

Education's Big Short:
Learning Peonage in American Universities

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Some of the biggest debtors in the 21st century are not small business owners or first-time homeowners, but rather university students who take out massive debt in the belief that it is an investment in their future. Like housing loans before the Global Financial Crisis, student loan debt is today being packaged and re-packaged into exotic financial products called Student Loan Asset Backed Securities (SLABS). This paper details the financialization of higher education and the emergence of SLABS, primarily through a case study of Pine Capital, a wealth management company, that has successfully shorted the market. Using investment reports and Federal Reserve data from the USA, the paper outlines the misaligned incentives and miscalculation of risk that allowed Pine Capital to profit. The paper then argues that those who are shorting the education market reveal not only an investment opportunity but also a fundamental challenge to the commonplace thinking about education today: higher education is teaching future generations the practices of debt peonage, a key feature of financial capitalism.

Keywords: student debt, higher education, human capital theory, finance, meritocracy

Knowing that our own individual judgment is worthless, we endeavor to fall back on the judgement of the rest of the world which is perhaps better informed.

– John Maynard Keynes (1937, p. 214)

1. Introduction

The desire for education among American youth knows no limit.² Some 20 million students enrolled in higher education in the Fall of 2017, a 50 percent increase from 1990 (NCES, online). Just as the renowned post-World War II economist, John Maynard Keynes (1937), acknowledged the power of social mimicry in economic decision making, so too have many American youth copied their peers and succumbed to social pressure when choosing to attend higher education. “Everybody tells you to go to college, get an education, and everything will be O.K.,” Samantha Watson recounted of her choice to attend Lehman College in the late 2000s (Cowley & Silver-Greenberg, 2017). “So that’s what I did.” Her recollection is not unique: 75 percent of American students surveyed between February and March 2017 agreed that it was easier to be successful with a college degree than without one (Fishman, Ekowo & Ezeugo, 2017). Better to earn a degree than be left behind.

In effort to afford higher education, students have increasingly relied on borrowed money. As of June 2017, some forty-four million American students were in debt to pay for their higher education.³ Like the housing market before, much of this debt

² Although this article is focused on the American case, a similar trend in the massification of higher education can be found worldwide (Levy, 2006; Becker, Hubbard & Murphy, 2010).

³ Much of the data reported here comes from Student Loan Hero (2018).

is being securitized through new financial instruments, creating a secondary market where student debt is bought and sold by investors looking to make a profit. Some savvy investors have even begun to short – that is, bet against – bundles of student loans on the secondary market. It is this phenomenon – student loan debt and its securitization – that is explored in this article. How did the American society arrive at a place where investors bet against students trying to pay back loans for higher education? What does shorting the education market mean for the value and purpose of higher education? And what does it reveal about the nature of higher education today?

The article argues, drawing on the work of Bowles and Gintis (1976), Harvey (2018), and Lazzarato (2015), that student indebtedness is a defining feature of contemporary higher education and generates new forms of docility through peonage. In order to make this argument, the article first outlines the student loan market in the USA, showing how higher education has moved from an era of post-massification to indebtedness. It then details the intellectual foundations connecting higher education to the labor market, which are assumed in Samantha Watson's statement above. These intellectual foundations set the stage for the case study of Pine Capital, a wealth management company that has successfully shorted the student loan secondary market. Pine Capital was chosen for this study because it released publicly available investment notes starting in 2015. The investment notes (now private) and public news articles about the founder of Pine Capital are the sources of data used in the case study. The findings provide insight into the way in which the financial class understands higher education, an important perspective now that indebtedness – and the securitization of student debt -- is increasingly commonplace in America. This

contributes to the study the financialization of higher education (e.g., Lewis & Shore, 2018). The article concludes by exploring the ways in which higher education reproduces social class differences despite its promise of upward social mobility based on meritocracy.

2. From post-massification to indebtedness

Higher education in America is said to have entered a “post-massification” era beginning in the 1980s (Gumport, et al., 1997). Gumport and colleagues detailed two trends marking this era. First, students began to see higher education “less a rite of passage and more as a consumer relationship” (p. 20). Students saw themselves as “shoppers” of higher education services. Second, tuition fees were increasingly paid through student financial aid as the cost to attend a university drastically increased, especially at private institutions (p. 22). These trends resulted, by the 1990s, in:

increased public scrutiny and calls for accountability, the withdrawal of public support, price resistance and discounting, rising market pressures and competition, a shift toward vocationalism, and persistence problems related to the elongation of time-to-degree. (Gumport, et al., 1997, p. 23)

The trends outlined by Gumport and colleagues have continued. Between 1997 and 2017, the cost of tuition at private universities increased 157 percent. At public universities, in-state tuition increased 237 percent (Boyington, 2017). These increases far outpaced inflation, which was 53 percent for the same 20-year period. Making matters worse, the real wage of middle and lower-class workers has stagnated (Shambaugh, Nunn, Liu, & Nantz, 2017, p. 2). Without a real increase in wages, the cost of university has become unaffordable for most Americans.

