PAYING FOR FAILURE: SUBSIDIZING SCHOOLS, NOT EDUCATION

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ABSTRACT

Government subsidies for higher education suffer from serious design defects that contribute to seemingly contradictory problems: (1) too few individuals earn college degrees because the United States underinvests in prospective students, and (2) too many students enroll in bad schools that leave them and society worse off than before they enrolled. Why would students overinvest in bad schools while they underinvest in education generally? Regarding underinvestment, many scholars have commented on how current aid is poorly targeted and fails to adequately encourage potential students who would otherwise not enroll in, and graduate from, an institution of higher education to do so. Regarding overinvestment, while many theories have been proposed, such as misleading advertising, an important but overlooked reason is that too high a percentage of student aid ends up encouraging prospective students to invest in bad schools. This misdirected aid exacerbates other problems that can lead prospective students to enroll in bad schools and can even be the sole reason a student chooses to enroll in a bad school. Additionally, while government regulations do attempt to prevent bad schools from receiving aid, those regulations are not working. To succeed, policymakers need to clearly define what a bad school is and understand bad schools' root causes. After proposing a definition – a school in which the aggregated matriculating students' estimated return, including personal consumption, is negative – I argue that bad schools are generally caused

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by two problems: unprepared students and underperforming schools. Schools target unprepared students who will not benefit from enrolling to obtain government aid. Unprepared students enroll due to a combination of market failures and badly designed subsidies. Schools are also able to underperform compared to their peers because of the flawed design of subsidies and related market failures. Current government regulations somewhat target these problems, but struggle due to the lack of a coherent underlying philosophy and a failure to more directly target the underlying issues. After discussing how the design of subsidies contributes to the problems, I propose possible reforms, including adding several indicators of school performance to the Government's Gainful Employment Rule, which currently has just one real proxy: debt-to-earnings.

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INTRODUCTION

Over the last thirty years, two seemingly contradictory arguments have gained support. The first is that America underinvests in institutions of higher education ("schools").[1] Such underinvestment leads to not enough prospective students graduating from said schools.[2] Behind this argument lurks the

1. I use the term "institutions of higher education" to include traditional colleges and universities, community colleges, for-profit career schools, and other postsecondary vocational institutions. *See* 20 U.S.C. § 1002 (2016) (providing a broad definition as to what counts as a postsecondary school).

2. *See* Michael Simkovic, *The Knowledge Tax*, 82 U. CHI. L. REV. 1981 (2015) [hereinafter Simkovic, *Knowledge Tax*] (arguing that the government actually taxes education unfavorably, potentially explaining underinvestment); *see also infra* note 18 (listing various papers urging policy

assumption that the education market needs government intervention aimed at boosting enrollment to correct this problem. The second is that too many schools exploit students and leave them worse off than before they enrolled because of various market failures.[3] This argument assumes that government intervention is needed to curtail enrollment in certain schools to correct this problem. The evidence seems to support the view that both arguments are right. This, however, raises a question: why would prospective students overinvest in bad schools while they underinvest in education generally? Commentators have pointed to a variety of answers, from deceptive marketing practices to the difficulty prospective students have identifying bad schools.[4]

This Article argues that the design of government subsidies plays an important and underappreciated role in leading prospective students to make these mistakes. Poorly targeted subsidies make schools that are a bad investment seem like a better investment, leaving prospective students and taxpayers worse off, while still failing to encourage marginal students to enroll in schools that would help them—and society—the most.

The first problem is that the government has failed to articulate a coherent theoretical definition of a "bad school."[5] One obstacle is the fact that students attend schools for many reasons beyond just maximizing their earnings, and just because dance majors earn less than economic majors does not mean that their school, or major, is inherently bad. This Article argues, however, that a bad school can—and should—be defined without

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reforms to encourage more students to attend college).

3. *See, e.g.*, Stephanie N. Morse, *For-Profit Schools: A History of Abuse and the Need for Reform*, 2015 BYU EDUC. & L.J. 585, 589–91 (2015) (discussing various governmental investigations concluding for-profit colleges and universities had engaged in fraudulent and abusive practices).

4. *See* Program Integrity: Gainful Employment, 79 Fed. Reg. 64,890, 65,031–32 (Oct. 31, 2014) (codified at 34 C.F.R pt. 600, 668).

5. While many commentators and policymakers have tried, no satisfying definition has been adopted by law or regulation. *See* Ben Miller, *America's Worst Colleges*, WASH. MONTHLY (Oct. 2014), https://washingtonmonthly.com/magazine/septoct-2014/americas-worst-colleges/ (using different methods in an attempt to define the worst colleges in America). For example, the Gainful Employment Rule ("GER") targets schools that fail to "provide[] training that prepares students for gainful employment in a recognized occupation," but then never elaborates on what exactly this means, beyond offering a single proxy measure. 34 C.F.R. § 668.403 (2017); *see also infra* Parts II.–IV. (critiquing the GER definition).

penalizing schools where students select less lucrative programs.[6] Instead, this Article proposes that a bad school be defined as one that provides a negative total return to society after accounting for a student's personal consumption utility,[7] a student's return on investment, positive externalities,[8] and internalities.[9]

Government attempts to solve the underinvestment problem exacerbate the overinvesting in bad schools problem.[10] Bad schools result from: (1) too many students enrolling in schools or majors for which they are unprepared; and (2) some schools underperforming relative to their peers.[11] Students attend bad schools because of internality issues, other market failures, and poorly targeted fiscal subsidies.[12] Such subsidies make bad schools better investments for students ex ante, even if the total return to society, and often the student, remains negative.[13]

By adopting this Article's proposed definition, policy reforms could then better prevent subsidy dollars from flowing to bad schools. One potential solution is to better identify indicators that demonstrate when a school meets the definition of bad

6. This Article uses the term "program" to refer to any postsecondary program, major, organized instruction, or method of study that leads to some kind of educational credential, similar to the definition of "educational program." *See* 34 C.F.R § 600.2. This credential could be anything from a certificate, to a bachelor's degree, to a doctorate. *See id.*

7. Personal consumption utility accounts for experiential or superficial elements of higher education, including personal enjoyment, amenities, and geographic location. *See generally Utility*, INVESTOPEDIA, https://www.investopedia.com/terms/u/utility.asp (last visited Mar. 30, 2018) (discussing the economic theory of utility).

8. An externality is a cost or benefit of an action not borne or reaped by the actor. *See infra* notes 28–30 (describing positive externalities and the social benefits they produce). For example, one may not fully internalize the cost of polluting because others bear some of the negative effects.

9. An internality is when an agent acts to obtain a short-term benefit or avoid a short-term cost, but ignores the long-term benefit foregone or cost borne, leaving the agent worse off overall. *See* Hunt Allcott & Cass R. Sunstein, *Regulating Internalities*, 34 J. POL'Y ANALYSIS & MGMT. 698, 698 (2015). A common example is eating unhealthy food. *See* DONALD B. MARRON, SHOULD WE TAX INTERNALITIES LIKE EXTERNALITIES? 1, 5 (Tax Pol'y Ctr., working paper) (2015), http://www.taxpolicycenter.org/sites/default/files/alfresco/publication-pdfs/2000508-should-we-tax-internalities-like-externalities.pdf. The present self enjoys an immediate benefit but imposes costs on the future self that the present self may not properly account for, and thus be left worse off. *See id.*

10. *See infra* Section II.B.

11. *See infra* Part III.

12. *See infra* Part III.

13. *See infra* Section III.A.1.

(such as graduation rates). Once identified, aid to schools that perform poorly on these metrics should be denied. More proxies that signal a school is bad should be added to the Gainful Employment Regulations or Rules (GER).[14] The GER only uses a single proxy (debt-to-earnings ratio) to target bad schools and deny them aid—needlessly creating a high error rate.[15] Other potential solutions include better disclosing expected returns to students (controlling for their ex ante credentials)[16] and reforming how aid is delivered.[17]

There has been a lot of writing on the need to encourage certain students to attend college, but much less on the bad school problem. Many articles critique education subsidies as being too complicated, not effective, regressive, or otherwise poorly designed.[18] Several articles have recognized the bad schools problem, though they often focus solely on for-profit

14. *See infra* Section IV.A.1. The GER was promulgated in an attempt to solve the bad-schools problem. *See* Program Integrity: Gainful Employment, 79 Fed. Reg. 64,890, 64,890 (Oct. 31, 2014) (codified at 34 C.F.R pt. 600, 668). In June 2017, the Trump Administration announced it was delaying implementation of certain provisions and intending to rewrite the entire rule because of negative feedback. Press Release, Betsy DeVos, Sec'y of Educ., U.S. Dep't of Educ., DeVos Presses Pause on Burdensome Gainful Employment Regulations (June 30, 2017), https://www.ed.gov/news/press-releases/devos-presses-pause-burdensome-gainful-employment-regulations. In response, eighteen states sued to prevent delayed implementation or unlawful modification. Complaint for Declaratory and Injunctive Relief, Maryland v. U.S. Dep't Educ., No. 1:17-CV-02139, 2017 WL 4685823 (D.D.C. Oct. 17, 2017).

15. *See infra* Section IV.A.1.; *see also* 34 C.F.R. § 668.403 (2017).

16. *See infra* Section IV.D.

17. *See infra* Section IV.C.

18. *See, e.g.*, Susan Dynarksi & Judith Scott-Clayton, *Simplify and Focus the Education Tax Incentives*, 111 TAX NOTES 1290 (2006) (arguing that educational tax incentives could be more effective if focused on low-income families); Deborah H. Schenk & Andrew L. Grossman, *The Failure of Tax Incentives for Education*, 61 TAX L. REV. 295 (2007) (arguing the poor design of education tax credits greatly weakens any effect they might have); George B. Bulman & Caroline M. Hoxby, *The Returns to the Federal Tax Credits for Higher Education* 20–21 (Nat'l Bureau Econ. Research, Working Paper No. 20833, 2015), http://www.nber.org/papers/w20833 (finding that the main education tax credit has no effect on college attendance); Susan Dynarski & Judith Scott-Clayton, *Tax Benefits for College Attendance* 24 (Nat'l Bureau of Econ. Research, Working Paper No. 22127, 2016) [hereinafter *Tax Benefits for College Attendance*], http://www.nber.org/papers/w22127 (arguing that tax incentives in education would be more effective if "targeted at households whose investments are plausibly sensitive to price"); Sima J. Ghandi, *Viewing Education Loans Through a Myopic Lens*, HAMILTON PROJECT (June 1, 2008), http://www.hamiltonproject.org/assets/legacy/files/downloads_and_links/Viewing_Education_Loans_Through_a_Myopic_Lens.pdf (arguing that the interest rate subsidy should be eliminated and replaced with an up-front needs based grant).

schools[19]—but whether a school is for-profit is really just one potential indicator.[20] The novel contributions of this Article are in demonstrating the need for defining the bad school problem, providing a definition, connecting it to the underinvestment and overinvestment issues and government attempts to combat those issues, and then exploring potential solutions.[21]

Part I discusses various justifications for government intervention with respect to higher education. Part II then proposes a definition of "bad school" and outlines the optimal fiscal system treatment of higher education. Next, Part II describes actual subsidies and policies designed to combat the overinvestment and underinvestment problems.

Part III analyzes the two main causes of the bad school problem—unprepared students and underperforming institutions. It contends that government subsidies attempting to correct the underinvestment problem are unintentionally exacerbating the overinvesting-in-bad-schools problem. Part IV assesses current policies and proposes reforms, using the framework described in Parts II and III. It argues that while many policies do make sense under this framework, different solutions are needed. The

19. *See, e.g.*, Jacob Alderdice, *The Informed Student-Consumer: Regulating For-Profit Colleges by Disclosure*, 50 HARV. C.R.-C.L. L. REV. 215, 216–30 (2015) (discussing the growth of for-profit colleges and universities and the political response to perceived abuses, such as misleading marketing); Morse, *supra* note 3, at 589 (detailing alleged abusive and illegal practices of some for-profit colleges).

20. *See* Program Integrity: Gainful Employment, 79 Fed. Reg. 64,890, 65,032–33 (Oct. 31, 2014) (codified at 34 C.F.R. pt. 600, 668) (discussing the evidence whether, even controlling for other variables, for-profit schools produce worse outcomes for students); *see also infra* Section IV.A. (considering whether "for-profit" status should be a proxy indicating a school is more likely to be bad).

21. This Article uses a utilitarian social-welfare maximizing framework, meaning that it focuses on maximizing aggregate utility while accepting the premise that a diminishing marginal utility of wealth exists. *See generally* JONATHAN GRUBER, PUBLIC FINANCE AND PUBLIC POLICY 607–10 (3d ed. 2011) (discussing optimal income taxes and the equity-efficiency trade-off); Jon Bakija, Social Welfare, Income Inequality, and Tax Progressivity: A Primer on Modern Economic Theory and Evidence (Oct. 2013) (unpublished paper), http://web.williams.edu/Economics/bakija/BakijaSocialWelfareIncomeInequalityAndTaxProgressivity.pdf (discussing the concept of social welfare maximization in the context of tax policy). This Article does not discuss deontological theories of education, such as what role education should play in society. *See* Michael Simkovic, *Risk-Based Student Loans*, 70 WASH. & LEE L. REV. 527, 531 (2013) [hereinafter Simkovic, *Student Loans*] (discussing why this article focuses on economic, rather than moral or philosophical issues, since "government support for higher education in the United States has primarily been driven by economic considerations, particularly during the mid-twentieth century when Federal Student Loan programs were established").

GER should be reformed by adding more proxies to better target bad schools and deny them funding (while minimizing the erroneous targeting of schools that should not be classified as "bad schools"). The delivery of aid should be reformed in several ways to better address the underinvestment and overinvestment problems. Finally, other potential reforms, such as different disclosure requirements, are discussed.

I. GOVERNMENT INTERVENTION IN THE HIGHER EDUCATION MARKET

The government provides various subsidies for higher education, with supporters citing justifications ranging from positive externalities to social justice.[22] Simultaneously, the need to protect students and taxpayer dollars from bad schools that fail to deliver a worthwhile product has long been referenced as justifying government intervention, including controls on how aid is delivered.[23] In theory, both the overinvestment and underinvestment problems are treatable. In practice, enormous amounts of federal aid flow to bad schools, but the evidence is mixed whether this aid helps with the underinvestment problem.[24] To better combat these problems, the law needs a coherent definition of what constitutes a bad school, an awareness of how subsidies can interact with the overinvestment problem to worsen the bad school problem, and ways to design subsidies to avoid problematic interactions.

22. *See* Daniel Barbezat, *The Mission of Education: Why We Subsidize Post-Secondary Education*, CMIND (Feb. 21, 2013), http://www.contemplativemind.org/archives/1703.

23. *See U.S. Department of Education Announces Final Regulations to Protect Students and Taxpayers from Predatory Institutions*, U.S. DEP'T EDUC. (Oct. 28, 2016), https://www.ed.gov/news/press-releases/us-department-education-announces-final-regulations-protect-students-and-taxpayers-predatory-institutions.

24. *See* STEFAN WINTER & ALEXANDER PFITZNER, EXTERNALITIES AND SUBSIDIZATION OF HIGHER EDUCATION 14–22 (June 18, 2013), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2281207.

A. *Justifications for Government Subsidization of Higher Education*

Supporters of education subsidies often cite the positive externalities education generates, the need to correct internalities that prevent prospective students from enrolling, advancing social justice via redistribution, and fixing liquidity crunch issues.

1. *Positive externalities*

The most cited economic argument supporting government subsidization of higher education is that education produces positive externalities. Since prospective students do not internalize some of the benefits that higher education produces, they will underinvest in education unless corrective subsidies are provided.[25] Positive externalities from increased civic engagement, such as voting, to reduced crime have been cited as justifications to subsidize higher education.[26] There is some empirical support that education causes some positive externalities, such as decreasing government health care costs.[27]

It is important to note two limits to this justification. First, many of the positive externalities associated with obtaining

25. *See* PAMELA J. JACKSON, CONG. RES. SERV., HIGHER EDUCATION TAX CREDITS: AN ECONOMIC ANALYSIS 1 (Apr. 29, 2008), https://file.wikileaks.org/file/crs/RL32507.pdf ("The economic reasons most often cited for government involvement in education include the 'neighborhood' or externality effect and the presence of capital market failure."); Schenk & Grossman, *supra* note 18, at 297 ("The generation of positive externalities from education, which benefit society more than is captured in higher additional wages for the student, makes the underinvestment suboptimal.").

26. *See* WINTER & PFITZNER, *supra* note 24, at 8–10; *see also* JACKSON, *supra* note 25, at 1–2 (arguing that positive externalities may "take the form of better citizenship, higher degrees of compliance with public laws, increased productivity, and inter-generational transfers of knowledge").

27. *See* Michael Grossman & Robert Kaestner, *Effects of Education on Health*, *in* THE SOCIAL BENEFITS OF EDUCATION 76–103 (Jere Behrman & Nevzer Stacey eds., 1997) (reviewing the literature on health and education and concluding that "[t]he upshot of most of the studies summarized . . . is that education has a positive causal effect on good health"); *see also* ANDREW LEIGH, THE IMPACT OF THE TAX-TRANSFER SYSTEM ON EDUCATION AND SKILLS IN AUSTRALIA 23 (2009), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1521228 ("[T]he literature seems consistent with modest health benefits to schooling."). The evidence is mixed on crime. *See* Lance Lochner & Enrico Moretti, *The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports*, 94 AM. ECON. REV. 155, 179–80 (2004) (arguing positive social returns relating to reduced crime for increased male high school graduation rates).

higher education do not seem to apply to those unable to complete a program.[28] In fact, while the literature is more certain of the private benefit of education, such as individuals earning more money,[29] dropouts do not even reap most of those benefits.[30] The benefit of subsidies is undermined since less than half of students who enroll actually complete college.[31] Second, there is much uncertainty about how much, if any, of these so-called positive externalities are actually generated by education rather than a confounding variable, "such as abilities as preferences."[32] Thus, while social benefits likely exist to some degree,

28. *See* Barbara Miles & Dennis Zimmerman, *Reducing Costs and Improving Efficiency in the Student Loan Program*, 50 NAT'L TAX J. 541, 549 (1997) (suggesting that one way to determine categories of students who don't generate positive externalities is to look at groups with higher default rates—students with one year or less of completion had a 16.8% default rate, versus a 6.4% rate compared to those with three or more years of completion).

29. Schenk & Grossman, *supra* note 18, at 297 n.4 ("It is universally accepted that a college education produces individual economic benefits via earnings differentials.").

30. For example, the unemployment rate for those with a high school diploma was 5.2%, and those with "[s]ome college, no degree" was 4.4% in 2016. *Employment Projections*, BUREAU LAB. STAT., http://www.bls.gov/emp/ep_chart_001.htm (last modified Oct. 24, 2017). While some studies show that those with some college, but no degree earned 13% more over their life, this does not take into account the cost of college, including being out of the labor force to attend. *Lifetime Earnings by Education Level*, COLLEGEBOARD: TRENDS HIGHER EDUC., http://trends.collegeboard.org/education-pays/figures-tables/lifetime-earnings-education-level (last visited Feb. 9, 2018). The wage premium over high school graduates is just 20% of the college wage premium of 66%, not even controlling for other factors such as ability. *Id.* Once these factors are taken into account, the private post-tax return on investment may actually be negative. *Cf.* Fabian Lange & Robert Topel, *The Social Value of Education and Human Capital*, *in* HANDBOOK OF THE ECONOMICS OF EDUCATION 493 (Eric Hanushek & Finis Welch eds., 2006) (finding that completing the 14th and 15th year each result in a negative return to wages without further completion (-0.23%; -2.07%), though a large return of 20.11% occurs upon completion of the 13th year).

31. Jordan Weissmann, *Why Do So Many Americans Drop Out of College?*, ATLANTIC (Mar. 29, 2012), http://www.theatlantic.com/business/archive/2012/03/why-do-so-many-americans-drop-out-of-college/255226/.

32. *See, e.g.*, LEIGH, *supra* note 27, at 25–26, 28 (reviewing the literature and finding mixed evidence in many areas, such as questions about any impact of university enrollment on crime rates); Lange & Topel, *supra* note 30, at 479, 488 (concluding that "the evidence for positive external returns is weak, at best, and founded on dubious identifying assumptions" as it relates to productivity externalities); Ann D. Witte, *Crime*, *in* THE SOCIAL BENEFITS OF EDUCATION 242 (Jere R. Behrman & Nevzer Stacey eds., 1997) (concluding that education itself does not reduce crime, and additionally, study results are questionable "because of measurement and statistical problems, among other things"); *see also* Phillip Farrell & Victor R. Fuchs, *Schooling and Health: The Cigarette Connection*, 1 J. HEALTH ECON. 217 (1982) (concluding that high school, not higher education, resulted in people smoking less); Fredrik deBoer, *Why Selection Bias is the Most Powerful Force in Education*, FREDRIK DEBOER (Mar. 29, 2017), https://fredrikdeboer.com/2017/03/29/why-selection-bias-is-the-most-powerful-force-in-education/ (reviewing various education studies to argue that failure to account for selection bias often distorts results).

"the best estimates of the size of social returns suggest that in the main, they should not be a key driver of policy."[33]

Ultimately, this Article assumes that students who graduate generate some social benefits. The exact amount does not dramatically change my arguments,[34] but this Article estimates that social benefits equaling somewhere between 20% to 25% of the private returns generated by an individual who completes a higher education program.[35] In contrast, this Article assumes dropouts generate no social benefits.

2. *Internalities*

Another justification for subsidies is that individuals may possess internalities that cause them to not fully perceive costs and benefits they themselves bear in the future, resulting in underinvestment or overinvestment in certain activities.[36] The concept of an internality and what government intervention it justifies, if any, is controversial.[37] Different internalities may, however, justify government subsidies because otherwise people would underinvest in education.

