

Labor Share across Countries

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Abstract

In this article, I document facts on labor share of income in a sample of 95 countries during 1975-2019. There is large variation in the labor share of income across countries. On average, labor share is smaller in rich countries by 6 percent points. Global decline in labor share since the 1980s is mainly concentrated in rich and middle-income countries while the decline in poor countries is marginal. Approx. 25% countries experienced an increase in the labor share, instead of a decline.

JEL Classification: E25, O11, O47

Keywords: labor income share, global decline of labor share, growth models

1 Introduction

A standard approach in cross-country quantitative studies based on the neoclassical growth model is to assume a constant labor share of income across countries (see, for instance Waugh, 2010; Hsieh and Klenow, 2010; Ravikumar, Santacreu, and Sposi, 2019). Most of these quantitative studies use a labor share of two-thirds. An argument for setting labor share equal to two-thirds relies on Gollin (2002). He calculated labor's share for a wide cross-section of countries to be around two-third. Is it valid to assume that labor share is constant across countries? Recently, Karabarbounis and Neiman (2013) presented evidence that the global labor share of income has declined by about 5 percent points since the early 1980s. Is the decline in labor share similar across countries?

In this article, I examine answers to aforementioned questions. Using cross-country data on labor shares, I find that labor shares are generally higher in poor countries. The cross-country variation in labor share has declined slightly over time indicating some convergence. Rich countries have experienced larger reductions in their labor shares since the early 1980s.

2 Data

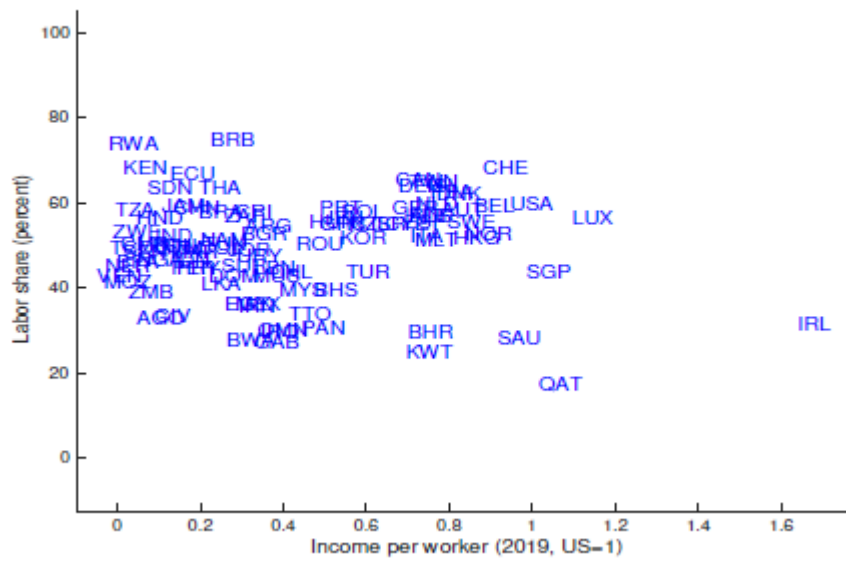
Data set for this paper comprises of the data on labor share and income per worker for a crosssection of 95 countries during 1975-2019. This data is sourced from the Penn World Table, version 10.01 (Feenstra, Inklaar, and Timmer, 2015). List of countries is in the appendix. Of the 95 countries, 22 are in Africa, 24 in Americas, 24 in Asia and Oceania, and 25 in Europe.

Average real income per worker in the sample is \$59,474 and average real per capita income is \$28,548 (chained PPPs in 2017 US\$). Average income per worker in countries above 90th percentile of the world income per worker distribution (henceforth, rich countries) is \$138,369 and average income per worker in countries below 10th percentile (henceforth, poor countries) is \$5,150.

3 Cross-country variation

Average labor share of income in the sample is approximately 50 percent in 2019. There are non-trivial differences in labor share of income across countries. In 2019, labor share ranges from 17.6 percent in Qatar to 75 percent in Barbados. There is significant variability across countries. The variance of labor share is 134 in 2019 and 176.2 in 1975 (see figures 1 and 2).

Figure 1: Labor share: 2019



Average labor share for rich countries is consistently lower than the average labor share for poor for all years in the sample, see figure 3. In 2019, average labor share is 47 percent in rich countries while average labor share in poor countries is 53 percent, see table 1. In 1975, average labor share is 52 percent in rich countries while that in poor countries is 54 percent.

On average, labor share is slightly higher for countries below the median income per worker in 2019, and similar across OECD and non-OECD countries. Labor share in Africa and Americas is about 51 percent, 47 percent in Asia & Oceania and 49 percent in Europe.

