The Importance of Partner Matching on Ascribed and Achieved Characteristics for Wealth Inequality

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Short Abstract

This paper provides the first estimates of how important partner matching based on ascribed and achieved characteristics is for wealth inequality between households. Wealth transmission from generation to generation within families is a key social stratification process in society. Partnering homogamy based on family background is therewith an important mechanism through which families can conserve and expand their advantaged societal position. We use data from the United States' Survey of Consumer Finances on the net worth of 2,155 couples in 2016. We estimate the importance of partnering based on ascribed characteristics for wealth inequality between households, and compare their potential impact to those of achieved characteristics. To achieve this goal, we elaborate existing counterfactual simulation techniques further to enable investigating wealth inequality. The results indicate that if individuals would partner across parental education lines, this would reduce the 90/50 percentile ratio in wealth by an estimated 17%. The potential impact of partner selection based on own achieved education is more limited, and this conclusion holds across inequality measures. These results shed new light on the relevance of partnering based on ascribed characteristics for our understanding of social stratification processes and how partnering based on achieved characteristics appear to have a surprisingly limited impact on wealth inequality.

Extended Abstract

Wealth inequality has been on the rise in many Western countries (Piketty & Saez, 2014). Research aimed at explaining these trends has mainly focused on individual-level processes such as differential returns from capital and labor (Piketty, 2013). But, because wealth is normally considered to be a household-level variable, family processes have the potential to be important contributors to wealth inequality. In this article, we provide to our knowledge, the first systematic estimates of the importance of partner selection based on ascribed and achieved characteristics for wealth inequality.

Partner selection has been prominent in studies on income inequality (Schwartz, 2010; Eika et al., 2019), but has been mostly overlooked in the study of wealth inequality. This is surprising because there are good reasons to believe that partnering behavior is especially interesting for wealth inequality.

Firstly, wealth is more easily accumulated within couples as compared to earnings or income. For instance, because generating earnings comes at the expense of free time, couples with a high earnings-potential might decide to reduce total labor supply to enjoy more free time or to facilitate the specialization of one partner in unpaid domestic work. In the case of wealth less trade-offs between time and wealth accumulation exist.

Secondly, studying wealth draws renewed attention to partnering based on ascribed characteristics such as social background. The direct and indirect transfers of wealth from parents to children are an important mechanism through which wealth and related advantages are transmitted across generations (Killewald et al., 2017). Such intergenerational transfers provide incentives for individuals to partner not only based on achieved characteristics but also on ascribed characteristics. Looking at wealth inequality can therefore increase our understanding of the persistence of barriers to partner across social backgrounds.

The main substantive questions investigated are therefore: What is the potential impact of partnering behavior on wealth inequality? And: What is the relative importance of partnering based on ascribed characteristics as compared to achieved characteristics?

Data and Method

We use data from the United States' Survey of Consumer Finances on the net worth of 2,155 couples in 2016 (as harmonized by the Luxembourg Wealth Study). The sample is restricted to heads of household and their different-sex partners. Single individuals will be added to the analysis in a later stage. The outcome variable of interest is

Household net worth which is the total of non-financial and financial assets (including pension assets) minus debts and liabilities owned by the household. *Own education* is currently used as a key achieved characteristic based on which individuals select each other (Schwartz & Mare, 2005); in later stages more achieved characteristics such as occupation and income will be added. Education is coded into three major categories (i.e. 12^{th} grade or less; high school degree/some college; college Degree). *The highest level of parental education* (among the mother's and father's level of education) is the main ascribed characteristic studied here (same categories as own education).

The influence of partnering on inequality has often been studied using simulation techniques where levels of inequality are estimated for counterfactual distributions of individuals across household types. Existing techniques have relied on decomposing the Theil index (e.g. Breen & Salazar, 2011) or individual-level information on earnings and income (e.g. Schwartz, 2010). As wealth is measured on the household level and takes on negative values, these existing techniques cannot be applied here, we therefore further develop them to study the impact of partnering on wealth inequality as follows:

First, the population is divided into two based on gender. Subsequently, each woman is randomly matched to a man to form a new simulated household. This simulated household now has a new combination of own educations and parental educations. For each new simulated household we randomly assign the household wealth of an actual observed household with the same combination of educations as the simulated household. Subsequently, a counterfactual level of inequality is calculated based on this simulated distribution of household wealth across simulated couples. Simulations for own and parental education are performed separately and repeated ten times (for now), results presented here represent the average of these ten replications.