Internalities that potentially affect prospective students' higher education investment preferences include myopia, inertia, biased information, and shrouded costs.[38] Myopia, or self-control, involves "short-run, myopic preferences" trumping "long-run, patient preferences" and leaving the agent worse

33. LEIGH, *supra* note 27, at 5. Instead, the author urged policy makers to focus on the "robust evidence that private returns to education are large and significant." *Id.*

34. The smaller the positive externalities, the smaller the subsidy needed to correct for them, but ensuring the subsidy is properly allocated remains important.

35. *See* LEIGH, *supra* note 27, at 29 (noting the "suggestion that the social benefits of education might be as large as the private benefits seem overstated").

36. *See supra* note 9 and accompanying text.

37. *Compare* Glen Whitman, *Against the New Paternalism: Internalities and the Economics of Self-Control*, 563 POL'Y ANALYSIS 1, 1–3 (Feb. 22, 2006), http://object.cato.org/sites/cato.org/files/pubs/pdf/pa563.pdf (taking a more skeptical view), *with* Richard H. Thaler & Cass R. Sunstein, *Libertarian Paternalism*, 93 AM. ECON. REV. 175 (2003) (taking a more pro-regulation of internalities view). There are several potential problems governments face when trying to correct for internalities, one of which is that "the new paternalism neglects the possibility of internal bargains and private solutions," which may overcome self-control problems. Whitman, *supra* note 37, at 14.

38. *See infra* notes 42–46.

off.[39] For example, evidence suggests myopia might cause students to overly discount the returns to education because of an irrational fear of defaulting on their student loans.[40] Inertia can cause people to underinvest when default rules require them to opt-in rather than make an active choice.[41] Biased information problems occur when people are systematically misinformed.[42] Shrouded costs are a variation of biased information, where the seller actively attempts to hide the cost to encourage consumption.[43]

The existence of internalities may create a "negative selection" problem—those lower-income individuals who would benefit the most from higher education might be the most likely to have internalities that cause them to underinvest in education.[44] For example, lower-income individuals "may have incomplete and systematically biased information leading them to underestimate the benefits and overestimate the costs of college, which would then lead them to make suboptimal decisions."[45] However, as discussed later, other internalities, such as optimism bias, might actually cause people to overinvest in education.[46]

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39. WILLIAM J. CONGDON ET AL., POLICY AND CHOICE: PUBLIC FINANCE THROUGH THE LENS OF BEHAVIORAL ECONOMICS 120 (2011).

40. *See* Ghandi, *supra* note 18, at 14–16 (arguing students may be irrationally loss-averse and too heavily discount the returns of education); *see also* Christopher Avery & Sarah Turner, *Student Loans: Do College Students Borrow Too Much – Or Not Enough?*, 26 J. ECON. PERSP. 165, 185 (2012) ("[R]isk aversion would likely reduce the attractiveness of borrowing to enroll in college.").

41. *See* Allcott & Sunstein, *supra* note 9 (quoting study on 401k savings plan and describing the contrast).

42. *See* ZACHARY BLEEMER & BASIT ZAFAR, FED. RESERVE BANK OF N.Y., INFORMATION HETEROGENEITY AND INTENDED COLLEGE ENROLLMENT 1–3 (2014), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2477860.

43. *See* Allcott & Sunstein, *supra* note 9 (citation omitted) (discussing the "shrouded cost" concept and citing a study showing this in the shipping cost and product context).

44. *See* Jennie E. Brand & Yu Xie, *Who Benefits Most from College? Evidence for Negative Selection in Heterogeneous Economic Returns to Higher Education*, 75 AM. SOC. REV. 273, 274 (2010), http://www.asanet.org/images/journals/docs/pdf/asr/Apr10ASRFeature.pdf (finding that for those individuals who are least likely to obtain a college education, they would most benefit from obtaining a degree); *see also* BLEEMER & ZAFAR, *supra* note 42, at 25–27 (concluding that lower-income and less education respondents tend to underestimate college returns relative to other groups because of a lack of information).

45. BLEEMER & ZAFAR, *supra* note 42, at 1.

46. *See infra* Sections III.A.–B.

3. *Redistribution & liquidity issues*

Two justifications for intervention that are frequently raised, but not as relevant to my paper, are equity arguments and solving potential liquidity issues. Though many make equity arguments,[47] unless they are actually relying on externalities or internalities, equity arguments cannot be justified under a social-welfare framework.[48] In addition, many economists argue "that imperfect capital markets limit the ability of students and their parents to borrow against future earnings to finance educational investments."[49] The least distortionary solution would be for the government to provide loans at an appropriate market rate after internalities and externalities are controlled for.[50] In

47. *See, e.g.*, Schenk & Grossman, *supra* note 18, at 296–97 (discussing the argument that "[s]ince [enrollment in] higher education reaps market rewards, everyone who is able should have the opportunity to attend college"). Other arguments focus on instrumental theories, such as education subsidies being needed to fight income inequality. *See, e.g.*, JACKSON, *supra* note 25, at 3 (suggesting efficacy of combatting income inequality with targeted education subsidies).

48. LOUIS KAPLOW, THEORY OF TAXATION AND PUBLIC ECONOMICS 391–92 (2008) ("All such normative criteria are prima facie problematic. If the welfare economic framework is accepted, either competing [normative] measures must be proxy indicators for aspects of social welfare or they register something else, the pursuit of which inevitably entails the sacrifice of social welfare."). Once social welfare has been maximized by correcting for externalities and internalities, a restricted cash transfer is never superior to a cash transfer. *See id.* Many non-welfare-maximalists should still support this Article's main conclusion—poorly designed subsidies leave society and many students worse off, and reforms would increase social welfare and better fulfill the goal of encouraging prospective students to graduate postsecondary programs. *See, e.g.*, JOHN RAWLS, A THEORY OF JUSTICE (2d ed. 1999).

49. JERE R. BEHRMAN ET AL., *Introduction*, *in* THE SOCIAL BENEFITS OF EDUCATION 5–6 (Jere Behrman & Nevzer Stacey eds., 1997). Transaction costs and general uncertainty would prevent many prospective students from obtaining loans even if the school was a good investment because they cannot mortgage their human capital. *See* JACKSON, *supra* note 25, at 3 (discussing the problem of students being unable to obtain commercial loans because "commercial lenders cannot mortgage a person's future income"); *see also* ELAINE M. MAAG & KATIE FITZPATRICK, URBAN INST., FEDERAL FINANCIAL AID FOR HIGHER EDUCATION: PROGRAMS AND PROSPECTS 8 (2004), https://www.urban.org/sites/default/files/publication/57976/410996-Federal-Financial-Aid-for-Higher-Education.pdf (asserting that, without subsidies, the inability to secure educational loans with collateral would lead to intolerably high interest rates); Susan Dynarski, *An Economist's Perspective on Student Loans in the United States* 4 (Sept. 2014) (Econ. Studies Brookings, working paper), https://www.brookings.edu/wpcontent/uploads/2016/06/economist_perspective_student_loans_dynarski.pdf (identifying the inability to secure student loans as a market failure necessitating government intervention).

50. *See* Dynarski, *supra* note 49, at 14–16. One could add subsidies to loans in order to encourage consumption because of positive externalities that are not otherwise corrected for. *See* Miles & Zimmerman, *supra* note 28, at 541 (stating that the federal student loan program targets both the market failure caused by "capital market imperfections or the presence of external

the real world, some deadweight loss will occur because of transaction costs and imperfect information, but liquidity problems do not justify extensive subsidies, rather they justify the government providing credit at a market rate.

B. Justifications for Government Regulations of Higher Education

Complaints about schools failing their students have been around a very long time.[51] Schools have been accused of issuing worthless degrees, having a low completion rate, providing subpar training, enrolling students unprepared or unable to succeed in the profession, and providing misleading advertising and data.[52] These complaints have then been used to justify government intervention.[53]

Since the government began subsidizing higher education, critics have argued that certain schools engage in bad behavior to take advantage of federal aid programs.[54] One example is the Corinthian Colleges bankruptcy saga. Before the for-profit school chain failed in 2015, it collected $2 billion in federal grants since the 2010–11 academic year, another $4 billion in loans, and untold more in indirect subsidies.[55] It shut down

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benefits from education"). An argument exists, however, that additional subsidies may be justified if existing subsidies distort behavior and penalize savings. *See* MAAG & FITZPATRICK, *supra* note 49.

51. *See* Alderdice, *supra* note 19, at 220–23 (discussing the "history of abuses" by for-profit institutions).

52. *See generally* Program Integrity: Gainful Employment, 79 Fed. Reg. 64,890 (Oct. 31, 2014) (codified at 34 C.F.R. pt. 600, 668) (addressing concerns for programs failing to properly train and prepare students, unreasonably training for low wage careers, and aggressively and deceptively marketing); Alderdice, *supra* note 19 (discussing for-profit university abuse); Sophie Quinton, *Will a For-Profit Degree Help You Get a Job?*, ATLANTIC (Mar. 25, 2014), https://www.theatlantic.com/education/archive/2014/03/will-a-for-profit-degree-help-you-get-a-job/359527/ (claiming for-profit degrees leave graduates with high debt and low salaries).

53. *See, e.g.*, Program Integrity: Gainful Employment, 79 Fed. Reg. at 64,890.

54. *See* Alexandra Samuels, *Feds Investigating Univ. of Phoenix for Possible Unfair Business Practices*, USA TODAY (Jul. 30, 2015, 12:59 PM), http://college.usatoday.com/2015/07/30/university-of-phoenix-federal-investigation/ (discussing government action against the University of Phoenix and other for-profit schools, in an attempt to shut down "bad actors" and other underperforming schools).

55. Shahien Nasiripour, *Corinthian Colleges Files for Bankruptcy*, HUFFINGTON POST (May 5, 2015), http://www.huffingtonpost.com/2015/05/04/corinthian-colleges-bankruptcy_n_7205344.html.

while being sued and was accused of "systematically deceiv[ing] students with false graduation and job placement rates."[56] Taxpayers ended up paying for $171 million in forgiven student loan money that had gone to Corinthian, on top of all the lost subsidies.[57] The Department of Education fined Corinthian $30 million for misleading students and accreditation agencies regarding graduate employment rates.[58] ITT Educational Services, another operator of for-profit schools, also shut down after being accused of deceptive practices and providing a subpar product.[59] It also derived most of its billions of dollars in revenue from federal student aid.[60]

Two other categories of schools that have come under sustained attack are lower-ranked but expensive liberal art

56. *Id.*

57. *See* Melody Petersen, *Obama Administration Has Forgiven $171 Million Owed by Former Corinthian Students*, L.A. TIMES (June 29, 2016, 5:42 PM), http://www.latimes.com/business/la-fi-corinthian-loan-forgiveness-20160629-snap-story.html.

58. Nasiripour, *supra* note 55.

59. *See* Gretchen Morgenson, *Student Victims Seek to Become Creditors in ITT Bankruptcy*, N.Y. TIMES (Jan. 6, 2017), https://www.nytimes.com/2017/01/06/business/student-victims-seek-to-become-creditors-in-itt-bankruptcy.html.

60. *Id.* Another example is critics' attacks against the for-profit University of Phoenix. *See* Samuels, *supra* note 54 (discussing government action against the University of Phoenix and other for-profit schools, in an attempt to shut down "bad actors" and other underperforming schools). It engaged in an aggressive marketing campaign to swell its class size to half a million students by 2010, despite boasting a six-year graduation rate of 17% for the class of 2008–09. *See* Aaron Glantz, *University of Phoenix Sidesteps Obama Order on Recruiting Veterans*, REVEAL (June 30, 2015), https://www.revealnews.org/article/university-of-phoenix-sidesteps-obama-order-on-recruiting-veterans/; *Fact Sheet: An Overview of University of Phoenix Activities*, U. PHX., http://www.apollo.edu/content/dam/apolloedu/pdf/Apollo-Group-UOPX-Fact-Sheet.pdf (last visited Jan. 30, 2018); *Student Right to Know Guide: 2015–2016*, U. PHX. 2 (June 2015), http://cdn.assets-phoenix.net/content/dam/altcloud/doc/about_uopx/Student-Right-to-Know-Guide.pdf. Additionally, 81,370 of its 121,517 undergraduates were Pell Grant Recipients for the 2008–09 academic year (16% of whom graduated within six years). *Id.* From 2009 to 2015 it received more than $1.2 billion in GI Bill funds alone. Glantz, *supra* note 60.

schools[61] and lower-ranked but expensive law schools.[62] The criticisms are similar—misleading advertising, failing to provide adequate training, too expensive, and low employment rates, even for those who manage to graduate.[63] Other programs have been subject to similar, though less extensive, attacks.[64]

Scholars and commentators have pushed back against these critiques. They have argued that excessive regulations "deprive hundreds of thousands of students of access to higher education."[65] They argue that for-profit schools provide valuable education and skills training to low-income and underrepresented students who otherwise would be unable to attain any kind of postsecondary schooling,[66] concluding that "[e]ducation pays—in more ways than one."[67] In regard to law schools, one study

61. *See, e.g.*, Andrew Martin & Andrew W. Lehren, *A Generation Hobbled by the Soaring Cost of College*, N.Y. TIMES (May 12, 2012), http://www.nytimes.com/2012/05/13/business/student-loans-weighing-down-a-generation-with-heavy-debt.html?pagewanted=all (critiquing Ohio Northern University and other lower-ranked but expensive private liberal arts colleges for their high costs). For an argument that many colleges and majors are bad investments, see Derek Thompson, *These U.S. Colleges and Majors Are the Biggest Waste of Money*, ATLANTIC (Mar. 26, 2014), http://www.theatlantic.com/business/archive/2014/03/these-us-colleges-and-majors-are-the-biggest-waste-of-money/359653/. This study does not even account for dropouts. *Id.*

62. *See, e.g.*, BRIAN Z. TAMANAHA, FAILING LAW SCHOOLS (2012) (discussing various problems with the current state of legal education, including the costs and benefits of attending law school); Paul Campos, *The Law-School Scam*, ATLANTIC (Sept. 2014), https://www.theatlantic.com/magazine/archive/2014/09/the-law-school-scam/375069/ (critiquing for-profit law schools); Editorial, *The Law School Debt Crisis*, N.Y. TIMES (Oct. 24, 2015), http://www.nytimes.com/2015/10/25/opinion/sunday/the-law-school-debt-crisis.html?partner=rss&emc=rss.

63. *See supra* notes 64–65.

64. *See, e.g.*, Matt Reed, *Gainful Employment for Graduate Schools?*, INSIDE HIGHER ED (June 25, 2015), https://www.insidehighered.com/blogs/confessions-community-college-dean/gainful-employment-graduate-schools (discussing expensive and risky graduate programs exempt from gainful employment).

65. Allie Bidwell, *Gainful Employment Survives For-Profit Challenge*, U.S. NEWS (June 24, 2015, 10:07AM), http://www.usnews.com/news/articles/2015/06/24/federal-court-sides-with-education-department-on-gainful-employment-rule.

66. *See* Carrie Sheffield, *In Defense of For-Profit Colleges*, FORBES (May 29, 2015, 6:21 AM), http://www.forbes.com/sites/carriesheffield/2015/05/29/in-defense-of-for-profit-colleges/#560ef5736741 (defending for-profit schools' accomplishments and contrasting them with poorer performing non-profit institutions).

67. *Tuition and Fees Calculator*, U. PHX., http://www.phoenix.edu/tuition_and_financial_options/tuition_and_fees.html (last visited Feb. 9, 2018) [http://archive.li/kvZf] (citing Bureau of Labor Statistics data about how increased levels of education correlate with higher wages and lower unemployment, though it acknowledges this data "is not specifically applicable to alumni of University of Phoenix").

contends that most students who enroll are better off by hundreds of thousands of dollars, and the risks of enrolling are overblown.[68] Commentators argue that many of the horror stories represent unusual outcomes,[69] and that the media overstates the problem to advance a narrative.[70]

Regardless, the government has cited many of the reasons discussed above to justify regulations restricting access to federal funds, mandating certain disclosures, or requiring other school behavior.[71] Yet, beyond intervening to stop fraud and other obvious abuses,[72] it is not particularly clear when and to what extent the government should intervene in the higher education market.

That is because important questions remain unanswered. What constitutes a bad school? Is it failure to graduate enough students? Failure to ensure graduates obtain well-paying jobs or obtain "gainful employment"? Is it a program that leaves students with a large amount of debt (or a large amount of debt relative to their income)? All of these definitions have clear counter-examples. Almost no one wants to shut down community colleges because a low percentage of their students graduate. Nor do most people seek to shut down dance programs because their graduates don't earn enough money or medical

68. *See* Michael Simkovic & Frank McIntyre, *The Economic Value of a Law Degree*, 43 J. LEGAL STUD. 249, 284–85 (2014).

69. The President of Ohio Northern University responded to a critical *New York Times* article by pointing out that its subject's "level of borrowing is not typical." Doug Schantz, *Ohio Northern President Responds to NYT's Student Loan Debt Article*, CHEAPSCHOLAR.ORG (May 23, 2012), http://cheapscholar.org/2012/05/23/ohio-northern-president-responds-to-nyt%E2%80%99s-student-loan-debt-article/.

70. For example, despite having a higher debt burden, only 3% of graduate students default on their loans, unlike 21% of undergraduates. Dynarski, *supra* note 49, at 13. That does not, however, stop the media from focusing on those 3%. *See* Michael Simkovic, *N.Y. Times Is Mistaken: Law Student Loans Are Safe and Profitable for the Government*, BRIAN LEITER'S L. SCH. REP. (Oct. 28, 2015), http://leiterlawschool.typepad.com/leiter/2015/10/new-york-times-editorial-board-is-wrong-law-student-loans-are-safe-and-profitable-for-the-government.html (criticizing a *New York Times* article for making unsupported claims "that law student borrowing is harmful to taxpayers").

71. *See, e.g.*, Program Integrity: Gainful Employment, 79 Fed. Reg. 64,890 *passim* (Oct. 31, 2014) (codified at 34 C.F.R. pt. 600, 668) (detailing issues surrounding educational programs and remedial government intervention to make schools more affordable and worthwhile for students).

72. *See, e.g.*, Morse, *supra* note 3 (discussing various governmental investigations concluding for-profit colleges and universities had engaged in fraudulent and abusive practices).

schools because they leave graduates deeply in debt. This Article argues in the next subsection that most government regulations can be understood through a framework that provides a coherent definition of a "bad school," and that the government should explicitly adopt this framework and adjust its regulations accordingly.

II. A THEORY OF BAD SCHOOLS AND OPTIMAL FISCAL POLICY

A. Defining Bad Schools and Optimal Fiscal System Treatment

This Article proposes a coherent definition of "bad school" before discussing how the optimal fiscal system would be structured, given such definition.

1. Defining a bad school

An individual's expenditures for higher education can be divided into two components using the Haig-Simons framework: Income = Consumption + Change in Net Worth.[73] The two components are the consumption (present utility obtained plus the present value of expected future utility earned) one obtains out of the expenditure,[74] and the investment value of the program that results in future increased earnings (the change in net worth).[75] For example, if an individual spent $5000 on education

73. A Haig-Simons framework is one definition of income that is used in calculating an ideal tax base before deviations are included. *See* Boris I. Bittker, *A "Comprehensive Tax Base" as a Goal of Income Tax Reform*, 80 HARV. L. REV. 925, 932 (1967). Haig-Simons income can be calculated over any period of time. *See id.* at 958. It differentiates between consumption activity, such as the purchasing of a movie ticket, and changes in the form of an asset one holds, such as converting cash into a bond. *See id.* at 932 ("Personal income may be defined as the algebraic sum of (1) the market value of rights exercised in consumption and (2) the change in the value of the store of property rights between the beginning and end of the period in question.").

74. These would be non-pecuniary benefits classified as consumption would be, for example, a preference for a lower-earning major that provides more utility. *See* Joseph M. Dodge, *Taxing Human Capital Acquisition Costs – or Why Costs of Higher Education Should Not Be Deducted or Amortized*, 54 OHIO ST. L.J. 927, 939–40, 953–61 (1993).

75. The investment component of higher education would be the portion of the expenditure that should be capitalized to reflect it being an asset that is expected to provide future economic value in a Haig-Simons framework. *See* Simkovic, *Knowledge Tax*, *supra* note 2, at 1986 (comparing higher education expenditures to other business capital expenditures, such as the purchase of equipment or R&D). *But see* ROBERT B. ARCHIBALD & DAVID H. FELDMAN, WHY DOES COLLEGE

in a given year, $2500 of that might be classified as consumption and decrease her net worth,[76] whereas the other $2500 would be capitalized as an investment in an asset that is expected to increase her future earnings and be amortized over that time. If this other $2500 yielded an asset with a present value of $5000 (the present value of the expected income premium), then the student would have made a positive investment for herself.[77]

The investment (economic) value derived from a program can be broken down further into the human capital gain (i.e., skills learned),[78] the signaling value of the credential,[79] and the social capital obtained through enhancing one's network by meeting other people.[80] All of these differ based on the type of school and major entered into, its quality, and its reputation. The total expected future economic gain, adjusted for present value, would then be added to the personal consumption value (both

COST SO MUCH? 93–96 (2010) (arguing that higher education expenditures should often be classified as personal consumption because the degrees have little economic value and students are often just maximizing their personal consumption by picking easy or fun majors and nicer schools).

76. It is possible that college actually has negative consumption value (i.e., the person enrolls solely for the return on investment and suffers through school) or a negative return on investment. *See* Simkovic, *Knowledge Tax*, *supra* note 2, at 1992 (discussing several studies suggesting "that education has *negative* consumption value").

77. An expenditure to obtain future consumption, rather than future pecuniary value, is classified as consumption even if it will take years to obtain the benefits.

78. *See* John Cassidy, *College Calculus: What's the Real Value of Higher Education?*, NEW YORKER (Sept. 7, 2015), http://www.newyorker.com/magazine/2015/09/07/college-calculus (describing the "human capital" theory of education as "the notion that colleges teach their students specific, marketable skills, which they can use to get a good job"); *see also* GARY S. BECKER, HUMAN CAPITAL: A THEORETICAL AND EMPIRICAL ANALYSIS WITH SPECIAL REFERENCE TO EDUCATION (2014) (likening investments in human skills to business investments in improved machinery); Simkovic, *Knowledge Tax*, *supra* note 2, at 1988–89 (discussing the human capital argument).

