

# *Homoploutia*: Top Labor and Capital Incomes in the United States, 1950–2020

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# 1. Introduction

- In classical political economy, and often implicitly in functional income distribution studies, it is assumed that the people who receive most of their income from ownership (capital) are different from those who receive most of their income from working (labor).
- Under such “classical capitalism,” workers and capitalists (or rentiers) were two separate groups of people with the composition of their personal income reflecting their positions in the process of production.

- That assumption is implicit in recent functional income distribution studies that have documented the increase in the capital share in many countries.
- A concern these studies express with the rising capital share is that it is likely to lead to higher interpersonal income inequality.
- This is so because capital income is more unequally distributed than labor income and is highly concentrated in the hands of the rich.
- If capital and labor income shares were similar across the income distribution (i.e., across poor and rich individuals), a rising overall capital share would not affect the interpersonal income distribution.

- New findings on the United States show, however, that the dichotomy between capitalists and workers may no longer hold.
- In fact, an increasing percentage of people who are capital-income rich are also labor-income rich.
- This is clearly a very different capitalism (from classical): people at the top of the income distribution are simultaneously top capitalists and top wage-earners.
- Milanovic (2019) called this phenomenon homoploutia, from the Greek word *homo* for equal, and *ploutia* for wealth or “richness.”
- This paper defines the phenomenon and documents and analyzes the evolution of homoploutia in the United States over the past 70 years.
- It also studies the link between rising homoploutia and rising interpersonal income inequality.

- Homoploutia breaks the strong capital-labor segregation that exists under classical capitalism.
- It thus poses at least two new problems:
  1. Having the rich who are rich in terms of both property and skills (human capital) may enable them to create an upper class that has little in common with the rest of the population and that is able, through significant investment in offspring, to transmit these advantages across generations. Thus, social mobility will likely be reduced.
  2. From an ethical point of view, high taxation of a homoploutic upper class becomes more difficult: the rich are not mere passive coupon-clipping rentiers of the classical capitalism, but hard, and often excessively hard, working wage-earners.

- To quantify homoploutia we use the intersection between the top decile of capital-income recipients and labor-income earners (top10K-top10L or  $H_{10,10}$ ).
- We also look at the relationship between  $H_{10,10}$  and overall capital share, and the relationship between  $H_{10,10}$  and marginal distributions of capital and labor incomes.
- For homoploutia to increase it is not sufficient that one of several factors (correlation between capital and labor incomes, marginal distributions of capital and labor incomes, or the capital/labor share) move in a given direction, regardless of what happens to the other factors.
- Yet, in practice, we find a strong and robust positive relationship between homoploutia and labor income inequality, especially after 1985.

## 2. What is Homoploutia?



- One could look at how many of the top one-percenters by capital income are also top one-percenters in terms of labor income (we denote this by top1K-top1L or  $H_{1,1}$ ).
- This paper focuses on a somewhat wider group, the intersection between the top decile of capital-income recipients and the top decile of labor-income earners (top10K-top10L or  $H_{10,10}$ ).
- Under classical capitalism, we would expect  $H_{10,10}$  to be small; the more different it is from zero, the more we move away from the capital-labor dichotomy, at least at the top of the income distribution.
- Other partitions, including “asymmetric intersections,” are possible.

- It is also possible to look at *homophytocheia* (*phytocheia* is poverty in Greek), that is, at the percentage of people who are poor in both capital and labor income terms.
- For our present purposes, however, and in order to better discriminate between classical and homoploutic capitalism, it may be more interesting to look at the presence of rich capitalists among poor wage earners (top10K-bottom10L).

