International Labour Office

THE GLOBAL LABOUR INCOME SHARE AND DISTRIBUTION

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Key Findings

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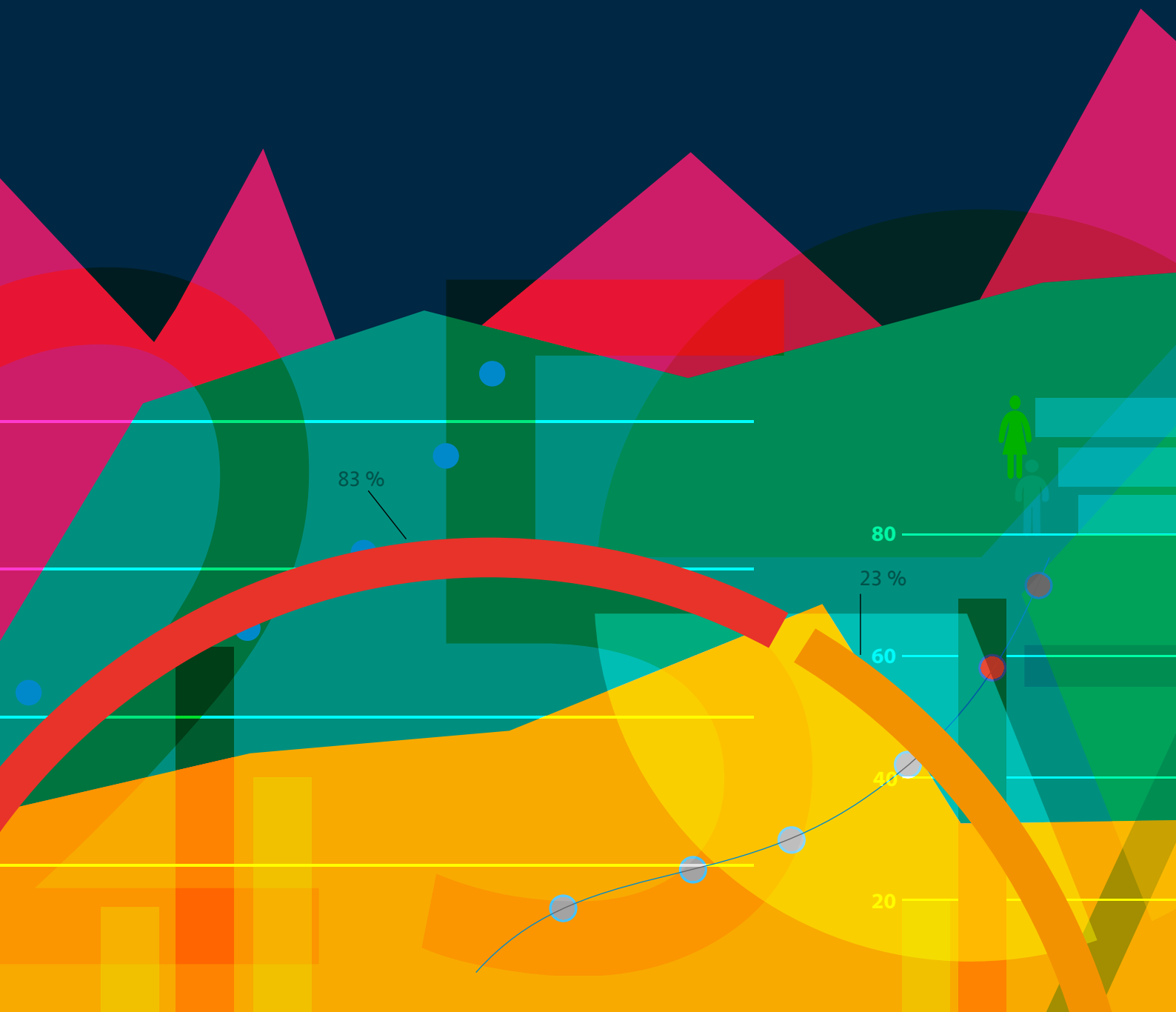


The global labour income distribution is lopsided: a worker in the top 10% earns US$7,445 (PPP) per month, a worker in the bottom 10% earns just US$22. The economic convergence of India and China is reducing global inequality, even if inequality is not decreasing in either country.

