

# Financing Legal Education Through Student Loans: Results from a Quasi-Experiment in Tuition Remission

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## Introduction

Educational debt is a mounting source of anxiety and concern in American society.<sup>1</sup> The rising cost of legal education and its impact on graduates has been a part of this conversation. Legal education is the subject of critique, often fairly, about its high costs. In a 2011 editorial, *The New York Times* declared that “American legal education is in crisis,” largely in response to the model of financing legal education on the backs of high debt loads and bleak job prospects for graduates.<sup>2</sup> A never-ending stream of news stories abound, focusing on law students swimming in high debt and the seeming paralysis of law schools to solve the crisis.<sup>3</sup> This critique is only exacerbated by the difficulties of placing recent graduates into well-paying jobs, let alone channeling students to public interest positions that often have lower pay.<sup>4</sup>

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1. See Adam Looney & Constantine Yannelis, *A Crisis in Student Loans? How Changes in the Characteristics of Borrowers and in the Institutions They Attended Contributed to Rising Loan Defaults*, BROOKINGS PAPERS ON ECON. ACTIVITY, Fall 2015, at 1.
2. Editorial, *Legal Education Reform*, N.Y. TIMES, Nov. 26, 2011, at A18.
3. See, e.g., Steven J. Harper, *Pop Goes the Law*, CHRON. HIGHER EDUC. (Mar. 11, 2013), <http://www.chronicle.com/article/Pop-Goes-the-Law/137717>; Elizabeth Olson, *Law Graduate Gets Her Day in Court, Suing Law School*, N.Y. TIMES (Mar. 6, 2016), <https://www.nytimes.com/2016/03/07/business/dealbook/court-to-hear-suit-accusing-law-school-of-inflating-job-data.html>.
4. See, e.g., Jonathan D. Glater, *High Tuition Debts And Low Pay Drain Public Interest Law*, N.Y. TIMES, Sept. 12, 2003, at A1; Elizabeth Lesly Stevens, *Will Law School Students Have Jobs After They*

Over the past few decades, the cost of attending law school has skyrocketed, while the number of students admitted has decreased. A recent report by the American Bar Association found that between 2004 and 2014, law school enrollment declined by 15 percent, with private law school enrollment declining by 16 percent and public law school enrollment declining by 13 percent.<sup>5</sup> Over the same time period, tuition dramatically increased, rising by 25 percent at private schools and 63 percent at public institutions (CPI-adjusted).<sup>6</sup> Although tuition has risen over time, the proportion of students who actually pay full tuition has gone down, due in part to increases in tuition assistance, including both need and merit based.<sup>7</sup>

Despite the fact that fewer students are paying the full cost of legal education, the proportion that finance their legal education by taking on debt, and the amounts of those debt loads, has increased substantially. Between 2005 and 2012, law school debt increased by 25 percent in private schools and 34 percent in public schools.<sup>8</sup> In 2012, the last year that data were available, average law school debt was \$127,000 for private and \$88,000 for public law schools, which reflects an increase of 25 percent and 34 percent since 2005, respectively.<sup>9</sup> In comparison, graduates entering the bar in 2000 had an average debt load of \$70,000.<sup>10</sup>

The substantial increases in both law school tuition and student debt loads raise important questions about the future career and life-course trajectories of

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*Graduate?*, WASH. POST (Nov. 1, 2012), [https://www.washingtonpost.com/lifestyle/magazine/will-law-school-students-have-jobs-after-they-graduate/2012/10/31/f9916726-of30-11e2-bd1a-b868e65d57eb\\_story.html](https://www.washingtonpost.com/lifestyle/magazine/will-law-school-students-have-jobs-after-they-graduate/2012/10/31/f9916726-of30-11e2-bd1a-b868e65d57eb_story.html).

