Career differences main driver of wage inequality

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Prof. Dr. Christian Bayer (left) and Prof. Dr. Moritz Kuhn (right) from the Institute of Macroeconomics and Econometrics at the University of Bonn with a graph on women and men. Credit: Volker Lannert/University of Bonn

Why does a 55-year-old worker earn on average around 40 percent more than a 25-year-old? Is there a link between average wage growth and rising wage inequality? Many answers to these fundamental questions have so far remained largely unanswered. The economists Prof. Moritz Kuhn and Prof. Christian Bayer from the University of Bonn have now evaluated wage data for the period from 2006 to 2016. They find that different progress on the career ladder is the most important driver of both wage growth and rising wage inequality. A college degree alone provides no guarantee for higher wages. The researchers present their findings in a recent "CEPR Discussion Paper".

Wage inequality is one of the key topics in the current policy debates on labor markets. Why do women earn on average less than men? Why do older workers earn higher wages than younger ones? While wage differentials are moderate among labor market entrants, labor market data show that wage differentials widen during working life. "Existing research has so far focused primarily on differences between employers and differences in worker characteristics," says Moritz Kuhn of the Institute for Macroeconomics and Econometrics at the University of Bonn. Together with his colleague Christian Bayer, the two economists explored labor market micro data from the Federal Statistical Office for the time period from 2006 to 2016.

In their new research, the researchers changed perspective: Instead of only considering the characteristics of employers and workers, they also considered differences in jobs in their analysis. Bayer: "Jobs describe bundles of tasks and duties and they differ in how much responsibility, complexity and autonomy is associated with the position. Using statistical methods, Bayer and Kuhn decomposed the observed wage growth and the increase in wage inequality over the life cycle. They found that job differences and career dynamics across these jobs are the most important driver of wage growth and rising wage inequality during working life. "Differences in how workers climb the career ladder accounts for 50 percent of the wage differences across workers," summarizes Bayer the results.

A college degree does not necessarily lead to a high wage

Their findings also shed new light on the common idea that graduating from college is directly associated with higher wages. Their results rather suggest that college education opens the way to jobs at the top of the career ladder but it does not provide the guarantee that workers will climb the career ladder to the top. "Simply put", says Kuhn, "the key question is rather, do I become a cab driver, a clerk, or an executive?"

Their results also provide new insights for the widely discussed gender pay gap. "Half of the wage differences between men and women result from differences in career paths," reports Bayer. "Between the ages of 30 and 45, many men keep on climbing the career ladder and thus experience high wage growth, while this career progress is largely absent for women," explains Kuhn. Since the data are limited in the available information, the causes behind the different career paths must remain largely speculation. However, it seems likely that women leave the labor market more often than men during a key phase of family formation and thus miss steps on the career ladder, which they cannot catch up when they return and that account for the increasing wage differences during working life.

Luck also plays a role

Changes of employer are often taken as a prerequisite for career progression. In line with this idea, Bayer and Kuhn also find that workers who change employers are about 20 percent more likely to be promoted at their new employer. However, the data also show that most steps on the career ladder happen with the same employer. Whether you make the next step on the career ladder or not also depends on the situation at the current employer. Is there a competitor in the peer group of workers with the same level of education but who is more experienced? Then this person is more likely to climb the career ladder. "Career progression has therefore at least some luck component: The next step on the career ladder is only going to happen if at the right time a position up on the career ladder becomes available," summarizes Bayer the findings from their research.

"Many of the results were very much in line with our expectations, the research corroborating these expectations based on representative data was still missing," explains Bayer the importance of their findings. The two researchers now want to further explore the causes of the rising wage inequality over the last decades with the newly gained perspective. Kuhn: "Now, we know where to look more closely in future research."

More information: Which Ladder to Climb? Decomposing Life Cycle Wage Dynamics. cepr.org/active/publications/d … s/dp.php?dpno=13158#

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