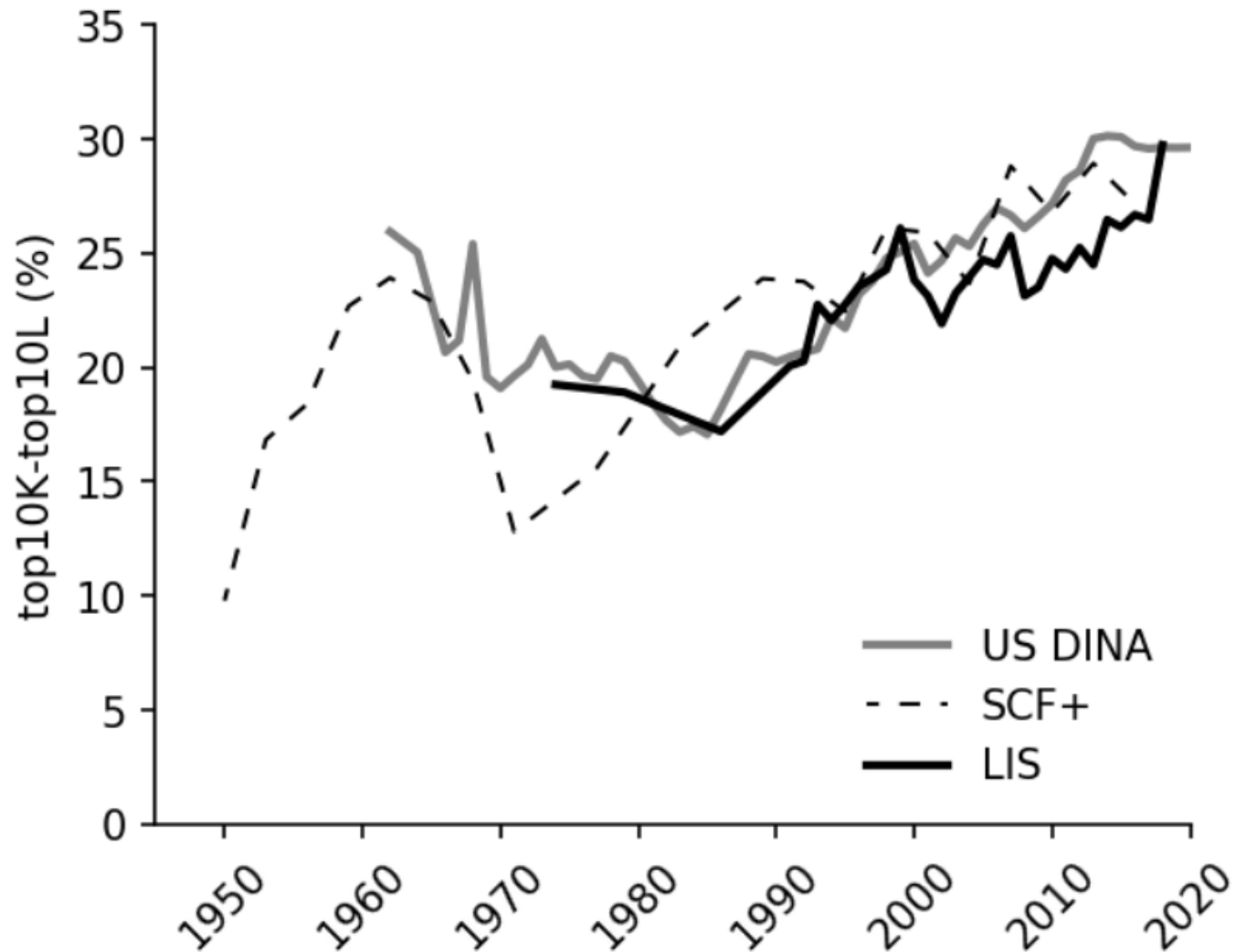
- It is also possible to consider the joint distribution of labor income ranks and capital income ranks, or the copula of labor and capital incomes.
- The copula is commonly used in intergenerational mobility studies to describe the probability of children to end up in the  $j$ th income rank as adults, conditional on their parents occupying the  $i$ th income rank at a similar age.
- This concept is also used, though less commonly, in the context of the joint distribution of labor and capital incomes.
- Copulas are linked to the rank correlation, also a possible way to quantify homoploutia.
- When the correlation between labor and capital income ranks is close to 0, we expect  $H_{10,10}$  to be around 10%.
- When the rank correlation is close to 1, i.e., perfect correlation,  $H_{10,10}$  will be very high, and close to 100%.

- Homoploutia needs, however, to be distinguished from capital-labor correlation  $\rho_{KL}$ , whether that correlation is measured by nominal amounts of capital and labor income, or by ranks.
- The capital labor correlation looks at the entire distribution while homoploutia (in the sense it is studied here) has a more specific and narrow focus on correspondence of high labor and high capital incomes among the same people.
- In general, we may expect that as the correlation between capital income and labor income increases, homoploutia would tend to go up, but this is not guaranteed.

