## Introduction

In their article "Gender Identity and Relative Income Within Households," Bertrand et al. analyze why in various data sources<sup>1</sup> there is a sharp decline in the fraction of married couples after the wife's income begins to exceed the husband's income. Their explanation for why this pattern is present in the data is that gender identity norms<sup>2</sup> induce an aversion towards situations where the man earns less than the woman in a relationship, decreasing the probability of marriage formation. On top of this, they also investigate how these traditional attitudes impact the wife's labor force participation, income conditional on working, marriage satisfaction, the likelihood of divorce, and the division of home production between husband and wife using various econometric techniques. Essentially, the main idea of this article is to show what happens to the likelihood of a relationship forming when the woman earns more than the man and how gender identity norms affect social and economic outcomes for married women.

## **Body**

The authors begin by first considering how the relative income of a woman affects whether people get married or not. However, standard models of marriage markets, as the authors point out, do not take into consideration whether the woman earning less or more income than the man affects marriage formation between two individuals. They only consider each individual's relative productivity in the household or labor force and their relative ranks of productivity<sup>3</sup> within their gender-specific distributions. Therefore, the authors must build their own theoretical framework. For their theoretical foundation, the authors assume that individuals are assigned to marriage markets based on homophily, i.e., most marriages occur between men and women. Also, marriage markets are defined by race<sup>4</sup>, age group, education group, and state of residence as all of these factors could influence whether people get married or not.

Given this theoretical framework for marriage formation, the authors then analyze how marriage rates are affected by changes in women's income relative to men. Data from the 1980 to 2000 U.S. Census and the 2008-2011 American Community Survey (ACS) are used to track how relative income between couples varies by decade and how long these couples have been married. Using this data, the authors construct the binary variable PrWomanEarnsMore\_\_\_\_, which indicates for each marriage market m and  $t \in \{1980, 1990, 2000, 2010\}$  how likely it is that a woman's income exceeds a man's income. After creating this variable, the authors create their baseline OLS specification by regressing  $\mathit{shareMarried}_{\mathit{mt}}$  - indicating the share of males who are currently married - on  $PrWomanEarnsMore_{mt}$  and other controls such as marriage

<sup>&</sup>lt;sup>1</sup> More specifically, the authors look at data from the Survey of Income and Program Participation (SIPP), U.S. Census Bureau, and the American Community Survey (ACS).

<sup>2</sup> In particular, the behavioral prescription that "a man should earn more than his wife".

<sup>&</sup>lt;sup>3</sup> For example, a man could be in the 50th percentile of men's income distribution and a woman could be in the 20th percentile of women's income distribution.

<sup>4</sup> The authors consider 3 races: whites, blacks, and Hispanics.

market fixed effects interacted with race, logs of female and male incomes, year fixed effects, etc. However, there is an issue with this baseline specification. It is well documented that women and men tend to work in different industries<sup>5</sup> and, depending on the industry, wage changes may happen more rapidly for one group than the other. This means that the variation seen in the variable *PrWomanEarnsMore* might be due to these wage changes and not aggregate labor shocks such as job loss. Thus, the authors introduce a modified Bartik-style instrument to their model. Essentially, what this modified Bartik-style instrument does is that it allows the authors to predict how wage incomes vary across markets and time - allowing them to construct a measure for *PrWomanEarnsMore* whose variation is caused by changes to labor market conditions.

Next, the same dataset is used to analyze how gender identity norms affect social and economic outcomes for women. For this, the variable  $PrWifeEarnsMore_i$  is created. This variable captures the likelihood that a woman earns more than her husband if her income were a random draw from the population of working women. The authors then regress their dependent variables for wife's labor force participation, income conditional on working, marriage satisfaction, the likelihood of divorce, and the division of home production between husband and wife on this crucial variable with controls using a linear probability model. After running their empirical models, the author's main findings are the following: Within marriage markets, when a randomly chosen woman becomes more likely to earn more than a randomly chosen man, marriage rates decline. In couples where the wife's potential income is expected to exceed the husband's, the wife is less likely to be in the labor force and earns less than her potential if she does work. In couples where the wife makes more than the husband, the wife spends more time on household chores; moreover, those couples are less satisfied with their marriage and are more likely to divorce.

## Conclusion

In conclusion, Bertrand et al. in this paper have presented evidence that traditional gender norms make marriage less likely for women who earn more money than their male counterparts and have social and economic consequences for married women. This suggests that even as women are slowly making gains in the pay gap between men, traditional roles and ideologies about who should be the primary breadwinner in the household continue to slow progress. However, there are some limitations in this article. One limitation is that the article focuses primarily on the U.S., where there have been rapid gains in workforce opportunities for women. If, as in more traditional countries, there is no chance for a woman to earn more than a man, the model would be of no practical relevance. Another limitation is that while the authors discuss general identity norms for women, they make no mention of how these norms evolve over time and how these norms are determined in society.

<sup>&</sup>lt;sup>5</sup> For example, women in nursing and men in construction work.

<sup>&</sup>lt;sup>6</sup> These controls are similar to the ones used in the marriage market model.