79. *See* Kenneth J. Arrow, *Higher Education as a Filter*, 2 J. PUB. ECON. 193, 194–95 (1973) (theorizing that higher education does not just increase labor productivity (i.e., human capital) but rather "serves as a screening device, in that it sorts out individuals of differing abilities, thereby conveying information to the purchasers of labor").

80. *See* Jeffrie W. Miracle, Higher Education In the Creation of Individual Social Capital: A Student Organization Ethnography, at iv (Apr. 3, 2013) (unpublished Ph.D. dissertation, University of Pittsburgh), http://d-scholarship.pitt.edu/18705/1/miraclejw_etd2013.pdf (emphasis added) ("Participating in higher education may also provide an individual with the opportunity to build valuable relationships with individuals that result in access to resources such as information, the mutual exchange of favors, emotional support and career networking—often referred to as *social capital*."). This section is referring to social capital that benefits an individual, even though social capital can also refer to the positive externalities created by the network effect. *See id.* at 35–37.

present and future) to yield a Haig-Simons change in income number. These calculations would take into account any internality issues.

Finally, a policymaker would want to adjust this "income" number to account for any externalities. The expected value of positive externalities generated by the expenditure (for example, the cost of one semester's tuition) should be added to the number. Any negative externalities should be accounted for as well. Of course, in a world of imperfect information all of these calculations will be rather imprecise.

We are left with this Article's proposed theoretical definition of a bad school: A school (or program)[81] in which the expected aggregate private return[82] plus social benefit (referred to as a "total return") of its students is negative.[83] Government regulations should explicitly adopt this definition, or at least rely on it, as it helps maximize social welfare. Any school that meets this definition should be regulated out of existence, assuming the market does not drive it out of existence.

As discussed more in Part III, there are two main types of bad schools. The first are schools that do an average job of providing value to their students relative to their peers, but they admit students who are unlikely to successfully complete their programs or obtain jobs in the relevant field.[84] The second are schools that underperform in educating their students compared to their peers; therefore, even though their students could obtain a positive total return if they enrolled in an average-quality school they end up generating negative total returns.[85] In both cases, the design of government subsidies worsens the

81. This Article uses "school" and "program" interchangeably to refer to distinct schools or programs where these calculations can be made; schools may have multiple programs. *See* Program Integrity: Gainful Employment, 79 Fed. Reg. 64,890, 64,890 (Oct. 31, 2014) (codified at 34 C.F.R. pt. 600, 668).

82. The expected aggregate private return includes inferred personal consumption.

83. *See infra* note 243 (discussing the idea that schools that function similarly to lotteries may need to be classified as bad schools. This would be a school in which a few students do so well that even though most students have a negative return, the aggregate return of the students is positive).

84. *See infra* Section III.A.

85. *See infra* Section III.B.

problem.

2. *Optimizing the fiscal system*

If this Article's definition of a bad school were accepted, the government could theoretically intervene, primarily through the fiscal system,[86] to correct for internalities, externalities, liquidity issues, and other market failures in the higher education market through a combination of subsidies, penalties, and other policies. The government would design the subsidies to avoid unintended negative side effects, such as encouraging students to attend bad schools. In practice, the lack of perfect information requires the use of proxies to solve these problems. For example, the government could direct more aid to less well-off students, if evidence indicates that lower socioeconomic status is a proxy used to detect the likelihood that someone suffers from an internality making them more likely to underinvest in education.[87] As government resources are limited, subsidies should first go to students who would otherwise not enroll.[88]

This Article's analysis accepts the premise that a free market without failures is efficient (i.e., maximizes social wealth).[89] It also accepts the premise that redistributing wealth to maximize aggregate social welfare can be successful because of the diminishing marginal utility of wealth.[90] Any ideal fiscal system, how-

86. The "fiscal system" refers to government policy overall. Whether the government provides a direct subsidy through the Department of Education or the tax code, it will still be a subsidy. David A. Weisbach & Jacob Nussim, *The Integration of Tax and Spending Programs*, 113 YALE L.J. 955, 958 (2004). Whether intervention in the form of aid or a penalty comes from the tax code or elsewhere, "the efficiency of government policy is unchanged." *Id.*

87. *See* Brand & Xie, *supra* note 44.

88. The question of whether some of the positive externality benefits should be transferred back to students who will enroll in higher education regardless of whether they receive subsidies is a distributional question that is outside the scope of this paper. *See infra* note 91 (discussing some factors to consider).

89. *See, e.g.* PAUL KRUGMAN & ROBIN WELLS, MICROECONOMICS 15 (2d ed. 2008). Measuring societal well-being based on economic surplus is very different than measuring utility based on happiness. *See* Bakija, *supra* note 21, at 2.

90. The diminishing marginal utility of wealth theory holds that "an additional dollar of well-being translates to a larger improvement in utility for someone who is economically worse-off compared to someone who is economically better-off." Bakija, *supra* note 21, at 2. Therefore, a transfer of $80 from a higher-income individual to a lower-income individual that results in

ever, would reject subsidies for purely redistributive purposes.[91] Otherwise, individuals would be stuck with restricted transfers that have to be spent on education rather than other items that would give them more utility. Even under a Rawlsian social welfare framework, a cash transfer would yield better results than a restricted transfer, all else being equal.

Instead, the ideal fiscal system should correct for internalities and externalities while minimizing transaction costs and efficiency distortions. For example, if attending school resulted in positive externalities, a subsidy would be justified to correct for this and maximize efficiency. If an internality caused overinvestment, such as a prospective student being too optimistic about certain schools, a penalty or equivalent regulation would be justified. Transaction costs should be minimized since they are deadweight losses. Finally, the overall fiscal system would want to avoid distorting individual decisions by unjustly favoring one type of capital investment.[92] For purposes of analysis,

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the destruction of $20 of wealth may still result in higher overall social welfare because the lower-income individual values the $80 more. *Id.*

91. *See* Ryoichi Sakano et al., *Subsidies and Inefficiency: Stochastic Frontier Approach*, 15 CONTEMP. ECON. POL'Y 113, 113–15 (1997) (discussing when and how subsidies are inefficient). Once internalities and externalities have been corrected, any additional transfers are just restricted transfers causing unnecessary deadweight loss. *Id.* Scholars have argued that those pursuing higher education should be taxed more rather than receive a subsidy because seeking higher education represents a "tag"—that is, a signal the individual has a higher ability to pay. Matthew C. Weinzierl, *Why Do We Redistribute So Much but Tag So Little? The Principle of Equal Sacrifice and Optimal Taxation* 7 (Nat'l Bureau of Econ. Research, Working Paper No. 18045, May 2012), http://www.nber.org/papers/w18045.pdf. This theory assumes that "individuals differ in their unobservable abilities to earn income but are equally able to enjoy consumption." *Id.* at 8. Redistributions to those seeking education could be regressive redistributions within a given income group to those with a higher real ability to pay. *Id.* Assuming that "social welfare is a weakly concave function of all individual utilities" redistribution from those with high ability to those with low ability creates "redistributive gains without efficiency losses," meaning "groups with higher mean ability ought to be taxed" more. *Id.* The tag theory was first postulated by J.A. Mirrlees, but he concluded that "[o]ne might obtain information about a man's income-earning potential from *his apparent I.Q., the number of his degrees*, his address, age or colour: but the natural, and one would suppose the most reliable, indicator of his income-earning potential is his income." J.A. Mirrlees, *An Exploration in the Theory of Optimum Income Taxation*, 38 REV. ECON. STUD. 175, 175 (1971) (emphasis added). Redistributions to those seeking education could be regressive redistributions within a given income group to those with a higher real ability to pay. This issue is not a subject of this Article, but it is one more reason to be wary of accepting redistribution as a justification for subsidies.

92. *See, e.g.*, Simkovic, *Knowledge Tax*, *supra* note 2, at 1983–84 (discussing how if capital investments in real estate are tax favored relative to investments in education suboptimal allocation and too few people seeking education would result). This, however, is complicated because

this Article assumes that all capital is being taxed equally, so that after everything else is accounted for, policies do not have to be adjusted to correct for human capital being taxed differently than other forms of capital.[93]

In the real world, imperfect information and limited resources mean proxies must be used, errors will occur, and not everyone will be able to receive subsidies. Two examples of real-world policy implications are worth flagging now. The first is that if an empirical study, such as the one relating to framing something as a loan or grant, shows different responses to programs with equivalent costs, then this is an internality and the more efficient policy should be selected.[94] Second, inefficient distortions can be created if lump-sum aid is given without regard for the cost of a school, as cheaper schools will be unjustly favored, assuming all schools had roughly the same rate of return pre-subsidy, controlling for risk.[95]

B. Reviewing Current Government Policies

Current government policies mostly make sense when viewed through the optimal policy lens discussed above, but there are many questionable deviations. The federal government and state governments provide billions of dollars in sub-

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of the imputed income concept. *See, e.g.*, David S. Davenport, *Education and Human Capital: Pursuing an Ideal Income Tax and a Sensible Tax Policy*, 42 CASE W. RES. UNIV. L. REV. 793, 796 (1992) (quoting MARVIN A. CHIRELSTEIN, FEDERAL INCOME TAXATION: A LAW STUDENT'S GUIDE TO LEADING CASES AND CONCEPTS 116 (6th ed. 1991)) ("Whereas the formation of human capital is tax-free by analogy to imputed income, the accumulation of tangible capital through wage-producing labor is fully taxable. On balance, then, the tax treatment of professional training costs turns out to be comparatively favorable."). Another complicating factor is the steepness of the progressive tax rate.

93. Treating education expenditures as personal consumption is the default treatment in the U.S. tax code. *See* I.R.C. §§ 62, 63, 67, 161–224 (2016) (describing various expenses that can be deducted, the vast majority of which are not personal consumption items); JOINT COMM. ON TAXATION, 113TH CONG., ESTIMATES OF FEDERAL TAX EXPENDITURES FOR FISCAL YEARS 2012–2017, at 38–39 (2013), https://www.jct.gov/publications.html?func=select&id=5 (treating education preferences as a tax expenditure). Many argue education expenditures should be treated like other capital expenditures. *See, e.g.*, Davenport, *supra* note 92, at 805–07.

94. *See* Ghandi, *supra* note 18, at 14–16. Upfront grants should be made rather than interest discounts. *Id.* at 17.

95. *See infra* Section III.A.2.

sidies to students and schools to counteract the underinvestment problem,[96] but much of those subsidies are poorly targeted. Regulations connected to such aid[97] tend to fall into two categories: (1) restrictions on disbursing aid based on indicators that a school is a bad school, because either (a) the school enrolls too many unprepared students; or (b) the school underperforms given the ex-ante credentials of its students,[98] and (2) disclosure requirements that try to help students make better decisions.[99]

1. Government subsidies

a. Government subsidies for higher education

The government supported schools by providing about $147 billion a year in subsidies for academic year 2013–14,[100] as shown in Figure 1 (excluding veterans' benefits).[101] The Higher Education Act of 1965 (HEA) and its successors primarily govern how federal aid is disbursed.[102] Relevant state statutes govern state aid.[103] Despite arguments to the contrary,[104] government aid to higher education has actually increased, adjusted

96. *See* Susan Dynarski & Judith Scott-Clayton, *Financial Aid Policy: Lessons from Research*, *in* 23 THE FUTURE OF CHILDREN 67, 68 (2013), https://files.eric.ed.gov/fulltext/EJ1015227.pdf.

97. This Article uses "aid" and "subsidy" interchangeably. Non-subsidy support, such as government student loans, is not included in either of these terms.

98. *See* Quinton, *supra* note 52.

99. *See* Alderdice, *supra* note 19, at 217.

100. The amount of government subsidies includes: (1) state general-purpose appropriations, (2) state and federal financial aid grants (including the Pell Grant), (3) tax expenditures, (4) student loan forgiveness programs (often known as income based repayment programs), and (5) other subsidies, such as below-market interest rates on student loans. PEW CHARITABLE TR., FEDERAL AND STATE FUNDING OF HIGHER EDUCATION: A CHANGING LANDSCAPE 7–12 (June 11, 2015), http://www.pewtrusts.org/~/media/assets/2015/06/federal_state_funding_higher_education_final.pdf. The amount of government subsidies is different from the amount of government "aid," a number that often includes student loans. *See* Dynarski & Scott-Clayton, *supra* note 96, at 68–69 (including "loans from all sources" in the calculation of aid and excluding income-based repayment and direct support for public schools).

101. Veterans' benefits are awarded as compensation for a job, rather than just given out as aid. *Education and Training: History and Timeline*, U.S. DEP'T VETERANS AFF., https://www.benefits.va.gov/gibill/history.asp (last visited Mar. 28, 2018).

102. *See, e.g.*, Higher Education Act of 1965, Pub. L. No. 89-329, 79 Stat. 1219.

103. *See, e.g.*, CAL. EDUC. CODE § 214 (Deering 2017).

104. *E.g.*, MICHAEL MITCHELL ET AL., CTR. BUDGET & POLICY PRIORITIES, A LOST DECADE IN HIGHER EDUCATION FUNDING 1 (2017), https://www.cbpp.org/sites/default/files/atoms/files/2017_higher_ed_8-22-17_final.pdf (arguing deep cuts in state funding have made "college

for inflation, over the last thirty years.[105]

Figure 1: Estimated Government Expenditures on Higher Education, Academic Year 2013–14			
Type of Aid	Amount (Billions)	Per Student[106]	Progressive[107]
TOTAL[108]	$147	$7137	MIXED
Public (General Operations)[109]	$66	$3204[110]	UNCLEAR
Student Financial Aid Grants[111]	$42.5	$2063	YES

less affordable and less accessible to the students most in need" and that "increases in federal student aid . . . have not kept up").

105. Paul Campos, *The Real Cost of College*, ATLANTIC (May 13, 2015), https://www.theatlantic.com/education/archive/2015/05/the-real-cost-of-college/393086/.

106. All per student figures were calculated using *Digest of Education Statistics: 2013*, NAT'L CTR. FOR EDUC. STAT., https://nces.ed.gov/programs/digest/d13/ (last visited Jan. 27, 2018) (projecting enrollment in degree-granting institutions in academic year 2013–14 as being at 20,597,000 and enrollment at public institutions as being at 14,857,000).

107. This assessment is based on whether aid is progressive within the universe of eligible prospective students, not society as a whole. Therefore, if more of the aid goes to prospective students from lower-income families, it is progressive, whereas if more of the aid goes to students from higher-income families, it is regressive. *See* MATHEW M. CHINGOS & KRISTEN BLAGG, DO POOR KIDS GET THEIR FAIR SHARE OF SCHOOL FUNDING? (May 2017), https://www.urban.org/sites/default/files/publication/90586/school_funding_brief.pdf.

108. This does not include other subsidies, such as the implied subsidies in the federal student loan program, because of a lack of data or general inability to accurately calculate costs, nor does this include veterans' benefits. *See* CONG. BUDGET OFFICE, OPTIONS TO CHANGE INTEREST RATES AND OTHER TERMS ON STUDENT LOANS 3–6 (2013) (discussing different cost projections). The one dollar per student difference between the total and the aggregate of the different types of aid numbers is due to rounding.

109. *See* PEW CHARITABLE TR., FEDERAL AND STATE FUNDING OF HIGHER EDUCATION: A CHANGING LANDSCAPE 11—12 (2015), http://www.pewtrusts.org/~/media/assets/2015/06/federal_state_funding_higher_education_final.pdf (describing the $62.2 billion in state and local appropriations to public institutions and the $3.8 billion in federal appropriations to certain schools). States provided "$53 billion . . . for [the] general operating expenses of public colleges and universities." *Id.* at 11. Local governments provided an additional $9.2 billion in funding, mostly to support "the general operating expenses of community colleges." *Id.* at 3. Federal subsidies of $3.8 billion "paid for the operating expenses at selected schools such as military academies, historically black colleges and universities, land grant institutions, and a few other specialized institutions." *Id.* at 11.

110. As the vast majority of this money went to public institutions, the amount per student enrolled at a public school would be $4442. Calculated using *Digest of Education Statistics: 2013, supra* note 106. A student at a private school would not receive this subsidy at all.

111. PEW CHARITABLE TR., *supra* note 109 (breaking down the Student Financial Aid grants

Tax Expenditures[112]	$31	$1505	NO
Income-Based Repayment Plans[113]	$7.5	$364	YES
Veterans' Benefits[114]	$12.2	N/A	UNCLEAR

A school that qualifies under the HEA can enter into a program participation agreement with the Department of Education and become eligible for various kinds of government aid, such as students being able to use Pell Grants and federal student loans at the institution.[115] An "institution of higher education" is defined very broadly in the HEA, including not only traditional degree-granting institutions but also postsecondary vocational institutions and other for-profit career schools.[116] In order to stay eligible for federal funds, the school must meet all HEA requirements and comply with any additional program participation requirements.[117] It must also comply with pro-

into Pell Grants ($31.3 billion), other federal aid grants ($1.6 billion), and state grant programs ($9.6 billion)).

112. *See id.* at 8. Data from the Joint Committee on Taxation Report JCS-1-13 has the number at $43.6 billion for education tax expenditures in 2013, but this includes items such as the charitable deduction and the exclusion of qualified bonds. Adding up the following resulted in a total of $31.7 billion: (1) student loan interest deduction, (2) higher education deduction, (3) Coverdell education savings exclusion, (4) exclusion of employer provided education assistance, (5) parental personal exemption for nineteen- to twenty-three-year-old students, (6) certain bond exclusions ("QPAB"), (7) education tax credits, (8) exclusion of scholarship/fellowship income, and (9) qualified tax program tax exclusions. *See* JOINT COMM. ON TAXATION, *supra* note 93.

113. The Government Accountability Office estimated that income-driven repayment programs will cost about $53 billion just with respect to loans made in fiscal year 2009 through 2016. GOV'T ACCOUNTABILITY OFFICE, FEDERAL STUDENT LOANS: EDUCATION NEEDS TO IMPROVE ITS INCOME-DRIVEN REPAYMENT PLAN BUDGET ESTIMATES 49, (2016), https://www.budget.senate.gov/imo/media/doc/GAO%20Student%20Loan%20IDR%20Final.pdf. This Article divided this number by the number of fiscal years covered, and used this to estimate the cost to taxpayers for the 2013–14 year.

114. FEDERAL AND STATE FUNDING OF HIGHER EDUCATION, *supra* note 109 (providing further information about veterans' benefits in the Appendix).

115. 20 U.S.C. § 1094 (2016).

116. *Id.* §§ 1001–02 (defining institutions of higher education, including for purposes of student assistance programs).

117. *Id.* § 1094 (listing various requirements to receive funds from any program in the HEA); *id.* § 1092 (listing various disclosure requirements).

gram requirements for students to claim tax credits for spending money on them.[118] These include regulations such as minimum default rates, the GER debt-to-income ratio, and disclosure requirements.[119]

Pell Grants and tax expenditures make up the bulk of federal government subsidies to students.[120] Pell Grants are targeted at lower-income individuals, and $31.3 billion was spent on them in academic year 2013–14 ($1520 per student).[121] A student can receive a grant of up to $5920—based on financial need, cost of attendance and enrollment status—for each year up to six years.[122] More than 90% of the aid goes to students in households making less than $40,000.[123] Various tax expenditures added up to $31 billion ($1505 per student) in 2013.[124] Of these, $20.1 billion were for tax credits students could claim if they had education expenses.[125]

Additional indirect federal aid includes various income-based repayment programs and student loan subsidies. The government currently offers four income-based repayment plans open to most students—all of them limit loan payments to a percentage of discretionary income, and then forgive the loan balance at the end of a set period (either twenty or twenty-five years).[126] Another program, the Public Service Loan Forgiveness Program, forgives student loan debt after ten years of

118. *See* I.R.C. § 25A(f)(2) (2016) (defining an "eligible educational institution" for education tax credit purposes as an institution "described in section 481 of the Higher Education Act of 1965" and is "eligible to participate in a program under title IV of such Act").

119. *See infra* Section II.B.2. (discussing these regulations in more detail).

120. *See* FEDERAL AND STATE FUNDING OF HIGHER EDUCATION, *supra* note 109.

121. This calculation is based on FEDERAL AND STATE FUNDING OF HIGHER EDUCATION, *supra* note 109, and calculated using additional data from *Digest of Education Statistics: Table 303.10*, NAT'L CTR. EDUC. STAT., http://nces.ed.gov/programs/digest/d13/tables/dt13_303.10.asp (last visited Mar. 30, 2018).

122. *Federal Pell Grants*, FED. STUDENT AID, https://studentaid.ed.gov/sa/types/grants-scholarships/pell#how-much-money (last visited Mar. 30, 2018).

123. CONSORTIUM FOR HIGHER EDUC. TAX REFORM, HIGHER EDUCATION TAX REFORM 10 (2013) [hereinafter TAX REFORM 2013]. The federal government also spent $1.6 billion on other financial aid grants. FEDERAL AND STATE FUNDING OF HIGHER EDUCATION, *supra* note 109.

124. *See supra* note 112.

125. *See* JOINT COMM. ON TAXATION, *supra* note 93 (estimating 2013 tax credit expenditures).

