

The Future Path and Consequences of the U.S. Earnings/Education Gap

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Local labor markets frequently yield natural experiments—the Mariel Boatlift, for example, or the decision of New Jersey to raise its minimum wage while neighboring states held constant. In the national labor market, natural experiments are harder to come by as one event is contaminated by others. The past and future evolution of the earnings/education gap is a case in point. That gap has evolved concurrently with two other developments:

- A twenty-year long period of slow wage growth followed more recently by a falling growth rate of per capita income.
- A continuing trend in which higher and lower income families have become increasingly concentrated in separate geographic areas.

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When these events are taken together, they pose the following dilemma:

- Human capital is becoming an increasingly important determinant of earnings.
- In the U.S. context of locally run schools, growing income stratification by place makes it harder for poor and working class children to acquire large amounts of human capital.
- The natural set of solutions to this problem involves intervention by higher levels of government.
- But stagnant earnings and living standards make persons increasingly suspicious of higher levels of government.

This dilemma makes the future of the education/earnings gap a problematic issue.

I will describe the dilemma by first reviewing the context of stagnant wages and living standards. I will then summarize some of the trends—political and demographic—that economic angst has accelerated. Finally, I

will examine the future path of the education/earnings gap in the short run, where the die is already cast, and in the long run, where the factors discussed in this paper will come into play.

SLOWER GROWTH IN EARNINGS AND INCOME

For reasons of brevity, the changing rate of return to education has often been described as “the college/high school earnings gap.” The term is good verbal shorthand—reporters love it—but it sometimes encourages two incorrect impressions. The first is that college graduates and high school graduates are groups of equal size. They are not. Among men ages 25 to 54, 27 percent have four years of college or more,¹ while 48 percent have a high school diploma or less. This means that the earnings of the “median man” will be closer to those of a high school graduate than to those of a college graduate.

The second incorrect impression is that while high school graduates have done badly, college graduates have done very well in an absolute sense. Among men, some have, but many have not. An extreme case—but not a terribly extreme case—is the college class that turned 30 in early 1972 just before wage stagnation began.² These men were hurt two times. They were hurt first because they spent most of their prime earning years in a period of slow wage growth. They were hurt again because they reached their late 40s and early 50s just in time for the white-collar recession and the displacement of the middle-aged managers who were “earning their age.”³

Chart 1 traces median earnings for three subgroups of the male cohort that turned 30 in 1972: high school graduates, college graduates (with no additional schooling), and the “median man” whose earnings represent the median of all cohort members, regardless of education.⁴ The path of median earnings for college graduates contradicts a second media story—that everyone is getting poorer. But earnings growth is only moderate—a total of 17 percent over twenty years, with very little of that growth in the last decade.

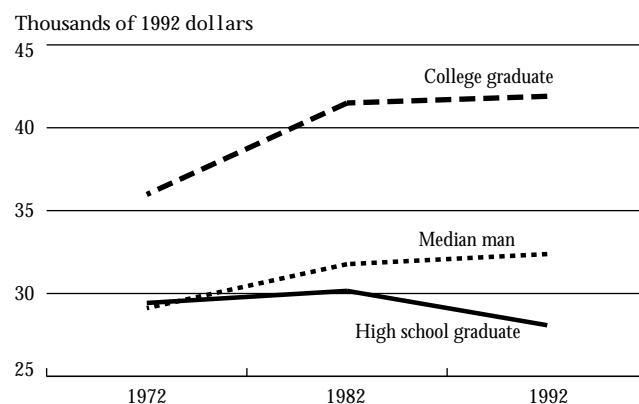
Median earnings growth for the high school graduate is significantly slower, falling slightly over twenty years. The median man’s earnings grew by a slow 11 percent over twenty years, with most of that growth in the first ten years.

Most studies of real wage trends (including my own) focus on the wage structure by looking at, say, the earnings of 40-year-old men in 1980 and 40-year-old men in 1990. The comparisons provide information about the economy and demography but they say little about life as the individual sees it since they obscure the wage gains that accrue to experience.⁵ Chart 1 displays those experience-based wage gains for men now in their late 40s and early 50s. Even the men with a bachelor’s degree have not seen big earnings gains over their careers.