5. TASK FORCE ON FINANCING LEGAL EDUC., AM. BAR ASS'N, REPORT 16 (2015), [http://www.americanbar.org/content/dam/aba/administrative/legal\\_education\\_and\\_admissions\\_to\\_the\\_bar/reports/2015\\_june\\_report\\_of\\_the\\_aba\\_task\\_force\\_on\\_the\\_financing\\_of\\_legal\\_education.authcheckdam.pdf](http://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/reports/2015_june_report_of_the_aba_task_force_on_the_financing_of_legal_education.authcheckdam.pdf) [hereinafter A.B.A. TASK FORCE REPORT].
6. *Id.* at 23. Consumer Price Index (CPI) rates take inflation into account when reporting increases in tuition. The CPI tuition amounts use 1983 dollars as their base. "This measure speaks to the consumer's cost and ability to pay for the service. If CPI tuition increases it means that the consumer's ability to pay for the service is not keeping up and the service functionally is costing more than in the past." *Id.*
7. *See Net Tuition for U.S. Law Schools*, LAW SCH. TRANSPARENCY, <https://data.lawschooltransparency.com/costs/net-tuition/?scope=national> (last visited June 5, 2018). Some schools have tried to buck this trend. For instance, Brooklyn Law School, among others, are implementing a variety of tuition breaks in an attempt to shelter students from the growing reality of high debt loads upon graduation. *See* James B. Stewart, *A Bold Bid to Combat a Crisis in Legal Education*, N.Y. TIMES (Apr. 4, 2014), <http://www.nytimes.com/2014/04/05/business/bold-bid-to-combat-a-crisis-in-legal-education.html>.
8. A.B.A. TASK FORCE REPORT, *supra* note 5, at 32.
9. *Id.* These amounts reflect inflation-adjusted 2014 dollars.
10. GITA Z. WILDER, NAT'L ASS'N FOR LAW PLACEMENT, LAW SCHOOL DEBT AMONG NEW LAWYERS: AN AFTER THE JD MONOGRAPH 3 (2007). For comparison, corrected for CPI this amounts to \$93,176 in 2012 dollars. *See* Bureau of Labor Statistics, *CPI Inflation Calculator*, [https://www.bls.gov/data/inflation\\_calculator.htm](https://www.bls.gov/data/inflation_calculator.htm) (last visited June 5, 2018).

law school graduates, especially in relation to the current model of financing legal education. The urgency of these questions increased after the Great Recession of 2008, as the career prospects of law school graduates began to shrink substantially. Unanswered questions remain, however, about the drivers of debt among law students. Despite the ongoing debates and heightened concerns surrounding the role of debt in financing legal education, there has been very little systematic, empirical analysis focused on the topic.

This study presents results from a quasi-experimental, panel study of law students at the University of California Irvine School of Law (UCI Law). With the launch of a new law school in 2009, UCI Law instituted a tuition remission program for the first three cohorts as a means to attract students to the school while awaiting accreditation. Cohort one, the class of 2012, received full tuition remission; cohort two, the class of 2013, received one-half remission; cohort three, the class of 2014, received one-third remission. Subsequent cohorts did not have a guarantee of tuition remission, but they were eligible for various merit and need-based scholarships and public interest fellowships.<sup>11</sup> This natural experiment presents a unique context to evaluate how an innovative approach to educational financing can facilitate or burden students' behavior related to debt.

What impact did this tuition guarantee have on educational debt among students at UCI Law? We find a non-linear relationship between tuition remission and educational debt. Overall levels of educational debt did not uniformly increase as the amount of tuition remission decreased. Full tuition remission resulted in lower levels of debt for students in the first cohort, as we expected, but students in our partial tuition remission group did not significantly differ from students that received no tuition remission. In addition to our natural experiment in educational financing, another salient factor affecting debt levels is debt aversion. Intuitively, we find that students with higher levels of debt aversion took out lower amounts of debt, even after controlling for the natural experiment and other factors including race, gender, and parents' background.

To explain students' decisions about borrowing, Part I of this article presents an overview of the relevant literature from studies of financing higher education through borrowing and professional socialization. In Part II, we turn to a description of the research site, hypotheses, and our methods, including a description of our key variables. In Part III, we present our findings. We conclude with a discussion of the policy implication of our findings.

### **I. Financing the Decision to Become a Lawyer**

We situate our study at the center of two streams of relevant research: (1) financing a legal education and the role of debt and (2) the broader context of professional socialization in the legal profession. Debt has become an increasingly important and consequential reality for all college students, but

11. *UC Irvine School of Law to Provide One-Third Tuition Scholarships for Next Class of Students*, UCI LAW (Oct. 21, 2010), <http://www.law.uci.edu/news/press-releases/10-21-10.html>.

we also know that law students occupy a very specific, and in many ways privileged, position within higher education.<sup>12</sup> The literature on professional socialization illuminates how law school functions as a gateway to the profession and its role in shaping students' decisions at career launch.