126. *See Income-Driven Plans*, FED. STUDENT AID, https://studentaid.ed.gov/sa/repay-loans/understand/plans/income-driven#eligible-loans (last visited Feb. 8, 2018).

work in a public service job as long as qualifying payments are made—even if those payments are based on discretionary income under another income-based repayment program.[127] Any amount forgiven is effectively a subsidy, just as if the student received a grant upon enrollment.[128] Only federal government student loans are eligible for income-based repayment programs.[129] In theory the subsidy is progressive (as it is based on income), but the Congressional Budget Office's 2017 projections indicate that much of the benefit may instead flow to well-off individuals with advanced degrees.[130]

Government student loans contain two other types of subsidies, both progressive. Some "subsidized" loans have a zero interest rate during college for certain low-income students.[131] The second subsidy occurs because all students pay the same fixed rate on unsubsidized loan, regardless of their credit risk.[132] Thus, lower-income individuals going to lower-ranked schools with bad job prospects receive a subsidy compared to someone attending a better institution, such as a top-ranked graduate

127. *Public Service Loan Forgiveness*, FED. STUDENT AID, https://studentaid.ed.gov/sa/repay-loans/forgiveness-cancellation/public-service (last visited Feb. 8, 2018) (qualifying employment positions include various non-profits, government work, and certain other jobs).

128. *See* John R. Brooks, *Income-Driven Repayment and the Public Financing of Higher Education*, 104 GEO. L.J. 229, 230–31 (2016) (describing income-driven repayment plans as "a system of full public financing of higher education paid for with progressive taxation").

129. *See Income-Driven Plans*, *supra* note 126.

130. CBO, CBO'S JANUARY 2017 BASELINE PROJECTIONS FOR THE STUDENT LOAN PROGRAM (2017), https://www.cbo.gov/sites/default/files/recurringdata/51310-2017-01-studentloan.pdf.

131. *See* Dynarski, *supra* note 49, at 14. Students can borrow up to $23,000 in subsidized loans if eligible; $3500 for year one of undergrad, $4500 for year two, and $5500 beyond. *See Subsidized and Unsubsidized Loans*, FED. STUDENT AID, https://studentaid.ed.gov/sa/types/loans/subsidized-unsubsidized (last visited Feb. 8, 2018) (discussing how subsidized loans are available based on financial need).

132. *Subsidized and Unsubsidized Loans*, *supra* note 131 (discussing that undergraduate direct loans have a fixed 4.29% interest rate; whereas graduate direct loans have a fixed 5.84% rate). Graduate rates are higher despite post-secondary students being a better credit risk. *See* Dynarski, *supra* note 49, at 13 ("Even though graduate students' loan balances are much higher, their default rate is only 3 percent, compared to 21 percent among undergraduate borrowers."); Jordan Weissmann, *Do Graduate Students Deserve Dirt-Cheap Loans?*, SLATE (Apr. 21, 2014), http://www.slate.com/articles/business/moneybox/2014/04/do_graduate_students_deserve_cheaper_loans_the_case_for_it_is_weak.html.

school.[133] It is unclear what the amount of these subsidies are.[134]

State and local governments provided an additional $71.8 billion in funding during academic year 2013–14 that subsidized student enrollment, almost all of it going to state schools.[135] This funding helps public institutions cost less than private institutions, though state funding has declined in recent years as federal funding has risen.[136] 62.2 billion dollars went to general-purpose appropriations—equating to $4186 per student attending a public university.[137] 9.6 billion dollars went to state-level financial aid grants ($466 per student).[138] The federal government provides an additional $3.8 billion for general-purpose appropriations ($184 per student).[139]

133. *See* Simkovic, *Student Loans*, *supra* note 21, at 590 ("Uniform pricing subsidizes the riskiest borrowers while profiting from the safest borrowers."); *see also* Dylan Matthews, *No, the Federal Government Does Not Profit Off Student Loans (In Some Years – See Update)*, WASH. POST (May 20, 2013), https://www.washingtonpost.com/news/wonk/wp/2013/05/20/no-the-federal-government-does-not-profit-off-student-loans/ (explaining that for many students, they would be unable to obtain a loan at a rate comparable to or lower than the government rate because they would be at higher risk, and discounting for risk reveals that many classes of loans would lose money). How large the subsidy is depends on what the market rate would have been controlling for the capital market failure. Some students with good credentials attending good schools actually pay an above market rate with federal loans, and can refinance into a lower interest rate. *See* Annamaria Andriotis, *Lenders Pitch Refinanced Loans to Former Students (Some of Them)*, WALL ST. J. (Jul. 30, 2015), http://www.wsj.com/articles/lenders-pitch-refinanced-loans-to-former-students-some-of-them-1438296345.

134. *See* CONG. BUDGET OFFICE, *supra* note 108, at 6–7.

135. *See* FEDERAL AND STATE FUNDING OF HIGHER EDUCATION, *supra* note 109 ("[S]tate funds primarily pay for the general operations of public institutions."). The $10.1 billion spent on "research, agricultural, and medical education appropriations" were not counted as aid for my paper. *Id.* at 3 fig.2. $9.2 billion in local general-purpose appropriations was included along with $53.0 billion in state general-purpose appropriations. *Id.*; *see also* JACKSON, *supra* note 25, at 3 ("A majority of [direct appropriations from state and local governments are] used to minimize tuition charges for in-state students.").

136. FEDERAL AND STATE FUNDING OF HIGHER EDUCATION, *supra* note 109, at 5 fig.4.

137. Calculated using FEDERAL AND STATE FUNDING OF HIGHER EDUCATION, *supra* note 109, and *Digest of Education Statistics: 2013*, *supra* note 106, at tbl.303.10 (14,857,000 students at public institutions). This roughly tracks the $3800 difference between taxpayer support for for-profit schools and community colleges found by Stephanie Riegg. *See* Stephanie Riegg, *For-Profit Higher Education: An Assessment of Costs and Benefits*, 65 NAT'L TAX J. 153, 168 (2012).

138. Calculated using FEDERAL AND STATE FUNDING OF HIGHER EDUCATION, *supra* note 109, at fig. 2, and *Digest of Education Statistics: 2013*, *supra* note 114, at tbl. 303.10 (20,597,000 students at all schools).

139. *Federal and State Funding of Higher Education*, *supra* note 111, at 3 fig.2; *Digest of Education Statistics: 2013*, *supra* note 106, at tbl.303.10 (20,597,000 students at all schools).

b. Assessing government aid allocation

The government's allocation of aid suffers from several serious flaws. First, as discussed in many other articles, it does not seem properly weighted towards the marginal students who most need the nudge to attend school.[140] Second, unnecessary transaction costs are often tied to the aid—such as a needlessly complicated structure or difficult to complete forms.[141] Third, and most importantly for this Article, the structure of aid and regulations worsens the overinvestment problem while weakening its positive impact on the underinvestment problem.[142] The Article focuses on this last problem the most, though not exclusively, since all of these issues overlap to some degree.

Before proceeding to Part III, it is helpful to provide examples of the amount of aid several hypothetical students attending different schools would receive (see Figure 2).[143] The four school types analyzed are: (1) low-cost private ($8000/year tuition), (2) low-cost public ($8000/year tuition), (3) high-cost private ($25,000/year tuition), and (4) high-cost public ($25,000/year tuition). Lower-income students tend to benefit more from aid. Counterintuitively, older students end up receiving less in total aid, despite being able to not count on their parents' income for aid purposes.[144] The main reason for this is because of how non-education related tax credits, such as the earned-income tax credit, treat younger adults who can be claimed as dependents

140. *See Tax Benefits for College Attendance*, *supra* note 18 (discussing how the poor design of some subsidies renders them ineffective). For example, the progressive nature of the Pell Grant is offset somewhat by the distribution of tax expenditures. The "other tax expenditure" amount of $10.4 billion was drawn from TAX REFORM 2013, *supra* note 123, at 7.

141. *See, e.g.*, Julia Glum, *FAFSA Too Complicated? Financial Aid Process Should Be Easier, Say Experts, Politicians*, INT'L BUS. TIMES (Jan. 7, 2015), http://www.ibtimes.com/fafsa-too-complicated-financial-aid-process-should-be-easier-say-experts-politicians-1776446 (describing arguments from experts who say the financial aid system should be simplified so low-income students are not discouraged from applying for aid).

142. *See infra* Part III. (describing the problem in more detail).

143. For the calculations and methodology relating to Figure 2, *see infra* Appendix, *Estimated Aid to Hypothetical Students*, Tables A-3, A-4.

144. *Dependency Status*, FED. STUDENT AID, https://studentaid.ed.gov/sa/fafsa/filling-out/dependency (last visited Feb. 8, 2018) (explaining how to determine whether a student qualifies as an independent or dependent student).

on their parents' tax return.[145]

Figure 2 – Government Aid For Hypothetical Students[146]				
Student Category[147]	School Category			
	Low-Cost Private ($8,000)	Low-Cost Public ($8,000)	High-Cost Private ($25,000)	High-Cost Public ($25,000)
$20K AGI (Dependent)	$9197	$13,377	$9274	$13,454
$50K AGI (Dependent)	$6419	$10,599	$6418	$10,598
$100K AGI (Dependent)	$4108	$8288	$4108	$8288
$20K AGI (Independent)	$7154	$11,334	$7231	$11,411
$50K AGI (Independent)	$6175	$10,355	$6175	$10,355
$100K AGI (Independent)	$3500	$7680	$3500	$7680

2. Government regulations

The government has promulgated various laws and regulations in an attempt to ensure subsidies do not flow to bad

145. *Id.*; *see also* Steve Lander, *Does Having More Dependents Help to Get a Pell Grant?*, NEST, https://budgeting.thenest.com/having-dependents-pell-grant-33851.html (last visited Feb. 9, 2018).

146. For the calculations and methodology relating to Figure 2, *see infra* Appendix, *Estimated Aid to Hypothetical Students*, Tables A-3 & A-4.

147. All income is calculated based on aggregate household income. *See infra id.* For a dependent student, household income includes parents' income. For an independent student, household income is just the student's income. AGI stands for "Adjusted Gross Income."

schools. Many of these regulations accord with the optimal fiscal system theory and bad school definition this Article proposes by attempting to prevent prospective students from enrolling in underperforming schools or schools they are not prepared for. This sub-section briefly reviews the following regulations: (1) the GER's debt-to-income test, (2) other regulations restricting the disbursement of federal aid, (3) restrictions on state aid disbursement, and (4) disclosure requirements.

a. The gainful employment rule

The GER was enacted in October 2014 in an attempt to ensure that certain schools delivered a minimum level of success to their students.[148] The GER only targets one kind of institution listed in the HEA[149]—schools providing "not less than a one-year program of training to prepare students for gainful employment in a recognized occupation."[150] The key component of the GER is a debt-to-earnings ratio test (D/E test).[151] A program can be barred from receiving HEA funds if it fails the D/E test, but dropouts are not considered in the formula.[152] The GER also mandates various general disclosures, such as the cohort default rate on student loans.[153]

b. Other federal restrictions

Various other federal regulations try to prevent prospective students from choosing bad schools. For example, loan default caps encourage schools to not enroll too many students who will end up defaulting, by sanctioning the school if default rates

148. *See* Program Integrity: Gainful Employment, 79 Fed. Reg. 64,889, 65,035 (Oct. 31, 2014) (codified at 34 C.F.R. §§ 600, 668).

149. *Id.* at 64,890 (discussing how it is targeting institutions listed under 20 U.S.C. § 1001(b)(1) (2016) (training programs that do not result in bachelor or associate degrees); § 1002(b)(1)(A)(i) (for-profit training programs); § 1002(c)(1)(A) (training programs that do not result in bachelor or associate degrees)).

150. 20 U.S.C. § 1001(b)(1).

151. *See* 34 C.F.R. § 668.403(b) (2016).

152. *Id.* § 668.403(c)(4).

153. *Id.* § 668.412.

exceed certain amounts.[154] High default rates can result in a school no longer being eligible to participate in federal loan and Pell Grant programs.[155] If a school's three most recent cohort default rates are 30% or greater,[156] or the school's current default rate is greater than 40%, the school will lose HEA program eligibility unless it successfully appeals.[157] Most of the appeals involve challenging the underlying data, but demonstrating "a high number of low-income students and high placement or completion rate" can also result in a stay of a suspension.[158]

There is also the 90/10 rule, which mandates that for-profit schools must derive at least 10% of their "revenue from sources other than funds provided under" the HEA.[159] This rule presumes if schools derive most of their revenue from federal funds, it could be an indicator they are bad schools. Unfortunately, this rule is easily avoided. For example, veterans' benefits do not count as funds provided under the HEA.[160]

c. Other state restrictions

Schools must also comply with any applicable state regulations. State governments usually have a great deal of power over public schools within the state.[161] States have two additional ways to combat the bad school problem that apply to all schools in their jurisdiction. First, to qualify under the HEA, a school has to be able to operate in a state, which requires it to

154. U.S. DEP'T EDUC., COHORT DEFAULT RATE GUIDE, at 2.4–2 (2017), https://ifap.ed.gov/DefaultManagement/guide/attachments/CDRMasterFile.pdf [hereinafter COHORT DEFAULT RATE GUIDE].

155. *Id.*

156. *Id.* § 2.1-2 (defining a cohort default rate as the percentage of a school's students who borrow federal loan, enter repayment, and then default within three fiscal years). "The phrase 'cohort fiscal year' . . . refers to the fiscal year for which the cohort default rate is calculated." *Id.*

157. *Id.* § 2.4-4.

158. *Id.* § 2.4-5.

159. 20 U.SC. § 1094(a)(24) (2016).

160. Paul Fain, *Clinton on Veterans and the 90/10 Rule*, INSIDE HIGHER ED. (June 22, 2015), https://www.insidehighered.com/quicktakes/2015/06/22/clinton-veterans-and-9010-rule ("Under current regulations, veterans' educational benefits like the Post-9/11 GI Bill do not count toward that 90 percent limit.").

161. *See* Kelly Knivila, *Public Universities and the Eleventh Amendment*, 78 GEO. L.J. 1723, 1729–33 (1990) (discussing public universities historical relationship with states).

be accredited in accordance with state law.[162] Second, states can control how difficult it is to obtain a high school degree or its equivalent within their borders, which impacts what individuals can enroll in schools.[163]

d. Disclosure requirements

The HEA also contains several disclosure requirements designed to correct perceived internalities and other market failures. One provision requires schools that advertise job placement rates to disclose comprehensive recent data about employment statistics, graduation rates, and relevant licensing requirements.[164] Information about grants and loan policies must also be disclosed.[165] The recent "College Scorecard" initiative attempts to provide clear, accurate, and up-to-date data on "college cost, graduation [rates], debt, and post-college earnings" so that students can better select colleges "that will help them learn, *graduate*, and *find jobs*."[166] Additionally, the GER requires colleges to collect and potentially disclose various types of information, such as the completion rates and total cost including supplies.[167]

III. BAD SCHOOLS: UNPREPARED STUDENTS AND UNDERPERFORMING SCHOOLS

Under the current system too many schools are able to enroll

162. 20 U.S.C. § 1094(a)(21).

163. *See Standard High School Graduation Requirements (50-State)*, EDUC. COMMISSION STATES, http://ecs.force.com/mbdata/mbprofall?Rep=HS01 (last updated 2007) (detailing the high school graduation standards for all fifty states); *see also* § 20 U.S.C. 1001(a)(1) (requiring enrolled students to have high school degrees with certain exceptions).

164. 20 U.S.C. § 1094(a)(8).

165. *Id.* § 1094(a)(9), (25) (requiring that schools develop a code of conduct regarding loans that prohibits a conflict of interest and "publish such code of conduct prominently on the institution's website").

166. Press Release, White House, Fact Sheet: Empowering Students to Choose the College that is Right for Them (Sept. 12, 2015) (emphasis added), https://obamawhitehouse.archives.gov/the-press-office/2015/09/12/fact-sheet-empowering-students-choose-college-right-them.

167. *See* 34 C.F.R. § 668.412 (2016).

unprepared students who receive significant government subsidies, despite those students having little chance of success. The current system also fails to adequately prevent subsidies from flowing to bad schools that underperform their peers. Both private returns and social returns would not normally justify students' enrollment in bad schools—after all, many of these students (and society) end up worse off for enrolling. Yet, excessive subsidies make bad overall investments better for students.[168] Moreover, evidence suggests vulnerable individuals may suffer from internalities, such as being overly optimistic, that cause them to be more likely to attend bad schools anyway.[169] Poorly designed subsidies exacerbate this problem.

The bad-schools problem costs taxpayers billions of dollars each year, and it leads to hundreds of thousands of students being left worse-off economically than before they enrolled. For example, the 2011 cohort of students had an average default rate of 10%—with those attending for-profit schools defaulting at a 13.6% rate, those attending public schools defaulting at a 9.6% rate, and those attending private schools defaulting at a 5.2% rate.[170] Default rates appear to be significantly higher for dropouts across the board. For those seeking a bachelor's degree, the six-year completion rate was 59%.[171] It was significantly lower at for-profit schools (23%) and schools with open admissions policy (32%).[172] There are also serious questions about how much of a wage premium, if any, many prospective students are actually receiving.[173] Thus, if just 10% of prospective students end up in bad schools—and remember that more than 40% of students pursuing bachelor degrees drop out—at

168. For example, even if the total expected private gain from enrollment (based on the school, the student's credentials and other relevant factors) is only $100, the social benefit is $0, and the total cost is $10,000, a $10,000 subsidy might induce the student to enroll.

169. *See infra* Part III.A.–B. (reviewing the evidence).

170. Clare McCann, *Federal Student Loan Default Rates*, EDCENTRAL, http://www.edcentral.org/edcyclopedia/federal-student-loan-default-rates/ (last visited Mar. 30, 2018).

171. *Fast Facts: Graduation Rates*, NAT'L CTR. EDUC. STAT., https://nces.ed.gov/fastfacts/display.asp?id=40 (last visited Mar. 30, 2018).

172. *Id.*

173. Quinton, *supra* note 52 (arguing that data shows 72% of career college programs produce graduates that go on to earn less than high school dropouts).

least $14 billion a year of government aid would be going to schools for prospective students who are left no better, and usually worse, off. Furthermore, because attendees of bad schools tend to be less well-off and eligible for more aid, the dollar amount of aid is probably larger. It is also larger because those students end up having to use income-based repayment programs more since they earn less, leaving taxpayers to pick up a portion of the bill.

As elaborated upon in Part IV, policymakers should take into account both the unprepared student and underperforming school problems when designing school subsidies.

A. The Unprepared Student Theory

An unprepared student problem occurs when a student enrolls and her expected total return is negative, assuming average school quality. A student's expected total return can be estimated by looking at the student's ex-ante credentials (e.g., test scores, GPA, other predictive factors), the school and program she enrolls in, and comparisons to similar students and the results they achieved. For many reasons some students are very likely not to complete a specific program or obtain a job that makes enrollment worth it to them, even if they do complete the program. Even worse, many of these students could do well if they enrolled in a different program.

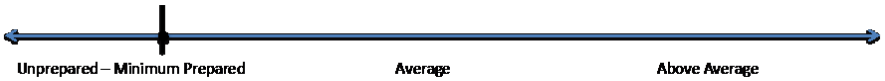
1. The theory

Assuming a school has average quality,[174] an "unprepared" student is one whose total expected return would be negative if she enrolled. Students' level of preparedness can be visualized on a spectrum (see Figure 3), ranging from unprepared to very prepared. A minimally prepared student would be one whose expected total return is zero, assuming an average quality school. An unprepared student may still expect a positive total return if the school is above average, but otherwise would have

174. This means it would provide the returns expected in a given field controlling for a student's entering credentials.

a negative total return.[175] A school is bad if it enrolls too many unprepared students by taking advantage of the issues that create the problem below to obtain government (and student) funds.

Figure 3 – Student Preparedness



In a functioning market, a prospective student would not make this kind of bad investment.[176] This is also true in a world with properly designed subsidies, since those would correct any unaccounted for internalities, externalities, and market failures. Different forces, such as poorly designed subsidies, market failures, and internalities, combine to cause unprepared students to enroll in programs that have a negative total return.[177] The following hypotheticals illustrate these causes:

Anthony has recently graduated from high school and is considering a two-year program. Anthony's credentials indicate that his ex-ante chance of graduating the program is low. If the subsidy is proper, his predicted performance, based on his ex-ante credentials and the ex-post record of similar students, is as follows (see figure 4):

Figure 4 – Proper Subsidy Program Returns	
	Two-Year Program
Cost (Tuition + Foregone Earnings)	$40,000 ($20,000 + $20,000)

175. *See infra* Section III.B.

176. This Article assumes there are no negative externalities to obtaining an education. *But see* NORMAN H. NIE ET AL., EDUCATION AND DEMOCRATIC CITIZENSHIP IN AMERICA (1996) (arguing that negative externalities offset positive externalities as they relate to political engagement).

177. *See supra* Section II.A.2.

Chance of Completing Year One	25%
Chance of Completing Year Two	50%
IRR (private)[178]	-1.05% Expected Value: ($4226)
IRR (Total Return Adjusted for Social)[179]	-0.22% Expected Value: ($904)
Proper Subsidy (Total) [180]	$2750/year Total Cost: $5500

178. The private Internal Rate of Return (IRR) is calculated by multiplying the expected graduation rate by the expected present value of the cash flow premium each year, and then adding the expected dropout rate times the expected present value cash flow premium for some college, no degree. For the two-year program the expected IRR for graduating is 10.62%, and for some college, no degree, 7.15%. For cost, it is assumed that if the person fails out in the first year, the person does not attempt it again, and does not pay for the second year, but instead works—thus costs are pro-rated accordingly (six out of every seven students who fail will fail out their first year, thus the expected cost paid by those who fail for the second year is 1/7 the actual tuition amount, adjusted upward by a small amount for those students working who gain a some college, no degree pay bump). *See generally* Harris S. Shultz, *Internal Rate of Return*, 98 MATHEMATICS TEACHER 531 (2005) (discussing IRR calculations and investment choices); Anthony Bottomley & John Dunsworth, *Rate of Return Analysis and Economies of Scale in Higher Education*, 8 SOCIO-ECON. PLANNING SCI. 273 (1974) (discussing IRR in the context of higher education investing).

179. It is assumed that the social benefits of failing to graduate are zero, but that a 20% positive externality bump exists if the individual graduates (this social benefit is added to all earnings for calculation purposes). Thus, the total return IRR is 13.18% if the person graduates the two-year school, but the overall return is still negative because most people fail to graduate. *See infra* Appendix, *Excess Subsidy Problem*, Table A-6.