In 2017, the latest year with available data, a worker in the top decile of global labour income earned US$7,445 (PPP) per month, whereas a worker in the bottom decile earned just US$22 (PPP). The average compensation for the 50 per cent of workers with the lowest pay was US$198 (PPP) per month. Figure 1 presents the underlying data. Figure 2 presents the relative distribution of labour income. In 2017, the top earning 10 per cent received 48.9 per cent of total pay, the next decile received 20.1 per cent, whereas the remaining 80 per cent of workers received just 31.0 per cent. Even if global pay inequality levels are very high, they have experienced a substantial reduction between 2004 and 2017. However, excluding India and China, the results point to a much slower reduction in labour income inequality. Interestingly, this does not indicate that in India or China inequality has decreased, indeed neither country registered a decline in inequality in the 2004-2017 span. Nonetheless, the two countries have experienced very high growth, which, together with their initial low labour income level, contributes to a global decrease in inequality.

Figure 1. Average monthly earnings per worker 2017, by decile, in US$ (PPP)

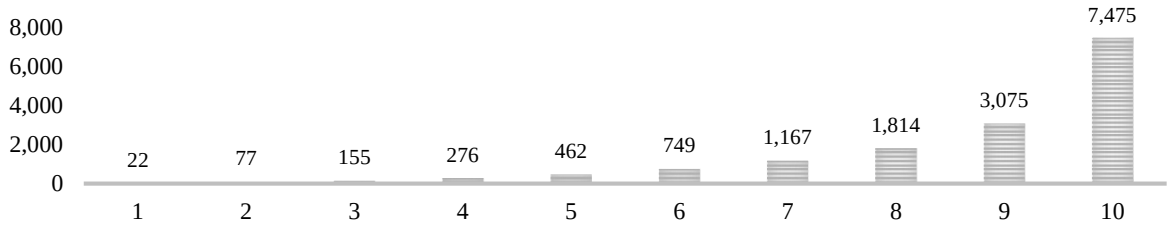
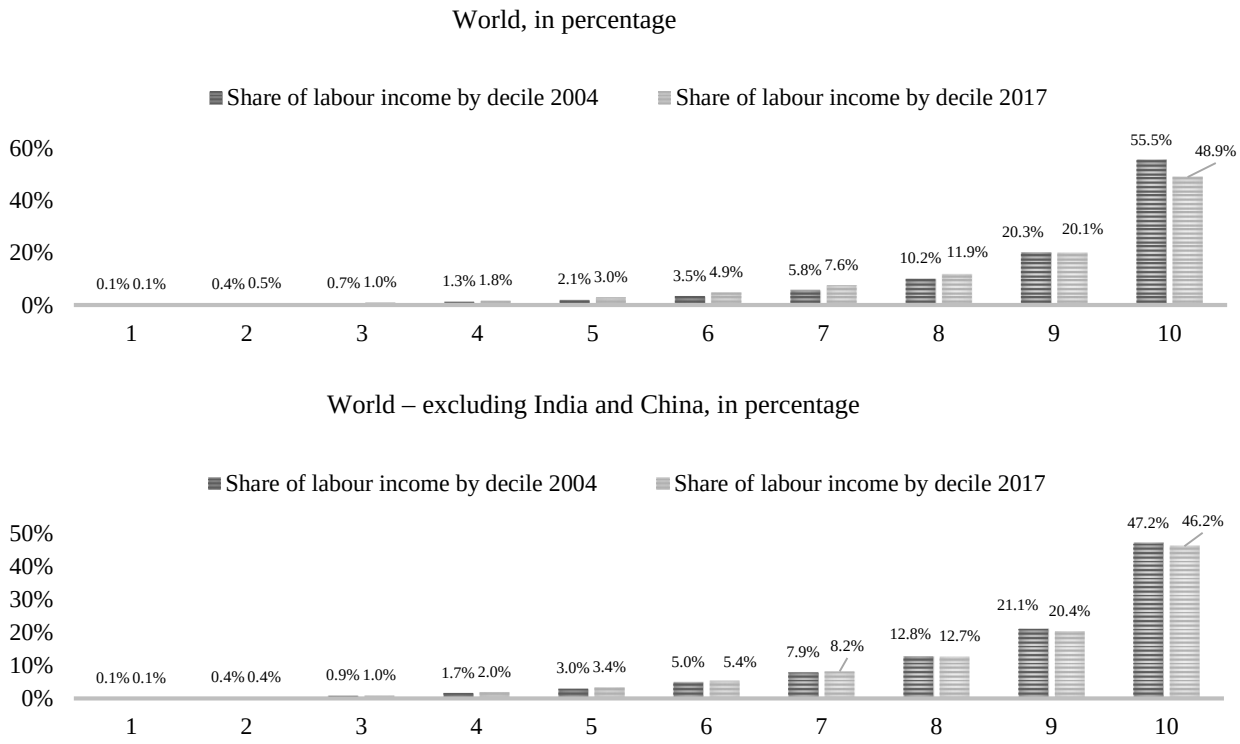