*A. What we know, and do not know, about the financing of higher education*

Before turning to UCI Law's natural experiment in tuition remission, we briefly review the current understanding of the student loan market writ large, and specific findings about debt burden among law school graduates. As of 2014, the overall average outstanding student loan debt in the U.S. was \$22,550.<sup>13</sup> Debt is not, however, equally distributed. Student loan debt is related to a host of student-level characteristics, including family socio-economic status, race and ethnicity, and gender.<sup>14</sup> In addition, debt varies based on institutional characteristics, with significant differences at the undergraduate level between public or private 4-year institutions and for-profit or non-selective 4-year colleges.<sup>15</sup>

Graduate students generally take on more debt than undergraduates and the majority of professional-practice doctoral students (63%) take on over \$100,000 in student loan debt.<sup>16</sup> Among all graduate students, default rates on student loans are generally low (~3% for loans with repayment beginning in 2011) and their earning potential remains high.<sup>17</sup> At the graduate level, Belasco, Trivette, and Webber find that graduate school debt is significantly correlated with a set of individual characteristics (such as race, age, family status, gender, and type of degree), as well as two important (though unsurprising) institutional factors: fees and tuition.<sup>18</sup> Similarly, Niu finds that students who are Black and Latino and those who have parents with lower education levels are more

12. See, e.g., Nicholas W. Hillman, *Borrowing and Repaying Federal Student Loans*, J. STUDENT FIN. AID, no. 3, 2015, at 35; Jason N. Houle, *A Generation Indebted: Young Adult Debt Across Three Cohorts*, 61 SOC. PROBS. 448 (2014).
13. SANDY BAUM & MARTHA JOHNSON, *STUDENT DEBT: WHO BORROWS MOST? WHAT LIES AHEAD?* 7 (2015).
14. See, e.g., Fenaba R. Addo et al., *Young, Black, and (Still) in the Red: Parental Wealth, Race, and Student Loan Debt*, 8 RACE & SOC. PROBS. 64 (2016); Jason N. Houle, *Disparities in Debt: Parents' Socioeconomic Resources and Young Adult Student Loan Debt*, 87 SOC. EDUCATION 53 (2013).
15. See, e.g., Christopher Avery & Sarah Turner, *Student Loans: Do College Students Borrow Too Much—Or Not Enough?*, 26 J. ECON. PERSP. 165, 171 (2012); BAUM & JOHNSON, *supra* note 13; Looney & Yannelis, *supra* note 1, at 17-32.
16. BAUM & JOHNSON, *supra* note 13, at 6. Professional-practice doctorates "include chiropractic, dentistry, law, medicine, optometry, pharmacy, podiatry, and veterinary medicine." *Id.*
17. Looney & Yannelis, *supra* note 1, at 50.
18. Andrew S. Belasco, Michael J. Trivette & Karen L. Webber, *Advanced Degrees of Debt: Analyzing the Patterns and Determinants of Graduate Student Borrowing*, 37 REV. HIGHER EDUC. 469, 481-85 (2014).

likely to borrow for graduate education, while the size of the institution they attend and the racial composition of its student body also have an effect on borrowing.<sup>19</sup>

There is a specific strand of debt research that focuses on how fear of debt operates in student decision-making about whether to take on debt and then how much debt to incur to cover educational expenses. Looking internationally, scholars have tested two forms of attitudes toward educational debt: a negative orientation and a positive one.<sup>20</sup> Findings from these studies indicate that fear of debt is salient in decision-making about education, but that fear also varies along socio-economic and racial lines, suggesting that debt-based models of education may not be as effective in increasing access to higher education.<sup>21</sup> A recent study by Espeland and Sauder suggests that prospective law students, who were contemplating law school during and in the aftermath of the Great Recession of 2008, share this fear about taking on debt to finance their legal education.<sup>22</sup>

An evaluation by Rothstein and Rouse among undergraduates may be particularly salient for thinking through the implications of debt among law students.<sup>23</sup> Rothstein and Rouse evaluated an experiment in debt-free education at a wealthy undergraduate program; they found that students who received grants in place of traditional student loans had lower debt loads and were more likely to take lower-paying jobs in public service at graduation, providing initial evidence that debt may be a barrier to public service entry.<sup>24</sup>