180. A proper subsidy in theory is one that corrects for unaccounted social returns and internalities. *If the school still has a negative return for a prospective student, that student should not enroll*. There are several ways to correct the IRR so that it accounts for social returns. The IRR can be corrected either by reducing the cost of the upfront investment or increasing the return to the person making the investment. Imagine that John is deciding between two investments (ignoring discounting), of which he can only pick one: A, which costs ($100) in year zero and yields $100 in year one and $100 in year two (62% IRR); or B, which costs ($100) and yields $50 in year one and $50 in year two (0% IRR). John will pick A. Now, imagine B also yields social benefits of $100 in year one and $100 in year two: the total return of the investment is 119%. The government could make an upfront transfer of $66.70 to John in year zero, such that he only needs to invest $33.30 in year 0 to receive $50 in year one and year two (119% IRR). John will now choose B. The government acts as a partner in the investment and thus retains a portion of the social returns ($200 - $66.70 = $133.30). John can now spend his remaining $66.70 elsewhere. The government could also increase the return to John's investment, adding $100 to the return in year one and year two (making John's personal return equal the total return of 119%). In this scenario, John must invest all of his $100, but he receives 100% of the social returns. I assume an upfront subsidy for each year of enrollment, both because reducing the upfront expenditure is often necessary to encourage students to enroll, that is how the current system is designed, and back-end subsidies would be technically complex and result in high transaction costs.

Post-Transfer Private Return	-0.16% Expected Value: ($805)
Residual Social Gain (Loss)	($96)
Final Total Return	-0.22%

Anthony will not choose to enroll even if the government has provided a subsidy to Anthony that transfers all of the social benefits to him. While there are some social benefits, they are not enough to make the total return positive. Anthony will choose another program.

If Anthony receives an excessive subsidy because of design flaws, then he may end up enrolling in the school even though the total return is negative. His private return is positive only because of the poorly designed excessive subsidy, such as in Figure 5.

Figure 5 – Misaligned Subsidy Program Returns	
	Two-Year Program
Cost (Tuition + Foregone)	$40,000 ($20,000 + $20,000)
Chance of Completing Year One	25%
Chance of Completing Year Two	50%
IRR (private)	-1.05%
IRR (adjusted for social)	-0.22%
Subsidy (Proper)	$2750/year Total Cost: $5500[181]

Even after transfers have been made to correct the IRR so that it reflects internalities and externalities, excess societal loss or gain may exist. Whether to do an upfront subsidy, a back-end subsidy, or some kind of hybrid is a distributional question best left for another paper, as it does not affect my analysis. This example also illustrates another distributional question I do not address—if the government could provide an upfront subsidy less than that necessary to have the IRR equal the total return, but still enough to encourage the prospective student to enroll, should it do so and retain an additional portion of the social return? Sakano et al., *supra* note 91.

181. The expected present value cost to the government is only $3417 because most students will only use one year of benefits before dropping out. *See infra* Appendix, *Excess Subsidy Problem*, A-7.

Subsidy (Actual)	$8000/year Total Cost: $16,000
Final Private Return	2.07% Expected Value: $5716
Final Total Return[182]	-0.22%

This poorly designed subsidy encourages Anthony to attend a bad school. Poorly targeted subsidies may even steer students away from programs that would have led to better results.[183] Imagine Anthony was better prepared for another program, such as a community college career program, one in which he had a higher chance of graduating, a higher expected value, and a positive return on investment (ROI). He may logically choose the two-year program because of bad government intervention that distorts costs and benefits, such as by providing a lump sum subsidy that is excessive for some schools, but not enough for others.[184] Yet, he would have been much better off just receiving the $16,000 subsidy in cash.

Poorly targeted subsidies can also create an incentive for prospective students to gamble on schools they are unlikely to benefit from. If the school is cheap enough that aid covers most of the cost, and a few graduates do well, students can roll the dice. If they succeed, they capture the private returns. If they fail, then the government bears most of the cost. This problem worsens if a prospective student suffers from optimism bias.[185] For example, if Anthony incorrectly believes he is 60% likely to complete Year 1 and Year 2 of the two-year program from Figures 4 and 5, even though he is not, he might choose it over a program he would actually be more likely to graduate and have

182. The final total return never changes, regardless of the size of the transfer. The expected present value of the earnings premium plus positive externalities does not become positive regardless of the size of the transfer, since that cost is accounted for in this metric. *Compare* Figure 4, *with* Figure 5.

183. *See* Michael R. Bloomberg & Jamie Dimon, *The Skills Schools Aren't Teaching But Must*, BLOOMBERG (May 16, 2016), https://www.bloomberg.com/view/articles/2016-05-16/the-skills-schools-aren-t-teaching-but-must (arguing that America should redirect resources to career and technical education, instead of putting students "on traditional academic tracks that lead to dead ends").

184. *See infra* Part III.A.2. (discussing the cheap school bias issue).

185. *See infra* Part III.A.2.

a positive ROI if the subsidy is too large. Compounding the problem, Anthony might struggle to compare costs and outcomes because of the complexity of financial aid and the difficulty in calculating accurate ROIs for programs due to a shrouded costs problem or aggressive and misleading advertising.[186]

2. *The evidence and causes*

Unfortunately, there is evidence that poorly targeted subsidies worsen the unprepared student problem. Prospective students attending schools with a very low graduation rate (such as less than 30%) and low earning premiums often have most or all of their tuition covered by government aid. For example, "90% of University of Phoenix Online Campus students received grant aid in [academic year] 2014–15."[187] Those grants averaged $5362, more than half of the total tuition and fees charge of $10,188.[188] Many of these schools also rely heavily on veterans' benefits, which create the same excess subsidy problem for their recipients.[189] In addition to government grants, these prospective students usually qualify for an additional one to two thousand in federal tax credits, several hundred dollars of student loan subsidies, and back-end benefits, such as income-based repayment programs.[190]

These large up-front subsidies (combined with loans) may entice students to try and improve their economic prospects by enrolling in schools, given that the personal cost to them may seem very low, especially if they can work part-time. Compounding this problem is the message that everyone benefits

186. *See* BLEEMER & ZAFER, *supra* note 42; Alderdice, *supra* note 19.

187. *Tuition and Cost to Attend University of Phoenix Online Campus*, COLLEGECALC, http://www.collegecalc.org/colleges/arizona/university-of-phoenix-online-campus/ (last visited Apr. 1, 2018).

188. *Id.*

189. *See, e.g.*, Glantz, *supra* note 60.

190. *See infra* Appendix, *Estimated Aid to Hypothetical Students*, Tables A-3, A-4. Prospective students who are still dependents mainly receive a subsidy via an increased earned-income tax credit for their parents. For independent students, the main tax subsidy comes from the American Opportunity Tax Credit.

from education that is relentlessly pushed in American society.[191] Concerns about advertising also motivate many mandatory disclosure requirements, such as the HEA requirement that job placement information must be clear and complete if used in advertising.[192] The GER recognizes the dangers of this message being used by bad schools—it specifically criticizes programs for engaging in "aggressive or deceptive marketing and recruiting practices."[193] It is unclear, however, how much effect either mandatory disclosures or advertising actually has in correcting misperceptions.[194]

Large subsidies can also combine with optimism bias to unintentionally encourage unprepared students to gamble on bad schools with a low graduation rate because each student will think she is the exception. Optimism bias is a person's mistaken belief that things will turn out better than they do. For example, "[s]econd-year MBA students were found to overestimate the number of job offers they would receive, the magnitude of their starting salary, and how early they would receive their first offer."[195] Students may overestimate their chances of graduating, because they "expect to receive higher scores on exams, at least when those exams are still some time away, then they actually receive."[196] When facing situations with much uncertainty about being able to graduate or obtain a job, prospective students might assume that while other people may fail, they are far less likely to.[197] Students may also overestimate the wages in their own field or how much different degrees earn in general.[198]

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191. Avery & Turner, *supra* note 40, at 168 (describing how the "connection between educational attainment and career success" is well publicized but students may not understand how their characteristics impact the expected value of their investment in education).

192. 20 U.S.C. § 1094(a)(8).

193. Program Integrity: Gainful Employment, 79 Fed. Reg. 64,889, 64,907 (Oct. 31, 2014) (to be codified at 34 C.F.R. pt. 600, 668).

194. Alderdice, *supra* note 19, at 244–48 (discussing the debate).

195. David A. Armor & Shelley E. Taylor, *When Predictions Fail: The Dilemma of Unrealistic Optimism*, *in* HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT 334, 334–35 (Thomas Gilovich et al. eds., 2002).

196. *Id.* at 334.

197. *Id.* at 336 ("[B]etween 85% and 90% of respondents claim that their future will be better—more pleasant and less painful—than the future of an average peer.").

198. Simkovic, *Student Loans*, *supra* note 21, at 582–84.

A related problem is superiority bias, or the fact that most people tend to believe they are above average in certain situations.[199] Part of this sense of superiority relates to intelligence.[200] In fact, Richard Thaler in *Nudge* discusses a survey he conducts each year asking where his students will end up on the grade distribution: "Typically less than 5 percent of the class expects their performance to be below the median (the 50th percentile) and more than half the class expects to perform in the top [20%]. Invariably, the largest group of students put themselves in the second decile [i.e., the top 20%, but not the top 10%]."[201]

Optimism bias and large subsidies can also combine with prospective students' general sense that education produces positive personal returns to mislead with respect to specific schools. This can be characterized as an anchoring problem—prospective students begin with the default position that pursuing higher education is good for them. Bad schools may be free-riding on this truth to encourage prospective students to enroll to better themselves, even though the prospective students will be left worse off. Calculating the ROI on various programs is incredibly difficult, because of incomplete data, misleading data, determining the personal utility component (if any), and all the other various assumptions that can complicate actual results.[202] In some cases the student may end up with a marginally positive personal return because the subsidy is so large, even as society is left worse off—though the individual student would have been better off with a straight cash transfer as opposed to the subsidy.[203]

A final problem is that the current system unjustifiably favors lower-cost institutions, even though evidence suggests that less prepared students tend to need more support.[204] If one assumes

199. *See* Corey L. Guenther & Mark D. Alicke, *Deconstructing the Better-Than-Average Effect*, 99 J. PERSONALITY & SOC. PSYCHOL. 755, 755 (2010).

200. *See* RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS 32 (2009).

201. *Id.*

202. Such as what discount rate to use, or even knowing what a discount rate is.

203. *See supra* Figures 4, 5.

204. *See Evaluation of Accelerated Study in Associate Programs (ASAP) for Developmental Education Students*, MRDC.ORG, http://www.mdrc.org/project/evaluation-accelerated-study-

that pre-government intervention, all schools have similar rates of return after controlling for risk, then aid should be given on a pro-rata basis. Lump-sum aid grants that do not take into account the cost of the school favor cheaper schools by increasing their return on investment relative to more expensive schools. Yet, expensive schools might actually do a better job of educating their students if a grant is given on a pro-rata basis—possibly by providing more support to students likely to drop out.[205]

Providing too much aid to lower-cost institutions relative to high-cost institutions distorts enrollment patterns. It also can encourage students to enroll in institutions that produce less total returns, including negative total returns, because their personal returns will be higher (see Figure 6). It may also worsen internalities that make students too risk-averse in taking on debt,[206] encouraging them to enroll in a low-cost institution where they are unlikely to succeed rather than a more expensive, but much better, school. It can even encourage students to enroll in bad schools rather than good schools.[207]

Figure 6 – Low-Cost School Bias		
	Low-Cost School (4-year)	High-Cost School (4-year)
Cost[208]	$36,000 + $80,000 = $116,000	$100,000 + $80,000 = $180,000

associate-programs-asap-developmental-education-students#overview (last visited Jan. 18, 2018) [hereinafter *Evaluation of ASAP*].

205. *See id.*

206. *See* Ghandi, *supra* note 18, at 14–16 (arguing students may be irrationally loss-averse with respect to loans). Students are not likely to treat foregone earnings and taking out a loan equally because of risk aversion. *See id.*

207. Imagine the numbers in Figure 6 mirrored the situation faced by Anthony in Figure 5. A low-cost school might go from providing a negative total return, worse than that of a high-cost school, to providing a higher private return for the student. Or, if a student has too high of confidence in his chance of graduating, a poorly targeted subsidy may lead the student to a low-cost school that results in a negative return for everyone, rather than a high-cost school that results in a positive return for everyone.

208. Cost equals tuition and books plus foregone earnings.

Initial Internal Rate of Return[209]	8.73%	8.73%
Aid (assuming 20K AGI)	$36,788	$37,096
New Investment Cost	$79,212	$142,904
New ROI[210]	11.90%	8.49%

An optimal subsidy system would adjust for internalities and externalities and encourage prospective students to avoid these bad schools. It would make sure a prospective student such as Anthony did not receive too large of a subsidy and might even provide him ex-ante data showing his estimated return, including when it is negative (see Figure 4).[211] Properly targeted subsidies combined with warnings to prospective students when their enrollment would lead to a negative personal return would greatly mitigate this "unprepared student" problem. Properly targeted subsidies would also avoid unintentionally rewarding low-cost schools with low graduation rates or create a bias toward such schools (see Figure 6). The current system, however, does none of these things well.

Instead, poorly targeted subsidies unintentionally encourage hundreds of thousands of students to enroll in school programs at which their chance of successfully completing the program is low (and even upon successful completion, the odds of a positive return on investment were far from guaranteed).[212] Students enrolled in institutions like ITT Tech or Corinthian Colleges with most of their costs covered, confident they could beat

209. These figures are adjusted for externalities, starting with a 12% internal rate of return before applying a 3% discount, and utilizing 40 years of post-tax, even cash flows. *See infra* Appendix, *Low-cost School Bias*, Table A-2 (describing calculations).

210. *See infra id.* (describing calculations).

211. *See* Avery & Turner, *supra* note 40, at 188 (arguing students should try to estimate their return on investment by looking at how other students with similar traits fared at their prospective school).

212. *See* MAMIE LYNCH ET. AL, EDUC. TR., SUBPRIME OPPORTUNITY: THE UNFULFILLED PROMISE OF FOR-PROFIT COLLEGES AND UNIVERSITIES 3–5 (2010), http://edtrust.org/wp-content/uploads/2013/10/Subprime_report_1.pdf (looking at six-year graduation rates for several for-profit colleges).

the odds (or ignorant of how bad those odds are), and convinced they were doing everything right by bettering themselves through education.[213] Some of these individuals were behaving rationally by using the poorly targeted subsidies to engage in positive expected-value behavior (see Figure 5). Others, such as those over-estimating graduation rates, were victims of bad schools' ability to feed off of government aid while enrolling students who had little chance of succeeding.

One might respond that students are primarily attending many of these institutions to reap non-materialistic personal benefits. A school for aspiring playwrights or art history majors may not yield a positive personal economic return, but most people do not enter certain professions for the money.[214] The normative arguments for including personal consumption are outside the scope of this Article, but the value of personal consumption is included when calculating the total return.[215] Critics could argue that while this Article includes it, assessing personal consumption benefits is extremely difficult and too often ignored in favor of a purely economic calculation.[216] This is inaccurate for several reasons. First, for many career training

213. This same phenomenon extends to various non-profit undergraduate and graduate schools. A 2010 study found that for two-year programs, completion rates at for-profit schools (60–66%) are better than those for public community colleges (22%). *Id.* at 3. Allen University, a non-profit historically black school, had a four-year graduation rate of 9% for the class entering in the fall of 2010. *Allen University*, NAT'L CTR. FOR EDUC. STAT., https://nces.ed.gov/collegenavigator/?q=allen&s=all&id=217624#retgrad (last visited Mar. 30, 2018). Further, only 48% of their first-year, full-time students who began in fall 2015 returned for fall 2016. *Id.* Nor are undergraduate schools the only ones with this issue. *See* Staci Zaretsky, *Law Schools with Low LSAT Medians Have Absurd Academic Attrition Rates*, ABOVE L. (Jan. 17, 2018, 1:16 PM), https://abovethelaw.com/2018/01/law-schools-with-low-lsat-medians-had-absurd-academic-attrition-rates/; *see also* sources cited *supra* note 62 (addressing various problems among law schools). For example, in 2015, Whittier Law School had about 34% of its first-year class drop out or suspend their enrollment, and only 47% of its students passed a bar exam during their 2014-year attempts. *2015 Standard 509 Information Report*, WHITTIER L. SCH. (2015), https://www.law.whittier.edu/resources/pdfs/Whittier-Law-School-509-Report-2015.pdf.

214. Ironically, art history majors actually do quite well, being overrepresented among the wealthiest one percent, though this almost certainly because of selection bias. *See* Robert Gebeloff & Shaila Dewan, *What the Top 1% of Earners Majored in*, N.Y. TIMES: ECONOMIX (Jan. 18, 2012, 10:00 AM), https://economix.blogs.nytimes.com/2012/01/18/what-the-top-1-of-earners-majored-in/?_php=true&_type=blogs&_r=0.

215. *See supra* Section II.A.1.

216. The debate over whether we should prioritize programs that lead to jobs or a liberal education is a long one, and far outside the scope of this article. *See generally* Larry D. Shinn, *Liberal Education vs. Professional Education: The False Choice*, TRUSTEESHIP MAG. (Jan./Feb. 2014),

schools, the personal consumption argument is much weaker, as the matriculated student's economic interest is much more apparent. Therefore, ignoring benefits could very well be justified. Second, if less than 20% of students are graduating,[217] it is hard to determine the amount of personal consumption benefits the students are receiving, especially if they do not enjoy many of the things we think lead to personal enjoyment (a job in the field, a traditional college experience, etc.). Third, many programs may actually result in negative personal consumption benefits, but these are outweighed by positive economic benefits.[218]

Finally, several plausible steps could be taken to account for personal consumption benefits, if deemed worth tracking.[219] Analysis could focus on inter-program performance so that a materialistic program is not pitted against a non-materialistic program. This is based on the assumption that personal utility accounts for the reason students self-select into these different programs. Another solution might involve collecting information from students themselves about their expected ROI and preferences before they begin a program and then surveying them again after they graduate. Third, measuring changes in behavior in response to transparency initiatives may reveal students' actual underlying preferences.

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https://www.agb.org/trusteeship/2014/1/liberal-education-vs-professional-education-false-choice (examining liberal education and why it is important); Tim Worstall, *Should We Abolish Liberal Arts Degrees? Quite Possibly, Yes*, FORBES (Sep. 1, 2012, 11:08 AM), https://www.forbes.com/sites/timworstall/2012/09/01/should-we-abolish-liberal-arts-degrees-quite-possibly-yes/#601d43f42608 (viewing liberal education as an outmoded model that states should cease supporting).

217. *See, e.g.*, *Allen University*, *supra* note 213.

218. *See* Simkovic, *Knowledge Tax*, *supra* note 2, at 1992 (discussing several studies suggesting "that education has *negative* consumption value"); *see also* Eilene Zimmerman, *The Lawyer, the Addict*, N.Y. TIMES (July 15, 2017), https://www.nytimes.com/2017/07/15/business/lawyers-addiction-mental-health.html (discussing the serious negative psychological effects law school has on law students).

219. *See infra* Part IV. (discussing GER changes that include student surveys and comparisons among otherwise different schools with different personal consumption elements, such as size and geography).

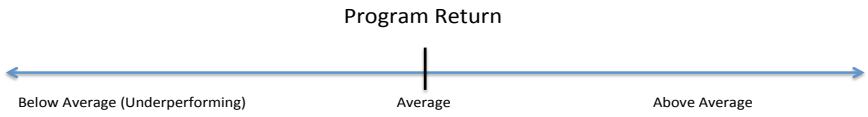
B. The Underperforming Schools Theory

The other main cause of the bad school problem is underperforming schools. These bad schools produce a lower total return, after controlling for personal consumption and a student's ex-ante credentials, than a similar school. Unlike the unprepared student problem, which may be solely caused by a rational reaction to poorly targeted subsidies, this problem always has at least one other cause. Poorly designed subsidies, however, greatly contribute to its occurrence.

1. The theory

Controlling for ex-ante student credentials, a school program that produces a lower ROI after accounting for personal consumption value relative to another school is underperforming. This problem can be displayed on a chart, such as in Figure 7 below. This chart should not imply an equal distribution—almost all schools might perform as well as one would expect, with only a few outliers in each direction. Alternatively, schools could be widely distributed on the spectrum. The underperforming problem is a direct result of the school failing in some way, as opposed to a school performing about as expected but enrolling too many unprepared students.[220]

Figure 7



In theory, the problem exists if two schools with similar programs, such as nursing, produce very different utility outcomes. Assuming equal personal consumption value, if Bad

220. For example, schools that have subpar academics but are not cheaper. *See* STAFF OF S. COMM. ON HEALTH, EDUC., LABOR & PENSIONS, 112TH CONG., FOR PROFIT HIGHER EDUCATION: THE FAILURE TO SAFEGUARD THE FEDERAL INVESTMENT AND ENSURE STUDENT SUCCESS 7–8 (Comm. Print 2012) [hereinafter HARKIN REPORT] (discussing how for-profit schools had academic quality and student service issues).

School has an IRR of 3% and Good School has an IRR of 10% for their students, but they are identical in all other ways, including students' characteristics, Bad School would be considered underperforming.[221]

Personal consumption should be accounted for as well when it comes to preparing student returns. If one compared the return on investment from schools training playwrights to those training engineers, it may appear that the playwright programs greatly "underperform." One reason we do not deprive art schools of funding or shut them down is that people recognize economic returns can be a poor indicator of total utility in this area because personal consumption may be playing a large role. Another reason is that fields with lower earnings, such as the arts, may also produce social benefits that societies want to encourage. If two playwright schools cost the same amount, enroll the same quality of students, and have wildly different results, however, an underperforming school problem exists.

