

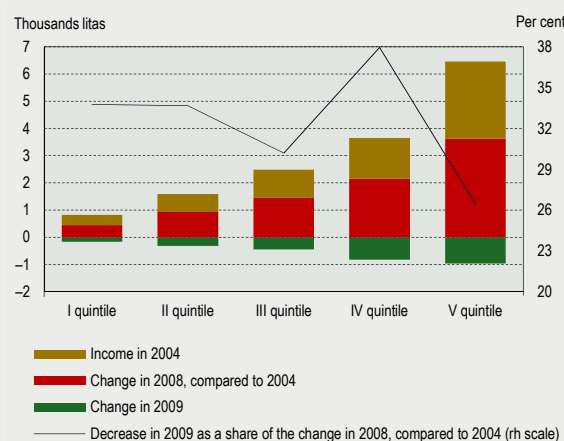
Box 1. Effects of the crisis on income inequality in Lithuania

It is generally believed that during the economic downturn, the situation of the less affluent population deteriorates disproportionately in comparison to those who are better off, i.e. poorer households are affected more by the recession, which increases the income inequality. These phenomena are seen in a negative light: although the perceived income inequality may motivate people to improve their financial situation by working more or acquiring new skills, greater inequality is often linked to higher crime and social exclusion. In this box, outlining the income change and distribution in 2004-2009, we sought to determine the effect of economic crisis in 2009 on the distribution of income in Lithuania.¹

During economic upheaval the country's income per capita has been growing rapidly (see Chart A). According to Statistics Lithuania, disposable monthly income per household² in 2008 was about 2.3 times (1.6 thousand litas) higher than in 2004. Income changes by income quintiles (i.e. five equally-sized groups, consisting of households arranged by ascending income, or fifths) counted in times, varied relatively little, but the least (2.2 times or 0.5 thousand litas) increase was in the income of the poorest (the first quintile). The income of the second, third and fourth quintiles in 2008 was 2.4 times greater than in 2004, while the highest-income group households had 2.3 times (3.6 thousand litas) higher incomes.

In 2009, during the severe economic downturn, the average income fell by about 16 per cent. The greatest decline (22%) was seen in the fourth quintile income, while the other quintiles, except the fifth, were only slightly behind (their income decreased by 18-20%). The least (15%) decline in income was seen among households with the highest income.

Chart A. Developments of disposable monthly income in cash per household by quintiles



Sources: Statistics Lithuania and Bank of Lithuania calculations.

The calculation of the share of increase in income (in 2008, compared to 2004) which was lost in 2009 shows that the largest share—38 per cent of income gains—was lost by the fourth quintile households (see Chart A). About one third of the gains were lost by the first and second quintiles, about 30 per cent—by the third, and only about 26 per cent by the fifth. The average household income of all quintiles, except for the fifth, in 2009 decreased to levels that were lower than in 2007. For the fifth quintile it was slightly higher than the level in 2007.

The following section addresses the Eurostat data. Its database contains not the average disposable household income but equivalised disposable income data. This indicator eliminates the impact of household size and composition on income, because in calculating it the household income is divided by the household equivalent size.³ When income is calculated in such a way, the percentage of income received by certain groups (quintiles, deciles, etc.), compared with the total income, is the share of equivalised income of these quintiles, compared with the national equivalised income.

The large income share in Lithuania is concentrated in the small share of the population. In 2004-2008, one-fifth of the population earning the highest income earned 42.0 per cent of all income. One-fifth of the population earning the lowest income received only 6.7 per cent of total income. When examining in more detail, it appears that the most affluent 10 per cent of people received 26.5 per cent of the total income, the twentieth part—16.5 per cent, 1 per cent—5.3 per cent of income.

In 2009, during the economic downturn, income was even more concentrated in the hands of the highest-earning section of the population. Compared with the average of 2004-2008, only the income share of highest-earning one-fifth of the population increased—their income totalled 43.5 per cent of the total income. This share could increase due to the decrease of the shares of other groups, especially the poorest: the share of the first quintile fell by 0.7 p.p.; of the second and the third—by 0.3 p.p. each; of the fourth—by 0.2 p.p. Therefore, the residents earning least in 2009 received only 6 per cent of the total income. When examining the smaller parts of the income distribution we can see that the share of one-fifth of the population with the largest income increased more because of the tenth decile (tenth population of the country with the highest-income), and the latter was mostly affected by the upper part of the income distribution—5 per cent of the highest-income residents.

The discussed changes in the income distribution imply that income inequality increases during a crisis. This is reflected also by the income inequality indicators widely used in the literature—the ratio of quintiles (the ratio of income received by the fifth and the first quintile) and the Gini coefficient. The quintile ratio, which in 2004-2008, on average, was 6.3 times, during the recession peaked to 7.3 times. Thus, the fifth of the population with the largest income earned 7.3 times more income than the poorest fifth. The calculated income ratios of other groups also show increased inequality: in 2004-2008 the amount of income received by the tenth decile exceeded the income of the first decile by 11 times while in 2009 by already 14.4 times, among the last and first 5 per cent, this ratio was 21.2 times (2004-2008) and 34.4 times (in 2009). The Gini coefficient is an indicator, the zero value of which indicates absolute equality of income

Table A. National equivalised income shares in 2009
(in per cent)

		EU	New EU member states	Lithuania
Lowest income	The first quintile	8.0	8.0	6.0
	The first decile	2.9	3.1	1.9
	The first 5 per cent	1.0	1.2	0.5
	The first 1 per cent	0.0	0.1	0.0
Highest income	The fifth quintile	38.6	38.4	43.5
	The tenth decile	23.9	23.6	27.4
	The last 5 per cent	14.8	14.4	17.2
	The last 1 per cent	5.0	4.6	5.5

while its 100 per cent value indicates absolute inequality. In 2004-2008, this indicator in Lithuania was 34.9 percent, in 2009—36.9 per cent.

Lithuanian income inequality indicators—the ratio of quintiles and the Gini coefficient—were among the highest in the EU in the previous years, and during the recession they were the highest, being significantly higher than the EU average (EU quintile ratio was 5 times, and the Gini coefficient was 30%). Comparing the income distribution indicators with both the EU and the new EU member states we can see that in Lithuania less income is received by the population in the bottom part of the income distribution, and more by those on the top (see Table A).

¹ The results of the income and living conditions survey are published much later than the survey is carried out. Eurostat provides data on the income distribution according to the data collection period. For example, the data of 2010 is the information received about income in 2009. Statistics Lithuania provides revenue data for the period when it was received, i.e. the information received during the survey of 2010 about the income in 2009 is the data of 2009. In this box, income is analysed by the period in which it was received.

² Statistics Lithuania defines household disposable income as the total income after individual income tax, fixed property taxes, compulsory social insurance contributions of employees, the self-employed and the unemployed (if applicable), and regular remittances to other households.

³ In calculating the equivalent household size, the first member of the household is given a weight of 1; each subsequent adult—0.5; and each child under 14 is given 0.3. Upon combining the weights of all household members, the equivalent household size is obtained.