Why should we be concerned about debt among law school graduates, arguably some of the most elite professionals in the United States? Rising law school tuition, decreasing government support for education, and increasing indebtedness among graduates was already on the rise before the Great Recession<sup>25</sup>, but their impact gained greater focus in the post-Recession period.<sup>26</sup> For instance, Olivas highlighted the complex system of financing a legal education even amidst a strong economy, including the fact that loan

19. Lian Niu, *Disparities in American Graduate Students' Tendency to Borrow: Race, Family Background, and Major*, 5 INT'L J. HIGHER EDUC. 194, 199-200 (2016).
20. See, e.g., Claire Callender & Jonathan Jackson, *Does the Fear of Debt Deter Students from Higher Education?*, 34 J. SOC. POL'Y 509 (2005); Steve Haultain et al., *The Structure of Attitudes to Student Debt*, 31 J. ECON. PSYCHOL. 322 (2010).
21. Callender & Jackson, *supra* note 20, at 529-35; Haultain et al., *supra* note 20, at 328-29.
22. WENDY NELSON ESPELAND & MICHAEL SAUDER, *ENGINES OF ANXIETY: ACADEMIC RANKINGS, REPUTATION, AND ACCOUNTABILITY* 154-55 (2016).
23. Jesse Rothstein & Cecilia Elena Rouse, *Constrained After College: Student Loans and Early-Career Occupational Choices*, 95 J. PUB. ECON. 149 (2011).
24. *Id.* at 158.
25. See John A. Sebert, *The Cost and Financing of Legal Education*, 52 J. LEGAL EDUC. 516 (2002).
26. See, e.g., A.B.A. TASK FORCE REPORT, *supra* note 5.

repayment is contingent on everything going right for a graduate (passing the bar, finding a job, etc.).<sup>27</sup> Finding a job is a particularly thorny issue: high debts require high salaries to repay in a timely fashion and avoid interest accrual.<sup>28</sup> Post-recession, as graduating lawyers were receiving more moderate incomes, questions arose about whether the new Federal Income Based Repayment program might mitigate this financial squeeze and what impact the program might have on future government funding for legal education.<sup>29</sup>

Relying on data from the *After the JD* study, Wilder estimates that law school graduates hold an average of \$70,000 in debt; these averages remain relatively constant across practice settings, although Black and Latino students face more difficult earnings-to-debt ratios than their white peers.<sup>30</sup> Wilder also indicates that lawyers in private practice were more likely to report that they considered the utility of their salary in paying down debt than lawyers in other settings.<sup>31</sup> The issue of law school drift from public service commitments to private sector practice has been at the center of the discussion of law school debt. Many policymakers and legal scholars pose that high debts, fueled by high tuition and insufficient scholarships and grants, drive students away from careers in public service.<sup>32</sup>

There have been few empirical studies of tuition interventions at law schools. In an early study of nine law schools, Chambers finds that many law school graduates found it difficult to meet their repayments obligations, with disproportionate effects for Latino/a and Black students.<sup>33</sup> Kornhauser and Revesz draw on data from New York University's School of Law and University of Michigan Law School to examine debt and the impact of loan repayment assistance programs.<sup>34</sup> They argue that factors like race, gender,

27. Michael A. Olivas, *Paying for a Law Degree: Trends in Student Borrowing and the Ability to Repay Debt*, 49 J. LEGAL EDUC. 333 (1999).
28. See Paul Campos, *The Crisis of the American Law School*, 46 U. MICH. J.L. REFORM 177, 204-08 (2012).
29. See William D. Henderson & Rachel M. Zahorsky, *The Law School Bubble: How Long Will It Last if Law Grads Can't Pay Bills?* A.B.A. J., Jan. 2012, at 30, [http://www.abajournal.com/magazine/article/the\\_law\\_school\\_bubble\\_how\\_long\\_will\\_it\\_last\\_if\\_law\\_grads\\_cant\\_pay\\_bills/](http://www.abajournal.com/magazine/article/the_law_school_bubble_how_long_will_it_last_if_law_grads_cant_pay_bills/).
30. WILDER, *supra* note 10, at 11-12.
31. *Id.* at 16-18.
32. See e.g., COMM'N ON LOAN REPAYMENT & FORGIVENESS, AM. BAR ASS'N, *LIFTING THE BURDEN: LAW STUDENT DEBT AS A BARRIER TO PUBLIC SERVICE* (2003); EQUAL JUST. WORKS, NAT'L ASS'N FOR LAW PLACEMENT & PARTNERSHIP FOR PUB. SERVICE, *PAPER CHASE TO MONEY CHASE: LAW SCHOOL DEBT DIVERTS ROAD TO PUBLIC SERVICE* (2002); SPECIAL COMM. ON THE IMPACT OF LAW SCHOOL DEBT ON THE DELIVERY OF LEGAL SERVICES, ILL. STATE BAR ASS'N, *FINAL REPORT, FINDINGS & RECOMMENDATIONS ON THE IMPACT OF LAW SCHOOL DEBT ON THE DELIVERY OF LEGAL SERVICES* (2013); Erwin Chemerinsky, *Creating a Law School That Emphasizes Public Interest Law*, 7 DEPAUL J. SOC. JUST. 1, 8-11 (2013).
33. David L. Chambers, *The Burdens of Educational Loans: Impacts of Debt on Job Choice and Standards of Living for Students at Nine American Law Schools*, 42 J. LEGAL EDUC. 187, 222-24 (1992).
34. Lewis A. Kornhauser & Richard L. Revesz, *Legal Education and Entry into the Legal Profession: The*