Restricting the analysis to same-program comparisons mitigates the personal consumption issue but does not entirely solve it. Students may attend one school over another for other personal consumption choices besides the program. They may want to live in a big city or have a certain type of experience. They may just hate cold weather. On the other hand, it is extremely unlikely that students attend schools intending not to complete degrees, to be burdened by debt, and/or to be unable to obtain a job in their desired field. Further, surveys or other data-gathering options exist to evaluate the role personal consumption is playing in students' choices.

2. The evidence and causes

Several internalities or market failures may cause students to make non-optimal school choices. This section explores some of the possible explanations, including the advertising issue (cost-

221. It may be that more students drop out of Bad School even if graduates have the same IRR, or that Bad School costs twice as much but provides no additional benefits.

shrouding), bounded rationality, the general difficulty of assessing a school's return on investment (uninformed choice), that a thin market is being created by regulations, and poorly targeted subsidies.

Cost-shrouding occurs because many students have difficulty figuring out the actual cost of their education, especially because foregone wages should be included. Some schools have been accused of providing misleading or difficult to understand numbers.[222] There have also been reports of schools instructing recruiters to just avoid answering the question, or to give the cost per credit hour rather than the cost per term or cost to graduate.[223] Financial aid forms can also create confusion, as students may have difficulty understanding what portion are grants and what portion of "financial aid" are things like loans, which they will be required to pay back.[224] Advertising may exacerbate the problem by further hiding the actual cost of the school.[225] Ironically, schools that spend money on advertising may then have to cut funding in other areas, thereby worsening school quality.[226]

As previously discussed, another issue is that a bounded rationality problem may be created by a prospective student's perception that most education is good for you. Many lower-ranked institutions will prominently advertise the fact that education is a good investment.[227] While many school programs

222. *See* HARKIN REPORT, *supra* note 220, at 61–62.

223. *See id.* at 62. One university's training manual instructed recruiters to avoid answering the question directly as much as possible, stating "[d]o not give out the complete program cost." *Id.* at 62–63. The GER cited a Government Accountability Office study in which 13 out of 15 for-profit schools gave "deceptive or otherwise questionable information" about key school statistics, such as graduation rates. *See* Program Integrity: Gainful Employment, 79 Fed. Reg. 64,889, 64,907 (Oct. 31, 2014) (codified at 34 C.F.R. pt. 600, 668) (citing U.S. GOV'T ACCOUNTABILITY OFF., GAO-10-948T, FOR-PROFIT COLLEGES: UNDERCOVER TESTING FINDS COLLEGES ENCOURAGED FRAUD AND ENGAGED IN DECEPTIVE AND QUESTIONABLE MARKETING PRACTICES 9 (2010)).

224. *See* Marian Wang, *How Financial Aid Letters Often Leave Students Confused and Misinformed*, PROPUBLICA (Oct. 16, 2012, 11:55 AM), https://www.propublica.org/article/how-financial-aid-letters-often-leave-students-confused-and-misinformed.

225. *See* Program Integrity: Gainful Employment, 79 Fed. Reg. at 64,907–08.

226. *See id.* at 64,906 (citing evidence that for-profit institutions may be doing a worse job preparing their students for licensing exams, and evidence that many prominent for-profit schools spent more money on marketing and recruiting than instruction).

227. *See Why Phoenix*, U. PHX., http://www.phoenix.edu/why-phoenix.html (last visited Mar. 28, 2018).

do result in positive earnings for many students,[228] not all do. This can extend to specific programs—students may associate attending law school with good economic returns, but not appreciate that some law schools are a very bad investment.[229] The lack of good historical data is an additional challenge because it makes it harder for students to determine what schools actually provide a good education worth pursuing.[230]

Next, assessing a school's return is difficult because of unclear data about dropout rates, graduation rates, job placement, and so on.[231] This may be creating an uninformed choice problem—in fact, this was a major motivator for the Obama administration's College Scorecard initiative.[232] While College Scorecard provides information about a school's cost, graduation rate, and salary after attending, it does not control for student credentials, nor does it compare programs within a school—though this is not as much of an issue for schools with only a single program.[233] Still, students lack the ability to easily calculate their

228. *See* Simkovic, *Knowledge Tax*, *supra* note 2, at 1985–94.

229. *See* Elizabeth Olson, *Not Only Elite Law Schools Offer Great Returns on Investment*, N.Y. TIMES (Jan. 24, 2017), https://www.nytimes.com/2017/01/24/business/dealbook/law-school-debt-salary.html (describing how many law schools are a good investment, but several, especially low-ranked for-profit law schools, have bad outcomes for their students). For example, Whittier Law School's webpage still talks about how "Whittier Law School students graduate more 'practice ready' than students from many other law schools," even though the school is closing and its California bar passage rate in 2016 was 22%. *See Resources for Prospective Students*, WHITTIER L. SCH., https://www.law.whittier.edu/index/prospective-students (last visited Feb. 8, 2018); *see also* Staci Zaretsky, *California Bar Exam Results By Law School (2016)*, ABOVE L. (Dec. 13, 2016, 1:15PM), http://abovethelaw.com/2016/12/california-bar-exam-results-by-law-school-2016/.

230. *See infra* Section IV.D. (describing potential programs, including "Launch My Career Colorado," that aim to provide prospective students and parents a better sense of schools' return on investments).

231. *See* HARKIN REPORT, *supra* note 223, at 83–84 ("Consistent and comprehensive institutional-level information tracking for-profit college student retention and graduation rates is not regularly available."). Law schools have faced similar criticisms, though reform efforts have led to more transparency. *See, e.g.*, Kyle P. McEntee & Patrick J. Lynch, *A Way Forward: Transparency at American Law Schools*, 32 PACE L. REV. 1, 10–11 (2012) (discussing various reforms to law school disclosures, such as clearer presentations and an expanded Standard 509 with more disclosure requirements); *Theory of Action*, LAW SCH. TRANSPARENCY, http://www.lawschooltransparency.com/who_we_are/theory_of_action/ (last visited Mar. 29, 2018) (discussing the need for reform, information, and accountability).

232. *See* Press Release, White House, *supra* note 166.

233. For example, using College Scorecard for information about Miami University-Middletown would yield the average annual cost: $11,661; the six-year graduation rate: 21%; and the median salary for those who attended ten years after graduation: $45,200. *Miami University-*

expected total return (or personal return), controlling for ex-ante credentials.[234]

Another problem might be the various regulations that prevent new schools from entering a market or restrict what current schools can do. For example, current American Bar Association regulations controlling whether a school can be approved govern everything from the composition of the faculty to the size of the library.[235] In order to qualify for funding under the HEA, schools usually have to be accredited by a state, meaning all schools fall under regulatory bodies of one kind or another.[236] Some have argued that this stifles innovation, drives up costs, and does a poor job of actually controlling quality.[237]

Finally, the current design of subsidies worsens the underperforming school problem in several ways. First, as discussed earlier, because of the bias towards low-cost schools, a low-cost school that is underperforming can actually end up being a better deal for the student after subsidies are factored in (see Figure 6).[238] That is, a far greater percentage of its cost ends up being subsidized, even if the higher cost of the other school is justified. Therefore, the high-cost school that, for example, has a far higher graduation rate ends up at a disadvantage.

Second, a lack of accurate information, combined with poorly targeted subsidies, can lead prospective students astray. Such prospective students may not have a good sense of the actual

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Middletown, U.S. DEP'T EDUC.: C. SCORECARD, https://collegescorecard.ed.gov/school/?204015-Miami-University-Middletown (last visited Mar. 29, 2018). It does not control for credentials, though it does provide them, nor does it attempt to calculate an expected return on investment or compare programs. *Id.*

234. *See supra* notes 226–37 and accompanying text; *see also infra* Section IV.D. (proposing possible reforms).

235. *See Standards*, A.B.A., https://www.americanbar.org/groups/legal_education/resources/standards.html (last visited Mar. 29, 2018); *see also* David Segal, *For Law Schools, a Price to Play the A.B.A.'s Way*, N.Y. TIMES (Dec. 17, 2011), http://www.nytimes.com/2011/12/18/ business/for-law-schools-a-price-to-play-the-abas-way.html (detailing critiques of A.B.A. regulations that allegedly keep law schools expensive).

236. *See* Lindsey Burke, *Reauthorizing the Higher Education Act – Toward Policies that Increase Access and Lower Costs*, HERITAGE FOUND. (Aug. 19, 2014), http://www.heritage.org/research/reports/2014/08/reauthorizing-the-higher-education-acttoward-policies-that-increase-access-and-lower-costs (discussing Title IV accreditation requirement).

237. *See e.g.*, *id.* (critiquing accreditation).

238. *See supra* notes 206–09 and accompanying text.

total return or personal return, and simply attend schools that are "cheaper" or seem like good deals, even if they would be better off attending another program. In exchange for subsidies, the government should act to correct any kind of information problem, assuming any solution's benefits outweigh its transaction costs.

It is likely that when people think of a bad school problem, they usually think of underperforming schools. Notably, a 1951 government study found that only 20% of veterans using their GI Bills at for-profit schools graduated.[239] This was not due to unprepared students, but underperforming schools.[240] More recently, a government report targeting for-profit schools blamed these schools for preventing students from obtaining jobs by devoting too few resources to students and too many to advertising, for having subpar academic quality, and for failing to provide proper accreditation.[241]

Critics may again raise the specter of personal consumption benefits being ignored, but the same rejoinder from the previous subsection effectively counters this argument.[242]

C. Optimal Fiscal System Treatment (Revised)

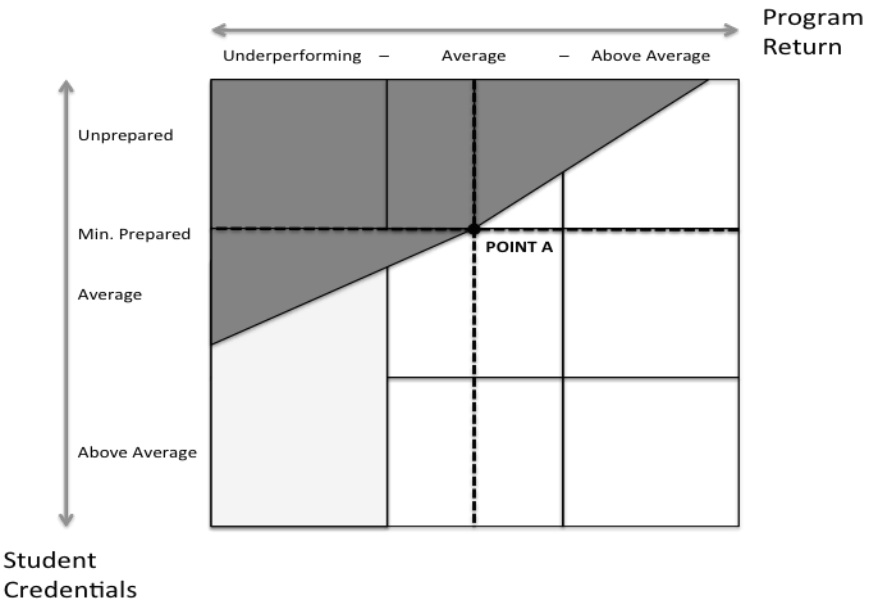
Once bad schools are defined and the unprepared student and underperforming school problems are taken into account, the Optimal Fiscal System theory discussed in Section II.A. should be refined to account for these problems. This section discusses treating these problems in the abstract, whereas Part IV evaluates more specific solutions. A policymaker is left with the following overview of the problem (see Figure 8):

239. Alderdice, *supra* note 19, at 220–21.

240. *Id.*

241. HARKIN REPORT, *supra* note 220, at 92–118 (discussing issues with for-profit schools). This report was, however, arguably quite partisan in nature.

242. *See supra* Sections III.A.2., III.B.1.



Four types of schools can be described.[243] First are schools that underperform and enroll students who are unprepared—these schools are the worst for students and society. Second are schools whose performance is average or above average but enroll unprepared students. Some of these schools are good enough that the students can eke out a positive total return, where others are not. Third are schools that underperform but enroll relatively prepared or better students. Many of these students are able to achieve a positive return, but this is despite the school's effort—identified by the light gray area. Other students

243. Most of these schools generate student wage premiums (and other benefits) that are distributed normally to their students. *See* JENNIFER MA ET AL, COLL. BD., EDUCATION PAYS 2016: THE BENEFITS OF HIGHER EDUCATION FOR INDIVIDUALS AND SOCIETY 20–27 (2016), https://trends.collegeboard.org/sites/default/files/education-pays-2016-full-report.pdf (discussing variations of earnings by those attaining certain levels of education). Most graduates receive around the average benefit for their major or program and ex-ante credentials, and a few outliers might do significantly worse or better. *See id.* Conversely, one could imagine a school where a few students do fantastically well, but most are no better, or even worse off. This kind of lottery institution raises additional concerns, even if in the aggregate student returns are positive. However, because this type of institution is not common, I do not address it in this article, other than to say that poorly targeted subsidies may encourage students to buy lottery tickets to these kinds of schools even if they are bad schools. The GER ends up treating these lottery schools as non-bad schools, by using the higher of mean or median income in the D/E test. 34 C.F.R. § 668.404 (2016).

would be able to achieve a positive total return, but for the school's underperformance—identified by the dark gray triangle that intersects with the light gray area. Finally, there are schools that fall into the average or above-average performers category, enrolling students who are minimally prepared. All of these schools lead to positive total returns for their students.

The optimal tax analysis from before can be applied.[244] The government would provide subsidies to correct internalities and externalities. Given limited resources, it would focus on encouraging marginal students to enroll, and in fact may need to increase the amount of subsidies marginal students receive to encourage them to attend better schools. Subsidies would be awarded in a manner not to reward underperforming schools or schools that enroll bad students—they would not be biased toward low-cost institutions and would better account for internalities and externalities.

An important question emerges—should the government deny subsidies to any student attempting to enroll in any program with an estimated negative total return, assuming it had a fair degree of confidence the total return would be negative?[245] An argument for this paternalism is that it would be in the best interest of the student, by encouraging them to attend a program they would benefit from. It would also protect taxpayer dollars from flowing to bad schools. However, in the real world, imperfect information and an uncertain future means it is unclear how well a student will do. Denying subsidies based on test scores (or other credentials) would appear to be government overreach. This kind of targeting would disproportionately hit low-income and other underrepresented prospective student groups. It would send a terrible message to these students—you cannot succeed in obtaining an education—even if its paternalistic goal of encouraging them to attend better programs succeeded. There would also be serious administrative issues, since every student would have to be evaluated for every program based on relevant credentials.

244. *See supra* Section II.A.2.

245. *See supra* Introduction.

There are also less-intrusive ways of helping students avoid enrolling in schools for which they are not prepared. Disclosure requirements should be modified to help the student better predict their total personal return, such as the College Scorecard initiative.[246] Loan entrance counseling could focus more on helping students predict their return on investment.

Another, better option would be to target bad schools directly.[247] The GER already does this, though it could be greatly improved.[248] The first hurdle is solving the information problem by selecting accurate proxies. For example, schools with a high dropout rate or a low wage premium often have some kind of problem.[249] Second, the GER and other HEA regulations use an all-or-nothing standard—if a school fails on certain proxy metrics, it loses access to all aid, not just some.[250] This might be overinclusive, as some students could still benefit by going to some so-called bad schools, but may be necessary to deter schools from enrolling too many unprepared students. There is also a risk that some good schools may accidently be punished because of miscalculations in determining the return on investment, as any loss-of-access rule will have an error rate. Only targeting the worst schools—those that underperform and enroll unprepared students—could mitigate this problem. Adopting the GER's practice of allowing the school time to correct the problem and creating a buffer zone could also help.[251] The GER uses debt-to-income ratio—if the debt is too high relative to income, this is seen as signaling that a school is bad and it is denied aid.[252]

Utilizing these types of proxies would go after both aspects of the bad school problem. Even if a school performs better than expected given the credentials of its students, it would still fail

246. *See supra* Section II.B.1; *see also infra* Section IV.D. This works better the more subsidies correct for common internalities and externalities.

247. *See infra* Section IV.A.

248. *See infra* Section IV.A.1.

249. *See* Miller, *supra* note 5 (defining a bad school as an institution that costs a lot, leaves students in debt, has a high default rate, and a low graduation rate).

250. *See supra* Section II.B.

251. *See* 34 CFR § 668.403 (2016).

252. 34 C.F.R. §§ 668.403, 668.410, 668.414.

and be penalized if it is enrolling too many unqualified students—since they will still have bad outcomes. This is a proxy for preventing subsidies from going to students unprepared to attend certain programs, without targeting the student directly. Schools that provide a negative total return would eventually cease to operate—preventing students from making bad decisions. Additionally, underperforming schools that caused students to obtain a negative total return would also fail under these types of proxies.

Critics might argue that poor prospective students and other underrepresented groups would be deprived of educational opportunities if such proxies were included. [253] In one sense this is true, but the educational opportunities are in fact traps that leave these students (and society) worse off. Designers should be wary of over-inclusive measurements though, because if the proxies cast too wide a net, then it risks making the critique true. While these students have the most to gain from bad schools being shut down, if a few good schools are accidently penalized this narrative could undermine attempts to target bad schools.

More radical solutions are also possible—such as effectively (or actually) nationalizing schools by giving the government much more power over their operation.[254] A similar tactic would be to re-direct all subsidies to public schools, under a theory that state governments could do a better job of quality control.[255] Another government-centric tactic would be for state governments to dramatically tighten accreditation standards in a bid to drive bad schools out of the market. State governments could also raise high school graduation requirements.[256] Conversely, aggressive deregulation has been proposed as a solution to rising higher education costs.[257]

253. *See supra* notes 65–73 and accompanying text; *see also* Program Integrity: Gainful Employment, 79 Fed. Reg. 64,890, 64,908–09 (Oct. 31, 2014) (codified at 34 C.F.R pt. 600, 668).

254. *See infra* Section IV.B.

255. *See infra* Section IV.B.

256. *See infra* Section IV.B.

257. *See, e.g.*, Matthew Denhart, *Federal Overreach into American Higher Education*, HERITAGE FOUND. (Nov. 4, 2010), http://www.heritage.org/education/report/federal-

Underperforming schools that still provide a positive total return present a special case. Increased transparency via mandatory disclosure requirements might be the best solution. These schools may be providing unknown personal consumption benefits, they may be the result of a thin market caused by recent changes in the economy or accreditation regulations, or they may just be underperforming. Schools that are clearly underperforming (such as two nursing programs in the same city having very different results) would seem to justify stronger government action, even if their students have a positive total return.

IV. ASSESSING GOVERNMENT REGULATIONS AND POTENTIAL REFORMS

Current government policy recognizes the bad school problem to some extent and has tried to counteract it, mostly with indirect controls. One counteractive measure is through the GER, which attempts to identify bad schools and deny them aid. Other measures include requiring schools to pass certain proxy requirements similar to the GER—such as loan default rates—or disclose certain information. Some scholars and policymakers have suggested more direct measures are necessary, such as tightening accreditation requirements. The structure of subsidies suffers from several flaws, discussed above, that worsen the problem. Common to current regulations is the failure to have a clear definition of a bad school and, unfortunately, this is also common to many proposed reforms. This Article argues that regulations, including the structure of subsidies, should always take into account the bad schools problem.

A. Indirect Government Controls

The HEA has various requirements a school must meet to access federal funds.[258] This subsection focuses on five: (1) the

overreach-american-higher-education; Judith S. Eaton, *Why Higher Education is in Need of Regulatory Relief*, HILL (June 2, 2017, 1:20 PM), http://thehill.com/blogs/pundits-blog/education/336094-why-higher-education-is-in-need-of-regulatory-relief.

258. *See* 20 U.S.C. § 1094 (2016).

GER's D/E test,[259] (2) the 90/10 rule,[260] (3) loan default rate caps,[261] (4) mandatory disclosure requirements (including those added by the GER), [262] and (5) accreditation requirements.[263] The latter four have been around for a while but have failed to adequately counter the bad schools problem. The GER most directly targets the bad school problem, but still suffers from issues that could greatly weaken its effectiveness.

1. Gainful employment rule – D/E test

The GER applies almost entirely to for-profit career schools and denies them HEA funds if they repeatedly fail the D/E test.[264] A program fails the D/E test "if its graduates have annual loan payments greater than 12 percent of their total earnings *and* greater than 30 percent of their discretionary earnings."[265] Additionally, a program "will fall into a warning zone if graduates have loan payments between 8 percent and 12 percent of their total earnings, or between 20 percent and 30 percent of their discretionary earnings."[266]A program will be barred from receiving HEA funds if it fails the D/E test "in two out of any three consecutive award years" or if it "[h]as a combination of zone and failing D/E rates for four consecutive award years."[267]

A positive of the GER is that it uses a proxy (debt-to-earnings) that appears to be caused by attending bad schools.[268] A higher debt-to-earnings ratio for graduates, all else being equal, does

259. *See* 34 C.F.R. § 668.403 (2016).

260. 20 U.S.C. § 1094(a)(24).

261. *See* 34 C.F.R. § 668.206; *see also* COHORT DEFAULT RATE GUIDE, *supra* note 154, at 2.4-4.

262. *See* 20 U.S.C. §§ 1094(a)(8)–(9), (25); *see also* 34 C.F.R. § 668.412; *College Scorecard*, U.S. DEP'T EDUC., https://collegescorecard.ed.gov/ (last visited Mar. 30, 2018) (providing information collected from schools to students).

263. *See* 20 U.S.C. § 1094(a)(21).

264. *See* 34 C.F.R. §§ 668.403, 668.410; *see also* Bidwell, *supra* note 65 (summarizing the GER).

265. Bidwell, *supra* note 65 (emphasis added).

266. *Id.*

267. 34 CFR §§ 668.403(c)(4)(i)–(ii).