### 3. The Evolution of Homoploutia in the United States, 1950–2020

- We then estimate  $H_{10,10}$  in the United States since 1950 by combining three datasets which allow covering different time periods: the Luxembourg Income Study (2020), the US Distributional National Accounts (2020) and early versions of the Survey of Consumer Finances (2020).
- Using the three data sources allows both covering a period of 70 years and testing the robustness of the estimates by comparing between them.
- To estimate  $H_{10,10}$  we detect in each year the income threshold above which units are to be included in the top decile of labor income and of capital income.
- Then we simply count the number of capital-income earners in the top decile who are also included in the top decile of labor income.
- This methodology cannot be applied when income tabulations are available but requires microdata.

Figure 1. The evolution of homoploutia in the US, 1950–2020.

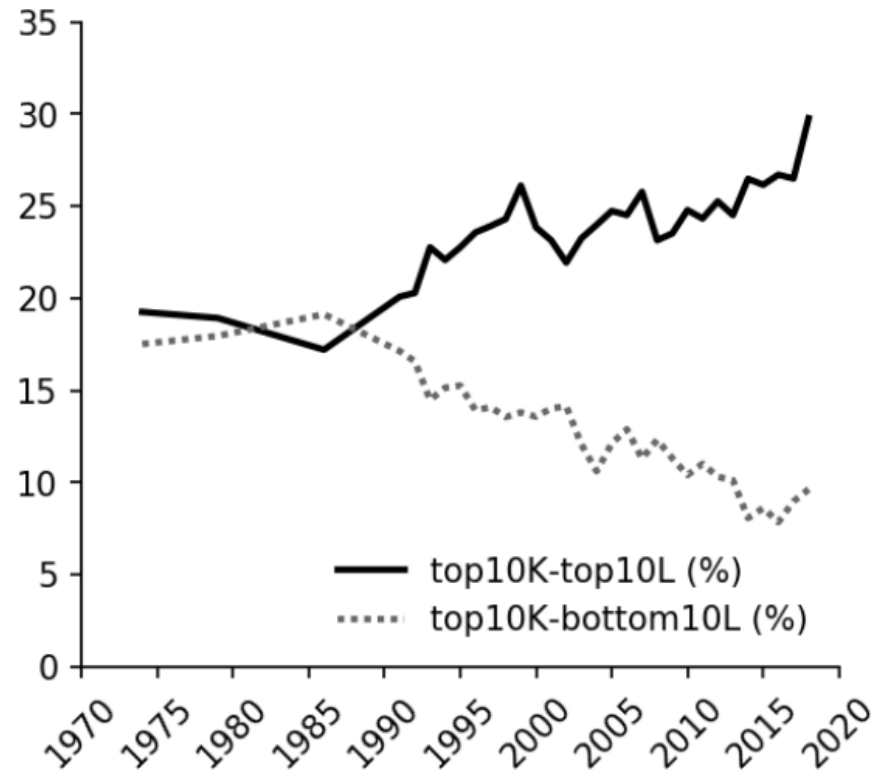
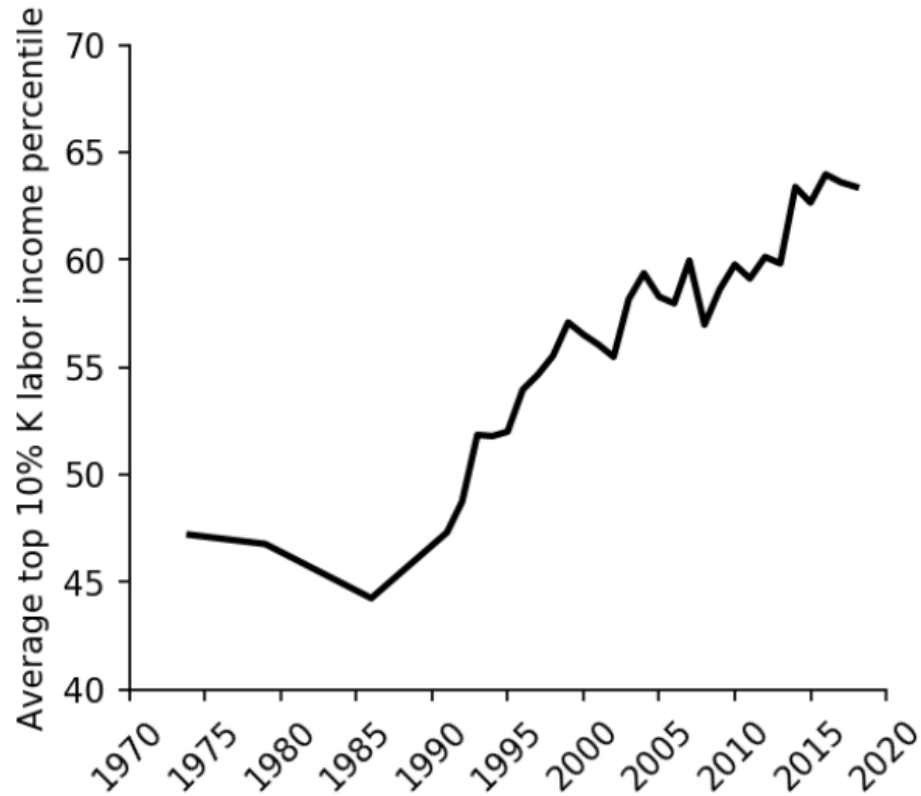


