A Growing Divide: The Promises and Pitfalls of Education for the Working Class

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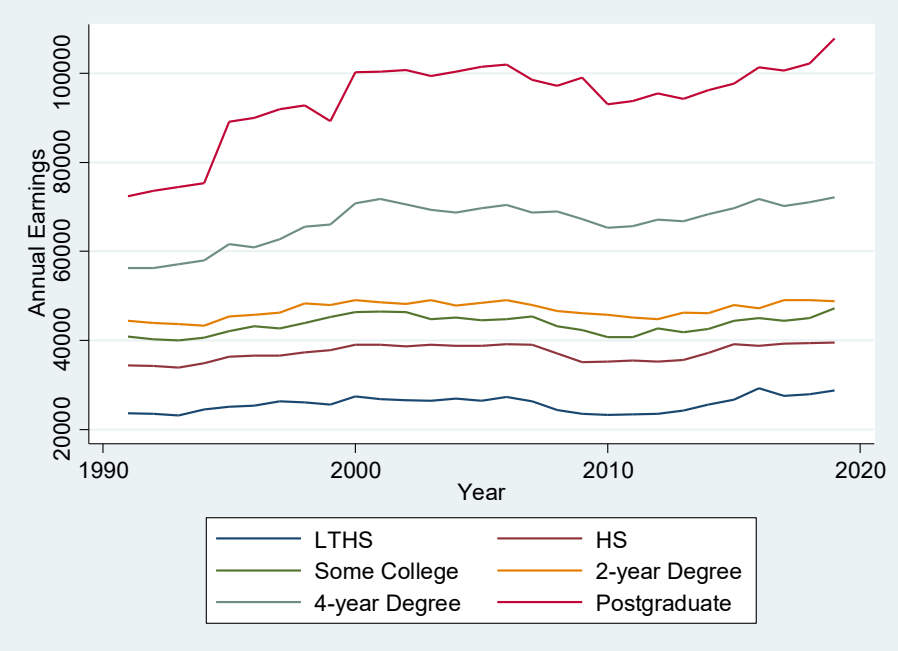
The Great Recession impacted virtually every aspect of the modern American economy, with the landscape of higher education (at least in the public sector) perhaps permanently changed. This essay explores how changes in the market for higher education have impacted the American working class. I do not believe you can define "working class" by a single educational credential. Perhaps the near universe of those without any college experience might fall into this category, while this label is likely appropriate for the vast majority of those with some college/an AA degree and at least a sizeable minority of those with only a BA. Below, I document the promises and pitfalls that education offers to individuals from less-than-privileged backgrounds, and discuss how the access, price, and risk of investing in additional education has changed over time. I also explore how the evolution of the institutional side of higher education (e.g. state support for public schools, the for-profit sector) has changed how students from working-class backgrounds interact with this market.

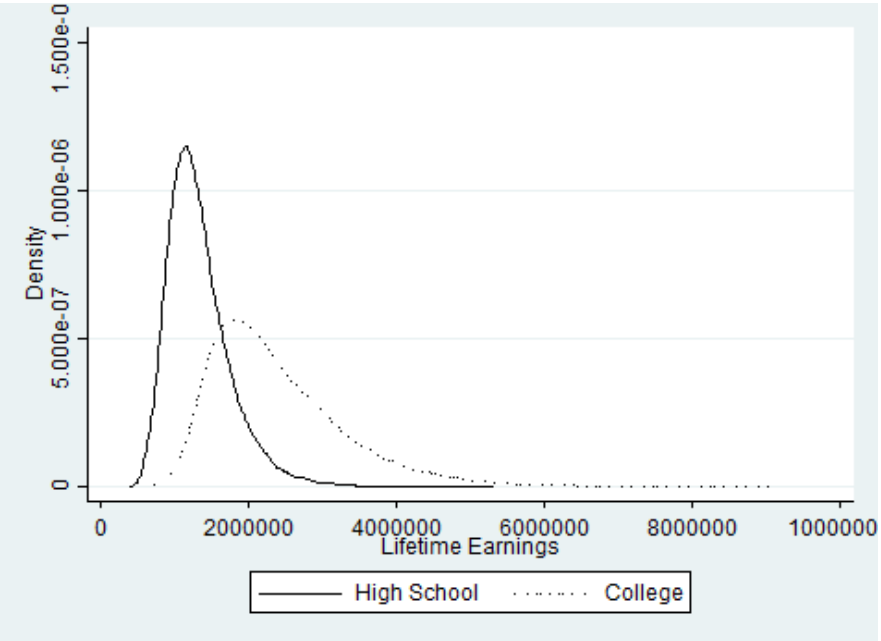
As shown in Figure 1, the return to education has increased substantially over time, even as the proportion of Americans with a college degree has grown. In 1990, workers aged 25-54 with a Bachelor's degree earned 63% more than those with only a high school diploma, but by 2019 this premium had grown to 83%. This raw statistic masks some important developments, however, as the Bachelor's premium has remained mostly stagnant since 2000 amid significantly rising tuition. Even if still quite high for the average graduate, this means the value proposition of attending college has declined over time, and the financial risk associated with not graduating (and thus not receiving the college premium) has grown. Moreover, any modest increase in the premium during the Great Recession was due to a decline in earnings among workers with a high school diploma rather than an increase in college graduates' earnings.