268. *See* Program Integrity: Gainful Employment, 79 Fed. Reg. 64,890, 65,031–33 (Oct. 31, 2014) (codified at 34 C.F.R pt. 600, 668) (describing how over-borrowing may be a symptom of "specific and limited conditions," such as schools that have poor results, engage in misleading advertising, and fail to prepare students for gainful employment in their chosen field).

appear to indicate students are not achieving a positive return on their investment in the underlying school.[269] The GER has a thorough and well-thought-out test designed to detect if the average graduate's debt-to-earnings ratio is so high as to be a red flag.[270] Another positive of the GER is that it uses a second implicit proxy by only targeting programs that explicitly prepare students "for gainful employment in a recognized occupation."[271] There is some evidence that these types of programs, almost all run by for-profit schools, are more likely to be bad schools.[272]

Although it may be a question of statutory authority, one issue with the GER is that it excludes most schools and programs.[273] The GER only applies to a limited number of career schools,[274] thus excluding almost all non-profit and two-year or longer for-profit schools.[275] There are many other bad schools in existence.[276] Expanding the GER to non-profits and graduate programs would also raise several new issues. First, for programs or majors not driven mainly by students' desire to obtain a job in a specific field, measuring personal consumption would be more difficult. This is also true in professional schools where many people enter into a "public interest" profession.[277] Second, considering the difficulty in passing the GER, an incremental

269. *See* Avery & Turner, *supra* note 40, at 179–80 (discussing choices that affect debt load and return on investment).

270. 34 CFR § 668.404.

271. Program Integrity: Gainful Employment, 79 Fed. Reg. at 64,904.

272. *Id.* at 65,033 (arguing greater debt and lower rates of return at certain for-profit programs).

273. The exclusion of certain schools may also be a question of statutory authority, as the Department of Education argues it lacks the rulemaking authority to regulate other higher education programs, including almost all non-profit programs. *See id.* at 64,904.

274. 20 U.S.C. § 1001(b)(1) (2016).

275. *See* Program Integrity: Gainful Employment, 79 Fed. Reg. at 64,902 (critiquing this aspect of the GER).

276. *See supra* notes 64–65 and accompanying text (discussing overpriced non-profit undergrad and graduate schools).

277. For example, Yale Law School may do worse on some employment measures relative to a lower-ranked law school such as Emory, but that is not because Yale is a "worse school" in an objective sense. *See* Jeff Schmitt, *Law Schools That Deliver the Jobs & Highest Pay*, TIPPING THE SCALES (Apr. 3, 2015), http://tippingthescales.com/2015/04/law-schools-with-highest-pay-and-job-placement/2/.

approach focused on adding tests is more likely to succeed. Finally, adding more proxies to the current GER will make it easier for the Department of Education to present more detailed data to students through the College Scorecard program and troubleshoot the GER before expanding it.

The GER's use of a single real proxy, the D/E test, is also a problem.[278] Using a single proxy creates over- and under-inclusive issues. The over-inclusive problem is that commentators can legitimately attack the rule as very imprecise, since one's debt-to-earnings ratio depends on a variety of factors besides the quality of the schools.[279] Commentators have pointed out that many well-regarded law schools would fail this test.[280] They argue this rule just punishes less well-off students who might not earn as much money for other reasons. It also risks making the cheap-school bias worse, as schools might further reduce resources and student support in an attempt to cut costs, despite evidence a contrary approach may be needed.

The under-inclusive problem is that the D/E test will miss a lot of bad schools.[281] The D/E test only looks to students who have graduated. Therefore, a school could have a 99% dropout rate and all those dropouts could default on their loans, yet the school would still pass this test (though the GER would make it disclose this information). The test also misses schools that are underperforming but are so cheap that students end up graduating with minimal debt (often because of the Pell Grant and other government subsidies). It would also miss other schools that fail to provide much of a total return, but are fortunate to have higher-earning graduates because of selection bias.

The GER suffers, in part, because it fails to adequately define

278. A desire to use a second proxy, loan default rates, was dropped. Ben Miller, *What Removing Default Rates Means for Gainful Employment*, NEW AM. (Nov. 6, 2014), https://www.newamerica.org/education-policy/edcentral/gainful-pcdr/.

279. Denhart, *supra* note 257 ("[T]he strict repayment rates and earnings ratios serve as a de facto price control that would greatly limit educational offerings.").

280. *See* Paul Caron, *New 'Gainful Employment' Rule Spells Trouble for For-Profit Law Schools (And Would For 50 Non-Profit Law Schools)*, TAXPROF BLOG (June 30, 2015), http://taxprof.typepad.com/taxprof_blog/2015/06/new-gainful-employment-rule-spells-trouble-for-for-profit-law-schools-and-would-for-50-non-profit-la.html.

281. Program Integrity: Gainful Employment, 79 Fed. Reg. at 64,902, 64,912.

what a bad school is. Instead, it tries to define bad schools via the use of its two indicators and then adopt those two indicators to detect if a problem exists.[282] Therefore, it never directly tackles the bad school problem. If this Article's proposed definition were adopted, the GER could more easily add several other proxies to its arsenal to openly attack bad schools, as defined. Instead, the GER avoids the question and justifies its proxies with somewhat circular logic.[283]

Even if this Article's definition is only implicitly adopted or kept vague, several proxies could be added so that bad schools are better targeted. Adding more tests would make the GER more accurate. Some potential tests, assuming affordable transaction costs, include: (1) loan default rates, (2) field of employment rate (post-graduation), (3) completion rates, (4) licensure passage rates, and (5) wage premiums. All these tests are potential symptoms that a school is not providing a positive total return to its students.[284]

Adding more tests would deter gamesmanship by schools. Using just the D/E test creates a risk that schools could lower costs and quality to capture grants and reduce students' debt burdens without making students better off. Multiple tests deter this type of manipulation more effectively. If schools tried lowering cost by sacrificing quality, the field of employment rate and wage premium numbers would decline, penalizing the school. Multiple tests also better assess the real underlying question—whether a school is providing a positive total return. Tests can be continually tweaked as data comes in. For example, loan default rates, completion rates, and wage premiums would look at all students who enroll, not just graduates. This is important to prevent schools from avoiding penalties by just fail-

282. Congress did not even define "gainful" with respect to the Gainful Employment Rule. *See* APSCU v. Duncan, 870 F. Supp. 2d 133, 146 (D.D.C. 2012) ("There is no unambiguous meaning of what makes employment 'gainful.' . . . [Congress] le[ft] a policy gap, which it is the Department's prerogative to fill.").

283. Program Integrity: Gainful Employment, 79 Fed. Reg. at 64,889–65,103.

284. *E.g.*, Miles & Zimmerman, *supra* note 28, at 545 (arguing that high default rates may be "evidence that neither educational output nor social benefits have increased"); Program Integrity: Gainful Employment, 79 Fed. Reg. at 64,912.

ing most of their students. The two GER proxies—debt-to-earnings ratio and whether a school is a career program—allow schools to fail a large number of students and pass.[285]

Adding more tests also allows policymakers to better protect "good schools." If a school fails a single metric, it should have the chance to present a case for why it should be exempted. A dance school could plausibly argue that a low-wage premium is the reflection of the personal preferences of its students, and not a failure. As long as it passed the other tests, there is less reason to worry. This better shields the GER from criticism that it is over-inclusive. If the dance school has a high default rate, a low employment rate, and a low wage premium rate, it is almost certainly a bad school and should fail. With more tests, a bad program will not be able to hide behind a "the one metric is not fair" argument.

The multiple tests may also counter the criticism that led to the cohort loan default rate test being dropped from the original GER. Critics argued that it was unfair because failing either metric would result in losing all HEA aid and that the Department could not properly administer challenges or appeals to failing the test.[286] Allowing a school a relatively easy exemption for one test would make it harder to argue that a single unfair metric is at play. More metrics could also lead to different metrics being applied to different programs to account for real-world variation.

A reformed GER that uses this Article's bad school definition could also make several other changes that would result in more accurate targeting. The current GER does not focus on students' wage premiums, but this is a much better proxy of whether the total return is positive relative to debt-to-earnings (which varies based on all kinds of other factors, such as average student wealth). An adjusted GER would account for public subsidies, instead of penalizing for-profits and private

285. 34 CFR § 668.404 (2018).

286. Miller, *supra* note 278.

schools.[287] The cost of borrowing would be amortized over a student's expected life, rather than amortizing over a fixed number of years (the current GER),[288] to better calculate the ROI. A reformed GER should also include foregone earnings, as this can make a dramatic difference when calculating an ROI.

Once refined, a better GER could prevent hundreds of thousands of students from making bad investments and save billions of taxpayer (and student) dollars each year. One study estimated that if the GER had just kept the loan default test it ended up dropping and stayed limited to career schools, 812 programs with a total enrollment of 191,666 borrowers would have failed.[289] Assuming that the numbers are similar to the University of Phoenix—in that two-thirds of students receive the maximum Pell Grant and the rest still receive some aid—this would amount to $1.28 billion. [290] The dropped GER loan default test would only cover the less than 20% of students enrolled in for-profit certificate and vocational programs.[291] Therefore, expanding the GER and adding proxies could prevent billions in losses.

2. Other regulations

The 90/10 rule mandates that for-profit schools must derive at least 10% of their "revenues from sources other than funds provided under" the HEA.[292] This rule indicates that a school is bad if it receives more than 90% of its revenues from federal aid.[293] Yet, this rule is easily avoided because veterans' benefits

287. Denhart, *supra* note 257 (arguing the GER places for-profits at an unjustified competitive disadvantage).

288. 34 CFR § 668.404(2)(b)(1).

289. Miller, *supra* note 278.

290. This assumes that two-thirds of the students receive roughly $8000/person in aid (halfway between the $20K AGI (dependent) and $20K AGI (independent), and the other one-third of students receive roughly $4000/person in aid (a conservative estimate based on Figure 2).

291. 79 Fed. Reg. at 64,994 (estimating that 3.34 million students will be covered by the GER for academic year 2010–11); *Digest of Education Statistics: 2013*, *supra* note 106 (noting that just over 21 million students attended a degree-granting postsecondary institution in 2010).

292. 20 U.S.C. § 1094(a)(24) (2016).

293. *See id.*

do not count as funds provided under the HEA.[294] If this is truly an indicator of a problem, it should be strengthened.

Loan default caps discourage schools from enrolling too many students who will end up defaulting by sanctioning the school if default rates exceed certain amounts.[295] High default rates can result in a school no longer being eligible to participate in federal loan and Pell Grant programs.[296] If a school's three most recent cohort default rates are 30% or greater, or the school's current default rate is greater than 40%, the school will lose HEA program eligibility unless it successfully appeals.[297] Most of the appeals involve both challenging the underlying data, and demonstrating "a high number of low-income students and high placement or completion rate" can also result in a stay of a suspension.[298]

While this provision did shut down some of the worst schools, it has been inadequate to address the problems discussed earlier.[299] The rise of income-based repayment programs will destroy this metric because bad schools can ensure their students enroll so that their payments are greatly reduced or even eliminated.[300] If the students fail to pay off the balance, taxpayers make up the difference and the school keeps the money.[301] Default rates on student loans are also lower than one might expect because they cannot be discharged in bankruptcy, and the government has extraordinary powers to collect on its debt relative to other debtors.[302] These problems could potentially be solved by entering into an income-based repayment program or the government counted repayment that does not

294. Fain, *supra* note 160 ("Under current regulations, veterans' educational benefits like the Post-9/11 GI Bill do not count toward that 90 percent limit.").

295. COHORT DEFAULT RATE GUIDE, *supra* note 154, at 2.4–2.

296. *Id.*

297. *Id.* at 2.4-4.

298. *Id.* at 2.4-5.

299. *See* Simkovic, *Student Loans*, *supra* note 21, at 561–63 (discussing how the cohort default rate (CDR) "eliminate[d] some small and poorly performing institutions, but sophisticated educational institutions increasingly manipulated the CDR statistic by moving recent students into deferment or forbearance" so that "CDR had a positive but limited effect").

300. *See Income-Driven Plans*, *supra* note 126.

301. *Id.*

302. *Id.*

lower the principal as a default.[303]

B. Possible Reforms

More dramatic reforms are possible—government control over schools could be greatly strengthened. We could return to a pre-1980s system where all student aid flowed to public universities and the government stayed out of the student loan business. This would allow state governments to re-assert control over education, possibly counteracting recent trends that are contributing to the bad school problem. The evidence, however, that state governments are better than private actors at not creating bad schools is mixed, at best.[304] Transferring aid away from private schools may disadvantage the least well off because it would be harder for them to attend many relatively prestigious institutions.[305]

States could make it substantially more difficult to obtain a high school diploma or its equivalent within their state, affecting which individuals can enroll in schools.[306] This may cut down on the unprepared student problem, as it would ensure a minimal level of academic preparedness before prospective students could enroll in a school. Unfortunately, the historical trend has been for high school standards to be dropped and accreditation to be granted to almost any school.[307] This would

303. *See* 34 C.F.R. § 668.413(b)(3) (2016). The GER already requires a school to disclose the percentage of its borrowers who are actually paying the principal of their loan down.

304. *See* MAMIE LYNCH ET AL., *supra* note 212, at 2–3 (finding that community colleges may perform poorly when compared to two-year for-profit schools).

305. They would, however, probably continue to receive full-tuition scholarships to the most elite undergraduate schools, such as Harvard. *See Affordability*, HARV. U., https://college.harvard.edu/admissions/choosing-harvard/affordability (last visited Feb. 5, 2018).

306. *Standard High School Graduation Requirements (50-State)*, EDUC. COMM'N STATES, http://ecs.force.com/mbdata/mbprofall?Rep=HS01 (last updated 2007) (detailing the high school graduation standards for all fifty states); 20 U.S.C. § 1001(a)(1) (2016) (requiring enrolled students to have high school degrees with certain exceptions).

307. *See, e.g.*, Motoko Rich, *As Graduation Rates Rise, Experts Fear Diplomas Come Up Short*, N.Y. TIMES (Dec. 26, 2015), https://www.nytimes.com/2015/12/27/us/as-graduation-rates-rise-experts-fear-standards-have-fallen.html (describing how high school graduation rates have sharply risen even though "measures of academic readiness for college or jobs are much lower" and have not risen—"[t]he most recent evaluation of 12th graders on a national test of reading and math found that fewer than 40 percent were ready for college level work"); Mark Huffman, *Small Accreditation Agency Feels Heat for Corinthian College Collapse*, CONSUMER AFF.

also be a blunt instrument, as students could be prevented from attending many programs, such as technical schools, that they would have benefited from. States could also more aggressively police accreditation standards.[308] This Article argues that accreditation should be based on the bad school definition, and it could supplement federal standards while allowing for more state experimentation.

Aggressive deregulation is another potential solution. Some scholars believe that many of the current problems, including the bad school problem, are the result of perverse incentives.[309] Regulations could be preventing schools from opening quickly enough or from taking advantage of new technologies.[310] Regulations lead to increased transaction costs, which, if not justified, create deadweight loss. Excessive subsidies may be draining resources away from causes that need more money, while encouraging students to pursue bad investments.

C. Structure of Subsidies

Changing how aid is delivered could mitigate many of the issues contributing to the bad school problem. Aid should be given pro rata based on the cost of the school to avoid the cheap school bias, while taking steps to ensure that increasing aid as cost goes up does not lead to higher costs.[311] Accurate IRR and

(Sept. 8, 2015), https://www.consumeraffairs.com/news/small-accreditation-agency-feels-heat-for-corinthian-college-collapse-090815.html (discussing a report that "structural flaws" causing lax accreditation standards may "open the door to mass fraud" and other problems).

308. Michael Stratford, *For-Profit College Accreditor in Crosshairs After 'Death Penalty' Recommendation*, POLITICO (June 15, 2016), http://www.politico.com/story/2016/06/for-profit-colleges-accreditor-224383.

309. *See, e.g.*, Scott Alexander, *Considerations on Cost Disease*, SLATE STAR CODEX (Feb. 9, 2017), http://slatestarcodex.com/2017/02/09/considerations-on-cost-disease/ (evaluating different theories on why cost disease occurs, including excessive regulations); Burke, *supra* note 236; Denhart, *supra* note 257.

310. *See* Eaton, *supra* note 257 (stating that regulation may "discourage[ ] flexibility and experimentation").

311. Some argue that increased government aid to students or schools results in a corresponding price increase, without any gain in quality. *See, e.g.*, Ellen Wexler, *Why is Tuition So High?*, INSIDE HIGHER ED (Feb. 9, 2016), https://www.insidehighered.com/news/2016/02/09/study-increased-student-aid-not-faculty-salaries-drives-tuition (discussing a study arguing that increased federal student aid causes increased school costs, though other scholars dispute this conclusion). Several scholars argue that increased student aid results in high costs at for-profits, but not at public schools. *Id.*

comparison metrics could mitigate unnecessary cost inflation. Aid should also be given in the form of upfront grants that are repayable via a back-end tax on income, rather than through loans. Changing the framing of aid from loans to grants, even if the underlying substance does not change, will avoid creating internality issues that discourage more risk-averse, less-well-off students from enrolling.[312]

There are various reasons why subsidies fail, but their failure has led for calls to expand aid and redirect more of it towards the lower and middle class.[313] Yet, this solution fails to account for bad schools targeting less well-off students to obtain these subsidies and, on its own, would not solve the underlying problems.[314] Instead, expansion of aid may do little more than transfer additional money to bad schools, while students drop out or graduate no better off than before they enrolled. Indiscriminate expansion of aid will also end up creating regressive transfers to students who likely would have attended schools anyway.[315]

Instead, spending more on aid directed to support marginal students once they enroll may actually be a cost-effective and all-around better alternative. The Accelerated Study in Associate Programs (ASAP) at the City University of New York (CUNY) costs a lot of money but leads to a lower cost per graduate rate than under a pre-ASAP system.[316] Spending more money could reduce the cost per graduate and increase social

312. *See* Ghandi, *supra* note 18, at 14–16 (discussing students' risk-aversion to debt).

313. *See, e.g.*, EXEC. OFFICE OF THE PRESIDENT, MAKING COLLEGE MORE AFFORDABLE FOR MILLIONS OF AMERICANS, at 3–5 (2015), https://obamawhitehouse.archives.gov/sites/default/files/docs/150507_final_-_state-by-state_progress_report_on_college_affordability.pdf (proposing expanding the size and refundable amount of the American Opportunity Tax Credit and expanding eligibility to part-time students).

314. *See* Melinda D. Anderson, *When For-Profit Colleges Prey on Unsuspecting Students*, ATLANTIC (Oct. 24, 2016), https://www.theatlantic.com/education/archive/2016/10/when-for-profit-colleges-prey-on-unsuspecting-students/505034/.

315. *See* Conor Friedersdorf, *Universal Free College Would Be a Regressive Scandal*, ATLANTIC, (July 30, 2013), https://www.theatlantic.com/politics/archive/2013/07/universal-free-college-would-be-a-regressive-scandal/278201/. *But see*, Jordan Weissmann, *No, Public Spending on Higher Education Isn't Regressive*, ATLANTIC (Nov. 21, 2013), https://www.theatlantic.com/business/archive/2013/11/no-public-spending-on-higher-education-isnt-regressive/281683/.

316. *See Evaluation of ASAP*, *supra* note 204.

benefits because a higher percentage of students will be graduating, offsetting the increased per-student public subsidy.[317] For prospective students who would otherwise have a very low graduation rate, the increased subsidy could be justified if the public externality gained outweighed the cost.

D. Disclosure and Data Collection

Pushing for better data collection and more transparency might combat the problem. Another benefit of this would be that the government and public could better identify bad schools and then adjust the design of subsidies as needed. More data would enable the government to better target its regulations at those schools either underperforming or enrolling too many unprepared students, while protecting good schools.

A variety of disclosure requirements have already been imposed. The HEA contains several mandatory disclosure requirements.[318] One provision requires schools that advertise job placement rates to disclose comprehensive recent data about employment and graduation statistics, and relevant licensing requirements.[319] Information about grants and loan policies must also be disclosed.[320] The GER added even more disclosures, such as the repayment rate.[321] The College Scorecard initiative attempts to provide clear, accurate and up-to-date data on "college cost, graduation [rates], debt, and post-college earnings" so students can better choose colleges "that will help them learn, graduate, and find jobs."[322] One shortcoming of the College Scorecard is that it does not disclose precise information

317. If the government spends $9000/year on ten students, but five drop out after the first year, four drop out the next year, and only one graduates a two-year program, it costs $135,000 for one graduate. Spending twice as much money might actually result in a lower cost per graduate if more than two students end up graduating. *See id.*

318. *See supra* note 262 and accompanying text.

319. *See* 20 U.S.C. § 1094(a)(8) (2016).

320. *See id.* § 1094(a)(9), (25) (requiring that schools develop a code of conduct regarding loans that prohibits a conflict of interest and "publish such code of conduct prominently on the institution's website").

321. *See* 34 C.F.R. § 668.412 (2016).

322. Fact Sheet: Empowering Students, *supra* note 166.

about a student's estimated ROI or post-graduation employment rate in the field, controlling for credentials.

A program that may be a model of how to help students make better ex-ante choices is "Launch My Career Colorado."[323] It allows prospective students and their parents to estimate their private ROI "from various post-secondary college degrees and certificates."[324] It displays the estimated time of completion and the graduation rate.[325] The ROI can be a little misleading, because it only estimates one's expected wage premium over twenty years, not adjusted to present value. The website, however, allows you to input forfeited earnings and then calculate how long it takes you to break even.[326] It also displays the cost of obtaining the degree[327] and provides helpful information about personal consumption benefits—displaying data about whether graduates in a certain major enjoy their jobs and are satisfied with their lives.[328]

One study found that just "providing information on population net college costs and college application procedures to high-achieving low-income students increases students' enrollment in 'peer institutions' by 0.12 standard deviations."[329] Providing information also seems more effective than providing subsidies, given that information directly targets the problem and is likely cheaper.[330] A national "Launch My Career"

323. *See* LAUNCH MY CAREER COLO., https://launchmycareercolorado.org/ (last visited Mar. 30, 2018).