This first counterfactual exercise simulates inequality for a situation where partnering would be randomized. The full potential impact of partnering behavior will be estimated by performing two more simulations. The second simulation consists of a counterfactual situation of "maximum homogamy" where partners select each other based on education to the maximum extent possible. To simulate this situation, instead of randomizing individuals across households, both men and women are ranked based on their education and subsequently matched based on that rank (the rank within educational groups is randomized). The third simulation represents the opposite scenario where partnering across educational groups is maximized: "maximum inverse homogamy". In this scenario, women are ranked in ascending order based on their

education whereas men are ranked in descending order. Subsequently, simulated households are formed by matching men and women based on their rank.

Preliminary Results

Figures 1 and 2 display the levels of inequality that resulted from the various simulations performed. The first set of symbols in each figure indicates the results for own education, whereas the second set regards partnering across parental education groups. The light-blue squares indicate observed levels of inequality in the data: wealth at the 90^{th} percentile is 9.1 times higher than wealth at the 50^{th} percentile and the Gini-coefficient of wealth inequality is estimated at 0.817. The grey diamonds indicate how high estimated inequality would be if individuals were to partner randomly across groups, the yellow circles indicate inequality under simulated maximum inverse homogamy, and the blue circles simulate inequality under maximum homogamy.

What can be observed from both figures is that partnering based on parental education has a larger potential impact on wealth inequality than partnering based on own education. If individuals would randomly partner across own educational groups, the 90/50 ratio is estimated to decline to 8.9, whereas randomization across parental education groups is estimated to reduce the ratio to 8.5, a reduction of 7%. Once simulating maximum inverse homogamy these numbers decline further to 7.9 and 7.4, respectively, corresponding to 13% and 17% decreases in wealth inequality. In the case of maximizing homogamy inequality is estimated to increase by 2% for own education, and by 5% for parental education. Results are less strong for the Gini-coefficient, primarily because reductions in homogamy do not necessarily compress wealth at the bottom of the distribution (not shown). Nonetheless, the larger impact of partnering based on parental education is even clearer once looking at Gini-coefficients.

How can the larger estimated impact of partner matching based on parental education be explained? Combinations of parental education are a stronger predictor of household wealth as compared to couple-combinations of own education. For example, couples where both partners have higher educated parents are clearly the wealthiest group considered in the analysis with a level of median wealth that is 53% higher than the median wealth of couples where both partners are higher educated themselves.

In conclusion, partnering behavior matters for levels of wealth inequality. In particular, partner selection based on ascribed characteristics, such as parental education, appear important for inequality. Future steps include adding more ascribed and achieved characteristics to the analysis, and looking at change over time.

Figure 1. Observed and Counterfactual Wealth Inequality (Ratio of p90 to p50)

