Ask an Economist: Lifetime earnings differences across Black and white individuals

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Study finds that differences in years worked contribute substantially to the lifetime earnings gap.

Most research on the topic of earnings differences between Black and white individuals has focused on earnings differences at a single point in time—such as for a month or a year. However, this approach might understate overall or lifetime earnings inequality, especially if lifetime employment differs between Black and white individuals. For a December 2022 *Economic Review* article, Andrew Glover, José Mustre-del-Río and Emily Pollard went beyond point-in-time measures of earnings and examined lifetime earnings differences between Black and white individuals.

Their findings highlight how differences in years worked, which are not captured by point-in-time measures, contribute substantially to earnings differences between Black and white individuals.

What did the research reveal about earnings differences?

We found that, on average, Black individuals earn about one-third less than white individuals over the course of their lifetimes (a difference equivalent to about $550,000), though the size of this gap varies by gender and education level.

Differences in years worked contribute importantly to this gap as well as to earnings gaps between Black and white individuals of different genders and educational backgrounds. For example, on average, college-educated Black women have higher lifetime earnings than college-educated white women because Black women work more years over the course of their lives.

In addition, Black men without a high school degree have lower lifetime earnings than similarly educated white men; fewer years worked among Black men explains the majority of this gap.

How was your study constructed?

To observe individuals' entire lifetime earnings trajectories as well as demographic characteristics such as race, we used data from the U.S. Census Bureau's Survey of Income and Program Participation Synthetic Beta (SSB). This combined the strength of survey-based and administrative data by linking individuals surveyed in the Survey of Income and Program Participation (SIPP) to earnings data based on records from the Social Security Administration (SSA) and the Internal Revenue Service (IRS).

The SIPP is a nationally representative longitudinal survey that captures a host of demographic characteristics (such as race and education) that are typically not available in administrative data alone. By linking individuals in this survey to earnings data from the SSA and IRS, the SSB allowed us to construct lifetime earnings histories for a large sample of individuals with little to no reporting error—a sample that we then decomposed by sex and education.

Why focus on lifetime earnings instead of annual pay?

The results of our study emphasize that focusing only on earnings per year, and not years worked, understates the Black-white earnings gap by 24 percent, reducing it in dollar terms from $550,000 to $417,000. Thus, lifetime earnings appear to provide a more complete measure of labor market inequality than point-in-time earnings.

To further explain, because lifetime earnings are the product of years worked and average earnings per year, our accounting framework ascribed differences in lifetime earnings to three factors: differences in the number of years worked, differences in earnings per year, and the combined effects of differences in both years worked and earnings per year, which can be thought of as a residual. It is important to note that point-in-time measures do not account for differences in years worked. Therefore, they cannot account for the first and third factors in our decomposition.

Although combining point-in-time measures with some measure of employment history can help address this issue, that procedure is likely to yield imprecise estimates, as it would not account for the way individuals' earnings change over the course of their careers.

What are some of the conclusions from this research?

There is high interest in the topic of disparate labor market outcomes across racial groups. Understanding differences in earnings between Black and white individuals is important for the design of policies and programs aimed at addressing these differences. The importance of years worked to Black-white earnings differentials provides empirical support to Federal Reserve policy aimed at reducing the unemployment rate and keeping people employed in a context of price stability.

Focusing specifically on race, other studies in recent years have shown that a hot labor market is generally associated with disproportionately larger declines in the unemployment rates of Black and Hispanic women and men. Our analysis suggests that declines in unemployment can have economically meaningful effects on lifetime earnings of Black workers to the extent that the declines in unemployment can be sustained and thus increase lifetime employment of these workers.

Media

The research was conducted by (from left) Emily Pollard, Andrew Glover and José Mustre-del-Río. Photo by Gary Barber.