Figure 2. Labour income distribution by decile



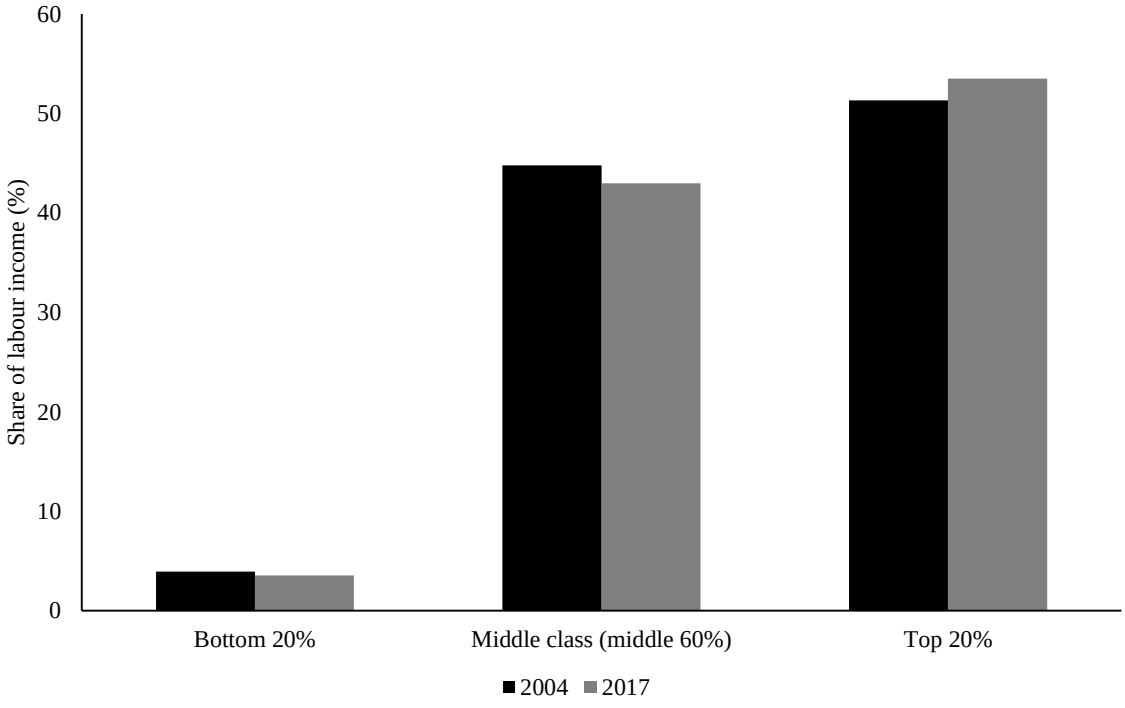
Economic convergence between countries hides an increase in pay inequality within countries. Weighting by each country's economic size, the top 20% of earners increased their average share of total pay from 51.4% in 2004 to 53.5% in 2017. In parallel, the middle class and the lowest earners have seen their average shares decline.

The average GDP-weighted labour income distribution shows increasing inequality in the last 14 years, which is shown in Figure 3. On average, the middle class (the middle 60 per cent of workers) has seen its share of labour income decline from 44.8 per cent in 2004 to 43 per cent in 2017. For the lowest earners (the bottom 20%), the decline has been even harsher in relative terms. The bottom 20 per cent of workers earned 3.5 per cent of labour income in 2017, a drop from 3.9 per cent in 2004. In contrast, the highest earners saw their average share of global pay rise. This trend is being driven by increasing labour income inequality in large countries around the world such as Indonesia, Italy, Germany, Pakistan, the United Kingdom and the United States.

Increasing within country inequality is particularly worrisome when considering the prevailing high level of inequality. To intuitively grasp the significance of the data, it is useful to compare them to the counterfactual benchmark of perfect equality. In that case the share of labour income for the bottom 20% would be precisely 20 per cent, the same as the share of the top 20%. In contrast for the latest year with data, 2017, the bottom 20% earned 6 times less than that whereas the top 20% earned 2.5 times that magnitude.