Chart 1 has several caveats but none of them are serious. First, the data are for men. Women did moderately better than men over the period.⁶ Second, the earnings figures, based on published Census data, exclude taxes. It is unlikely, however, that after-tax income grew faster than pretax income over these years.

Third, the earnings figures exclude the rising payments for employer-provided health insurance. But to understand the mood of the country, it makes little sense to include health care costs as income. If rising income makes a person happier, it is because the person knows she can purchase more now than in the past—that is, she can refer

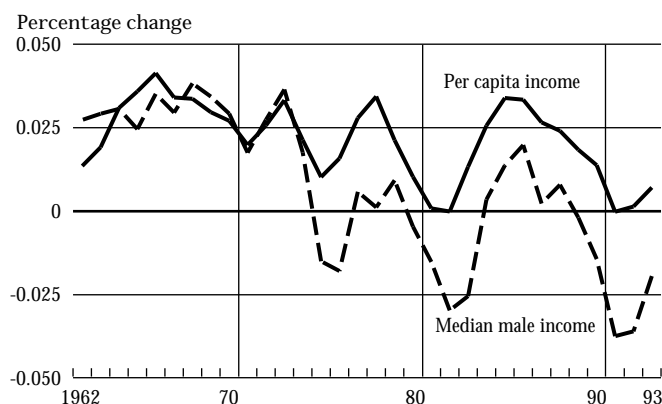
Chart 1
The Earnings Paths of Men Who Were 30 Years Old in 1972



back to her own experience to form a judgment. Better health care means that if a person develops breast cancer today, she has a better prognosis than someone else who had a similar breast cancer fifteen years ago. Persons who are not ill may know all of this in some vague way but not as well as they know that their insurance costs more. Persons who are sick may have difficulty comparing themselves to their counterparts fifteen years ago. In either case, it is unclear that rising health insurance costs should produce the same happiness as an increase in money income.⁷

A final caveat is that earnings are not the whole story—the standard of living as measured by per capita income is important as well. Per capita income continued to rise briskly even after the early 1970s because the composition of the population was shifting toward earners and away from dependents. But that shift had demographic limits and leveled off by the late 1980s. The result is contained in Chart 2, which shows the three-year moving average of the annual growth rate of per capita income. For comparison, the chart also includes a three-year moving average of the annual growth rate of the median income of 35- to 44-year-old men. While the growth of per capita income remains well above the growth of the earnings statistic, both growth rates have been falling over time. In particular, the growth of per capita income has in recent years averaged less than .5 percent a year.⁸

Chart 2
Smoothed Growth Rates of Per Capita Income and Median Income of Men 35 to 44 Years Old
Three-Year Averages



POLITICAL AND DEMOGRAPHIC CONSEQUENCES

In a country that counts on mass upward mobility, slow earnings growth has had obvious consequences. The clearest is real disgust with government—particularly the federal government. The President’s approval rating now stands at about 38 percent, and the approval rating for Congress is about half as high. In the current electoral climate, it is fashionable to blame most of this response on President Clinton’s policy problems and personality. In reality, the issues are more long-standing. Consider two responses to the Washington Post-ABC News Polls in the fall of 1991, a year before the last election:

Question: When the government in Washington decides to solve a problem, how much confidence do you have that the problem will actually be solved?

A lot	7%
Some	31%
Just a little	38%
None at all	23%
Don’t know	1%

Question: Do you think elected leaders in Washington are really interested in solving the nation’s biggest problems, or do you think that they are just interested in appearing to solve them?

Only want to appear to solve them	65%
Really interested in solving them	29%
Don’t know	1%

So the antipathy toward the federal government has been there for some time. Attitudes toward lower levels of government, while slightly more positive, are still distrustful.

It is likely that economic insecurity and frustration play a role in these attitudes. And as the data in the previous section suggest, economic problems are not limited to high school graduates. For example, political analyst Stan Greenberg has done an extensive examination of the religious right—conservative Protestants who voted in the 1992 election, attend church at least once a week, and identify themselves as evangelical, charismatic, or pentecostal. Greenberg found that the educational attainment of these voters is not heavily skewed toward high school grad-

uates but instead closely resembles the educational attainment in the rest of the electorate.⁹

Turning away from higher level government means, of necessity, turning toward lower levels of government for at least some functions. Here it is important to note a second trend: the growing sorting of neighborhoods by income. At one level, this trend is very old—far older than economic stagnation. It began in earnest at the end of World War II as mass automobile ownership allowed the middle class to leave central cities for suburban single-family homes. But the trend has continued, stimulated, I believe, by the increased importance of access to “good schools” in a child’s future earnings.