Unaffordability has not slowed enrollment. With costs rising and wages flat, students have increasingly relied on borrowed money from the federal government to pay for higher education, just as Gumpert and colleagues first detected in the early 1990s.⁴ By the end of 2018, former students (not all of whom graduated) owed \$1.46 trillion, making student loans the second largest share of consumer debt after housing (Federal Reserve, online). Since the federal government was the originator of most of these loans, roughly seven percent of the American population was in debt to its government for what amounts to nearly seven percent of Gross Domestic Product. An average 2016 graduate with student loans, for instance, owed \$37,172 plus 6.8 percent interest. This fictitious student should expect to make monthly payments of \$283.75 for the next 20 years. By 2036, this mid-forty-year-old will have paid \$68,100, including \$30,927 in interest, for her or his college degree.

The repayment terms of student loans are unlike other debt obligations. Whereas a home owner who falls behind on mortgage repayments has the legal option of declaring – or may be forced into – bankruptcy through foreclosure, student debtors cannot declare bankruptcy unless they can show “undue hardship,” a legal term that is all but impossible to prove. It is simply not feasible to return the “asset” of education like it is a physical home. What would one actually give back to the government (or bank)?

The federal government expects student debtors to make repayments for 10 to 30 years, depending on the size of the loan (Federal Student Aid, online). Over half of borrowers are likely to be in their forties by the time their loan is repaid (Citizens Bank,

⁴ Loans typically cover costs beyond tuition fees, including books and living expenses. Some students even re-invest borrowed money not in their education but in other financial markets: Nearly a quarter of indebted students surveyed in 2018 used student loans to purchase cryptocurrencies, such as Bitcoin. (Cloud, 2018).

2016). Such a financial position negatively impacts the rate of home ownership and individual retirement planning, as income must be used for repaying student loans rather than other purchases or for savings (Mezza, Ringo, Sherlund & Sommer, 2016; NerdWallet, 2015). Indebtedness has also been found to cause stress and anxiety (Tay et al., 2017).

With few opportunities to be legally discharged from loan obligations, many students risk destroying their credit scores and other financial consequences by not repaying their debt obligations. As of 2017, over 11 percent of student borrowers were delinquent in their repayments, which is defined as 90 days late on a scheduled repayment or in default. This was a larger percentage of delinquency than in 2008 during the first year of the Global Financial Crisis (GFC) when 4.5 percent of households failed to make a repayment within 90 days (Mortgage Calculator, n.d.). Without the ability to declare bankruptcy, however, these delinquent students face an onerous future anytime a credit score is needed (e.g., renting some homes or borrowing additional money from banks).

Neither the difficulty of repaying student debt nor the longevity of loans have dissuaded future students from borrowing. This reality has, to no great surprise, spawned a new wave of financial securitization, creating a secondary student loan market. In this secondary market, student loans are bundled together into Student Loan Asset Backed Securities (SLABS), like the now-infamous Mortgage Backed Securities that lay at the heart of the GFC, and then issued to investors by investment banking firms in tranches with varying degrees of risk. The resultant security, graded by rating agencies like Moody's, can be bought and sold by investors in financial markets just like any other

stock. As students repay their loans, investors earn returns. As of the fourth quarter of 2017, US\$ 10.6 billion worth of SLABS have been issued through firms such as Goldman Sachs, Morgan Stanley, and Citi Bank (PeerIQ, 4Q2017). That represents a 76 percent growth rate year-to-year. Although the current market accounts for only 0.07 percent of the share of total student debt, investors see plenty of room for growth: New players have emerged, such as SoFi, Lending Club, and Upstart – all Marketplace Lending (MPL) companies that rely on peer-to-peer lending. These latter creditors are expanding the private student loan market through online platforms, some offering lower interest rates than the federal government. Peer IQ (4Q2017) predicts that SoFi will be “the first [US\$ 1 billion] securitization in the MPL space in 2018” (p. 1).⁵

Just as some investors grew weary of packaging and repackaging sub-prime housing loans into exotic financial instruments before the GFC (e.g., Mason & Rosner, 2007), already some investors see SLABS as a risky investment – and therefore an opportunity to profit. Instead of investing in the student loan secondary market to make a return as securities increase, some investors are shorting the market, hoping to profit from declining share value.⁶ One investor, Taylor Mann, who successfully shorted the student loan secondary market, observed in an investment note for his wealth management fund, Pine Capital:

⁵ SoFi made headlines in December 2016 because it received funding from a venture firm connected to Betsy DeVos, then President Donald Trump’s pick for secretary of education (Das & Rudegeair, 2016). Secretary DeVos divested from SoFi in January 2017.

⁶ In simple terms, shorting works like this: Investor A (1) borrows a stock owned by investor B; (2) Investor A then sells the borrowed stock in the market when its value is high; (3) when the time is right, Investor A buys a new stock when its value is low; and finally (4) returns the stock back to investor B. The difference between (2) and (3) is the potential profit for investor A. Financial losses for Investor A would occur if the stock price increases between the two steps rather than decreases.

