

# The Long View: Technology, Education, and Inequality

For the first three-quarters of the 20th century, wage inequality declined. Then, it started to rise, and has kept growing since. Claudia Goldin and Larry F. Katz, two economists at Harvard University, point to education as a major factor behind the two different trends in inequality.

U.S. educational attainment, measured by the completed schooling levels of successive generations of students, was exceptionally rapid during the first three-quarters of the century. However, educational advance slowed considerably for young adults beginning in the 1970s and for the overall labor force by the early 1980s. For generations born from the 1870s to about 1950, every decade was accompanied by an increase of about 0.8 years of education. During that 80-year period the vast majority of parents had children whose educational attainment greatly exceeded theirs. A child born in 1945 would have been in school 2.2 years more than his or her parents born in 1921. But a child born in 1975 would have been in school just half a year more than his or her parents born in 1951.

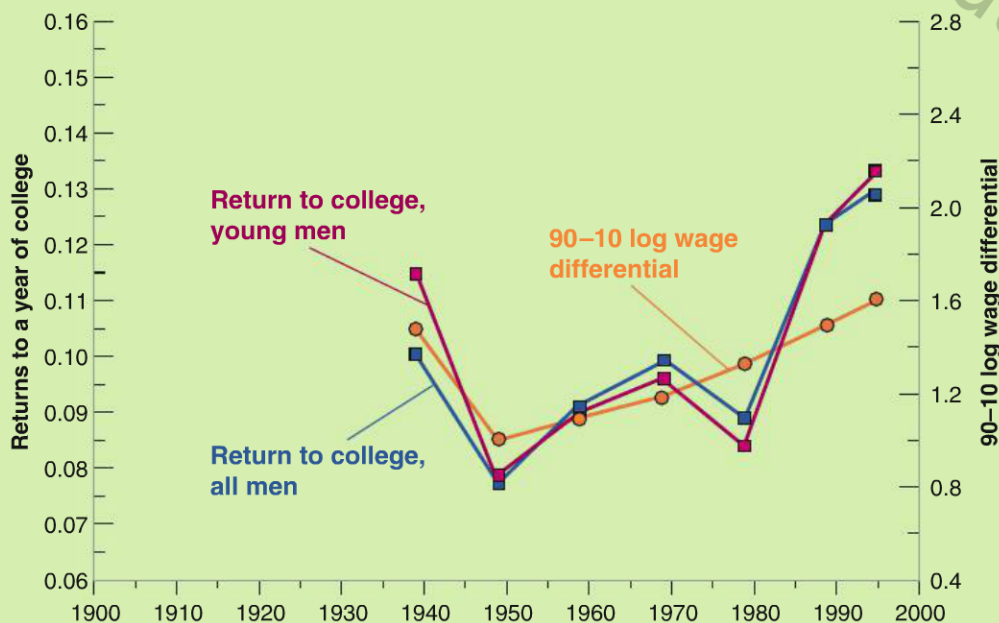
Underlying the decision to stay in school longer were clear economic incentives. As shown in Figure 1, the return to one more year of college education (meaning how much higher is the average wage of a worker with one more year of college education) was high in the 1940s: 11% for young men and 10% for all men. This induced U.S. families to keep their children in school longer and then send them to college. The

increase in the supply of educated workers lowered both the returns to education and the wage differentials. By 1950, the return to one more year of college education had fallen back to 8% for young men, 9% for all men. But by 1990, rates of return were back to their 1930s levels. The return to a year of college today is higher than in the 1930s.

There are two lessons to be drawn from this evidence:

The first is that technological progress even when skill-biased, that is accompanied by an increase in the demand for skilled and educated workers, does not necessarily increase economic inequality. For the first three-quarters of the 20th century, the increase in demand for skills was more than met by an increase in the supply of skills, leading to decreasing inequality. Since then, demand growth has continued, whereas supply growth has decreased, leading once again to increasing inequality.

The second is that, although market forces provide incentives for demand to respond to wage differentials, institutions are also important. For most Americans in the early 20th century access to schooling, at least through high school, was largely unlimited. Education was publicly provided and funded and was free of direct charge, except at the highest levels. Even the most rural Americans had the privilege of sending their children to public secondary schools, although African Americans, especially in the South, were often excluded from various levels of schooling. This has made an essential difference.



**Figure 1**

*Wage Differentials and the Returns to Education, 1939 to 1995*

Source: Claudia Goldin and Larry F. Katz, "Decreasing (and then Increasing) Inequality in America: A Tale of Two Half Centuries," In: Finis Welch *The Causes and Consequences of Increasing Inequality*. Chicago: University of Chicago Press; 2001. pp. 37-82.