

# Inequality of Opportunity in Wealth - Measurement from Germany

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Wealth inequality increased steadily since the second half of the last century (Chancel et al., 2021). Today, wealth is highly concentrated at the top of the distribution in many developed and developing countries; much more so than income (Alvaredo et al., 2017; Saez and Zucman, 2016; Zucman, 2019). That wealth is highly concentrated among very few individuals is of major importance to economists since wealth is one of the crucial factors determining the material well-being of individuals next to income (Davies and Shorrocks, 2000; König et al., 2020). Therefore, describing wealth inequality and investigating the process through which it comes about is the subject of a large literature in economics (see surveys in Benhabib and Bisin, 2018; Davies and Shorrocks, 2000; De Nardi and Fella, 2017; König et al., 2020; Zucman, 2019).

Generally, a large part of the literature has focused on explaining the cross-sectional inequality in wealth. The focus of early work was on retirement and life-cycle savings (De Nardi and Fella, 2017), and while these forces explain large parts of the variation in wealth, they remain insufficient. Other mechanisms, such as income risk (Aiyagari, 1994; Huggett, 1996), bequests (De Nardi, 2004), preference heterogeneity (Hendricks, 2007), and heterogeneous wealth returns (Benhabib et al., 2019), are necessary to fully explain the cross-sectional distribution of wealth.

The development of economic models of the wealth distribution shows that scholars have resorted to new mechanisms that explain wealth inequality, going beyond lifecycle savings, which most observers would consider fair. Forces like bequests, heterogeneous earnings risk, and heterogeneous wealth returns would be considered unfair by most observers, since they may result from differences between individuals that are not under the control of said individuals. The question of whether differences in wealth are due to fair or unfair factors has been lingering in the background of much of the contemporaneous literature on wealth inequality.

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We answer this question directly by estimating inequality of opportunity in wealth, which has generally focused on income (Brunori and Neidhöfer, 2021; Ferreira and Gignoux, 2011; Peichl and Ungerer, 2016; Ramos and Van de gaer, 2016; Roemer and Trannoy, 2016). Wealth has not been the object of study in this literature because of data limitations and methodological limitations. As concerns data limitations, there are almost no data sets with high quality data on (individual) net wealth in conjunction with a broad set of circumstances.

We address the data limitations by relying on the Socio-Economic-Panel (SOEP). The SOEP is a representative panel of households. Since 2004, this panel contains rich information on individuals' net wealth. In addition, due to its genealogical design, the SOEP provides a rich set of circumstances. With this data, we show how to adapt the methodology for ex-ante inequality of opportunity in income to wealth.

We find that inequality of opportunity in wealth as measured by the Gini coefficient makes up around 45% of total net wealth inequality in the early 2000s (see Figure 1). However, since 2010, this fraction has declined to around 33% in 2019. Among our standard set of circumstances, i.e., variables determining unfair inequality, we identify intergenerational transfer receipt (indicator), region of birth, and father's occupation (especially self-employment) as the most important. This is in sharp contrast to applications focusing on income, where gender, education, and body height tend to be most important.

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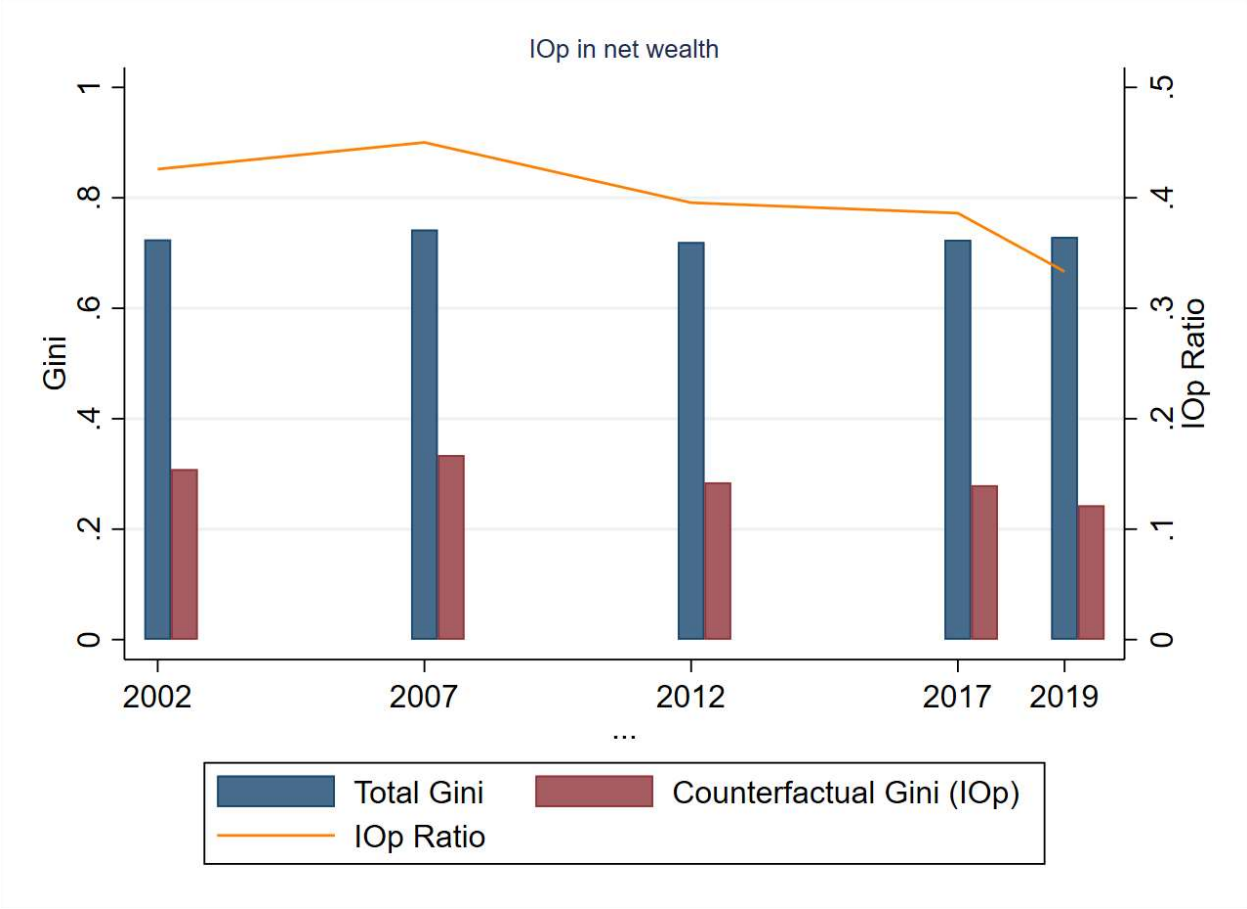


Figure 1: Estimates of Net Wealth Inequality and Inequality of Opportunity. Source: SOEP v36