Figure 1



Indeed, while the average college graduate may receive a financial premium far in excess of their investment[2], the risk of attending college and being worse off as a result has never been higher. This is the case for several reasons. First, there is enormous variation in the returns to college both across schools (more on this later) and within schools (e.g. major). So even if the expected return is large, the probability of a zero or negative return is nontrivial. Figure 2 shows the distribution of projected lifetime earnings (author's calculations) for both college graduates and workers with only a high school diploma. While the college graduate distribution is clearly the preferable earnings distribution from which you would want to draw from, there is still a sizable overlap, and this is before things like net present value or the costs of college are taken into account.

Figure 2



Second, as the inflation-adjusted price of attending college has increased (17% at public schools and 11% at private non-profit institutions relative to the year prior to the Great Recession)[3], more students have had to turn to student loans.[4] At the height of the recession, students were borrowing 64% more annually relative to only five years prior. The fact that student loan debt is extremely difficult to have discharged in bankruptcy significantly increases the downside risk for those who don't receive the return on their educational investment they envisioned. It is also critical to point out that while part of the Great Recession/student debt story can be told with numbers and trends, to fully comprehend the human costs of the struggle

[2] Author's calculations based on the model from Webber (2016) estimate a $900k lifetime premium, roughly $360 in net present value. This work was also used to generate Figure 2.

[3] See Archibald and Feldman (2010) or Ehrenberg (2012) for a thorough treatment of the main drivers of college prices. See https://research.collegeboard.org/pdf/trends-college-pricing-student-aid-2020.pdf for the most recent facts and figures.

[4] This trend is in part due to the decline in purchasing power of the Pell Grant, the most significant source of financial aid available to students from low and middle-income families (Protopsaltis and Parrott, 2017).

you must blend such data with a qualitative analysis of the lived experience of students, Goldrick-Rab (2016) is an excellent example of work which strikes this balance.

Finally, the increased cost of college attendance hits hardest for those who do not eventually graduate. As there is virtually no wage premium associate with "some college", the individuals in the worst position are those who fail to complete their degree (roughly 40% of students at four-year schools), but have accrued some (effectively non-dischargeable) debt in the process. This can be most easily seen in the rates of student loan default broken down by debt burden, where borrowers with large balances (typically individuals with Bachelor's and postgraduate degrees)[5] default at substantially lower rates relative to borrowers with small balances.

When discussing the causes and consequences of student debt in relation to the Great Recession, it is impossible to ignore the massive racial disparities which are often further perpetuated by the current system. Preexisting wealth disparities force Black students to borrow more money and at a higher frequency relative to white students. At the repayment stage, these Black students are significantly more likely to default as their families are unable to provide the same financial safety net relative to those from more privileged backgrounds (Houle and Addo, 2019). In one especially striking example, Scott-Clayton and Li (2016) document that the $7,600 debt disparity at graduation grows to $25,000 just four years later.

It is well known that the current national student debt portfolio is both large and growing, with cumulative debt currently standing at $1.6 trillion (up from $0.5 trillion in 2007). Less understood, however, is how that debt is distributed across students and how it has evolved over time. First, roughly half of al student debt is owed by individuals who have attended graduate school, despite only comprising a quarter of borrowers.

Student debt is distributed very unequally, with average debt of about $30,000, but six percent of students owing more than $100,000. Due to federal loan limits on how much students can borrow for an undergraduate degree, this high debt group is made up almost entirely of individuals who attended graduate school. Even more striking is that this small group of borrowers collectively makes up a third of the entire national student loan portfolio.[6]

Taken with the statistics on student loan default mentioned above, this paints a much different picture of student debt than is often described in the popular press. While there are doubtlessly some borrowers in this high debt group who are struggling to repay their loans (not everyone who attends graduate school winds up with a high income), this is decidedly not the typical struggling borrower. Far more often, struggling borrowers are people who dropped out of college because it was infeasible to balance the many demands on their time. Indeed, the image of the "traditional" college student is out-of-step with the actual demographic makeup. Seventy percent enrolled students work, about half of those work more than 20 hours per week. Perhaps

[5] See Miller (2017) or Akers and Chingos (2018) for excellent analyses.
[6] Looney, Wessel, and Yilla (2020)

most striking, nearly a quarter of college students have a dependent child while enrolled in school (Emrey-Arras, 2019).