- Figure 1 shows that homoploutia was low after World War II, when  $H_{10,10}$  was about 10%.
- With a purely random distribution of labor incomes among the top decile of capital-income recipients,  $H_{10,10}$  would be 10%.
- Homoploutia increased by the early 1960s, rising to about 25%, and then slightly decreased until the mid-1980s.
- Since 1985 it has been sharply increasing: In 1985, about 17% of adults in the top decile of capital-income earners were also in the top decile of labor income earners.
- In 2018 this indicator was about 30%.



- Figure 1 also shows that the different data sources are in good agreement with one another, despite the major differences between their methodologies and original raw data.
- This is especially the case after the mid-1980s when all three sources move in unison.
- We can see that the current levels of homoploutia are the highest to be recorded.
- This indicates not only that “capital is back” in the sense that the capital-income ratio and the capital share of income have increased in the past few decades, but also that the traditional division of capitalists to laborers, which may have been relevant when  $H_{10,10}$  was low, is much less relevant today.
- The currently high homoploutia has far-reaching implications for social mobility and equality of opportunity.

Figure 2. Additional facets of rising homoploutia.



- Figure 2 shows how the average labor income rank of top 10% capital-income earners changed from 1974 onward.
- Until the early 1990s the average rank was limited within percentiles 45–48, meaning that on average, top 10% capital-income earners had below median labor income.
- The average rank had increased since to percentile 63 in 2018.
- The right panel of Figure 2 depicts the evolution of top10K-top10L and top10K-bottom10L using LIS data and shows that the two measures roughly mirror one another.
- While the top10K-top10L increased from 17% to about 30% between 1985 to 2018, the top10K-bottom10L decreased from 19% to 10% during the same period.

## *3.1 Drivers of Homoploutia*

## What is driving this evolution of homoploutia?

- In part, the rising homoploutia may be driven by the abundance of individuals who earned high wages, saved a large share of their wages, invested it, and after some years began receiving large capital incomes.
- It might also be driven by an increasing importance of inheritance, received predominantly by individuals in the higher labor income ranks.
- Moreover, it is likely that homoploutia will further increase in the next generation.
- This is because individuals born to capital-rich families that can invest heavily in children's education would likely command high wages.
- In this sense, high homoploutia is an important mechanism that limits social mobility.

- To disentangle the different effects, rare detailed longitudinal microdata including information on inheritance and saving are required.
- Nevertheless, we can shed light on such effects in the absence of these data by considering four key variables:
  1. Marginal labor income inequality (quantified, e.g., by the top 10% labor income share)
  2. Marginal capital income inequality
  3. The capital share of income
  4.  $H_{10,10}$  (top10K-top10L)

- To map these relationships we use the US DINA, which cover the years 1962, 1964 and 1966–2020.
- We regress  $H_{10,10}$  on the other three components for the entire period and for the years 1986–2020, in which the changes in all of them were most visible.
- We also regress  $H_{10,10}$  on the top 10% labor income share only for 1986–2020.

