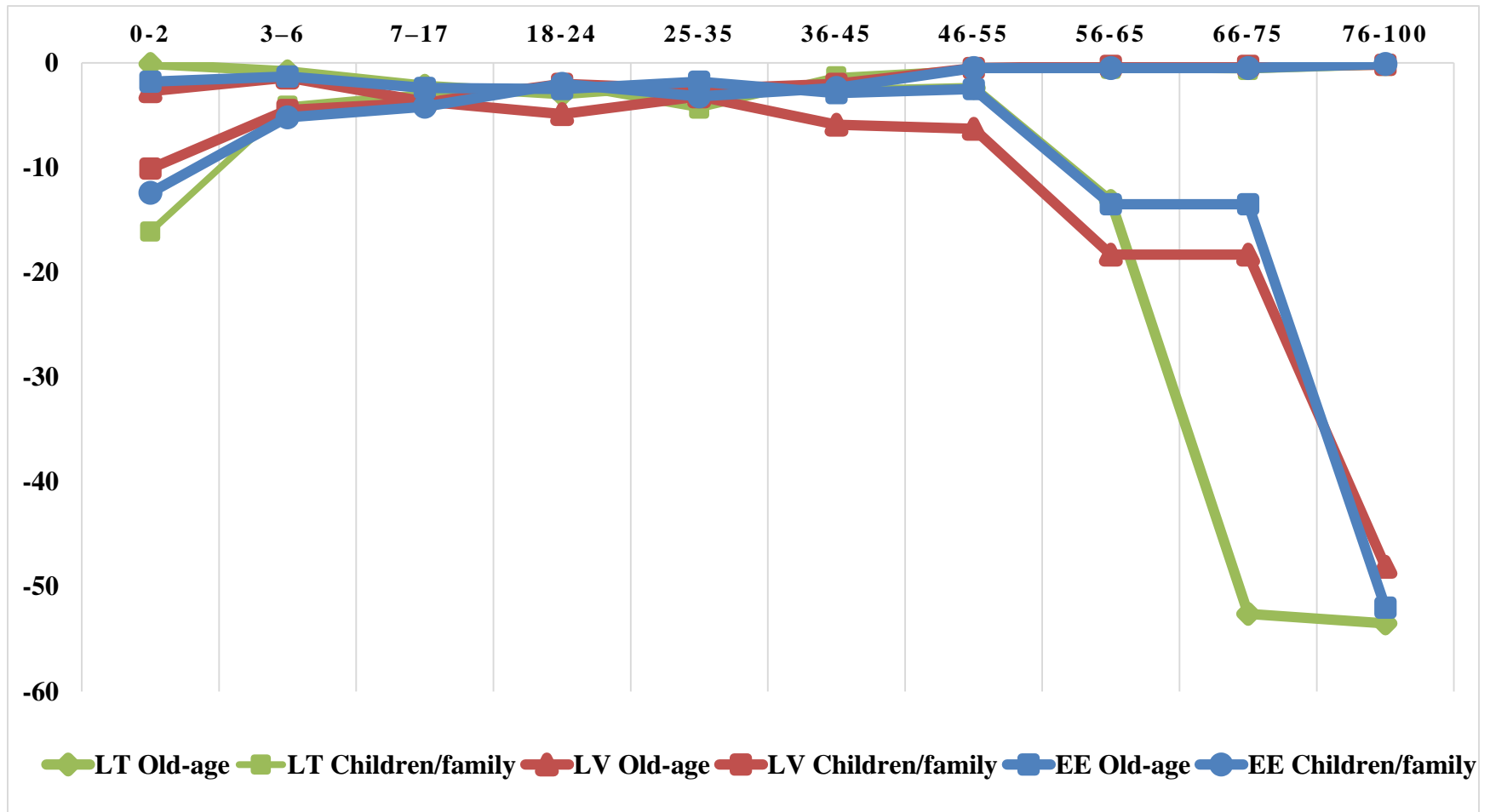
The most significant benefits for poverty reduction in 2010