Figure 3. The average GDP-weighted income distribution

Average share of total labour income accruing to the middle class (middle 60%), and the top and bottom quintiles



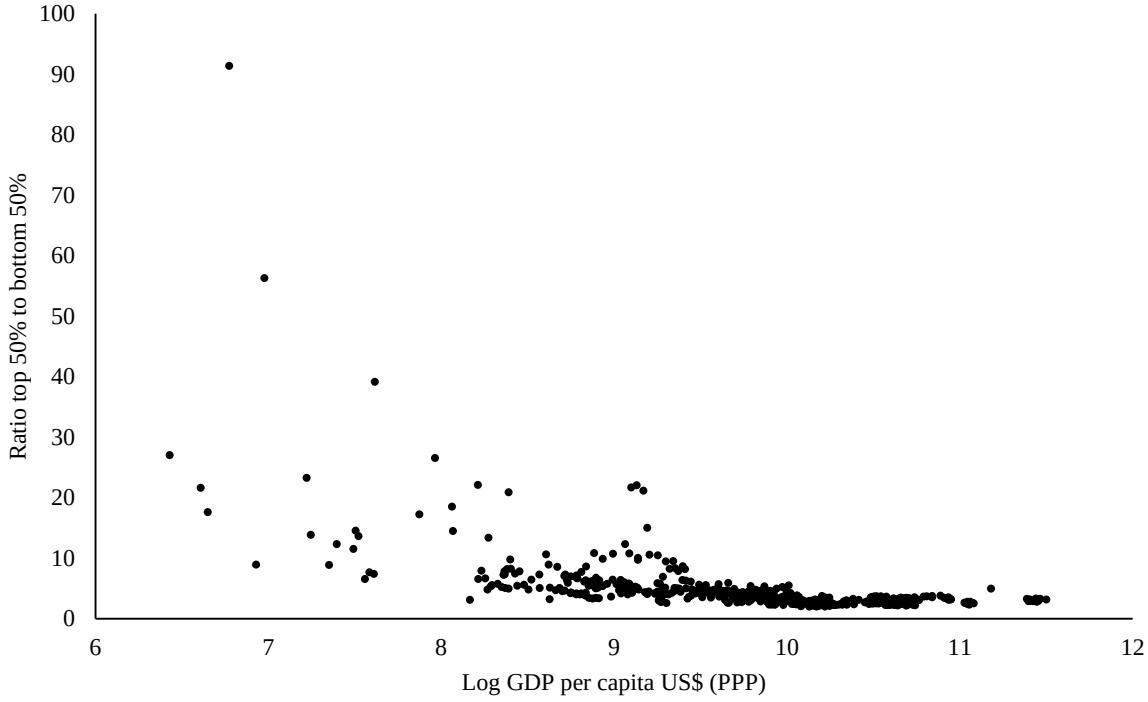
The degree of inequality in global labour income is not only a consequence of differences in average earnings across countries. Poorer countries tend to have higher levels of inequality. Therefore the poorest workers in the poorest countries are affected by both low average earnings in the country, and very small shares of labour income for the bottom of the distribution.

Given the highly unequal distribution of labour income worldwide, the following question is interesting to analyse: Is labour income more unequal than we would expect given the country differences in income per capita? The answer is yes. Figure 4 presents the ratio of the labour income earned by the top 50 per cent to the pay of the bottom 50 per cent, a measure of inequality. The inequality measure is plotted against (log) GDP per capita. The results show a strong, negative association between inequality and income per capita. Poor countries tend to have much more unequal labour income distributions. Therefore, labour income is unequally distributed globally due to both differences in average per worker labour income and because of a more unequal pay distribution in countries with lower average income.

The countries in the figure with the most unequal distributions (a ratio above 25) are Congo DR, Côte d'Ivoire, Liberia, Niger and Uganda. The high inequality of labour income in developing countries derives both from a top end of the distribution with very large incomes (i.e. the top 10 per cent vs. the following 40 per cent) and a large share of the workforce (broadly speaking, the bottom 50 per cent of the distribution) with extremely low labour income.