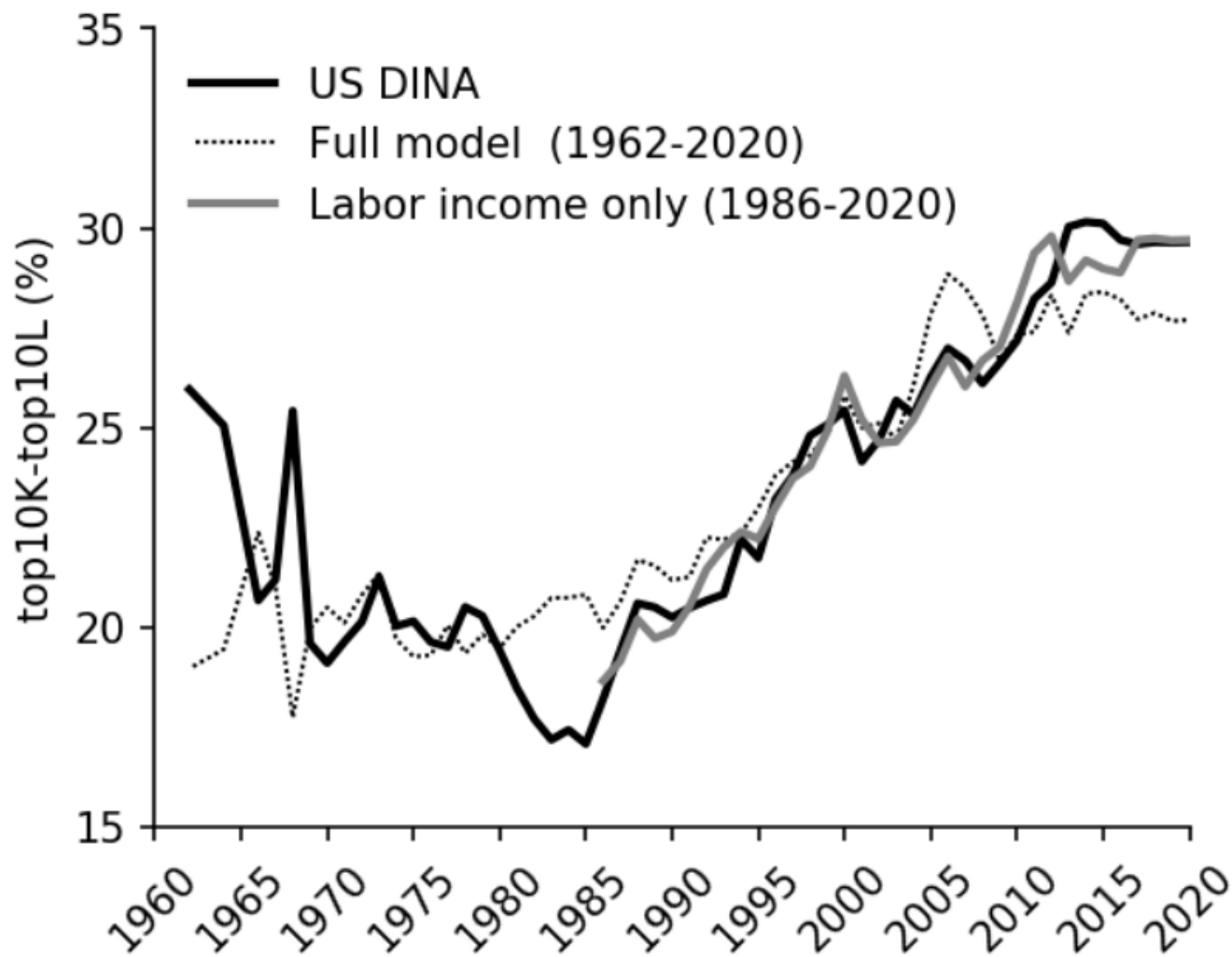
Table 1. Regression results for the relationship between  $H_{10,10}$ , the overall capital share of income ( $S$ ), the top 10% labor income share ( $L$ ), and the top 10% capital income share ( $K$ ).

	Full model (1962—2020)	Full model (1986—2020)	Lab. income only (1986—2020)
	$H_{10,10} = \alpha + \beta_S S_i + \beta_L L_i + \beta_K K_i + \varepsilon_i$	$H_{10,10} = \alpha + \beta_S S_i + \beta_L L_i + \beta_K K_i + \varepsilon_i$	$H_{10,10} = \alpha + \beta_L L_i + \varepsilon_i$
$\beta_S$	0.18 (0.067)	0.71 (< 0.001)	
$\beta_L$	0.66 (< 0.001)	1.53 (< 0.001)	1.74 (< 0.001)
$\beta_K$	28.5 (0.310)	22.0 (0.084)	
$R^2$	0.72	0.97	0.96
Obs.	57	35	35



- Table 1 shows that there is a strong and robust positive relationship between homoploutia and labor income inequality, especially after 1985.
- There is no robust positive or negative association between  $H_{10,10}$  and the other variables before 1986.
- Figure 3 further demonstrates the strong association between  $H_{10,10}$  and the top 10% labor income share, showing how their evolution is almost identical after 1985.