At-risk-of-poverty levels before and after social benefits in the Baltic States, (%), 2015

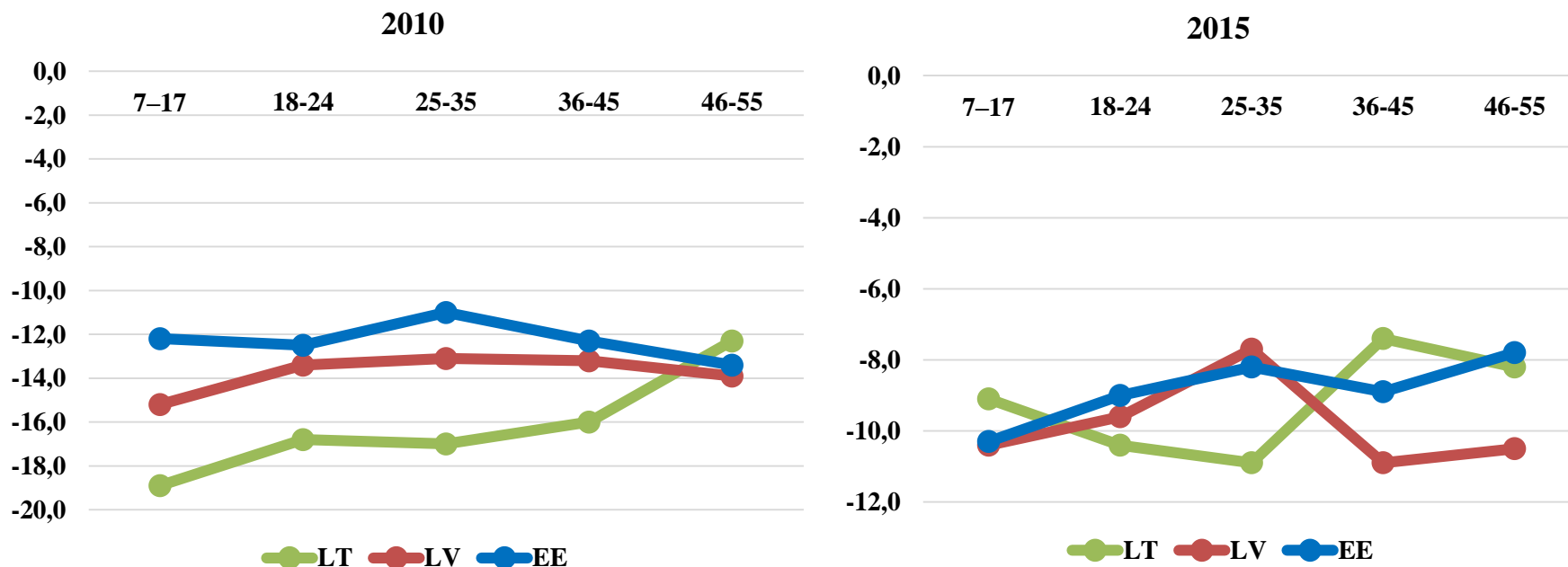


The most significant benefits for poverty reduction in 2015

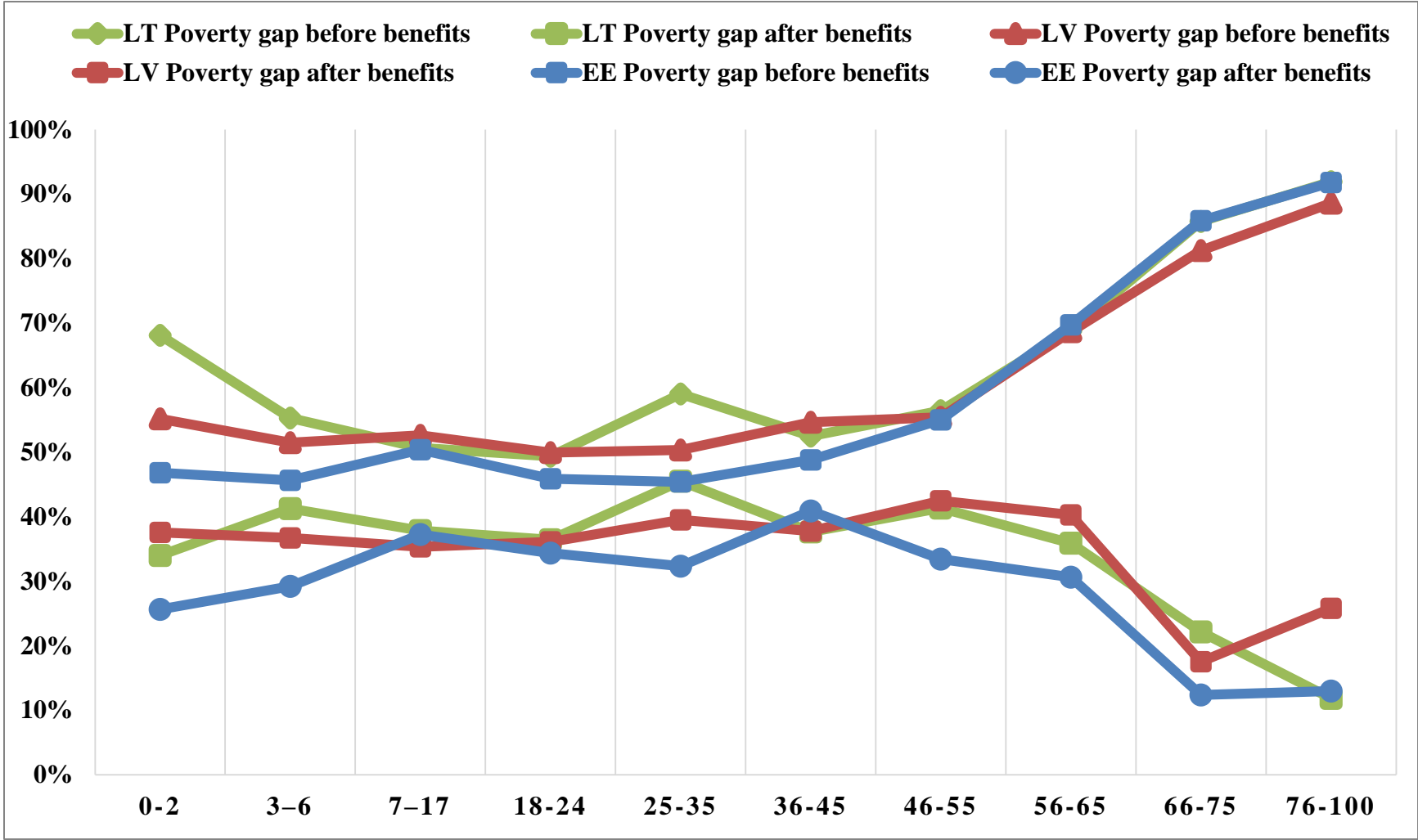


Sum of all benefits, 2010 and 2015

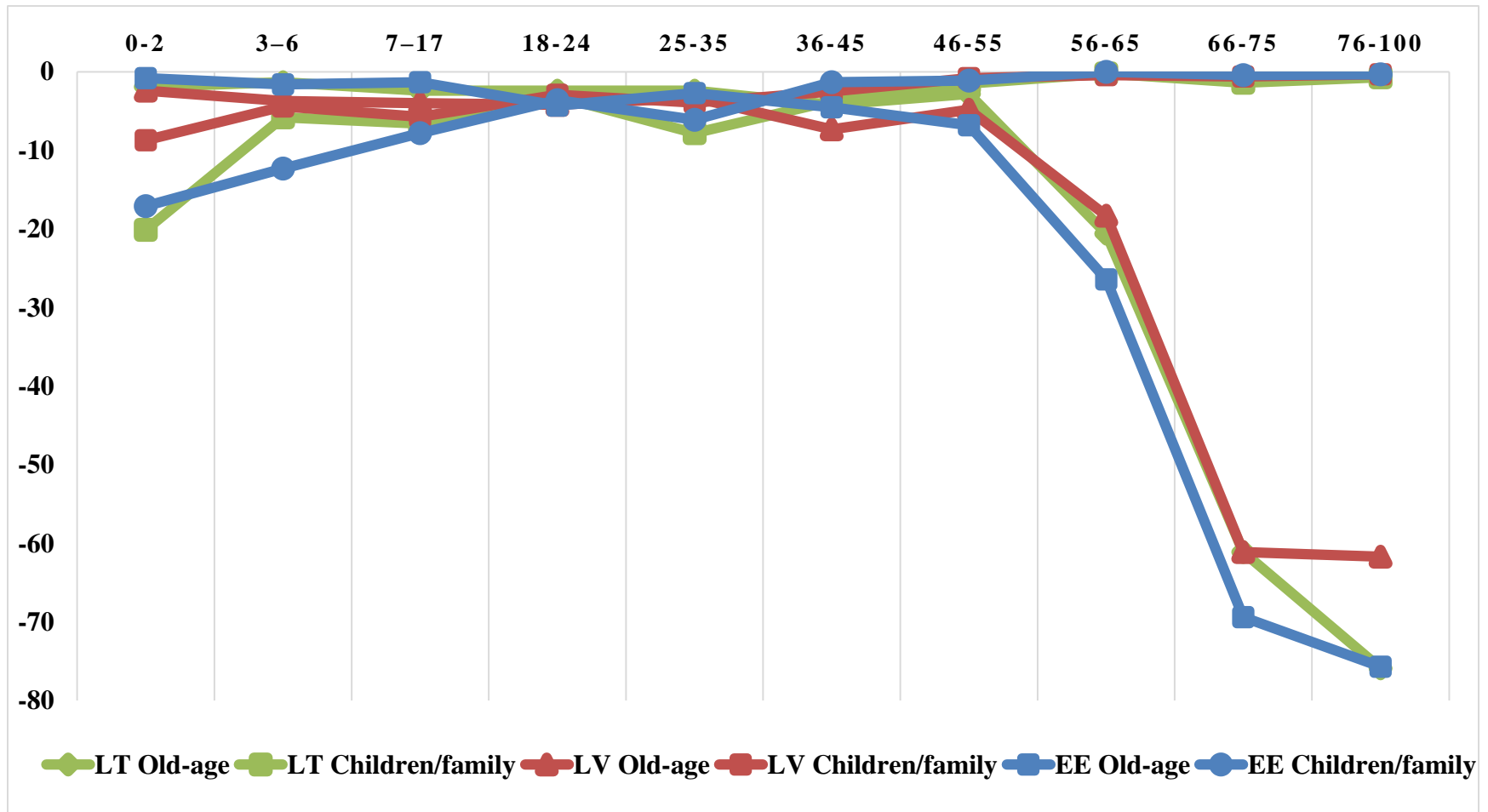
- The impact of social benefits on poverty reduction for 0-2 age groups in Baltic States in 2015 was lower compared with 2010. The impact was twice lower due to received children/family benefits in Lithuania, compared with 2010;
- The impact of social benefits on poverty reduction was lower for the 3-6 age groups in Baltic States in 2015, compared with 2010.
- The impact of social benefits on poverty reduction for 18-24 age group was similar as it was in 2010 in all three Baltic States.
- The role of social benefits also slightly decreased for 25-35 age group in all three countries in 2015, compared with financial crisis period (2010).