success in law school, and income within a professional sector ultimately have greater influence over career launch than debt.<sup>35</sup> Field builds on the New York University Law experiment, focusing on two alternate debt reduction strategies: tuition subsidies and loan repayment plans.<sup>36</sup> While the two financial aid packages were equivalent in their monetary value and had the same conditions for public service employment at graduation, they offered different timelines for debt alleviation: during law school or after.<sup>37</sup> Students in both debt reduction programs were more likely than students in the control group to take jobs in public service at graduation, but her findings also reveal that students have a distinct preference for tuition remission over tuition forgiveness, even if those were ultimately equivalent.<sup>38</sup>

Law students' decisions about how to finance a legal education unfold in a broader context of professional socialization. A large body of research has repeatedly shown that a legal education is not just about the passing on of relevant expertise, but also extends to students' socialization into the values, norms, mores, and culture of the law. Going back to the earliest work by Merton and colleagues in a study of medical students, findings consistently show that professional socialization, whether in law or medicine, includes a process of "indirect learning, in which attitudes, values, and behavior patterns are acquired as by-products of contact with instructors and peers" that is often more salient in shaping students' aspirations than the direct transmittal of knowledge.<sup>39</sup>

### *B. Professional Socialization in Law School*

A large body of empirical research examines the law school experience and its role in the professional socialization of new lawyers. Upon entry to law school, research has unpacked turning points in initiation rituals, particularly the key theories and forms of reasoning required to enter the profession.<sup>40</sup> The primary pedagogical form of this knowledge transfer is the case-dialogue method, which privileges advocacy for the client<sup>41</sup> through

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*Role of Race, Gender, and Educational Debt*, 70 N.Y.U. L. REV. 829 (1995).

35. *Id.* at 913-19.

36. Erica Field, *Educational Debt Burden and Career Choice: Evidence from a Financial Aid Experiment at NYU Law School*, 1 AM. ECON. J. APPLIED ECON. 1 (2009).

37. *Id.* at 2.

38. *Id.*

39. THE STUDENT PHYSICIAN: INTRODUCTORY STUDIES IN THE SOCIOLOGY OF MEDICAL EDUCATION 41 (Robert K. Merton et al. eds., 1957).

40. See, e.g., ROBERT GRANFIELD, MAKING ELITE LAWYERS: VISIONS OF LAW AT HARVARD AND BEYOND (1992); ELIZABETH MERTZ, THE LANGUAGE OF LAW SCHOOL: LEARNING TO "THINK LIKE A LAWYER" (2007); WILLIAM M. SULLIVAN ET AL., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW (2007).

41. See DEBRA J. SCHLEEF, MANAGING ELITES: PROFESSIONAL SOCIALIZATION IN LAW AND BUSINESS SCHOOLS 125-28 (2006).

what Nelson, Trubek, and Solomon describe as a “hidden curriculum”<sup>42</sup> and Mertz has described as the meta-linguistic “power of legal discourse.”<sup>43</sup> In this environment, whether explicitly or implicitly, students begin to take for granted the profession’s fundamental values, including the neutrality of legal reasoning and advocacy. Some argue that this process of socialization de-emphasizes a professional commitment to the pursuit of social good<sup>44</sup> or a “cultural invisibility” of social injustices.<sup>45</sup>

