Results and Henry E. Siu began to notice National Bureau of Economic We hypothesized D Jaimovich in low wage occupations, thus increasing wage inequality consistent with highly educated workers increasing wage competition. Research Hypothesis: importantly, polarization occurs due to routine Economists reduction of wages. bargaining power of unions are decreasing real value of demand for workers in routine occupations for highly educated substantial growth in wage inequality including, Background: During the 1980’s, economists began to notice changes in the wage gap between high-income and low-income workers. There are many theories as to why there has been a substantial growth in wage inequality including, Skill Biased Technical Change: Technological change allows firms to cut back on low-skilled workers while increasing the demand for highly educated workers because computers cannot replace human analytical and problem-solving skills. There is a lower demand for workers in routine occupations because technological advances substitute for labor in routine tasks. Unionization: Decline in unionization contributes to the decreasing real value of wages. Since union membership is declining, bargaining power of unions are decreasing which results in a reduction of wages. Economists Nir Jaimovich and Henry E. Siu (2012) argued that job polarization occurs due to routine-biased technological change. Most importantly, Jaimovich and Siu assert that a lot of inequality is documented during recessions.

Research Hypothesis: We hypothesized that the transition to a service-based economy has allowed highly skilled workers to attain low skill jobs during the Great Recession (2007-2012). This is consistent with highly educated workers increasing wage competition in low wage occupations, thus increasing wage inequality.

Data/Methods

Data: The American Community Survey (ACS) is an annual household survey that collects data on occupation, wages, and education from 3 million people across the United States. The ACS started in 1999 and it is a 1% random sample of the United States population. The ACS large sample size makes it ideal to run statistical analysis. For this project, we analyzed ACS data from 2005 to 2013.

Method: Stata was used to perform weighted ordinary least squares regressions of the data. We took the average weight of occupations and added more weight based on the number of people in that occupation. We found wage growth by calculating the growth rate of wages from 2006 to 2013. We found education growth by calculating the growth rate of education from 2005 and 2006 to 2012 and 2013.

Figure 1

The regression line in figure 1 shows that high-paid workers experience higher wage growth in comparison with low-paid workers. High-educated workers along with low-educated workers will apply for low-paid jobs which will drive wages down and lead to slow wage growth. This graph is consistent with our hypothesis that the shift to a service economy drove wages down for low-paid jobs during the Great Recession (2007-2012).

Figure 2

The regression line in figure 2 shows that for low-paid jobs, there is a higher increase in educational attainment of workers. On the contrary, there is very little increase in educational attainment of high-paid workers. During a recession, applicants with a high school degree or less will not apply for high-paid jobs since they do not satisfy the education requirement.

Figure 3

The regression line in figure 3 shows that occupations with a higher change in education tend to experience higher wage growth in comparison with occupations with a lower change in education.

Conclusion

Figure 1 and Figure 2 support the hypothesis of this study. During the Great Recession (2007-2012), highly skilled workers competed with low-skilled workers for low-paid jobs which drove wages down. The number of applicants applying for high-paid jobs is relatively the same; therefore, wages declined at a slower rate compared to low-paid jobs. Thus wage inequality rose during the Great Recession (2007-2012). However, Figure 3 does not support our hypothesis, but it doesn’t disprove it either. Some occupations are upgrading and educated workers are going to those jobs. Therefore, wages will increase to attract educated workers to those positions.

Future Research

This research is significant because it shows that highly educated workers moved into low paid jobs during the Great Recession (2007-2012). There needs to be more research on wage inequality during other recessions in the United States. We can use our methods and apply them to previous recessions to see if the results support our hypothesis. We can also test our hypothesis by exploring high unemployment states versus low employment states to determine whether there is in fact a link between unemployment and wages.

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Citations