In addition to changing student demographics, part of the growth in the national student loan portfolio can also be attributed to the changing nature or repayment options. The Great Recession, and subsequent recovery, saw a substantial rise in the use of Income Driven Repayment (IDR) plans, which tie monthly loan payments to borrowers' incomes, allowing payments to be spread out over a much longer time horizon than the traditional ten-year standard/fixed repayment plan. Most importantly, if borrowers earn less than 150% of the Federal Poverty Line for their family size, they do not need to make any loan payments while at the same time they are counted as "current" (meaning they avoid the negative credit consequences that come from defaulting on a loan). Between 2010 and 2017, student loan balances enrolled in IDR plans ballooned from $24 million to $384 million (Karamcheva, Perry, and Yannelis, 2020). Such options both led to a larger national debt portfolio, and a reduction in the rate of student loan defaults (Mueller and Yannelis, 2018)

On the institutional side of the market, the Great Recession accelerated a long-term persistent decline in support for public higher education. State appropriations are the primary subsidy that public schools receive, effectively serving as a payment to schools for which they discount tuition for in-state students. The generosity of state appropriations varies greatly both across and within states (more-selective state flagships typically receive a larger subsidy). The general pattern over the past forty years has been for state appropriations to follow the business cycle with a 1year lag due to the legislative colander and the fact that the tax revenues which fund appropriations also lag the business cycle. The slow recovery in state appropriations following a recession mostly, but not completely, returns to pre-recession levels. This incomplete recovery following each recession leads to a long-term steady decline.

This pattern continued with the Great Recession, but with a much sharper decline in state support than usual. In 2012-13, the low-point in terms of state funding levels, state appropriations per student stood at 30 percent below the pre-recession peak. By 2018-19, funding had rebounded to only 8.7% below the levels seen before the Great Recession (Weeden, 2019). Schools can respond to such a budget shock in one of two ways: cut spending or raise revenue. Recent work has found that between 30% and 60% of a reduction in state appropriations is passed through to students in the form of higher tuition (Webber, 2017; Chakrabarti, Gorton, and Lovenheim, 2020). While higher tuition might be a more visible harm to students, Deming and Walters (2017) conclude that reductions in spending resulting from these budget shocks are actually more damaging to students as they lead to lower graduation rates.

State support for higher education is often one of the first types of discretionary spending to be cut during a recession precisely because it is an investment in the future (public sector pension liabilities also fall into this category). The impacts won't be felt for years down the line, oftentimes when current legislators are no longer serving. That said, it is not obvious that modest reductions in state appropriations isn't optimal given other policy tradeoffs. For instance, Webber (2018) documents that the majority of higher education support displaced in

the past decade went instead to public health/Medicaid. Given the state budget difficulties that loom on the horizon of a post-pandemic economy, it seems likely that public institutions should prepare for budget cuts at least as severe as those seen at the height of the Great Recession.

In the wake of the above-described state budget cuts, many states have also tied appropriations to performance metrics such as graduation rates in order to incentivize/reward the schools that, in legislators' eyes, are the most responsible stewards of their state funding. This general framework, known as Performance Based Funding (PBF), as of this writing is in use in 41 states. Despite the intuitive appeal of a PBF regime, there are two large problems with its common implementation. First, it incentivizes institutions against enrolling students from disadvantaged backgrounds who are more likely to take longer/require a larger investment in order to graduate. Second, given the large impact that students' family backgrounds/resources have on future outcomes, PBF policies tend to reward schools which enroll wealthier students (typically state flagship institutions) at the expense of less selective schools which educate the broadest set of students (regional comprehensives and community colleges).[7]

While states have targeted academic outcomes such as graduation rates, the ballooning national student debt portfolio during/post-Great Recession has led to federal policymakers to focus on longer-term labor market outcomes in a number of ways.