Like a decade ago, people are becoming completely irrational in regards to their return on investment — instead of buying multiple homes, borrowers are getting multiple degrees...The parallel between the subprime mortgage industry and the student loan sector is essentially identical: misaligned incentives, miscalculation of risk and miscalculated academic theories. (Mann, n.d., p. 17)

Insights like Mann's have led to profitable investment strategies. As will be shown, he correctly predicted the decline in share price of the Apollo Education Group, the parent company of the for-profit University of Phoenix, and Navient Corp, a company formed in 2014 after Sallie Mae⁷ spun off its federal student loan portfolio. The insights from successful shorting reveal serious structural deficiencies in higher education and the academic theories, as Mann pointed out, underpinning it. Before exploring the case of Pine Capital in depth, it is important to review the intellectual foundations that have become commonplace for many Americans who attend higher education. It is these intellectual foundations that have made possible the indebtedness of university students.

3. Intellectual Foundations

Long before investors were figuring out ways to short the student loan secondary market, neoclassical economists had to solve the decades-long problem of incorporating labor into macro-economic modeling. How are wages set? Why, for example, can wages differ for the same job? Vexed by this problem, neoclassical economists set out to determine wages by worker productivity while also assuming perfect competition, full mobility, and

⁷ Originally, Sallie Mae serviced federal student loans on behalf of the Department of Education. Today, it is a publicly traded company that administers private student loans and provides other services.

rational behavior within the labor market, key tenants in its models. Despite lacking realism and clearly taking an anti-Marxist stance (Brunetta, 1991, pp. 77-78), neoclassical economists in the 1950s and 1960s, such as Gary Becker and Theodore Schultz, settled on the concept of Human Capital to analyze labor “as if it were like any other commodity, through its supply and demand” (Klees, 2016, p. 645). Becker (1957) was, for instance, able to explain wage differentials based on the educational levels of the laborer: the more education one had, the more productive one could be, thus earning a higher wage from an employer, who, it was assumed, hired purely on merit. This research was groundbreaking⁸ and dramatically changed the definition of a laborer, at least for neoclassical economists:

Laborers have become capitalists not from a diffusion of the ownership of corporation stocks, as folklore would have it, but from the acquisition of knowledge and skills that have economic value. (Schultz, 1961, p. 3)

Seeing laborers as capitalists was revolutionary. Lauder (2015) argued that the theory of human capital:

was attractive because it was consistent with a capitalist ideology in which all human beings could themselves become capitalists by investing in knowledge and skills, so dissolving at a conceptual stroke the idea that there was a fundamental conflict between capitalists and workers (p. 491).

The conflation of labor and capital through the idea of human capital set off a wave of research trying to determine the exact sets of “knowledge and skills” that would increase a worker’s productivity and therefore wage, save for exogenous forces like labor unions, which were – and are – seen by neoclassicals as institutions worthy of destruction (see

⁸ Schultz received the Nobel Memorial Prize in Economic Sciences in 1979 for his work on human capital.

Hanushek & Ettema, 2017). This type of research continues today, much focused on the fourth industrial revolution and Artificial Intelligence (e.g., Dintersmith, 2018).

This is not to say that Human Capital Theory was a monolithic theory. There were – and are – many debates. Becker was interested in the stock of knowledge increasing a worker’s productivity in all tasks, while Schultz focused on the ability of workers to adapt to changing environments. Bowles and Gintis (1976), meanwhile, emphasized that human capital was about a worker’s ability to follow orders. On top of these slightly different versions of Human Capital Theory, there were other theories directly challenging its basic premise. Signaling Theory (Spence, 1973), for instance, focused on education credentials instead of the knowledge or skills (or obedience) learned in school. A credential signals to an employer the value of a potential employee (called inherent human capital), thus creating a demand for higher value credentials. From this perspective, a degree from Harvard is believed to be more valuable than a degree from Lehman College. As such, higher education massification is explained not by the need for future workers to upgrade skills or knowledge as the economy changes (as Schultz would have it), but by the desire to have more and better credentials used to differentiate oneself from the field of job candidates.

Without entering these debates directly, across the variants of Human Capital Theory as well as Signaling Theory, more education is assumed to be a positive aspect for a student’s chances on the labor market, either because education provides more knowledge and skills (i.e., Human Capital Theory) or because education provides valuable credentials (i.e., Signaling Theory). Assumed in both cases is a version of meritocracy where employers will hire the best candidate, either through a set of skills or

knowledge or signaled through a degree, and a positive impact on wages. As Jim Kjelland (2008, p. 70) argued about the differences between Human Capital Theory and Signaling Theory:

From an individual's perspective it matters very little which theory is most correct. After all, individuals can do little more than optimize their private utility within a given system. Whether higher education endows an individual with human capital, or acts merely as a signal of existing human capital, the fact remains that wages are an increasing function of educational attainment. In other words, an individual's decision to pursue higher education depends on nothing more than the established positive correlation between education and earnings, upon which both signaling theory and human capital theory depend.

These intellectual foundations of the relationship between education and the labor market created the conditions for a type of social mimicry mentioned by John Maynard Keynes (1937, p. 214) and updated by economists like Rene Girard (1994) who suggest emulation is a primary propensity of individuals. People want what others have, or what Girard called "mimetic desire" (see Palaver, 2013). As people like Samantha Watson saw neighbors attaining higher education and higher wages, so too would she.