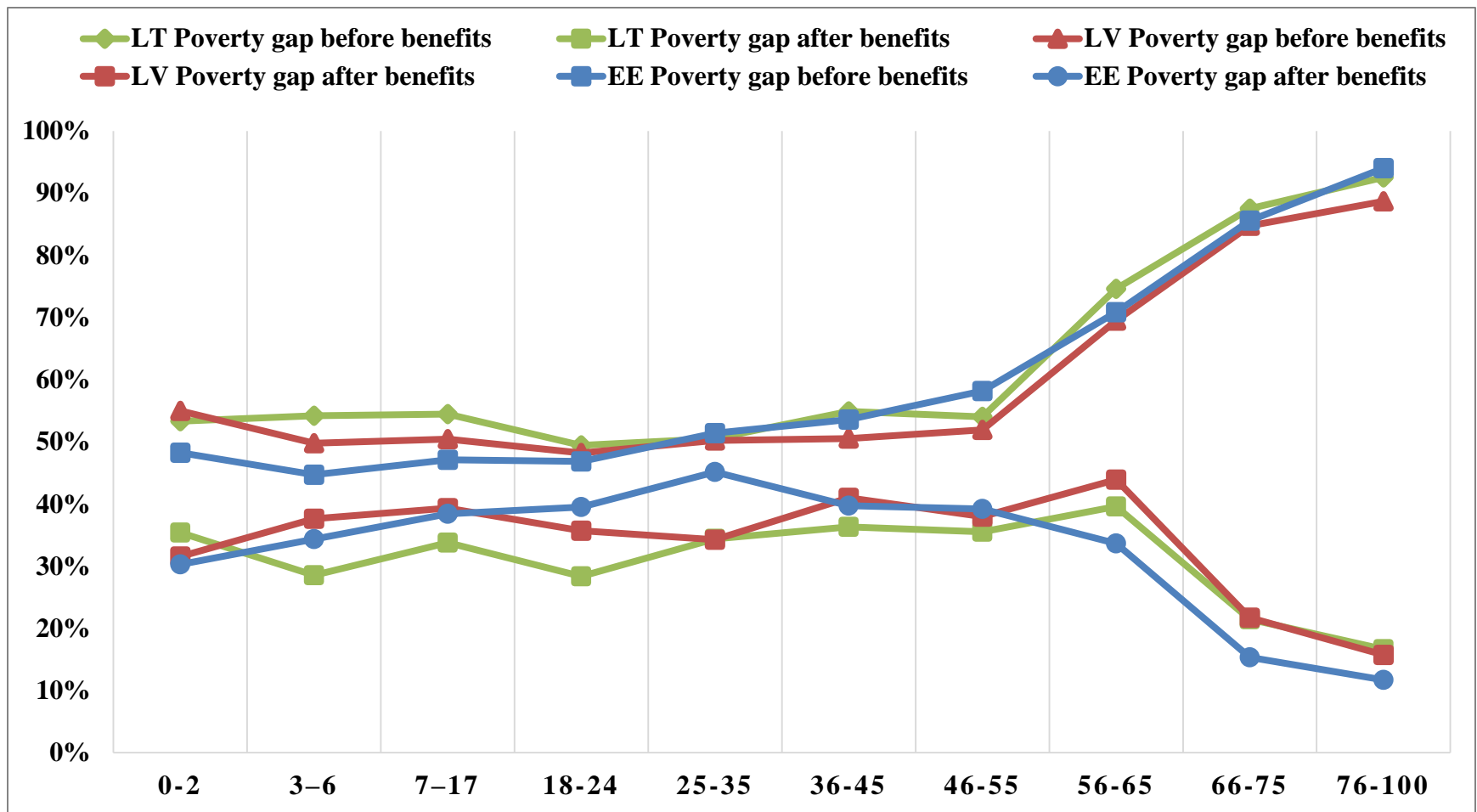
Poverty gap before and after benefits, (%) , 2010