324. Mark J. Perry, *What's the Value of a College Degree? A New Interactive Website Provides Some Answers and Much Needed Transparency*, AEI (June 23, 2016), http://www.aei.org/publication/whats-the-value-of-a-college-degree-a-new-interactive-website-provides-some-answers-and-much-needed-transparency/.

325. *See, e.g.*, *Political Science and Government: General*, LAUNCH MY CAREER COLO., http://launchmycareercolorado.org/majors/2910?degree=f (last visited Mar. 30, 2018).

326. *See, e.g.*, *id.*

327. *See, e.g.*, *Bachelor's Degree in Political Science and Government: General*, LAUNCH MY CAREER COLO., http://launchmycareercolorado.org/schools/457/majors/2910?degree=F (last visited Mar. 30, 2018).

328. *See, e.g.*, *id.*

329. BLEEMER & ZAFAR, *supra* note 42, at 5n.8 (citing Caroline Hoxby & Sarah Turner, *Expanding College Opportunities for High-Achieving, Low Income Students* 2 (Stanford Inst. for Econ. Policy Research, Discussion Paper No. 14, 2012), https://siepr.stanford.edu/sites/default/files/publications/12-014paper_6.pdf). Just providing better information can fix the problem. *See id.*

330. Providing information directly targets the uninformed problem, whereas subsidies

website, tied to obtaining student aid, could provide a massive benefit to prospective students.[331]

For some other problems, disclosures rather than harsher penalties might be the better approach for normative and pragmatic reasons. It would be politically easier to force borderline schools to present realistic information about themselves, rather than move to deny them aid and effectively shut them down. For many schools, there would be an uncertainty about whether they are bad, or whether they underperform relative to their peers. In this case, just presenting the data and allowing schools to make arguments about why they are different (e.g., experiencing life on a ranch) might be worth it to some individuals even if it does not look good on a test.

CONCLUSION

The question of why students overinvest in bad schools while underinvesting in education generally has a complicated answer. Yet, it is vital to consider whenever aid policy is altered. Otherwise too much aid ends up wasted and too many students end up worse off. Clearly defining the problem is the first step. Gathering better data is the second. Identifying bad schools and depriving them of aid is the third. Hopefully, this Article provided some useful answers.

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would try to bring costs into line with uninformed beliefs. Also, providing information one time to correct beliefs is pretty cheap. *See id.* at 5 n.7 (citing Hoxby & Turner, *supra* note 329) (detailing how it costs $6 per student to provide information on college costs and $600 to provide information and application fee-waivers in another study). Inability to afford application fees is likely a capital market failure or an inertia/myopia problem.

331. *See* Avery & Turner, *supra* note 40, at 188–89 (stating students could optimize their borrowing if they could better calculate their projected earnings premium based on their characteristics and choices).

APPENDIX

Allocation of Student Aid By Income Group (Table A-1)

Calculations for the allocation of student aid by income group are below:

	$0 AGI - $30K	$30K-$50K	$50K-$100K	$100K-$200K	
Pell Grant	$25,441	$5765	$1873	$112	Using Table T13-0091, Tax Policy Center
AOTC	$4332	$3958	$7714	$5337	Using Table T13-0091, Tax Policy Center
LLC	$352	$451	$765	$114	Using Table T13-0091, Tax Policy Center
Tuition and Fees Deduction	$53	$78	$235	$357	Using Table T13-0091, Tax Policy Center
Other Tax Expenditures	$520	$1560	$2080	$6240	Best Estimate + CLASP ($10.4 Other)
TOTAL (millions)	$30,698	$11,812	$12,667	$12,160	
Total Students (thousands)	12,298	5358	6894	4171	Using Table T13-0091, Tax Policy Center
Aid Per Student	$2496	$2205	$1837	$2915	

Low-Cost Schools Bias (Table A-2)

Original cash flow streams are equal for simplifying results. The discount rate is at 3% (note that a higher discount rate makes the distortion slightly worse). Year 1–40 numbers represent earnings premiums. See calculations below:

		Cheaper School	Expensive School	Cheaper School (discounted)	Expensive School (discounted)	Cheaper School (discounted + aid)	Expensive School (discounted + aid)
Discount	COST (Year 0)	(116,000)	(180,000)	(116,000)	(180,000)	(79,212)	(142,904)
0.03	1	14,067	21,828	13,657	21,192	11,774	16,483
0.03	2	14,067	21,828	13,259	20,575	11,431	16,003
0.03	3	14,067	21,828	12,873	19,976	11,098	15,537
0.03	4	14,067	21,828	12,498	19,394	10,775	15,085
0.03	5	14,067	21,828	12,134	18,829	10,461	14,645
0.03	6	14,067	21,828	11,781	18,281	10,156	14,219
0.03	7	14,067	21,828	11,438	17,748	9860	13,805
0.03	8	14,067	21,828	11,105	17,231	9573	13,403
0.03	9	14,067	21,828	10,781	16,729	9294	13,012
0.03	10	14,067	21,828	10,467	16,242	9024	12,633
0.03	11	14,067	21,828	10,162	15,769	8761	12,265
0.03	12	14,067	21,828	9866	15,310	8506	11,908
0.03	13	14,067	21,828	9579	14,864	8258	11,561
0.03	14	14,067	21,828	9300	14,431	8017	11,224
0.03	15	14,067	21,828	9029	14,011	7784	10,898
0.03	16	14,067	21,828	8766	13,602	7557	10,580
0.03	17	14,067	21,828	8511	13,206	7337	10,272
0.03	18	14,067	21,828	8263	12,822	7123	9973
0.03	19	14,067	21,828	8022	12,448	6916	9682
0.03	20	14,067	21,828	7789	12,086	6714	9400
0.03	21	14,067	21,828	7562	11,734	6519	9127
0.03	22	14,067	21,828	7341	11,392	6329	8861
0.03	23	14,067	21,828	7128	11,060	6145	8603
0.03	24	14,067	21,828	6920	10,738	5966	8352
0.03	25	14,067	21,828	6718	10,425	5792	8109
0.03	26	14,067	21,828	6523	10,122	5623	7873
0.03	27	14,067	21,828	6333	9827	5459	7643
0.03	28	14,067	21,828	6148	9541	5300	7421
0.03	29	14,067	21,828	5969	9263	5146	7205
0.03	30	14,067	21,828	5795	8993	4996	6995
0.03	31	14,067	21,828	5627	8731	4851	6791
0.03	32	14,067	21,828	5463	8477	4709	6593
0.03	33	14,067	21,828	5304	8230	4572	6401
0.03	34	14,067	21,828	5149	7990	4439	6215
0.03	35	14,067	21,828	4999	7757	4310	6034
0.03	36	14,067	21,828	4854	7531	4184	5858
0.03	37	14,067	21,828	4712	7312	4062	5687
0.03	38	14,067	21,828	4575	7099	3944	5522
0.03	39	14,067	21,828	4442	6892	3829	5361
0.03	40	14,067	21,828	4312	6692	3718	5205
	IRR	12.00%	12.00%	8.73%	8.73%	11.90%	8.49%

Estimated Aid to Hypothetical Students (Tables A-3 and A-4)

Aid is calculated based on FASFA Forecast estimates, using a tool knows as "FAFSA4caster" provided by the government.[332] Calculations are below:

Table A-3

Dependent (Parents' Taxes Calculated)						
	$8000 Option			$25,000 Option		
Household AGI:	$20,000	$50,000	$100,000	$20,000	$50,000	$100,000
Exemptions	$16,200	$16,200	$16,200	$16,200	$16,200	$16,200
Standard Deduction	$12,600	$12,600	$30,155	$12,600	$12,600	$30,155
Taxable Income	$0	$21,200	$53,645	$0	$21,200	$53,645
Tax Liability	$0	$2253	$7119	$0	$2253	$7119
CTC (Possibly Refundable)	$0	$0	$0	$0	$0	$0
EITC (no FTS exception)	$3373	$0	$0	$3373	$0	$0
Additional EITC (FTS)	$2199	$40	$0	$2199	$40	$0
Refundable AOTC	$923	$243	$0	$1000	$243	$0
Non-Refundable AOTC	$0	$2253	$2500	$0	$2253	$2500
Exemption Value	$0	$608	$608	$0	$608	$608
Other Tax Expenditure	$0	$250	$1000	$0	$250	$1000
Subsidized Loan	$300	$0	$0	$300	$0	$0
Pell Grant	$5775	$3025	$0	$5775	$3025	$0
IBR	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN
Public School Aid	$4180					
TOTAL AID (Private)	$9197	$6418	$4108	$9274	$6419	$4108
TOTAL AID (Public)	$13,377	$10,598	$8288	$13,454	$10,599	$8288
Tax Info (2016):	Public School Aid Varies Wildly Based on State and School http://taxfoundation.org/article/2016-tax-brackets					

332. *FASFA4caster*, U.S. DEP'T EDUC., https://fafsa.ed.gov/FAFSA/app/f4cForm?execution=e1s1 (last visited Mar. 25, 2018).

Table A-4

Independent (Parents' Taxes Calculated)						
	$8000 Option			$25,000 Option		
Household AGI:	$20,000	$50,000	$100,000	$20,000	$50,000	$100,000
Exemptions	$8100	$8100	$8100	$8100	$8100	$8100
Standard Deduction	$9300	$9300	$30,155	$9300	$9300	$30,155
Taxable Income	$2600	$32,600	$61,745	$2600	$32,600	$61,745
Tax Liability	$260	$4138	$9734	$260	$4138	$9734
CTC (Possibly Refundable)	$1000	$1000	$0	$0	$0	$0
EITC (no FTS exception)	$3084	$0	$0	$3084	$0	$0
Additional EITC (FTS)	$0	$0	$0	$0	$0	$0
Refundable AOTC	$818	$0	$0	$896	$0	$0
Non-Refundable AOTC	$260	$2500	$2500	$260	$2500	$2500
Exemption Value	$0	$0	$0	$0	$0	$0
Other Tax	$0	$250	$1000	$0	$250	$1000
Subsidized Loan	$300	$0	$0	$300	$0	$0
Pell Grant	$5775	$3425	$0	$5775	$3425	$0
IBR	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN
Public School Aid	$4180					
TOTAL AID (Private)	$7154	$6175	$3500	$7231	$6175	$3500
TOTAL AID (Public)	$11,334	$10,355	$7680	$11,411	$10,355	$7680
Tax Info (2016):	Public School Aid Varies Wildly Based on State and School http://taxfoundation.org/article/2016-tax-brackets					

All tax calculations are based on the laws in effect for 2016. The passage of the Tax Cuts and Jobs Act of 2017[333] will impact these calculations to some degree, but did not significantly impact the American Opportunity Tax Credit, the Earned Income Tax Credit, or the Pell Grant. The following assumptions were used for each hypothetical student:

For All Students: (1) Room and Board costs are $12,000 at all schools; Books cost $1000 per year at all schools; (2) Everybody resides in in Delaware;[334] and (3) Taxpayers making $25,000 and

333. Pub. L. No. 115–97, 131 Stat. 2054 (codified in scattered sections of 26 U.S.C.).

334. The Delaware state tax exclusion is at 4% for the Effective Family Contribution calculation, which is median. *See* THE EFC FORMULA, 2017–2018, at 17 (2017), https://studentaid.

$50,000 claimed the standard deduction, but taxpayers making $100,000 claimed itemized deductions totaling $30,155,[335] and (4) Whenever the FASFA4caster offers a default, such as assumed net worth, that default number is used.

Assumption for Dependent Students: (1) She is the first student to attend college, (2) Including herself, there are four people in the household (no one is CTC eligible), (3) The oldest parent is fifty, (4) She is not assumed to make more than $6000 and is not assumed to have any assets – meaning they do not add to EFC, (5) She is single, and attending her first year of college, and (6) She is nineteen years old as of December 31, 2016. Results:

- For dependent student, household AGI of $20,000 (at both private and public school): (1) Federal Pell Grant: $5775 and (2) Direct Stafford Loan: $5500 at 4.29% ($3500 likely subsidized)
- For dependent student, household AGI of $50,000 (at both private and public school): (1) Federal Pell Grant: $3025 and (2) Direct Stafford Loan: $5500 at 4.29% (unknown amount subsidized)
- For dependent student, household AGI of $100,000 (at both private and public school): (1) Federal Pell Grant: $0 and (2) Direct Stafford Loan: $5500 at 4.29% ($0 subsidized)

Assumptions for Independent Students: (1) She is thirty years

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ed.gov/sa/sites/default/files/2017-18-efc-formula.pdf.

335. Only 12% of taxpayers with an AGI between $20,000 and $25,000 claimed itemized deductions, only 33% of taxpayers with an AGI between $40,000 and $50,000 claimed itemized deductions (though 48% with an AGI between $50,000 and $75,000 did), but 84% with an AGI of $75,000 to $100,000 did, and 95% making between $100,000 and $200,000. Andrew Lundeen & Scott A. Hodge, *Higher Income Taxpayers Are Most Likely to Claim Itemized Deductions*, TAX FOUND. (Nov. 7, 2013), https://taxfoundation.org/higher-income-taxpayers-are-most-likely-claim-itemized-deductions/ (reporting this information for 2012 tax returns). For average itemized deduction based on 2011 return data, see *Average Itemized Deductions*, WOLTERS KLUWER, https://www.cchgroup.com/news-and-insights/wbot2015/average-itemized-deductions (last visited Apr. 11, 2018) (averaging $50,000 to $100,000 and $100,000 to $200,000 AGI brackets).

old as of June 1, 2016, (2) Household size is two (one kid—CTC eligible), and (3) She is single. Results:

- For independent student, household AGI of $20,000 (at both private and public school): (1) Federal Pell Grant: $5775 and (2) Direct Stafford Loan: $9500 at 4.29% ($3500 subsidized)
- For independent student, household AGI of $50,000 (at both private and public school): (1) Federal Pell Grant: $3425 and (2) Direct Stafford Loan: $9500 at 4.29% ($3500 subsidized)
- For independent student, household AGI of $50,000 (at both private and public school): (1) Federal Pell Grant: $0 and (2) Direct Stafford Loan: $9500 at 4.29% ($3500 subsidized)

Excess Subsidy Problem (Tables A-5 through A-8): The discount rate in all hypotheticals is 3%.

Table A-5

Pre-Positive Externality; Pre-Subsidy				
		2-year (graduate)	2-year (fail)	2-year (expected return)
Discount	COST (Year 0)	($20,000)	($20,000)	($20,000)
0.03	1	($19,417)	($2607)	($4709)
0.03	2	$5656	$189	$872
0.03	3	$5491	$183	$847
0.03	4	$5331	$178	$822
0.03	5	$5176	$173	$798
0.03	6	$5025	$167	$775
0.03	7	$4879	$163	$752
0.03	8	$4736	$158	$730
0.03	9	$4599	$153	$709
0.03	10	$4465	$149	$688
0.03	11	$4335	$144	$668
0.03	12	$4208	$140	$649
0.03	13	$4086	$136	$630
0.03	14	$3967	$132	$612
0.03	15	$3851	$128	$594
0.03	16	$3739	$125	$576
0.03	17	$3630	$121	$560
0.03	18	$3524	$117	$543
0.03	19	$3422	$114	$528
0.03	20	$3322	$111	$512
0.03	21	$3225	$108	$497
0.03	22	$3131	$104	$483
0.03	23	$3040	$101	$469
0.03	24	$2952	$98	$455
0.03	25	$2866	$96	$442
0.03	26	$2782	$93	$429
0.03	27	$2701	$90	$416
0.03	28	$2622	$87	$404
0.03	29	$2546	$85	$393
0.03	30	$2472	$82	$381
0.03	31	$2400	$80	$370
0.03	32	$2330	$78	$359
0.03	33	$2262	$75	$349
0.03	34	$2196	$73	$339
0.03	35	$2132	$71	$329
0.03	36	$2070	$69	$319
0.03	37	$2010	$67	$310
0.03	38	$1951	$65	$301
0.03	39	$1895	$63	$292
0.03	40	$1839	$61	$284
	Expected Value	$93,446	($18,179)	($4226)
	IRR	10.62%	7.20%	**-1.05%**

Table A-6

Included Positive Externality; Pre-Subsidy				
		2-year (graduate)	2-year (fail)	2-year (expected return)
Discount	COST (Year 0)	($20,000)	($20,000)	($20,000)
0.03	1	($19,417)	($2607)	($4709)
0.03	2	$6787	$189	$1013
0.03	3	$6589	$183	$984
0.03	4	$6397	$178	$955
0.03	5	$6211	$173	$927
0.03	6	$6030	$167	$900
0.03	7	$5854	$163	$874
0.03	8	$5684	$158	$849
0.03	9	$5518	$153	$824
0.03	10	$5357	$149	$800
0.03	11	$5201	$144	$777
0.03	12	$5050	$140	$754
0.03	13	$4903	$136	$732
0.03	14	$4760	$132	$711
0.03	15	$4621	$128	$690
0.03	16	$4487	$125	$670
0.03	17	$4356	$121	$650
0.03	18	$4229	$117	$631
0.03	19	$4106	$114	$613
0.03	20	$3986	$111	$595
0.03	21	$3870	$108	$578
0.03	22	$3758	$104	$561
0.03	23	$3648	$101	$545
0.03	24	$3542	$98	$529
0.03	25	$3439	$96	$513
0.03	26	$3339	$93	$499
0.03	27	$3241	$90	$484
0.03	28	$3147	$87	$470
0.03	29	$3055	$85	$456
0.03	30	$2966	$82	$443
0.03	31	$2880	$80	$430
0.03	32	$2796	$78	$417
0.03	33	$2715	$75	$405
0.03	34	$2636	$73	$394
0.03	35	$2559	$71	$382
0.03	36	$2484	$69	$371
0.03	37	$2412	$67	$360
0.03	38	$2342	$65	$350
0.03	39	$2273	$63	$339
0.03	40	$2207	$61	$330
	Expected Value	$120,019	($18,179)	($904)
	IRR	13.18%	-7.20%	**-0.22%**

Table A-7

Proper Subsidy to Correct Expected Private Return IRR and Account for Externalities					
		2-year (graduate)	2-year (fail)	2-year (expected)	2-year positive
Discount	COST (Year 0)	($17,250)	($17,250)	($17,250)	($2750)
0.03	1	($16,748)	($2226)	($4041)	($667)
0.03	2	$5656	$189	$872	$141
0.03	3	$5491	$183	$847	$137
0.03	4	$5331	$178	$822	$133
0.03	5	$5176	$173	$798	$129
0.03	6	$5025	$167	$775	$126
0.03	7	$4879	$163	$752	$122
0.03	8	$4736	$158	$730	$119
0.03	9	$4599	$153	$709	$115
0.03	10	$4465	$149	$688	$112
0.03	11	$4335	$144	$668	$108
0.03	12	$4208	$140	$649	$105
0.03	13	$4086	$136	$630	$102
0.03	14	$3967	$132	$612	$99
0.03	15	$3851	$128	$594	$96
0.03	16	$3739	$125	$576	$94
0.03	17	$3630	$121	$560	$91
0.03	18	$3524	$117	$543	$88
0.03	19	$3422	$114	$528	$86
0.03	20	$3322	$111	$512	$83
0.03	21	$3225	$108	$497	$81
0.03	22	$3131	$104	$483	$78
0.03	23	$3040	$101	$469	$76
0.03	24	$2952	$98	$455	$74
0.03	25	$2866	$96	$442	$72
0.03	26	$2782	$93	$429	$70
0.03	27	$2701	$90	$416	$68
0.03	28	$2622	$87	$404	$66
0.03	29	$2546	$85	$393	$64
0.03	30	$2472	$82	$381	$62
0.03	31	$2400	$80	$370	$60
0.03	32	$2330	$78	$359	$58
0.03	33	$2262	$75	$349	$57
0.03	34	$2196	$73	$339	$55
0.03	35	$2132	$71	$329	$53
0.03	36	$2070	$69	$319	$52
0.03	37	$2010	$67	$310	$50
0.03	38	$1951	$65	$301	$49
0.03	39	$1895	$63	$292	$47
0.03	40	$1839	$61	$284	$46
	Expected Value	$98,866	($15,049)	($805)	
	IRR	12.67%	-6.66%	**-0.22%**	($96)

Table A-8

Private Return - Improper Subsidy				
		2-year (graduate)	2-year (fail)	2-year (expected return)
Discount	COST (Year 0)	($12,000)	($12,000)	($12,000)
0.03	1	($11,650)	($1498)	($2767)
0.03	2	$5656	$189	$872
0.03	3	$5491	$183	$847
0.03	4	$5331	$178	$822
0.03	5	$5176	$173	$798
0.03	6	$5025	$167	$775
0.03	7	$4879	$163	$752
0.03	8	$4736	$158	$730
0.03	9	$4599	$153	$709
0.03	10	$4465	$149	$688
0.03	11	$4335	$144	$668
0.03	12	$4208	$140	$649
0.03	13	$4086	$136	$630
0.03	14	$3967	$132	$612
0.03	15	$3851	$128	$594
0.03	16	$3739	$125	$576
0.03	17	$3630	$121	$560
0.03	18	$3524	$117	$543
0.03	19	$3422	$114	$528
0.03	20	$3322	$111	$512
0.03	21	$3225	$108	$497
0.03	22	$3131	$104	$483
0.03	23	$3040	$101	$469
0.03	24	$2952	$98	$455
0.03	25	$2866	$96	$442
0.03	26	$2782	$93	$429
0.03	27	$2701	$90	$416
0.03	28	$2622	$87	$404
0.03	29	$2546	$85	$393
0.03	30	$2472	$82	$381
0.03	31	$2400	$80	$370
0.03	32	$2330	$78	$359
0.03	33	$2262	$75	$349
0.03	34	$2196	$73	$339
0.03	35	$2132	$71	$329
0.03	36	$2070	$69	$319
0.03	37	$2010	$67	$310
0.03	38	$1951	$65	$301
0.03	39	$1895	$63	$292
0.03	40	$1839	$61	$284
	Expected Value	$109,213	($9069)	$5716
	IRR	18.90%	-5.27%	2.07%