Nonpecuniary benefits of schooling

The financial rewards-or what economists call "pecuniary benefits"-of educational attainment are well known and well documented: other things equal, people with more education earn more income than those with less education. But in an article titled "Priceless: The Nonpecuniary Benefits of Schooling," published in the winter 2011 issue of the Journal of Economic Perspectives, economists Philip Oreopoulos and Kjell G. Salvanes examine and attempt to quantify the "nonpecuniary benefits" of education. The authors use data from a variety of U.S. and other sources to measure the nonpecuniary benefits of schooling both inside and outside the labor market. Within the labor market, for example, those with more education tend to experience greater job satisfaction and lower unemployment; benefits outside the labor market include better health and more successful marriages (or at least less chance of getting divorced). Oreopoulos and Salvanes review and draw on a rich body of literature that documents these findings, and they use econometric methods to analyze relevant data and quantify the relationship between education and various benefits.

As the authors explain, a substantial body of evidence suggests that the nonpecuniary benefits from schooling are "quantitatively important." But establishing a *causal* relationship has been challenging for at least two reasons. The first is that it is difficult to separate the schooling effects from other factors that might lead to benefits, such as family background, perseverance,

or genetics. The second reason is that it has proved equally difficult to separate the effects of schooling from the effects of increases in income that result from more schooling. More education tends to lead to more income, but more income brings its own nonpecuniary benefits. The challenge for researchers is how to isolate the various effects. Oreopoulos and Salvanes structure their article to reflect the two bodies of existing research that result from these difficulties. One body of research provides considerable evidence that a strong positive correlation exists between education and nonpecuniary benefits but is unable to establish a strong causal relationship. The other body of research establishes the causal relationship better, but the data are relatively sparse. The authors analyze a variety of data from both bodies, employing some innovative techniques in order to better establish the causal relationship. In so doing, they make a compelling case that education leads to a large number of nonpecuniary benefits.

Oreopoulos and Salvanes begin by analyzing data from the General Social Survey (GSS), which is conducted by the University of Chicago's National Opinion Research Center. The GSS tracks the opinions of a large sample of Americans and has been conducted since 1972. The GSS data allow the authors to assess the nonpecuniary returns to education both inside and outside of the labor market. To assess the benefits outside the labor market, for example, Oreopoulos and Salvanes examine the effects of schooling on a number of variables such as health, marriage, parenting, and long-term behaviors that affect people's overall

quality of life. They even look at the consumption effects of schoolingthat is, the extent to which people derive utility from attaining more education without regard for the financial returns on their investment. To assess the nonpecuniary benefits within the labor market, the authors look at the effects of education on unemployment, job satisfaction, and various other labor-related measures. They also examine data from other sources, such as the U.S. Department of Labor's Occupational Information Network, administrative records from Norway that provide data on siblings (including twins), and data on the effects of compulsory education on various outcomes.

Among the findings of their study, Oreopoulos and Salvanes present evidence showing that at any given level of educational attainment people report being happier than those at all lower levels of education. The authors run regressions on the data and control for variables such as the income level and other characteristics of a person's family of origin, arguing that schooling affects overall well-being in ways unrelated to such factors. Thus, among workers from similar family backgrounds, those with more education report greater job satisfaction and more sense of accomplishment in their jobs than those with less education. Oreopoulos and Salvanes look at numerous other measures as well and reach similar conclusions. Nonpecuniary benefits on the job, for example, include more independence, better relationships with coworkers, greater recognition, more support from management and coworkers, and superior working conditions (including more job security). In addition to those mentioned previously, benefits outside the workplace include better social skills and the ability to think critically. As the authors explain, critical thinking "helps individuals process new situations or problems and make better decisions," and "social skills facilitate interaction and communication with others." Although it is poorly understood how these skills are actually acquired, both skill sets are "strongly and positively correlated with schooling."

The authors caution that the life outcomes they examine in their study are averaged across many individuals, some of whom benefit more from schooling and others less. Still, aside from the obvious financial benefits of education, Oreopoulos and Salvanes demonstrate that, by almost any measure, people with more education are generally better off than those with less education.