Figure 3. The statistical relationship between homoploutia, the capital share of income, the top 10% labor income share, and the top 10% capital income share.



- The robust association demonstrates that there are two mechanisms for the increase in homoploutia supported by the data.
  1. It is possible that following the increase of income inequality over the 1970s and early 1980s high-wage earners were able to save a large share of their wages, invest it, and then begin receiving large capital incomes.
  2. It is also possible that the growing labor income inequality made top labor incomes more attractive for the capital-rich, who were less incentivized to engage with the labor market while labor income inequality was relatively low.
- This can be reinforced by higher bargaining power that such workers may have due to their high capital incomes.
- This mechanism is also related to mechanisms suggested for the increase in wage inequality and executive compensation.

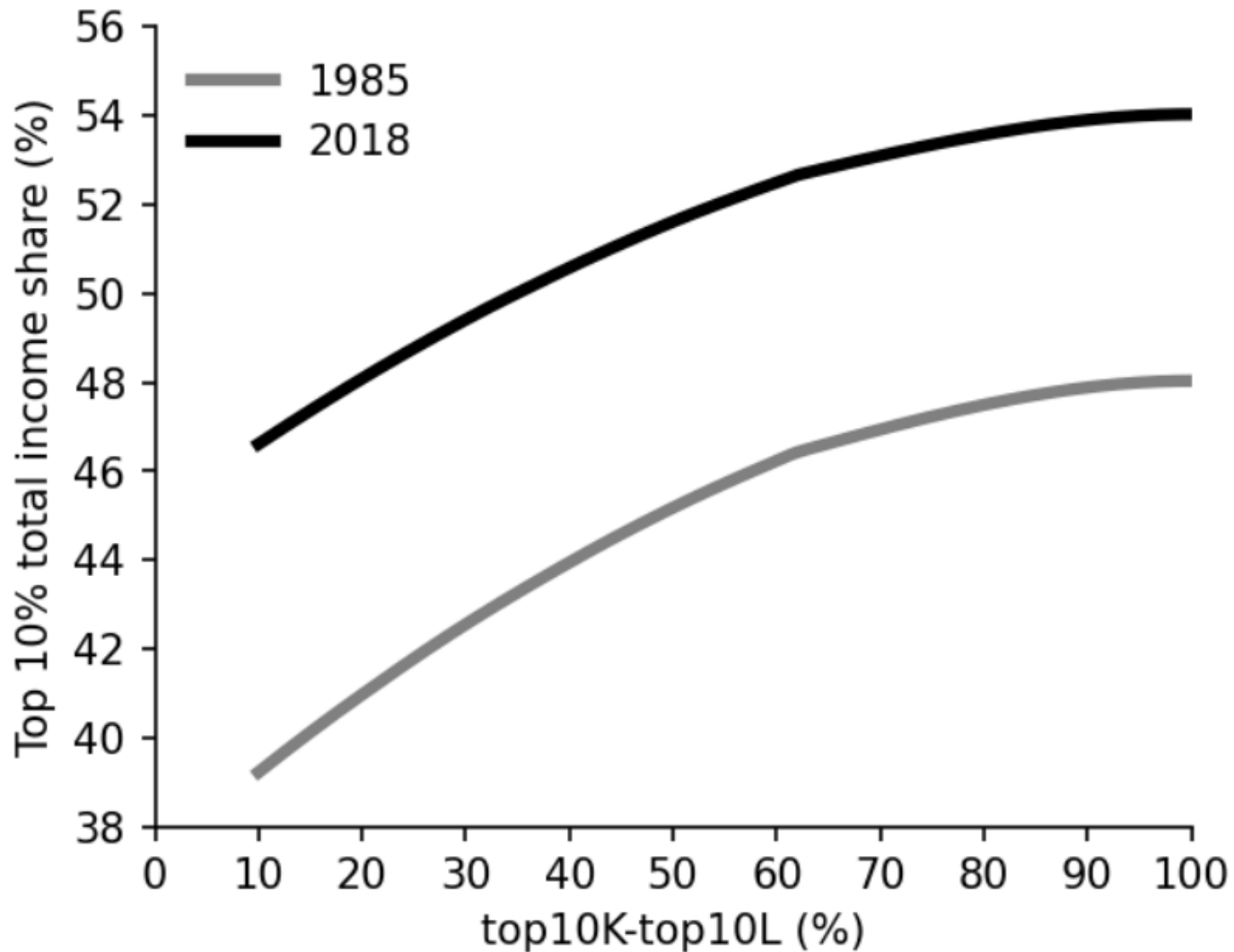
## 4. Homoploutia and Income Inequality

- In addition to the possible causal relationship between labor income inequality and homoploutia, there is also a clear mechanical link between homoploutia and interpersonal or total income inequality.
- Intuitively, as the association between labor and capital incomes becomes stronger, i.e., higher homoploutia across the entire distribution, we should expect total income inequality to be higher as well.
- Specifically, the recent 35 years have seen a rise in the US in all four variables discussed above: labor income inequality, capital income inequality, the capital share of income, and homoploutia.