One of the most well-known advances in connecting education to the labor market was the use of rates of return analyses to determine the value of education as measured in future income. How much can one expect to earn from an additional year of schooling? In 1974, Jacob Mincer, who worked with Gary Becker, published a book called *Schooling, Experience and Earnings*, which argued that each additional year of schooling produced a 5 to 10 percent increase in annual earnings. The equations he developed (using US census data from the 1950 and 1960) for this study would go on to be called the Mincer earnings function. George Psacharopoulos, a student of Schultz, used the Mincer

earnings function on an international scale. Psacharopoulos found that primary education provided greater social and private rates of return than secondary and higher education (see table 1). This proved for simple policy advice: invest state (and, eventually, private) money in primary education rather than higher education.

[insert table 1 about here]

The impact of these findings cannot be overstated. By determining that primary education was purportedly more “valuable” than higher education in terms of social rates of return, the World Bank, the institution where Psacharopoulos spent most of his career, altered its investment strategy beginning in the 1980s. The World Bank’s 1980 *Education Sector Policy Paper* urged “governments to shift their spending away from vocational and higher education toward basic education” (Edwards & Storen, 2017, p. 5). Instead of investing in systems of higher education as it had since 1963 when it first entered the education sector (see Jones, 2006), the World Bank’s focus shifted to primary education because it supposedly offered greater social returns. Access to higher education would subsequently require a user-fee, as the state was encouraged to spend its limited funds on primary education (Heyneman, 2003).

The impact of these findings on America may not be as direct as they were on the higher education systems of developing countries. The World Bank does not have the same power to change policy in the USA as it does in low-income countries (Verger, 2014). That does not mean, however, that the concept of rates of return of higher education was not discussed in America society. The Carnegie Commission (1973), for

instance, published a report one year before Mincer wrote his book entitled *Higher Education: Who pays? Who Benefits? Who Should Pay?* Moreover, user-fees have had a long history in the American higher education system: the increase in federal funding to universities in the 1950s and 1960s was likely an aberration; user-fees have been the historical norm (Labaree, 2017). The academic research by Mincer, Psacharopoulos, and others added a new justification for why those user-fees should exist – it is more efficient for the state to spend its money on primary school leaving individuals to invest in their own future by paying for higher education.

The use of rate of return analyses of higher education has had material effects, despite many critiques (e.g., Leslie, 1990). By the 1990s, the burden of tuition in American higher education fell primarily on the individual (Breneman & Finney, 1997, p. 55). This resulted in universities, even public ones, relying on tuition as a source of revenue. Hemelt and Marcotte (2016, p. 44) tracked net tuition revenue and state appropriations revenue of US universities between 1980 and 2010. They found state appropriations have decreased as net tuition revenue increased. Today, universities rely on tuition for a large share of revenue. Who pays for higher education in America? The answer is decidedly the individual because of the high rate of return it produces.

Despite the trend away from state financing of higher education in America, enrollment rates continued to increase. Higher education became “massified” and the economic prospects from education underpinned most people’s thinking, even if unknowingly. Higher education as a private good that is solely the responsibility of an individual (and her or his family) became the norm across social classes. It was the logic implied by Samantha Watson in her aforementioned quote and re-confirmed each time

a news story appeared showing the earning differentials by graduates with a high school diploma, Associate degree, bachelor's degree, or Master's degree (e.g., Locsin, n.d.). It even crept into President Obama's (2010) speech at the University of Austin (emphasis added):

The economy took a body blow from this financial crisis and this great recession that we're going through. But I want everybody here to remember, at each and every juncture throughout our history we've always recognized that *essential truth* that the way to move forward, in our own lives and as a nation, is *to put education first*.

President Obama's remarks, suggesting education is an essential or universal truth to thwart economic catastrophe both privately and socially, are fitting. The GFC impacted American higher education patterns in important ways when it comes to contemporary student debt. Lost among the financial destruction that cost 2.6 million Americans their jobs in 2008 (Goldman, 2009) was the fact that many Americans decided to reskill, re-train, or re-credential in hopes of over-coming financial ruin. If one lost his or her job because of the GFC, then it was likely he or she would return to school in hopes that a degree would open new employment opportunities. Higher education, as the President proselytized, was *the* answer; it would provide new skills, knowledge and credentials for people to re-enter the labor market and earn (higher) wages, which would collectively boost the national economy. Instead of enrolling in expensive private universities, however, students:

opted for public universities instead of private ones, for regional institutions instead of flagships, for two-year instead of four-year, for commuting instead of attending a residential college (Geiger, 2015, p. 10).

As enrollment rates increased, so too did tuition costs, with tuition at for-profit colleges

rising faster than public universities, which were rising faster than private universities. Across the higher education landscape, business was good for universities in America post-GFC.

As more students enrolled in higher education, hoping to re-train in order to overcome, as President Obama put it, the “body blow” of the GFC, students relied on loans to pay their higher education fees. This is where the era of post-massification ended and indebtedness began. As figure 1 shows, levels of student debt as reported on Federal Reserve Economic Data (FRED) remained relatively flat from 2005 until 2009, at which point, they increased substantially. This was after the GFC, which is demarcated by the grey vertical rectangle. Massive student debt is thus a recent, post-GFC phenomenon in the American experience.