Figure 4. Inequality vs average income

Ratio of the labour income of the top 50% to the bottom 50% vs (log) GDP per capita US$ (PPP),



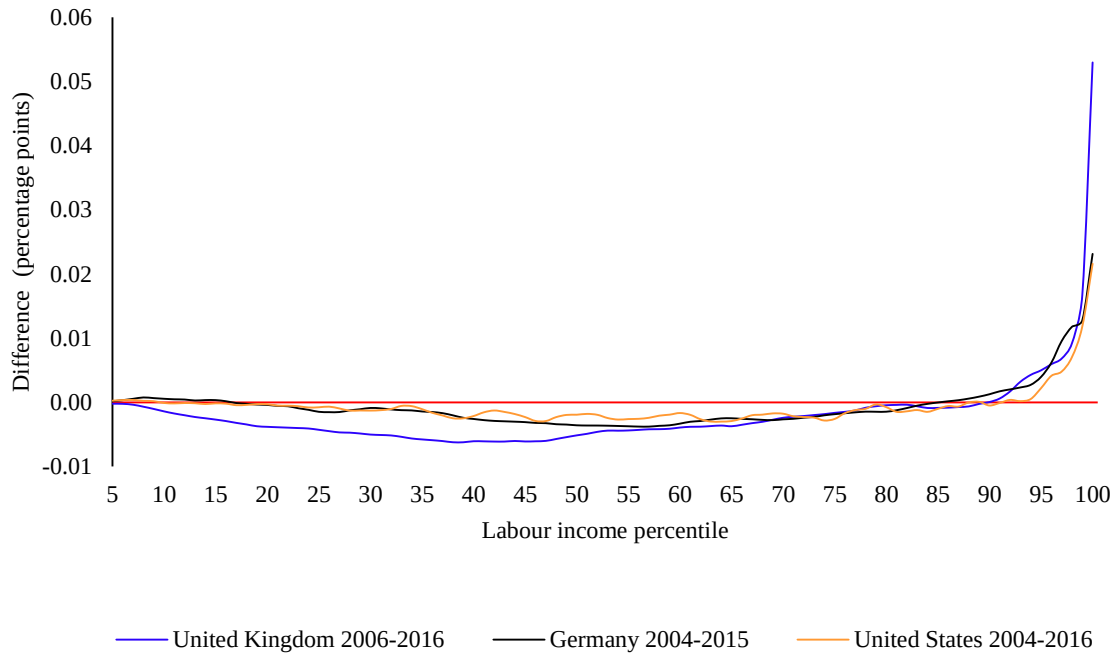
In several high income countries, the evolution of the labour income distribution between 2004 and 2017 follows a 'hockey stick' pattern: substantial loses for the middle and lower-middle class, and large gains for the top. This pattern can be found, among others, in Germany, the United States and the United Kingdom.

The pattern of decreasing global pay inequality stems mainly from "between country" effects, i.e. economic convergence of countries with an initially low level of average labour income. It is also interesting to look at the within country component of inequality.

In several high income countries, a pattern of large gains for the top, coupled with losses for much of the rest of the distribution, can be observed. Examples include Germany, the United States and the United Kingdom. In Germany and the United States, a pattern of middle class declines and stagnation or moderate gains near the bottom, coupled with large increases in the top can be observed. This pattern is consistent with a relative decline in the share of labour income going to the middle class. In contrast, the United Kingdom presents a pattern of significant losses for much of the distribution, including the lower end. In fact, in relative terms (focusing on growth rates instead of differences), the largest losses were experienced among those in the percentiles ranging between 7 and 50. So the upper middle class in the UK has been somewhat sheltered from decreases in their share of labour income, whereas much of the bottom 50 per cent have been more heavily affected. Additionally, the increases for the top earners in the United Kingdom are much more pronounced than in the United States or Germany.

Figure 5. The 'hockey stick' pattern in selected high income countries.

Labour income distribution change (in percentage points) by percentile.



On average, increases in the shares of the top 5% of labour income earners are associated with losses for all other workers except the top earners. In contrast, increases in the share of pay of the median worker are associated with increases for all workers, except for those at the top.

Given the variety of patterns in the evolution of the labour income distribution, it is worth investigating whether there have been some common patterns. For instance, it is interesting to assess whether increases in the top are associated with losses for all the rest, or the zero-sum changes disproportionately affect particular segments of the distribution. To do so, a statistical analysis was conducted to estimate the association between changes in the shares of the top 5 per cent and the shares of all the percentiles of the distribution. The basic aim of the analysis is to identify the ways in which changes in the share of labour income going to the top 5 per cent are associated with changes in the share of each percentile in the labour income distribution. Figure 6 shows that increases in the shares of the top 5 per cent are associated with declines for much of the rest of the distribution. The magnitude is statistically and economically significant. An increase of 1 per cent for the top 5 per cent of earners is associated with a decline of 0.4 per cent for the 50th percentile and 1.6 per cent for the lowest percentile. Figure 7 presents the results of a similar exercise, but instead of studying the effect of changes in the top share, it analyses the effect of the median worker's share. Figure 7 shows that increases in the median share of labour income are associated with increases in almost all the distribution, but declines among roughly the top 10 per cent of earners. The positive association is particularly strong towards the lower end of the distribution.

