

Estimating the return to schooling using the Mincer equation

The Mincer equation gives comparable estimates of the average monetary returns of one additional year of education

Keywords: human capital, labor market experience, earnings, income distribution, Jacob Mincer

ELEVATOR PITCH

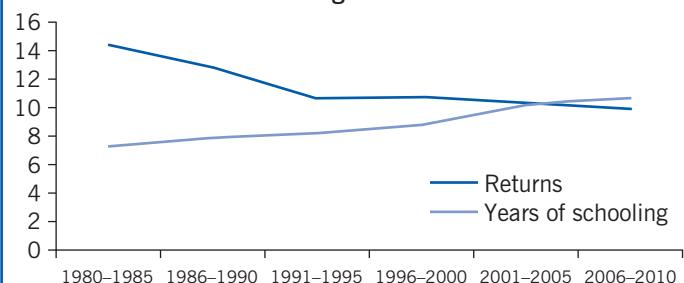
The Mincer equation—arguably the most widely used in empirical work—can be used to explain a host of economic, and even non-economic, phenomena. One such application involves explaining (and estimating) employment earnings as a function of schooling and labor market experience. The Mincer equation provides estimates of the average monetary returns of one additional year of education. This information is important for policymakers who must decide on education spending, prioritization of schooling levels, and education financing programs such as student loans.

KEY FINDINGS

Pros

- ⊕ Earnings can be explained as a function of schooling and labor market experience using the Mincer equation; this provides policymakers with important information about how to invest in education.
- ⊕ Due to the comparability of Mincerian results, individuals can make use of these results to help guide their personal decisions about how much schooling they should invest in.
- ⊕ Recent studies using the Mincer equation indicate that tertiary education, as opposed to primary education, may now provide the greatest returns to schooling; this represents a shift in the conventional wisdom.

Returns to additional years of schooling decline as
schooling levels rise



Note: Returns = the average annual increase associated with an extra year of schooling, expressed in annual percentages.

Source: [1].

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Cons

- ⊖ The relationship between schooling and earnings does not necessarily imply causality.
- ⊖ Earnings functions provide private (i.e. individual) returns to schooling, whereas government/public costs and other benefits are needed to estimate social rates of return.
- ⊖ As economies become more complex and technological developments alter the demand for education, decades-old cross-sectional data may not be informative about returns to current investment decisions.

AUTHOR'S MAIN MESSAGE

The Mincer equation suggests that each additional year of education produces a private (i.e. individual) rate of return to schooling of about 5–8% per year, ranging from a low of 1% to more than 20% in some countries. Globally, the returns to tertiary education are highest, followed by primary and then secondary schooling; this represents a significant reversal from many studies' prior results. Policymakers can learn much from Mincerian results; for instance, further expansion of university education appears to be very worthwhile for the individual, meaning that governments need to find ways to make financing more readily available, and that high rates of return are found through investment in girls' education.