

COMMENTARY

An Unexpected Return from Education: Inequality

By Timothy Mathews

Affordability and inequality are hot button issues in the United States. Many lament (I would say, inaccurately) that average Americans cannot achieve the standard of living of previous generations and that the rich are getting richer while everyone else is getting poorer. While it is true – by the measure of inequality most widely used by economists, the Gini Coefficient – that the distribution of incomes in the United States has consistently become less equal over the last fifty years, this does not provide support for the claims that the current generation is worse off than previous generations or that middle and low income earners are realizing a declining standard of living. On the contrary, even a cursory inspection of the relevant data reveals that over the last half century there has been a general trend of increasing real (i.e., inflation adjusted) incomes for all income groups in the United States. Yes, the rich are getting richer, but so are the middle class and the poor.

Even if you care about reducing inequality, don't get so narrowly focused on the issue that you lose sight of the larger picture. The goal should be to implement policies and, more broadly, put a system in place to make people's lives better off. In short, people are made better off by having a higher income, *not* by having the same income as their neighbors.

When thinking about these issues, it is important to recognize that the earnings of workers are not randomly drawn values. Earnings generally reflect the productivity of the worker and the value added to the production process by the worker. In a market oriented economic system, a worker elicits a higher income or wage from an employer when she can meaningfully contribute to providing a highly valued good or service for consumers. Worker productivity is a direct function of human capital, which refers to the skills, knowledge, experience, and other relevant attributes which collectively determine how much the worker contributes to the production process. One tried and true way for a worker to increase her human capital – and therefore increase her expected earnings in the labor market – is to acquire education.

The "returns from education" (i.e., more highly educated workers can expect higher earnings) can be seen by looking at weekly earnings of full-time wage and salary workers. A partial summary of weekly earnings as calculated by the U.S. Bureau of Labor Statistics (BLS) is reported in Table 1.³ The values for different quartiles and deciles report the earnings of a worker at the specific stated level along the income range. That is, for example, of all workers that have a High School Diploma but have not completed any College coursework, 25% earn less than and 75% earn more than \$740 per week.

The reported Mean values were computed from the BLS data as follows. First, income cutoffs were defined based upon the midpoints between the levels reported by the BLS. This results in workers of each education level being grouped into the following five different ranges based upon weekly earnings: 0% up to 17.5%; 17.5% up to 37.5%; 37.5% up to 62.5%; 62.5% up to 82.5%; and 82.5% up to 100%. Second, it was assumed, for each different level of education, that all workers in each of these five ranges had earnings equal to the value reported by the BLS which falls in the corresponding range. For example, it was assumed that all workers that have a

¹ For an overview of how the Gini Coefficient is calculated, see the Bagwell Center Commentary "Inequality of Incomes and of Alcohol Consumption in the U.S." (October, 2019) by Timothy Mathews,

https://www.kennesaw.edu/coles/centers/markets-economic-opportunity/docs/october-2019-commentary.pdf.

² See https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-income-households.html.

Values of the Gini Coefficient for the U.S. are reported in Table H-4. Values of mean household income for different quintiles of income earners are reported in real terms (in "2024 dollars) in Table H-3.

³ These are weekly earning for the third quarter of 2025. See https://www.bls.gov/news.release/wkyeng.t05.htm.

High School Diploma but have not completed any College coursework and that have earnings within the 17.5% to 37.5% of such workers have weekly earnings of \$740.4

Table 1 – Weekly Earnings of Full-Time Workers with Different Levels of Education

Highest Education Level	1st Decile	1 st Quartile	Median	3 rd Quartile	9 th Decile	Mean
Less than High School	\$493	\$615	\$777	\$1,009	\$1,388	\$848
High School, no College	\$589	\$740	\$980	\$1,388	\$1,919	\$1,110
Some College, no Bachelor's	\$639	\$813	\$1,099	\$1,582	\$2,200	\$1,251
Bachelor's Degree	\$795	\$1,099	\$1,580	\$2,387	\$3,421	\$1,830
Advanced Degree	\$946	\$1,355	\$1,970	\$2,918	\$4,430	\$2,288

From Table 1, the returns from education are clear. Average incomes (as measured by both median and mean) get higher as one moves down the corresponding columns (i.e., as one acquires more and more education). Similarly, at each reported decile and quartile, earnings are higher for workers with higher education. And it is precisely these returns from education in the form of higher expected earnings which induce many people to incur significant costs to acquire more education – such as forgone earnings from exiting the workforce to go to school fulltime, the "hardship" of studying for someone who does not intrinsically enjoy learning, and financial expenses which are often financed by taking out loans.

But becoming more highly educated has a second, less obvious impact on earnings. It leads to greater inequality. This can be seen by computing and observing the value of the Gini Coefficient for groups of workers of different education levels, as reported in Table 2.

Table 2 – Earnings Inequality of Full-Time Workers with Different Levels of Education

Highest	Less than High	High School,	Some College,	Bachelor's	Advanced
Education Level	School	no College	no Bachelor's	Degree	Degree
Gini Coefficient	0.1941	0.2256	0.2356	0.2705	0.2813

Mathematically, the value of the Gini Coefficient must be between 0 and 1, with a higher value revealing that earnings are distributed less equally (i.e., there is greater inequality). Therefore, from Table 2 we see that among workers with higher and higher levels of education, there is greater and greater income inequality.

But when we as individuals look at all of the values in Tables 1 and 2 and decide how much education to get, we would never say "Well I'm not going to get more education because then I'll

⁴ To compute values of Gini Coefficient for each group of workers – which will be done below – it is necessary to make *some assumption* about earnings levels of all workers. The approach taken is simple and should not bias the computed measures of mean and Gini Coefficient in any obvious way.

be in a pool of workers with less equal incomes!" On the contrary, when we make decisions regarding human capital development, many of us incur high costs to climb the education ladder to become part of a pool of people between which there is greater inequality, simply because of the greater expected earnings. That is, we correctly recognize that what matters for our own improved wellbeing is how much income we earn and *not* how equal or unequal our income is relative to our peers. Let's not forget this fact when thinking about inequality more generally.