



Education and Lifetime Earnings

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There are substantial differences in lifetime earnings by educational attainment

Men with bachelor's degrees earn approximately \$900,000 more in median lifetime earnings than high school graduates. Women with bachelor's degrees earn \$630,000 more. Men with graduate degrees earn \$1.5 million more in median lifetime earnings than high school graduates. Women with graduate degrees earn \$1.1 million more.

After controlling for key socio-demographic variables that influence earnings and the probability of college completion, the differences in lifetime earnings by educational attainment are reduced, but still substantial

Regression estimates show that men with bachelor's degrees would earn \$655,000 more in median lifetime earnings than high school graduates. Women with a bachelor's degrees would earn \$450,000 more in median lifetime earnings than high school graduates.

We also measure the lifetime returns of educational attainment using the discounted present dollar value

Applying a 4 percent annual real discount rate, the net present lifetime value at age 20 of a bachelor's degree relative to a high school diploma is \$260,000 for men and \$180,000 for women. For those with a graduate degree, it is \$400,000 for men and \$310,000 for women.

Overall, these findings confirm the significant long-term economic benefits associated with college education.

Background

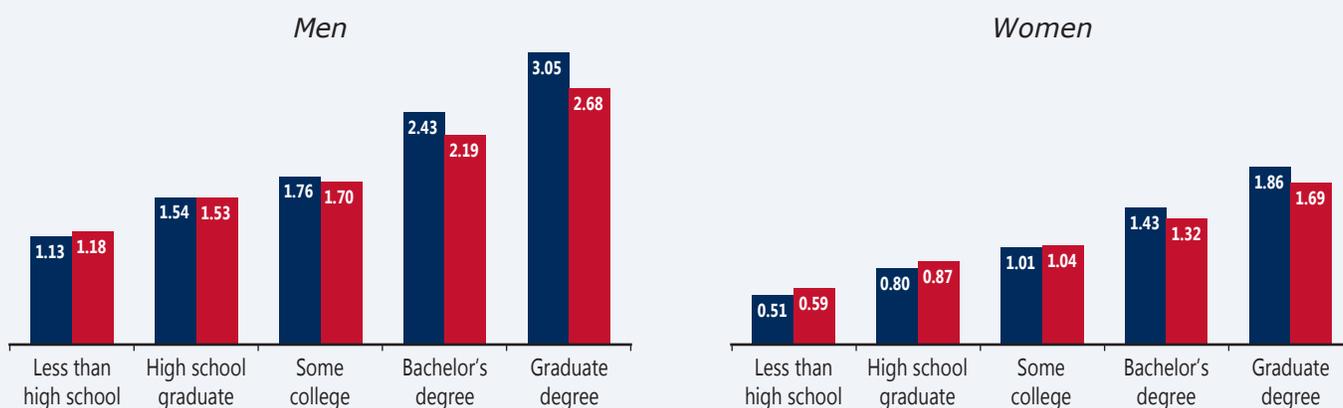
- Lifetime earnings have important implications for retirement outcomes, including the level of Social Security benefits.
- Although a large literature examines earnings differences by educational attainment, research on lifetime earnings is limited.
- Using survey data matched to administrative records that track the earnings of individuals for over two decades allows us to generate a more robust estimate of lifetime earnings by educational attainment than cross-sectional data allows.

Key Terms

- *Lifetime earnings* are total accumulated earnings over 50 years from age 20 to age 69.
- *Educational attainment* is an individual's highest level of education.

Estimated lifetime earnings by educational attainment (in millions of dollars)

■ Gross (without controls) ■ Net (with controls)



SOURCE: Tamborini, Christopher R., ChangHwan Kim, and Arthur Sakamoto. 2015. "Education and Lifetime Earnings in the United States." *Demography* 52: 1383–1407.

NOTES: Results are based on median regression using data from the 2004 Survey of Income and Program Participation (SIPP) and longitudinal records from the Social Security Administration.

All content is simplified for presentation. Please see source material for full details and caveats.

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