[insert figure 1 about here]

The rise in student debt levels has had unequal impacts, reflecting national patterns of inequality among social classes, races, and genders. Although Latino graduates have a smaller debt burden than their white counterparts (likely because more white students attend more-expensive private universities), they are more likely to drop out of university, and thus more likely to be unable to repay loans. In 2009, 31 percent of Latino students dropped out of college, diminishing their prospects of obtaining a higher wage job to repay their loans (Demos, 2016a). Meanwhile, over fifty percent of black borrowers are in default, over-representing their population (Demos, 2017), and women graduates continue to earn smaller wages than men, compounding their burden of student debt

(Bureau of Labor Statistics, 2015). White graduates by contrast disproportionately graduate debt-free: of the students who graduated without loans in 2012, over 70 percent were white while only 4 percent were black (Demos, 2016b). Most of the debt-free students came from households earning over \$100,000 per year.

The contemporary higher education landscape in America has been built on the idea that more education will lead to higher future income. This idea is based on the assumption of meritocracy – that employers, for instance, hire based on one’s skills, knowledge, or credential, not on one’s privilege or social networks. Many people have subsequently taken out student loans to afford higher education because of these perceived future benefits, assuming a university degree will enable upward social mobility. During the economic downturn in 2008, greater numbers of Americans turned to higher education to re-skill as unemployment rose. Student debt in higher education increased in tandem. The historical disadvantaging of minorities in America eventually appeared in the higher education student loan market, challenging the notion of meritocracy. Despite the precarious financial situation in which many student debtors find themselves, the higher education market has ushered in a new era of financial securitization post-GFC. It is to this phenomenon – and its parallels to the housing market in 2007-2008 – that the next section explores.

4. Shorting the Market

The rapid growth of student loan securitization did not happen until the GFC ended, when an increasing number of students took out debt to enroll in university. It was only in 2014

when SLABS made their debut as a new financial product (see figure 2). Once in existence, they quickly took off. Although still below the total issuance of consumer asset backed securities, which include, among other things, credit card and auto loans, SLABS have seen rapid growth since 2015, far above the total issuance of Small and Medium Enterprise (SME) asset backed securities. Investors who purchase SLABS, by and large, profit from the future work of (largely minority) students. David Harvey (2018) argues debt is a claim on future value production. He labels this “anti-value”: “if future value production is insufficient to redeem the debt then there is a crisis” (p. 80).

[figure 2 about here]

There are, however, investors who see SLABS as inherently risky, finding similarities to the housing market bubble before the GFC. This section explores the case of one such investor who is shorting the SLABS market with great success. The reason for looking at a financial investor in-depth in an education journal is the prospect for cross-disciplinary learning. Just as the investors who shorted the housing market revealed structural problems in the economy (and in economics) in 2008, so too, I propose, can investors shorting SLABS reveal structural problems in (the field of) education.

The Case of Pine Capital

Pine Capital is not your typical wealth management company. Based in Larue, Texas (population 160), it is over 1,500 miles from Wall Street, the epicenter of finance in America. That has not stopped its founder and chief investment officer, Taylor Mann, from

making notable trades. After Britain voted to leave the European Union in June 2016, Mann posted a sticky note on his computer screen reading “It is an iron rule of history that what looks inevitable in hindsight was far from obvious at the time” (quoted in SumZero, 2016). Unlike other financial advisors who believed Britain was going to be the economic loser in its separation from Europe (which it still might be), Mann recommended *shorting* Eurozone financials, believing it would experience a decline. His recommendations have since panned out for investors who followed his counter-intuitive advice.

Mann has a reputation for recommending short positions in seemingly bullish markets. He spent “hundreds if not thousands of hours trying to understand how student loans were constructed in securitizations and how those securitizations would be affected in a recession” (quoted in SumZero, 2016). He was looking for the “Lehman Brothers of student loans” (quoted in SumZero, 2015). He quickly focused his attention on Navient, the company that spun off of Sallie Mae and services a large share of federal student loans. Mann realized that the company was overleveraged – carrying so much debt that interest payments become difficult to make. Navient was holding roughly US\$ 130 billion in debt (anti-value, in Harvey’s terminology) primarily because it had to add larger amounts of government-issued student loans to its portfolio in order to increase its profit. Navient earned a profit by servicing loans through a government contract, as well as by re-packing the student loans into SLABS, which could then be sold to investors on a secondary market. That was its business model. Not taking on more student debt from the government to service could slow its growth, a fiduciary responsibility it has towards its shareholders as a publicly traded company. Navient could easily continue to increase its share of student debt because more students were taking out federal loans to enroll in

higher education post GFC, which were then passed onto its books through a government contract. This cycle, on the surface, resulted in a bull market – increasing the number of loans serviced meant more government fees to be earned as well as more SLABS to sell.

Mann scratched the surface and came to the opposite conclusion; he saw signs of trouble ahead for Navient. In March 2015, Mann published an investment note recommending investors take a short position against Navient. At the time of the note, Navient stock was trading at \$19.62 per share. He recommended investors short the stock, holding it for between 1 to 2 years. He set a target price of \$11.50, at which point he advised investors to end their short position, earning an expected 52 percent return. How did Mann's recommendation turn out? One year after Mann issued his investment note, Navient's stock was trading at \$11.90. A hypothetical investor who followed Mann's advice and shorted 100 shares in March 2015, would have earned \$772 one year later. A shrewd investor who followed the market closely would have ended the short in January of 2016, when the stock reached a low of \$9, earning an additional \$3 per share. Mann's investment success echoed Itoh and Lapavitsas' (1999) warning that an "optimistic perspective of the future in the capital market" can sometimes "cause stock exchange bubbles by mobilizing the flexible powers of expansion of the credit mechanism" (p. 113). Mann took advantage of the optimism in higher education.