To summarize, labor share of income is highly dissimilar across countries. While cross-country variability in labor share has declined over time, it is far from zero. Therefore, an assumption of constant labor share across countries conflicts with the data.

Figure 2: Variance of Labor share

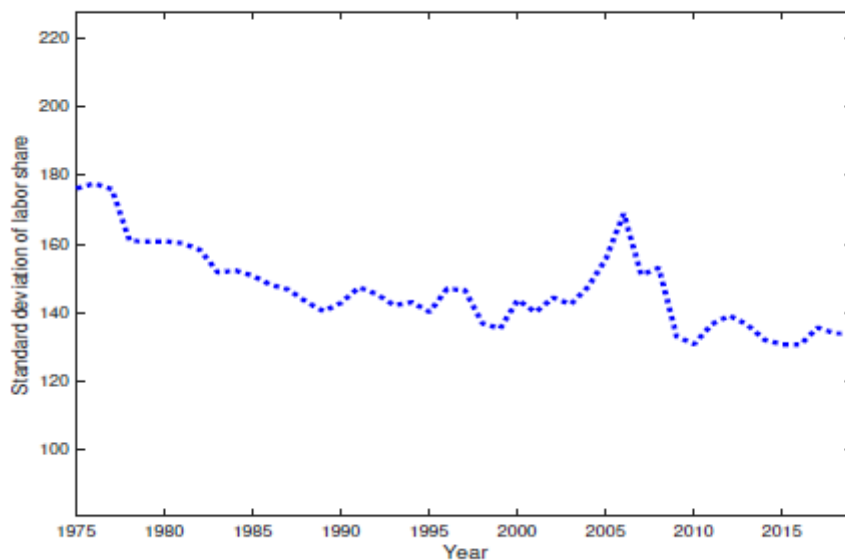


Figure 3: Labor share: 1975-2019

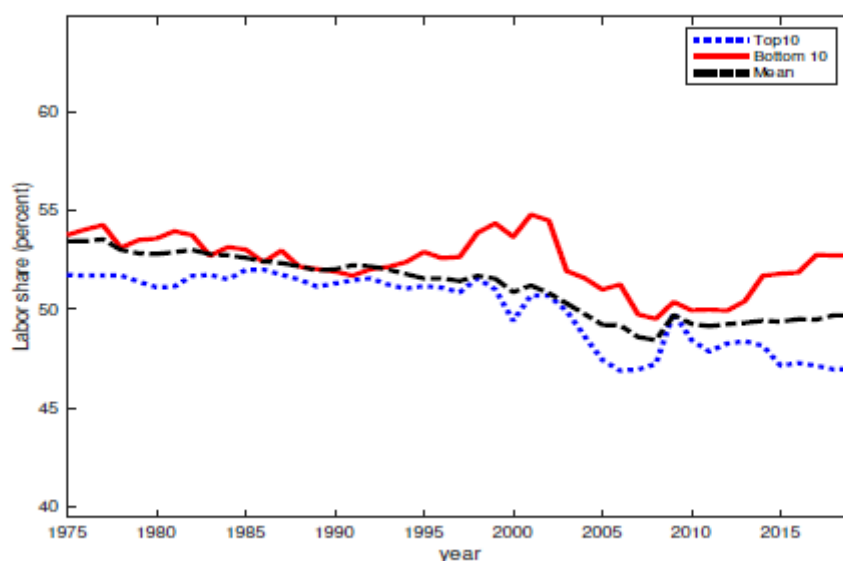


Table 1: Labor Share (percent)

	labor share	1975-2012 change in labor share
Overall avg.	49.7	-3.7
Avg. Rich	47.0	-4.8
Avg. Poor	52.7	-1.0
Above median	49.4	-3.9
Below median	49.9	-3.5
OECD	49.7	-2.6
Non-OECD	49.7	-4.3
Africas	51.4	-5.5
Americas	51.2	-5.2
Asia and Oceania	47.0	-3.3
Europe	49.4	-1.8

Note: Countries above 90th perc. are Belgium, Hong Kong, Ireland, Luxembourg, Norway, Qatar, Saudi Arabia, Singapore, Switzerland, and USA. Countries below 10th perc. are Burkina Faso, Chad, Kenya, Mozambique, Niger, Rwanda, Senegal, United Republic of Tanzania, Venezuela, and Zimbabwe.