The (relatively speaking) easiest to implement policies were those that improved transparency. The Obama administration's College Scorecard initiative made available to prospective student a wealth of education and post school earnings/loan repayment outcomes for virtually every postsecondary institution. A chief aim was to help students and their families, especially those from modest backgrounds, make informed choices about where to attend college. Unfortunately, recent work has found this information-driven intervention had limited effects on college decisions, with effect almost entirely driven by students from higher income families (Hurwitz and Smith, 2018).

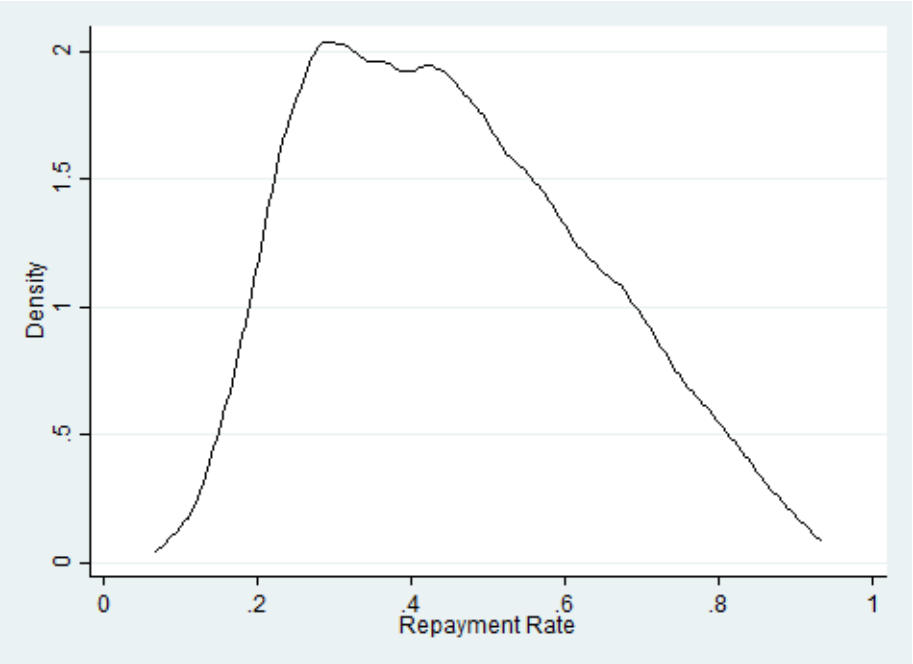
There are two main reasons that designing a federal accountability regime[8] for higher education has been a hot topic among policy makers in the post-Great Recession landscape. First, the advent of loan repayment programs like the aforementioned Income Driven Repayment plans have rendered the only current performance standards that institutions must abide by as toothless. This is because the these standards are based entirely on student loan "defaults", which are all but eliminated by IDR as $0 is an acceptable payment for anyone making below 150% of the federal poverty line.

Second, the variation across schools in terms of student loan repayment rates is quite large. Figure 3 plots the College Scorecard's definition of an institution's repayment rate (using data for students who left school in 2015-16), which is the proportion of borrowers who have paid at least $1 in principal balance after three years. In other words, this is a very low bar to

[7] For a comprehensive overview of PBF policies and research into their impact, see Ortagus et al (2020). For a case study of how a PBF system in one particular state exacerbated inequality across institutions, see Diep (2020).
[8] For the most comprehensive treatment of higher education accountability in terms of both scholarly research and public policy details, see Kelchen (2018)

clear, effectively that your loan balance isn't still growing due to interest accumulation three years after leaving school. As Figure 3 shows, roughly half of all postsecondary institutions have repayment rates below 50%, and a sizable number have rates even below 20%. At this level, it seems unlikely that either taxpayers or the students who borrowed are being well-served.

Figure 3



Despite broad agreement across the political spectrum, one political hurdle has hampered years of attempts at reform: the treatment of for-profit institutions. The story of the Great Recession and education cannot be told without a discussion of the rise, and subsequent fall, of the for-profit college industry. This is especially important given the focus of this series, as this industry radically expanded college access for working class Americans. In most cases the industry failed to deliver on the promises of labor market success they made.

In a typical (e.g. not during a pandemic) recession, individuals flock to higher education both to improve their skillset for a smaller and more competitive pool of available jobs and because the opportunity costs of time spend out of the labor force are much lower. Long (2014) documented the meaningful increase in college attendance due to the Great Recession. At the time, the for-profit college industry was booming. This was due in large part to a failure of non-profit institutions to respond to the needs of modern working-class students. The vast majority of classes at "traditional" institutions are offered during the working day rather than at night, in person rather than online, and without amenities like child care.