Figure 6. The effect of increasing the share of the top 5% to each labour income percentile.

Within country elasticity of each percentile share of labour income to the labour income share of the top five per cent.

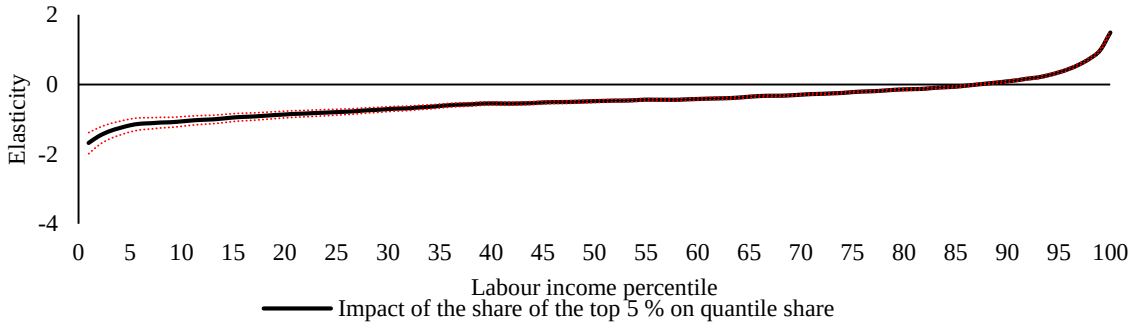
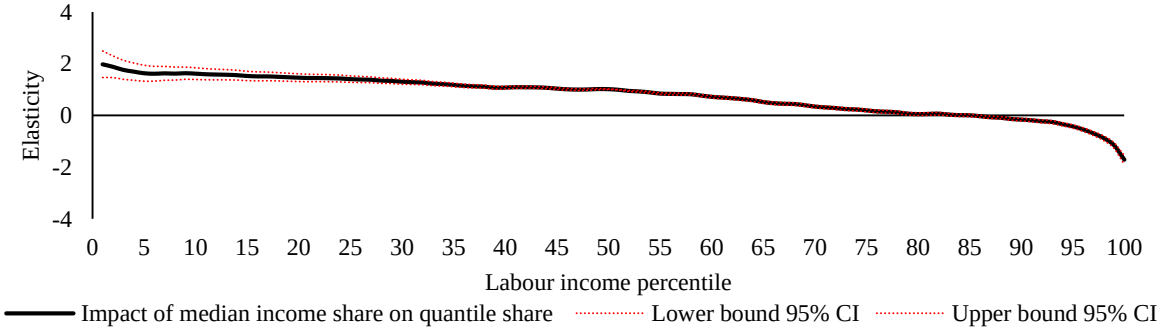


Figure 7. The effect of increasing the share of the median worker to each labour income percentile.

Within country elasticity of each percentile share of labour income to the labour income share of the median worker.



The share of global income earned by workers has declined from 53.7% in 2004 to 51.4% in 2017. This implies that the share of capital income has increased from 46.3% to 48.6%. This trend was only temporarily interrupted by the financial crisis.

The global adjusted labour income share declined substantially in the period from 2004 to 2017. The measure dropped to 51.4 per cent in 2017, from 53.7 per cent in 2004. The decrease was temporarily reversed during the financial crisis in 2008-2009, because during recessions the compensation of workers tends to decline more slowly than capital income. Both Europe and the Americas are key drivers of the global decline in the labour income share. Since 2004, the share in the Americas declined by 1.6 percentage points, and in Europe by more than 2 percentage points.

The pattern of long-run decreases, with countercyclical behaviour, does not generally hold outside of developed countries. Asia does present an important decline, with a countercyclical blip in 2008-2009, mainly due to the behaviour of the labour share in India. Africa, on the other hand seems, to have been decoupled from the global declines, and since 2010 its labour income share is steadily raising (albeit from the lowest level of the considered regions). It is important to highlight that in the last two regions, data availability is scarce, and hence the regional figures present a larger degree of uncertainty.

Figure 8. Global and regional adjusted labour income shares, 2004-2017.