4 Global decline in labor share

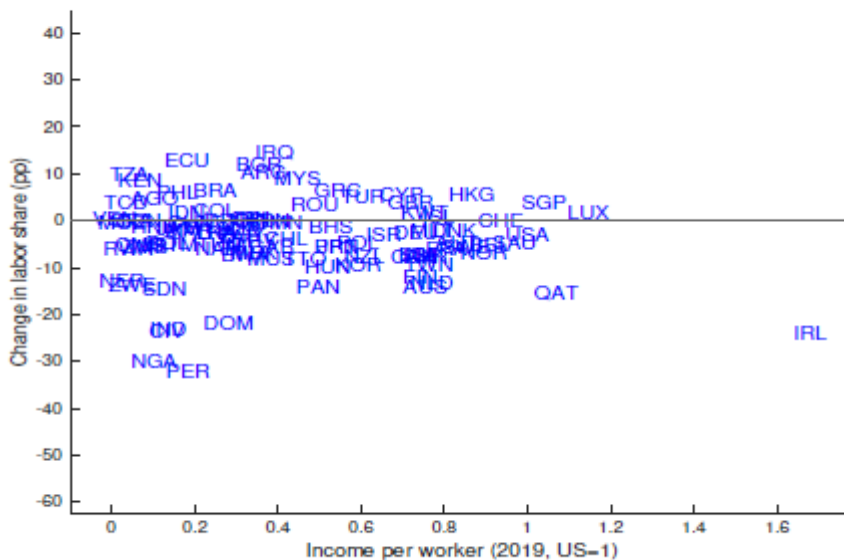
Karabarbounis and Neiman (2013) present evidence that the average global labor share of income has declined by about 5 percent points (henceforth pp.) since the early 1980s. This led to numerous studies on the global decline of labor share and possible explanations. In this section, I examine if the decline in labor share has been experienced by all countries.

Figure 3 re-affirms the global decline in labor share in my sample of 95 countries during 1975-2019. Mean global labor share declined by 3.8 pp. Average labor share for rich and poor countries also declined during this time period. Table 1 shows that labor share declined in all country groupings during 1975-2019.

Cross-country differences in the labor share decline are far from zero. Labor share declined by 4.8 pp in rich countries between 1975 and 2019, while labor share in poor countries declined by 1 pp. This narrowed the rich-poor gap in labor share, resulting in the reduction in variance of labor share, as evidenced in figure 2. The decline in labor share is slightly higher for countries above median and for non-OECD countries. Of all the continent groupings, Europe experienced the smallest decline in labor share.

However, as shown in figure 4, all countries did not experience a decline in their labor share. Of the 95 countries, labor share in 29 countries increased from 1975-2019. Of these 29 countries, 13 are above median, 16 are below median, 4 are above 90th percentile and 5 are below the 10th percentile of the world income per worker distribution in 2019. Average labor share increase in these 29 countries is 4.9 pp.

Figure 4: Decline in labor share: 1975-2019



Andic and Burda (2021) highlight that a possible reversal in the decline in labor share took place with the global financial crisis of 2008. Data employed in this paper shed light on the possible reversal. Figure 3 shows that the reversal in mean global labor share indeed took place after 2008. Global labor share increases slightly during 2008-2019. However, this reversal appears to be absent in case of rich economies. After a brief reversal in 2008, labor share continued to decline in case of rich countries but increased in poor countries.

5 Conclusion

To summarize, results in this article show that constant labor share of income across countries is not a valid assumption in multi-country neoclassical growth models. Additionally, the decline in labor share is slightly more in case of rich countries.

Appendix

Countries: Angola, Argentina, Australia, Austria, Belgium, Burkina Faso, Bulgaria, Bahrain, Bahamas, Bolivia (Plurinational State of), Brazil, Barbados, Botswana, Canada, Switzerland, Chile, China, Cote d'Ivoire, Cameroon, Colombia, Costa Rica, Cyprus, Germany, Denmark, Dominican Republic, Ecuador, Egypt, Spain, Finland, France, Gabon, United Kingdom, Greece, Guatemala, HongKong, Honduras, Hungary, Indonesia, India, Ireland, Iran (Islamic Republic of), Iraq, Iceland, Israel, Italy, Jamaica, Jordan, Japan, Kenya, Republic of Korea, Kuwait, Lebanon, Sri Lanka, Luxembourg, Morocco, Mexico, Malta, Mozambique, Mauritius, Malaysia, Namibia, Niger, Nigeria, Netherlands, Norway, New Zealand, Oman, Panama, Peru, Philippines, Poland, Portugal, Paraguay, Qatar, Romania, Rwanda, Saudi Arabia, Sudan, Senegal, Singapore, Suriname, Sweden, Chad, Thailand, Trinidad and Tobago, Tunisia, Turkey, Taiwan, U.R. of Tanzania: Mainland, Uruguay, United States, Venezuela (Bolivarian Republic of), South Africa, Zambia, and Zimbabwe.

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