What was the logic behind Mann's investment note to short Navient? He pointed to three catalysts for his decision: Misaligned incentives, miscalculation of risk, and miscalculated academic theories. Since he was correct in his projection, it is valuable to think through what a financial investor who capitalizes on a market's shortcomings reveals about the state of that market itself. Just as economists could have learned from the

insights of Michael Burry (2010) who foresaw the GFC in 2004 and profited immensely by shorting the housing market, so too can scholars of education learn from the insights of investors like Mann who are shorting the education market today.

The first catalyst for Mann's decision were the misaligned incentives he saw in the market. The misalignment stemmed from a for-profit company – Navient – outsourced by the federal government to collect and service federal student loans. Navient had a fiduciary responsibility to increase its share price while simultaneously guide the repayment of student borrowers; sometimes these goals did not overlap and were, in fact, at odds with each other. Navient treated borrowers based on its contractual obligations to the government. The contract Navient signed with the government to service approximately \$100 billion in federal student loans provided higher fees for collecting money from borrowers in delinquency than for collecting money from standard repayment plans. Navient was therefore incentivized to maximize the number of students in delinquency, even if that was not in the best interest of the students or government. The ability to earn more on servicing delinquent loans (because the contract stipulated that Navient earn a percentage of each dollar repaid for loans in delinquency compared to a small fixed amount for normal debt servicing) created an adverse incentive for Navient to guide – perhaps illegally – student borrowers into delinquency in order to collect higher fees, something referred to as predatory lending. The profit motive resulted in bad practice.

The incentive misalignment could not last, in Mann's perspective, given the new regulatory framework being implemented under the Obama administration. The Bipartisan Budget Act of 2013 prevented Navient from predatory lending, which was a

major source of its revenue. If the contractual rules of the government changed to prohibit predatory lending, then Navient's profits would likely decrease. As such, Mann believed Navient's investors miscalculated risk, his second catalyst in his investment note. Once consumer surveys, which detailed the predatory lending from the perspectives of the students, were made public, it would only be a matter of time, Mann assumed, before Navient's stock would decrease as its main source of revenue – that is, pushing borrowers into delinquency – dried up. Borrowers would demand change and federal regulations would eventually catch up with Navient's now-illegal practices. (Under the Obama administration such changes did occur and were likely a major reason for Mann's profitable short position; however, the Trump administration, under the leadership of Betsy DeVos, has been re-working government regulations in favor of companies like Navient and the aforementioned SoFi.)

Mann's last catalyst for recommending a short position came from the miscalculation of academic theories. Here he is referring to financial theories that justified the securitization of student debt into SLABS, a source of profit for Navient. For Mann, the "multivariable calculus that was used" to create these securities was "caused by moral hazard, nothing more and nothing less" (Mann, n.d.). The moral hazard he is referring to is the additional risk (i.e., would students continue to make loan repayments?) Navient took on by securitizing loans without concern because it assumed the federal government would bear the burden of those risks if something were to go wrong (i.e., students stop repaying their loans). This was reminiscent of the No Income, No Job or Assets (NINJA) loans at the height of the housing bubble that preceded the GFC: mortgage brokers, who made money on each loan they secured, could quickly sell the underlying loan to a

securitization firm, obscuring the risk of writing a loan to someone who literally had no job, steady income, or assets. Since students cannot declare bankruptcy on their loans, the federal government would ultimately be financially responsible for loans that could not be repaid. Navient thus packaged and re-packaged student debt into sub-prime asset classes and sold them to investors on the secondary market, assuming that the government would step in just as it had in the housing market. This is a clear moral hazard.

Mann highlights that the problems of student loans in higher education stem from faulty academic theories. He cites the over-emphasis of some neoclassical economists, such as Ben Bernanke, on mathematical economists who proclaimed housing would never decline. It was believed by mainstream economists, policymakers, and many homeowners alike to be a truism, prior to the GFC, that the price of homes would always increase. A similar belief in the education market exists too: education is always worth going into debt because it will always produce a return on investment. The more education one gets, it is believed, the higher one's future income. Mann saw that the moral hazard built into the very student loan market was a "house of cards." The student loan secondary market was, to use a different but more common metaphor, a bubble built on debt that could only continue so long as students kept taking out loans and believed they would get higher earning jobs after graduation. However, "the inevitable burst of such bubbles is often caused, and always worsened, by a swing of expectations toward pessimism" (Itoh & Lapavitsas, 1999, p. 113). At some point, particularly when the inevitable pessimism sets in, the bubble must burst.⁹

⁹ On the relationship between debt and economic crises, see Keen, 2017, p. 83.