As late as 1965, central cities had significant numbers of middle class families. Today, one-third of all central city children are poor, and central cities contain 45 percent of all poor children. And stratification goes beyond the city/suburban split. In a recent working paper, Paul A. Jargowsky (1994) shows that neighborhood sorting by income has proceeded steadily for all families over the last twenty years, and has proceeded particularly rapidly over the last ten years for black and Hispanic families.¹⁰

This growing stratification by income has obvious implications for the distribution of educational quality among the current generation of students. There is, first, the issue of fiscal resources for low-income children. Classroom observers have long been skeptical of claims that New York City spends as much per student as do wealthy suburbs. A recent city report resolved the confusion: one-quarter of the city’s school budget goes to special education classes for handicapped students, a burden no suburban school district has. In terms of resources, high-income suburbs, with both richer families and fewer problems, have a clear advantage.

Equally important are the peer group effects of increased stratification. The problem is clearest in lower income schools. Outstanding teachers can make any classroom learn. But as numerous studies document, average teachers are often overwhelmed by hostile student attitudes, so that classes settle into “treaties” in which teachers make few demands in exchange for student compliance. Apprenticeships and other schools-within-schools provide

partial solutions, allowing students who want to learn to segregate themselves from their peers. But the growing stratification of families by income makes all of these problems more difficult.

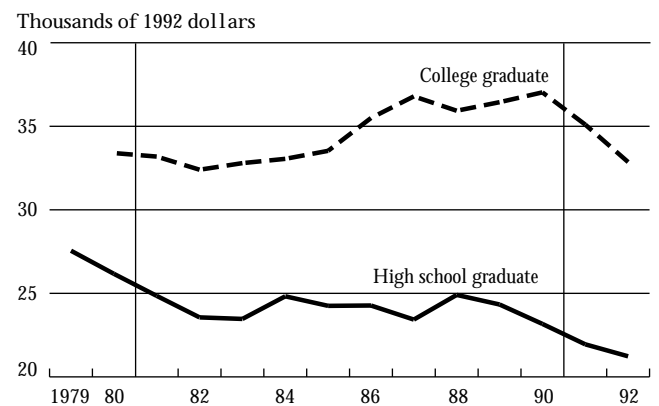
HOW THE EARNINGS/EDUCATION GAP WILL EVOLVE

Given this background, what is the future path of the college/high school earnings gap? The question is most usefully answered in two parts—the short run, where relevant variables are already in the pipeline, and the long run, where answers are of necessity more speculative.

Chart 3 gives a sense of the short term, based on the college/high school earnings gap for 25- to 34-year-old men. This is the most dramatic of recent wage movements—the one most often cited in the press. As shown in the figure, most of this gap developed between 1980 and 1985. Since 1985, the gap has been relatively stable.

It is reasonable to believe that the gap will remain fairly stable in the near term. On the supply side, the collapse of high school wages in the early 1980s led to a surge in the proportion of high school seniors matriculating to higher education. In the coming years, this outward shift in supply will come to dominate the 25- to 34-year-old age bracket and will, *ceteris paribus*, hold down college wage rates while it shrinks the current excess supply of high school graduates. On the demand side, it appears that the

Chart 3
Median Earnings of Men 25 to 34 Years Old, by Education



recent white-collar recession is more of a onetime adjustment than a long-term trend. Job creation in the current recovery continues to be concentrated in occupations with high educational requirements, and it appears that both international trade and new technologies such as voice recognition will work against the less skilled. On balance, then, the near term earnings gap seems unlikely to change much in either direction.¹¹

In the longer run, however, the prognosis is less certain for the reasons described in the preceding section. If large numbers of children are raised in communities with heavy concentrations of poor and working class families that cannot or will not improve schooling, there are limits to what normal supply responses can accomplish.

This problem, of course, is not an act of nature. It follows from the very decentralized organization of U.S. schools, in which local jurisdictions are responsible for the bulk of educational funding and for setting the bulk of educational standards.¹²

Solutions to this problem come in two forms. One form, alluded to earlier, consists of mechanisms that permit

good students in poor districts to segregate themselves. Vouchers and choice are one way of achieving this result. Schools-within-school programs are another. But it is reasonable to believe that all of these programs will leave large numbers of students behind.