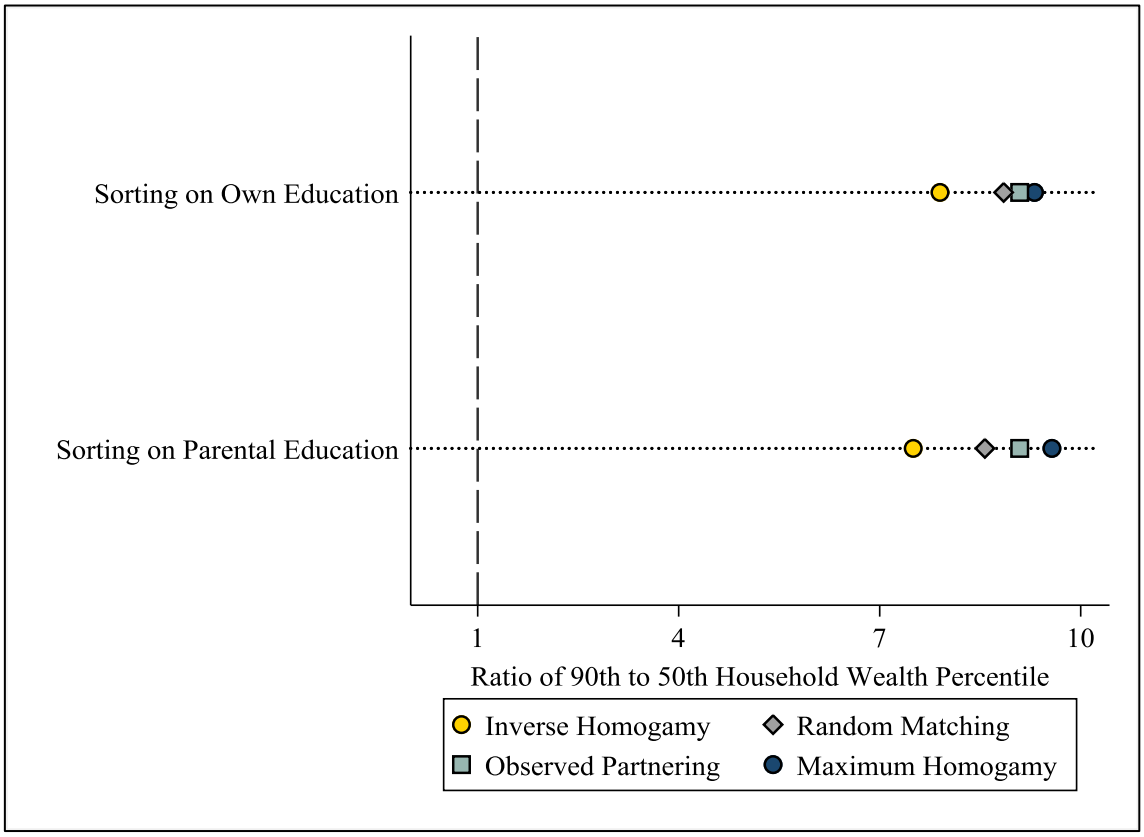
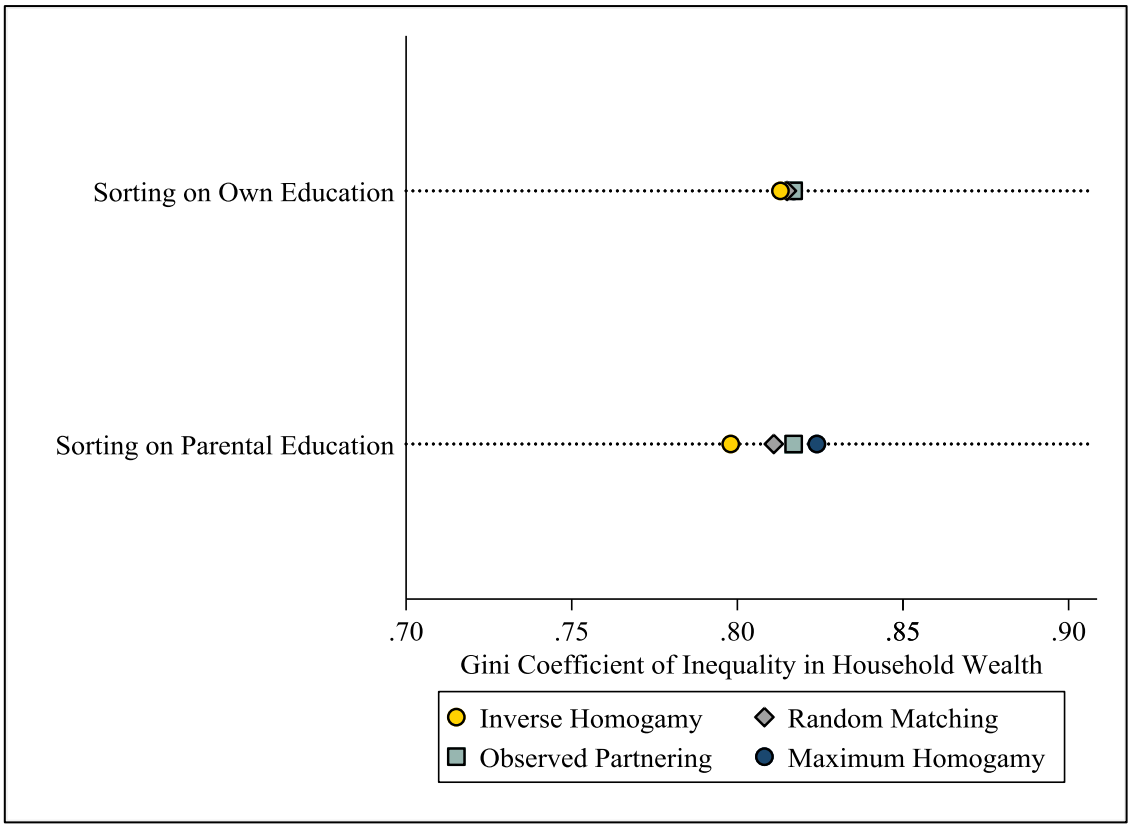


Figure 2. Observed and Counterfactual Wealth Inequality (Gini)



Source: Survey of Consumer Finances 2016; N = 2,155 couples

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