"The Gender Gap Between Earnings Distributions"

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Abstract

This paper examines the gender gap in the U.S., accounting for selection into full-time employment and implications of heterogeneity in outcomes. Distribution of wages for men and women, and in several counterfactual states are identified, with and without selection. Definition of the gap between these distributed outcomes is largely arbitrary, and has consequences. Summary definitions which build from the gap at quantiles require rank invariance assumptions that are not plausible and rejected by our tests. We advocate the gap between summary measures of distributions, computed separately. Examples include inequality measures and similar entropy functions which characterize each distribution anonymously. A brief account is given of the decision-theoretic bases that motivate different summary functions. Absence of a universally accepted evaluation function motivates examination of robustness by means of tests for uniform ranking (stochastic dominance) over classes of evaluation functions.

We adopt quantile-Copula approaches to account for labor force participation, and invert these corrected quantiles to recover the wage distributions for male and female populations, including counterfactuals, and for those who do not work full-time.

Some aspects of the evolution of the gender gap depend on the measure of it. Compared to the popular mean or median wage gap, inequality and "entropy" measures reveal a generally larger convergence until early 90s, and a more pronounced flattening since then. This corresponds to a decline in labor force participation (LFP) for males, and an increasing one for women which may have peaked. Once selection is accounted for, the gap is no longer trending down uniformly, with a slower convergence and even a recent reversal in the trend over portions of the distribution between the mid-1990s and the most recent recession. In the great recession, there is a marked decline in the gap among low-skilled workers, perhaps due to a relative deterioration in wages of the low-skilled males. LFP also varies by education and race. Convergence is much smaller amongst the least educated or black women, especially during the recent years. Non-market values, especially for those who choose not to work, are estimated, providing a new summary measure of the gap in the market and non-market distributions between men and women. Failure to account for non-market values can both exaggerate the gender gap and mask the deteriorating situation for some women. Using the estimated wage function and distributions, we further assess and challenge a variety of assumptions, hypotheses, and findings in the literature on the gender gap and inequality.