A second class of solutions involves intervention by higher levels of government. Legislators could equalize state funding or impose more uniform standards, including the kind of mathematics portfolio assessments being developed in Vermont or wider use of the New York State Regents Examinations. But as I argued above, such solutions become less feasible as economic problems create growing suspicion of government at all levels.

In sum, the college/high school earnings gap indicates that the nation is going through a difficult period, a period in which trade, technological change, and general economic turmoil have created frustrated aspirations. The trick is to keep frustrated aspirations from blocking the institutions that might help us pass through this period to something better.

ENDNOTES

1. This proportion is actually slightly lower for younger men, ages 25 to 34, in the cohort.
2. My friend Robert Samuelson points out that the sudden stagnation of real wages after 1973 was in part an artifact of President Nixon's wage and price controls. Without those controls, which channeled the recovery into output, stagnation might have begun earlier and proceeded somewhat more gradually.
3. In published data, the median earnings of 45- to 54-year-old men with exactly four years of college fell by about 14 percent between 1988 and 1992. The decline was due in part to a growing cohort size in this age range—the entrance of the baby boom. But much of the decline appears to reflect the downsizing noted in the text. See Levy (1995) for more discussion.
4. In order to use published data, I have approximated the average earnings of 30-year-old men to the published median earnings of men aged 25 to 34; the earnings of 40-year-old men to the published median earnings of men aged 35 to 44, and so forth.
5. Put differently, the term “wage stagnation” usually means that a 30-year-old today earns the same amount as a 30-year-old earned ten years ago; a 40-year-old today earns the same amount as a 40-year-old earned ten years ago, and so forth—that is, the wage structure is stagnating. This stagnation is still compatible with a person's earning more at 40 than at 30.
6. Interpreting published women's earnings in a similar framework is difficult because women's rates of labor force participation changed substantially over the period.
7. Likewise, rising incomes among the elderly may fail to produce political happiness. As with medical care, rising incomes among the elderly typically involve comparisons among different people—the elderly today relative to the elderly ten or twenty years ago. Today's elderly may have little basis for comparing their situations to the elderly of twenty years ago and may make a less happy comparison—that their income is less adequate in retirement than it was in their working years.
8. The weak performance of the earnings statistic partially reflects the 1980s entrance of the baby boomers into this age range. Two other factors leading to discomfort are the increasing rate of job instability (David Marcotte 1994) and the increasing rate of earnings instability (Peter Gottschalk and Robert Moffitt 1994).
9. In unpublished tabulations, Greenberg shows that about 42 percent of the religious right and 37 percent of the rest of the electorate have not gone beyond high school. Thirty percent of the religious right and about 34 percent of the rest of the electorate are college graduates.
10. An example is the way in which black middle and working class families left Washington, D.C., for Prince Georges County, Maryland—a factor partially responsible for rising poverty rates among the D.C. population.
11. At the same time, within-group earnings gaps—for example, earnings gaps among college graduates with different majors—may well continue to grow.
12. At the level of economic theory, this kind of problem has been investigated by Roland Benabou (1992) and Steven Durlauf (1992), among others.

REFERENCES

- Benabou, Roland.* 1992. "Heterogeneity, Stratification, and Growth." Massachusetts Institute of Technology, Department of Economics, Working Paper no. 93-4.
- Durlauf, Steven M.* 1992. "A Theory of Persistent Income Inequality." National Bureau of Economic Research Working Paper no. 4056.
- Gottschalk, Peter, and Robert Moffitt.* 1994. "The Growth in Earnings Instability in the U.S. Labor Market." BROOKINGS PAPERS IN ECONOMIC ACTIVITY.
- Jargowsky, Paul A.* "Take the Money and Run: Economic Segregation in U.S. Metropolitan Areas." University of Texas at Dallas, School of Social Sciences, working paper, undated.
- Levy, Frank.* 1995 (forthcoming). "Incomes and Income Inequality since 1970." Russell Sage Foundation 1990 Census Project.
- Marcotte, David.* 1994. "The Declining Stability of Employment in the U.S.: 1976-1988." University of Maryland, School of Public Affairs, working paper.