The Spillover Effect

Everyone knows that the more you learn, the more you earn. Economists can even tell you how much: Generally speaking, every additional year of schooling is worth 8 to 10 percent more in pay, give or take a few bucks.

Now UCLA economist Enrico Moretti asserts that a college education benefits the less-educated on payday as well. He says that an increase in the proportion of college graduates in a city seems to raise everyone’s wages—with the biggest bonus collected by those with the least education. He found this effect after controlling for other factors typically associated with higher earnings and regardless of how the community is faring economically.

Overall, he says, a 1 percentage point increase in the proportion of college graduates who live in a metropolitan area translates, on average, into a 1 percentage point increase in everyone’s pay. Moretti calls it “spillover”—a financial windfall that people collect simply because they’re living in the right place at the right time.

The premium was largest for high school dropouts, he found. A one-point increase in the supply of college grads raised the wages of high school dropouts by about 2 percent, high school graduates’ wages by 1.6 percent and college graduates’ wages by 0.4 percent, Moretti reported in a paper published last week by the National Bureau of Economic Research.

Moretti analyzed 14 years of data from the National Longitudinal Survey of Youth, which has tracked approximately 12,000 individuals since 1979. He then ran separate analyses on data collected from 4 million workers in the 1970, 1980 and 1990 censuses. In both studies, he found the spillover effect.

Why would the less educated profit from the academic toils of the best-educated workers?

“There are two things going on here,” Moretti said. One is straight out of Economics 101: The laws of supply and demand. As the supply of less-educated workers declines relative to skilled college grads, the value of these relatively scarce unskilled workers increases and their wages rise. After all, somebody needs to park all those turbo Saabs in Silicon Valley.

But that’s not the whole story; in fact, it may be very little of it. After all, if the spillover effect were simply due to supply and demand, then the wages of college graduates would decline as their proportion in the population increased. But the wages of the best-educated also went up, albeit slightly, which suggests that other factors were at work.

Moretti speculated that less-well-educated workers acquire skills from better-educated workers. That means an increase in the proportion of college graduates would increase the chances of these informal transfers of marketable skills.

“People talk, people interact, people learn from each other,” he said, adding that such contact could happen at work or in the stands at a Little League game. Then again, it could be that firms in cities with growing numbers of college grads acquire “better technology, which would benefit both skilled and unskilled workers.”