Although Mann points out important parallels between the sub-prime housing crisis that caused the GFC and the current market for SLABS, he misses a fundamental issue that is crucial for scholars of education to heed. The belief that housing would never decline is analogous to the belief in meritocracy in educational and employment practices. Similarly, the neoclassical economic theory of rational behavior is mirrored in education – that which posits wages are a direct reflection of the skills, characteristics, or credentials, obtained through education, of workers. This latter point of seeing the failure of the commonplace connection between education and the labor market – and the misplaced assumption of meritocracy – reveals a critical insight of higher education today: students are learning how to be in debt by enrolling in higher education, which cements class antagonisms before people enter the workforce. This is an update of Bowles and Gintis' (1976) insights that education teaches students obedience needed for the workplace: today education teaches debt, a major part of the capitalist economy (Minsky, 1977). It is to this point that I turn by way of conclusion.

5. Discussion and Conclusion

The \$1.46 trillion of student debt suggests the academic theories connecting education and the labor market are incomplete. That is not to say that individuals do not earn more money when they graduate with a higher education degree than with a high school degree. They certainly do in most cases. However, theories of education and the labor market do not include debt, a major feature of contemporary capitalism and contemporary higher education. Including debt in academic theories about education and the labor

market are important, even in neoclassical terms. Indebtedness limits mobility and rational behavior – two tenants of neoclassical economic theory. Since capital is increasingly mobile, jobs are rarely tied to one location. However, many indebted graduates cannot afford to move where jobs are easier to obtain, especially if their credit is ruined from delinquent student loans. Worker mobility, moreover, cannot keep pace with capital's ability to arbitrage commodities across markets. Labor has a difficult time retaining power *in situ* because of global, mobile capital. Rational behavior, meanwhile, is limited by the need to make repayments on student loans. Indebted students must prioritize debt repayment over other purchases that may seem rational for individuals in surplus. On top of these two points, the emotional and physical toll high debt levels have on individuals negatively impact worker productivity (Choi, 2009). Academically, then, it is possible to see challenges of ideas such as rates of returns to education by thinking through the phenomenon of student debt.

The larger issue, however, is problematizing the assumed relationship between education and the labor market. Rates of return of higher education remain the *sine qua non* of educational decision making for many individuals, families, and policymakers. This seemingly harmless logic results in an insidious problem: the never-ending search for higher-skills or better credentials deemed important for the labor market has effectively stunted workers, an essential part of the production process, through debt. Future workers are trapped by debt. Student debt reveals a massive academic and practical challenge for education.

On an academic level, the theories connecting education and the labor market created an outcome that undermines human capital development itself. This contradiction

mirrors the contradiction of social reproduction within capitalism: “if labourers do not reproduce themselves...then capital cannot reproduce” (Harvey, 2014, p. 104). Capital *needs* labor or else it will be impossible to earn a profit. Too much debt, however, could negatively slow or even stop social reproduction. As Harvey (2014) points out, social reproduction has increasingly focused on education in the knowledge economy, which has inevitably taken on class-conflict dynamics: “For what has been at stake here...is what it is that capital wishes the working classes to be educated in and what it is that the working classes themselves want and desire to know” (pp. 104-105). It is precisely the value of education that is at stake.

The contradiction of social reproduction vis-à-vis high levels of student debt suggest capital – and not labor – have the advantage in defining the value of higher education today. What is it that capital wants workers to learn? What, in other words, is the *true* value of higher education once we rid ourselves of the false hopes of meritocracy? Lazzarato (2015, pp. 65-66) provides an answer in the form of rhetorical questions: “What better preparation for the logic of capital and its rules of profitability, productivity, and guilt than to go into debt? Isn’t education through debt, engraving in bodies and minds the logic of creditors, the ideal initiation to the rites of capital?” Students who took out loans in search of more education to earn higher wages began to “act, think, and behave as if they were individual businesses” (Lazzarato, 2015, p. 70). This is a natural extension of the conflation of labor and capital made by Schultz in 1961. Entering the labor market, which is increasingly based on casual labor within the “gig-economy” (Friedman, 2014; see also Srnicek, 2017), heavily indebted, has limited graduates’

prospects. But such limiting may be exactly the outcome desired by capital. It is certainly a main outcome once we take seriously the phenomenon of massive student debt.

Student debt reveals the contemporary reality that workers – and likely society writ large – has become subordinated to capital through the very idea of Human Capital and rates of return to education. Through various forms of social mimicry, youth *voluntarily* join the class of debtors through higher education, forever foreclosing their futures to creditors through debt peonage (Harvey, 2018, p. 204). In effect, higher education ultimately re-produces the credit-debtor class antagonism Marx observed over 150 years ago (Marx, 1990). Just as Lazzarato (2015, p. 104) theorized, “The subordination of society to capital would be fully realized first by way of financialization then through the economy of debt.” SLABS are the epitome of finalization of higher education, and the economy of debt is what millions of Americans are currently experiencing.

Are alternatives possible? Steve Keen (2017) has discussed the possibility of a debt jubilee or helicopter money to reduce private debt. In both cases, it would be the government that pays off the debts of individuals. Although historically such events have happened, the prospect of debt forgiveness today seems unlikely. Instead students will continue to lead their lives with terrible credit scores, putting off marriage and home-ownership, and settling on any wage within the gig-economy to pay off university loans, likely into their forties or fifties. Pointing to the protests against educational privatization in Latin America, Harvey (2014) believes “a heavily debt-encumbered educated labour force...will likely be a simmering source of discontentment” for the foreseeable future (Harvey, 2014, p. 105). At some point, the pressure and anxiety will hopefully be so great

that a new workers and students' rights movement is born, through which peonage can be unlearned.