- While the literature has focused so far on the first three, this section attempts to describe the relationship between the rise in homoploutia in the US since 1985 and the rise in total income inequality.
- Moreover, we can compare the relative importance of changes in homoploutia with the importance of the capital share of income, both as factors contributing to the increase in income inequality.

## *4.1 Homoploutia and Inequality: Static Analysis*

- To test the impact of homoploutia on total income inequality, we assume that the joint rank distribution of labor and capital incomes follows a Gumbel copula.
- This has been shown as a good approximation used in the inequality literature in recent years.
- Repeating the matching procedure systematically, each time with a different parameter for the copula, allows showing how inequality reacts to changes in homoploutia.
- This is demonstrated in Figure 4 for the marginal labor and capital income distributions in the US in 1985 and 2018.

Figure 4. The top 10% total income share in the United States in 1985 (gray) and 2018 (black) as a function of homoploutia.





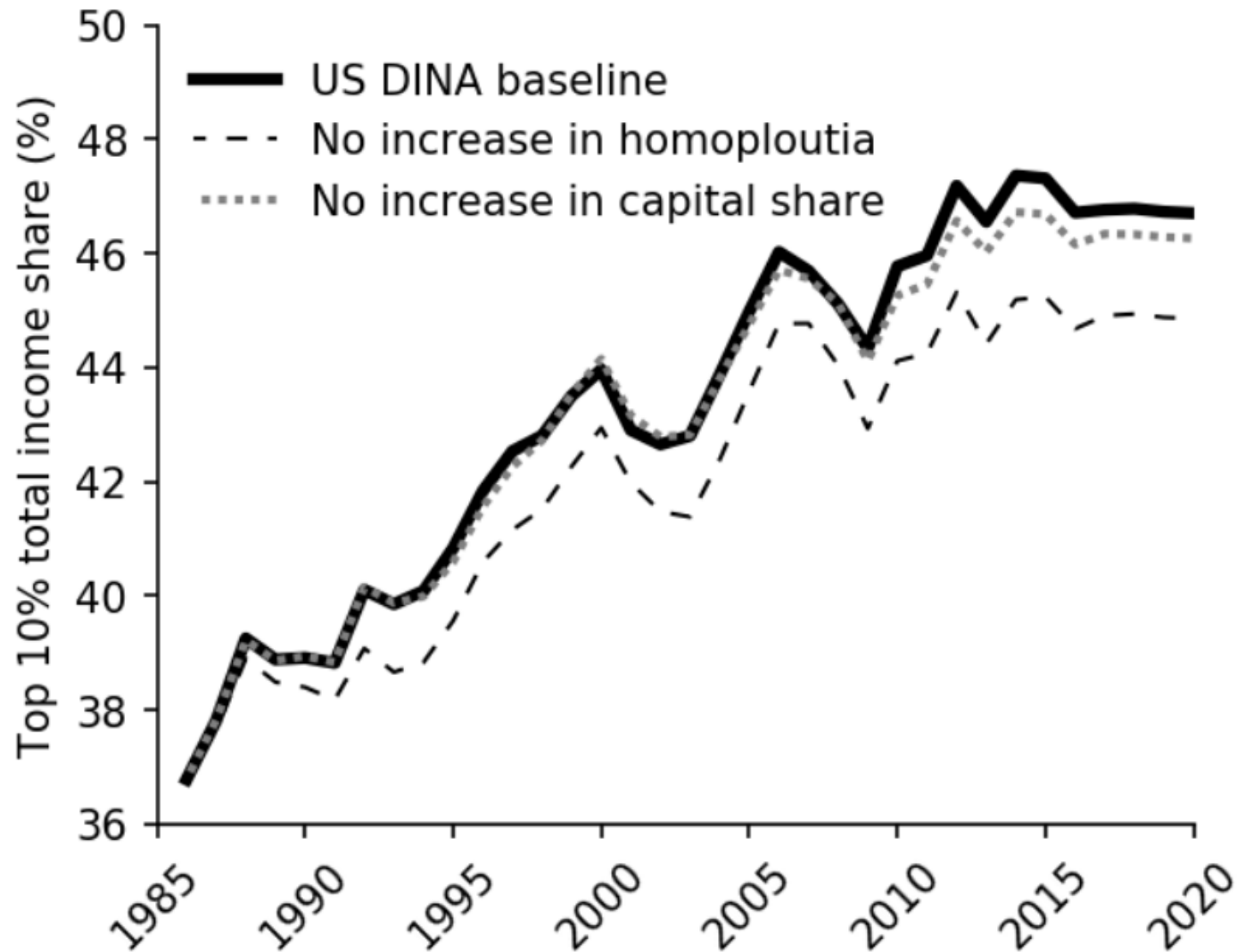
- Figure 4 shows how the top 10% total income share mechanically depends on homoploutia.
- As hypothesized, total income inequality increases with homoploutia.
- The dependence of the top 10% share on  $H_{10,10}$  is concave, and is steepest for realistic  $H_{10,10}$  values, between 10% to 30%.
- Figure 4 also demonstrates that even with perfect homoploutia, i.e., when the top10K-top10L is 100%, the top 10% total income share is limited.
- This limit depends on the marginal capital and labor income distributions and on the capital income share.
- For 2018 it is about 54%, a level classified as “very high inequality.”

