## Gender inequality in the value of higher education, 1980-2017: new conclusions from new measurement

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## Background

- The growth in earning differentials between moreand less-educated workers is the single most important factor explaining the overall increase of income inequality.
- The economic value of higher education ("education premium") has attracted extensive scholarly attention, especially among labor economists.
- NEVERTHELESS, gender inequality in the economic value of higher education has not been examined.


## Goals

- To examine the different economic values of higher education between men and women
- To document trends in this gap between 1980 and 2017 in the US labor market


## Terminology

- Education premium = wage gaps between educated workers (BA and above) and noneducated workers


## Previous studies

The education premium is higher for women than for men.

This means that:

- Women have a grater incentive than men to acquire higher education
- The percentage wage gaps between more- and less-educated women are greater than the equivalent gaps between more- and lesseducated men.

What are the differences between men and women in the economic value of higher education?

## We don't know!!

## WHY?

- Question of interest: the linkage between investment in education, productivity, and earnings within each gender group (rather than comparing the gap in the economic value of education between men and women).

For example*, the col
Black women=144\%
White men $=69 \%$

The College wage premium:
$144 \% \rightarrow \rightarrow 11,927$ US\$
$69 \% \rightarrow \rightarrow 12,353$ US\$

## WHY?

- Methodology: Due to the transformation of the dependent variable (wage) to logarithms:
- The education premium is estimated in relative terms (wage differences expressed as a percentage based on each group's own distribution) rather than in the unit of the dependent variable (US\$).
- The gender gap in education premium is underestimated (because it compresses the top end of the wage distribution, where men's returns to education are expected to be the highest)


## To sum

- Previous studies on education premium:
- Mostly concerned with the relationship between investment in education and earnings.
- Using log regression models, they estimated wage gaps between workers (men as well as women) with higher and lower levels of education, but not gaps in education premium between men and women.


## Data \& Method

- Two different regression models, based on the same specification and differing only in the dependent variable:
- Wage in logarithmic terms (inflation adjusted)
- Wage in US\$ (inflation adjusted)
- Main covariates: gender, education, genderXeducation
- Controls: working hours, age, and race
- 38 regressions, one for each year (1980-2017)
- US- CPS (IPUMS)
- Aged 25-64 with positive earnings
- Average 63,851 respondents in each year




## Gender gaps in education premiums across the wage distribution

- The gender wage gaps tend to be larger in the upper wage segments (Albrecht, Bjorklund and Vroman 2003).
- If this is the case in education premium as well, then the use of log wage should conceal the full gender gap in education premium, because it compresses the right tail of the wage distribution.

Absolute education premium, by gender, percentiles, and period (based on quantile regressions)

$\rightarrow$ Male $\rightarrow$ Female

## Absolute education premium by gender, year, and percentile (based on quantile regressions)



## Summing up

- Higher education has become a major determinant for acquiring prestigious and rewarding positions in the labor market
- The rising value of higher education has been fueled, first and foremost, by the impressive growth in educational attainments among women
- The two combined processes are expected to improve the economic attainments of women relative to men.
- Yet, women draw lower economic rewards from their education than men, and the gender gaps in the academic premium increase over time.


## Summing up

- Persistence of men's advantage in the college wage premium, during a period when major aspects of gender inequality were in decline - aspects that should have contributed to the decline in the gender gap in returns to education.
- Our findings address the underutilization of female human capital, and the devaluation of women's education and professions.


Absolute returns to education, by gender, based on predicted wages from log models


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