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Table 1: Rates of return in education

Per capital income group	Mean per capita (US\$)	Social			Private		
		Primary	Secondary	Higher	Primary	Secondary	Higher
High income (\$9,266 or more)	22,530	13.4	10.3	9.5	25.6	12.2	12.4
Middle income (between \$756 and \$9,265)	2,996	18.8	12.9	11.3	27.4	18	19.3
Low income (\$755 or less)	363	21.3	15.7	11.2	25.8	19.9	26
World	7,669	18.9	13.1	10.8	26.6	17	19

Source: Psacharopoulos & Patrinos, 2002, p. 14

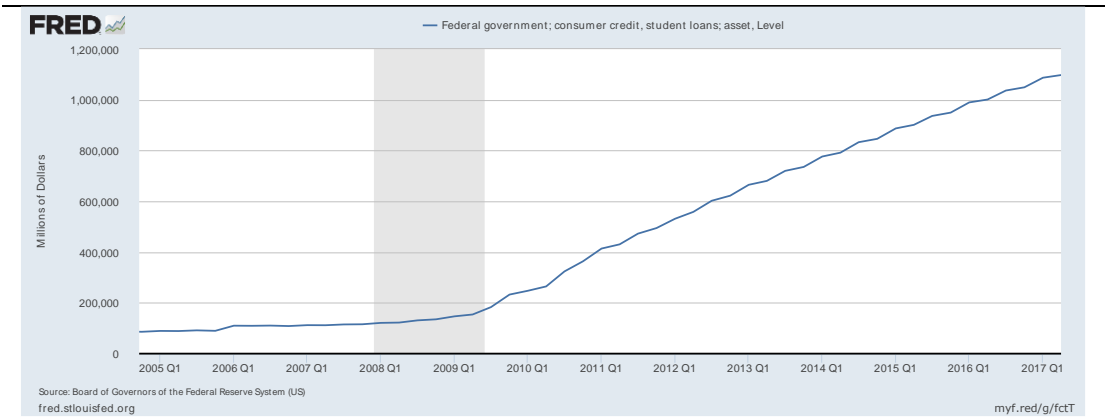


Figure 1: Federal Government, consumer credit, student loans (GFC represented by shaded box)

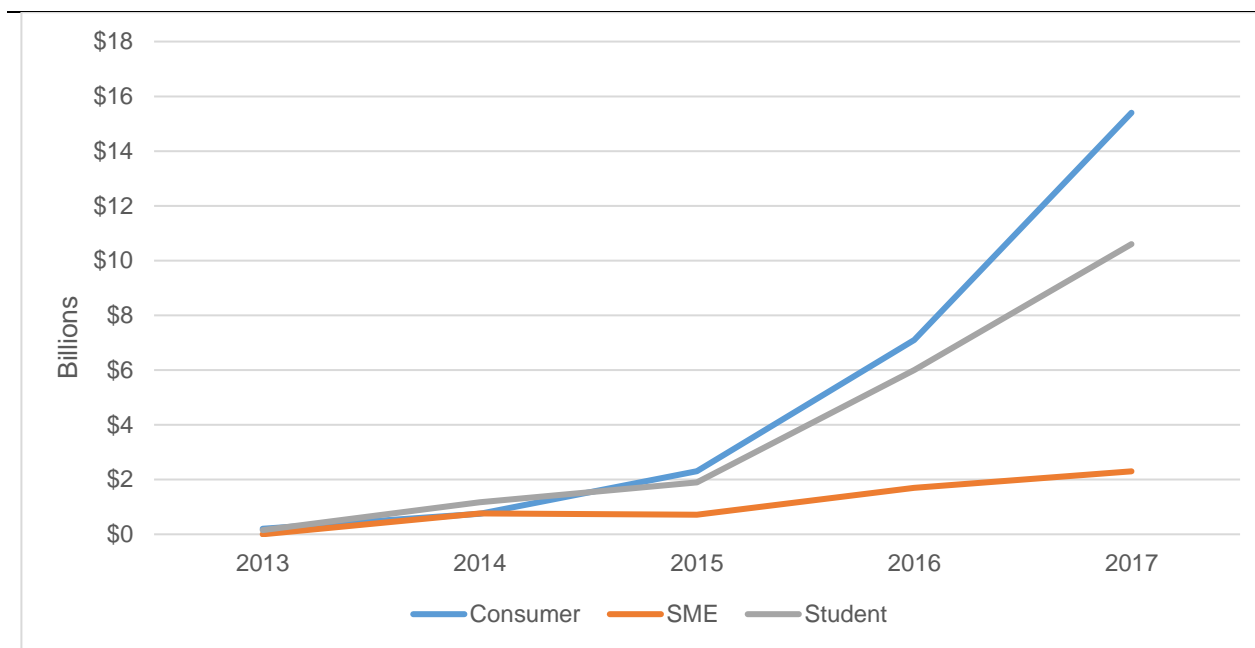


Figure 2: Cumulative total issuance of asset backed securities by class, 2013-2017
Source: Peer IQ data