## *4.2 Inequality Effects of Homoploutia and Capital Share Increase over Time*

- We are interested in understanding how homoploutia interacts with the changing capital share of income.
- In Figure 4, the capital share of income was fixed (to the shares representing the US in 1985 and 2018).
- In practice, however, both variables—homoploutia and the capital share of income—are changing and have been increasing in the past few decades.
- We want to determine the contribution of each of them to the increase in total income inequality.
- This question is central in current discussions on inequality and has importance for policy aiming to impact total income inequality.

- For this analysis we look at two counterfactual scenarios from 1986 to 2020:
  1. We fix homoploutia to its 1986 level but let the capital share change according to its historical evolution (using the US DINA data).
  2. We fix the capital share to its 1986 level but let the homoploutia change.
- In both scenarios we let the marginal labor and capital income distributions change according to their historical evolution.
- The first scenario neutralizes the impact of rising homoploutia on inequality.
- The second scenario neutralizes the impact of rising capital share.

Figure 5. The mechanical impact of rising homoploutia and capital income share on total income inequality, 1986–2020.



- Both scenarios, as well as the baseline (real) scenario show somewhat similar evolution.
- This demonstrates that the changes in the marginal distributions are the biggest contributors to the increase in total income inequality.
- In the first scenario (dashes in Figure 5), in which the impact of rising homoploutia is neutralized, there is an increasing distance from the baseline, reaching about 2 percentage points in the late 2010s.
- Thus, we can say that the rising homoploutia mechanically led to an increase of 2 percentage points in the top 10% income share.
- This is about 20% of the entire increase in the top 10% income share between 1986 and 2020.
- The direct impact of the rising capital share on the top 10% total income share (as indicated by the dotted line in Figure 5), is much smaller, and was less than half a percentage point over the entire time period.

- These results show that homoploutia works as an independent factor in raising inequality.
- Even if the capital share were fixed (while allowing marginal capital and labor income distributions to evolve as they did), homoploutia would make the income distribution more unequal.
- The direct mechanical impact (i.e., regardless of a causal relationship) of homoploutia on total income inequality in the US in the past 35 years has been substantial.
- We have thus shown first, that statically (in a one-year analysis) greater homoploutia is leading to higher inequality, and second, that over the recent past, homoploutia has played a bigger role in increasing US inequality than the aggregate capital share.

## 5. Conclusion



- The current trend of rising homoploutia is potentially unprecedented in modern times.
- It has far-reaching implications for social mobility.
- This, in turn, may lead, as explained, to even higher interpersonal income inequality.