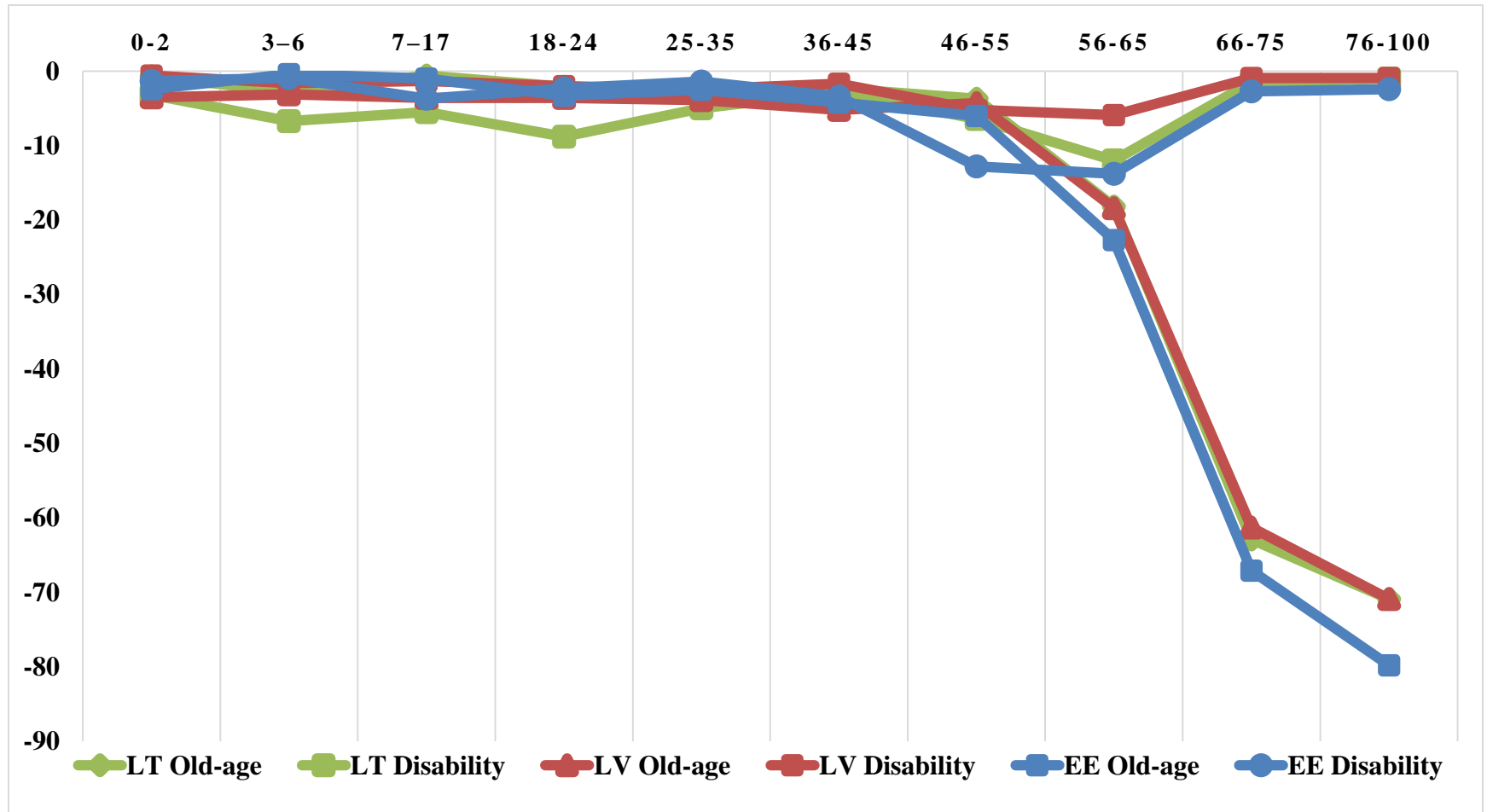
The most significant benefits for poverty gap reduction in 2010