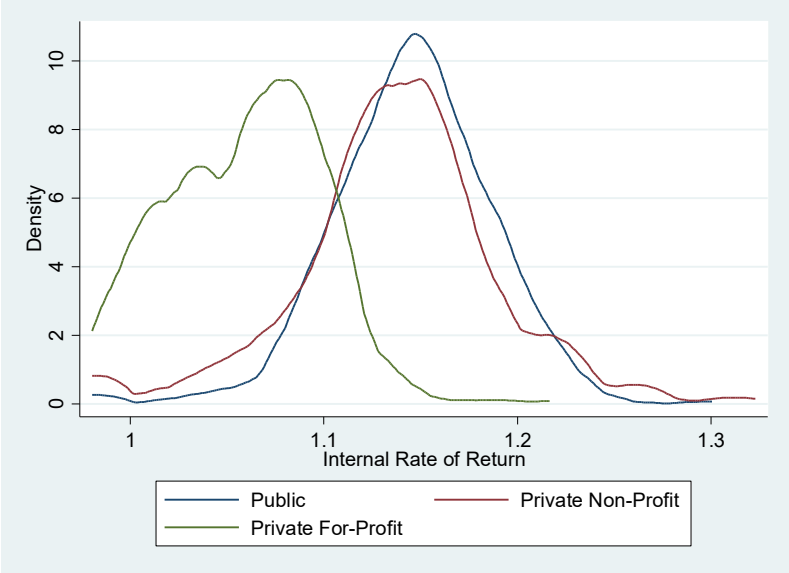
The for-profit sector sought to capitalize on this gaping hole in the market by offering access to the working students and parents who desired it. This represents the positive side of the profit motive driving this sector, a system of schools which were able to be far more responsive to consumer demands than the often glacially-slow-to-evolve non-profit sector. Combined with the fact that many Americans live in so-called education deserts (Hillman, 2016),

lacking any choice in higher education options, there are certainly people who are better off because they had a for-profit college as a viable option.

Unfortunately, the negative side of the profit motive likely renders the net effect of many for-profit schools as negative. The so-called "marketization" of higher education also incentivizes growth at the expense of quality (which can be very hard to observe, especially for the type of students often targeted by for-profit schools), bloated marketing budgets focused on style rather than substance, and generous federal student aid that is delivered almost regardless of student outcomes. For an excellent systematic investigation of the sector and the factors which led to its ascension in wake of the Great Recession, see Cottom (2017) or Cottom and Darity (2017).

Using data on costs and earnings outcomes (up to 10 years post initial enrollment), I project lifetime earnings for every institution using a model similar to Webber (2016). There are many caveats to an empirical approach such as this which are well beyond the scope of this chapter, but I believe it can serve a useful descriptive purpose. Figure 4 plots the distribution of Internal Rates of Return (IRR) for public, private non-profit, and for-profit schools based on the costs and earnings metrics from the College Scorecard. You can think of an IRR as the annual percentage return you are receiving on your college investment. Given two schools with identical student earnings outcomes, the cheaper school would thus have a higher IRR. A useful benchmark for an acceptable return might be the long-run stock market return (6-7%, or 1.06-1.07 in Figure 4).

Figure 4



The distribution of projected IRR's is considerably lower than those of non-profit institutions, with about half of the sector falling below the stock-market benchmark. For more thorough (and causal) analyses supporting the conclusions of the descriptive analysis above, see Cellini (2012), Cellini and Chaudhary (2014), or Cellini and Turner (2019).

The latter half of the decade saw a precipitous decline in the stature of the for-profit sector, averaging 10% annual enrollment drops in the four-year span of 2015-2018 while other sectors saw mostly level enrollments (National Student Clearinghouse Research Center, 2019). Probably most damaging to the for-profit industry were the high-profile failures of two large chains, ITT Tech and Corinthian College, amidst legal threats and claims of fraud (Kelderman, 2014). The future of the sector is at the time of this writing uncertain. While it has seen a brief resurgence in enrollment during the pandemic (Cellini, 2020), the incoming Biden administration has signaled a much tougher stance on for-profits relative to the outgoing Trump administration.

Overall, I believe the trajectory of higher education and how it relates to the working class depends on how long of a time horizon you have. Over the past forty years, I think it is safe to say things have largely improved. The cost of tuition might be higher now relative to 1980, but a college education is still far more accessible and available (and profitable!) today. I can't say the same relative to the past decade, however. I see the Great Recession and its aftermath leaving higher education more unequal and the promise of upward mobility less attainable than a decade ago. As we enter a new recession, I hope I am able to write a similar chapter to this in ten years with a more optimistic closing message.

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