Poverty gap before and after benefits, (%), 2015

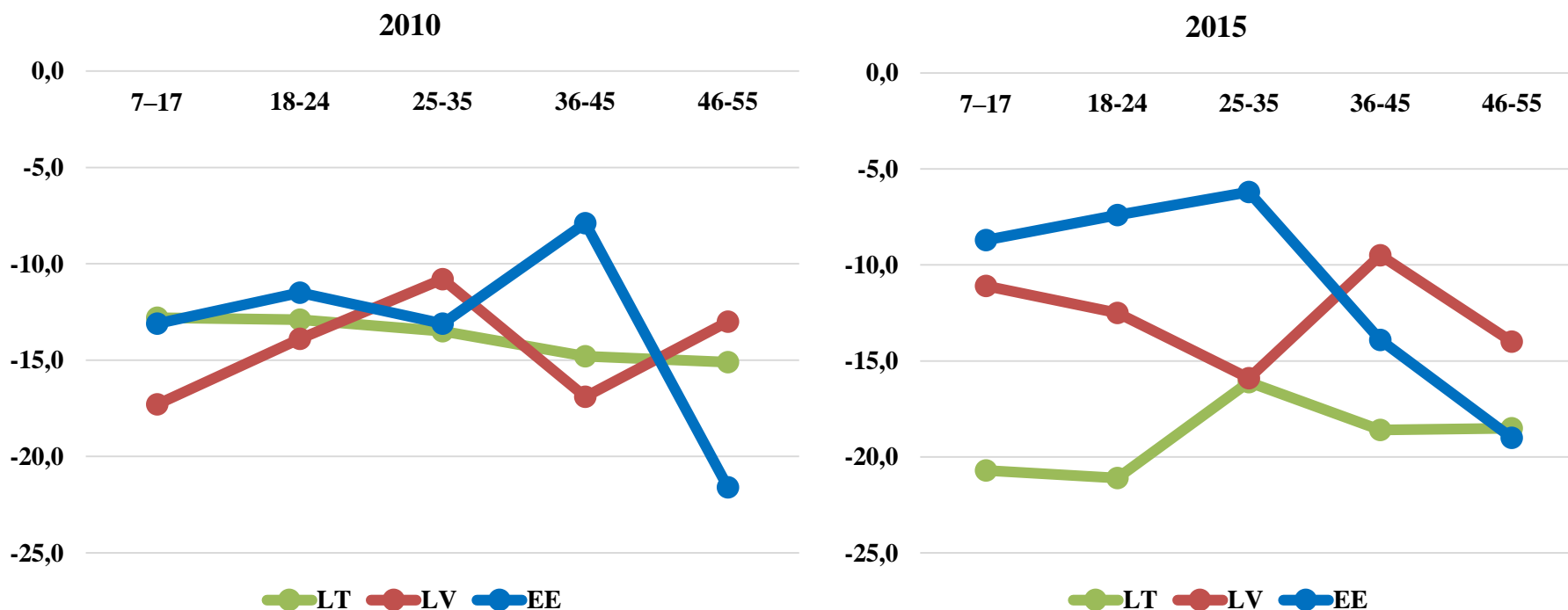


The most significant benefits for poverty gap reduction in 2015



Sum of all benefits, 2010 and 2015

- The highest impact on poverty gap reduction had old age pensions;
- The impact of social benefits on poverty gap was similar in 2015 as it was in 2010.
- We observe reduced impact of social benefits on poverty gap in Latvia in 2015, compared with 2010 for the further age groups (36-45). It is related with decreased impact of old age, disability and children/family benefits in 2015.



Conclusions

- Social benefits had modest impact on income inequality in 2010 and 2015 up to retirement age during life course in Baltic States. Income inequality after social benefits still remains high up to retirement.
- The more equal market income in Estonia ensured more equal income after social transfers as well, compared with Lithuania and Latvia. Despite that, the capacities of social benefits on income inequality reduction were similar among Baltic States.
- The social benefits had higher impact on at-risk-of-poverty reduction compared with income inequality.
- The poverty gap remains high after social benefits in Baltic States. The highest impact on poverty gap reduction had old age pensions other social benefits reduced poverty gap up to one quarter.
- At-risk-of-poverty did not decrease even during economic growth period after social benefits in Baltic States.

Thank you for attention!

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