In this context of professional socialization, scholars have documented a drift in students’ goals at career launch: while many express a commitment to a career in public service at the beginning of their legal education, most gravitate toward private sector, corporate-oriented practice, with higher salaries and greater respect among peers<sup>46</sup>, by the time they graduate.<sup>47</sup> Findings suggest that the critical point is a student’s summer job decision between the 2L and 3L year: despite the initial expression of a desire to be a public interest lawyer, by their 2L summer many drift into a summer job in the private sector with the expectation that this will lead to a job offer at graduation. As students put aside their “lay” views of the law and absorb the “mythology of the legal profession,”<sup>48</sup> they absorb the profession’s valorization of “money, prestige, and career advancement” that is often conveyed through their exposure to attorneys in the private sector and their professors’ humor and anecdotes in class.<sup>49</sup> Anecdotal evidence suggests that students facing large debt loads to finance their legal education are particularly susceptible to these pressures. Nuances to this drift occur along race, class, and gender lines<sup>50</sup>, but, overall, graduates of elite law schools are significantly more likely to accept positions

42. Robert L. Nelson and David M. Trubek, *Arenas of Professionalism: The Professional Ideologies of Lawyers in Context*, in *LAWYERS’ IDEALS/LAWYERS’ PRACTICES: TRANSFORMATIONS IN THE AMERICAN LEGAL PROFESSION* 186 (Robert L. Nelson, David M. Trubek & Raymond L. Solomon eds., 1992).
43. MERTZ, *supra* note 40, at 104.
44. See, e.g., ROBERT V. STOVER, *MAKING IT AND BREAKING IT: THE FATE OF PUBLIC INTEREST COMMITMENT DURING LAW SCHOOL* 43-70 (1988); SULLIVAN ET AL., *supra* note 40, at 185-188.
45. MERTZ, *supra* note 40, at 132.
46. JOHN P. HEINZ ET AL., *URBAN LAWYERS: THE NEW SOCIAL STRUCTURE OF THE BAR* 81-97 (2005).
47. See, e.g., STOVER, *supra* note 44; John Bliss, *Divided Selves: Professional Role Distancing Among Law Students and New Lawyers in a Period of Market Crisis*, 42 *LAW & SOC. INQUIRY* 855, 886-87 (2017); Howard S. Erlanger et al., *Law Student Idealism and Job Choice: Some New Data on an Old Question Research Note*, 30 *LAW & SOC. REV.* 851 (1996).
48. STOVER, *supra* note 44, at 87.
49. *Id.* at 66.
50. See, e.g., CARRIE YANG COSTELLO, *PROFESSIONAL IDENTITY CRISIS: RACE, CLASS, GENDER, AND SUCCESS AT PROFESSIONAL SCHOOLS* (2005); LANI GUINIER ET AL., *BECOMING GENTLEMEN: WOMEN, LAW SCHOOL, AND INSTITUTIONAL CHANGE* 45-46 (1997); Jené Desmond-Harris, “Public Interest Drift” Revisited: *Tracing the Sources of Social Change Commitment Among Black Harvard Law Students*, 4 *HASTINGS RACE & POVERTY* L.J. 335 (2007).



in the “corporate hemisphere” while graduates of lower-tier law schools move into less prestigious and less remunerative positions, including very small firms and local government.<sup>51</sup>

Many have raised concerns about this trend in legal education.<sup>52</sup> For example, the 2007 report by the Carnegie Foundation found that current legal education, with competition for good grades and securing a seat on law review, developed strong intellectual and cognitive skills, but often failed to train its students in the critical areas of practice and professional identity that might impart to students a broader understanding of their role as lawyers in a democratic society.<sup>53</sup> At its founding, UCI Law directly responded to those critiques, providing students with a first-year curriculum that includes courses in forms of analysis (rather than strictly content knowledge about topics such as common law, constitutional law, and procedure), lawyering skills, and developing an understanding of the legal profession; there are then opportunities across their legal education to gain practice experience via experiential learning.<sup>54</sup> These curriculum innovations were not all drastic departures from the traditional law school canon, which reflects UCI Law’s desire to become a top-tier institution, but ultimately strike a “balance between innovation and tradition.”<sup>55</sup>

Building on this research, the UCI Law quasi-experiment in tuition remission allows us to systematically analyze the relationship between tuition remission and a student’s propensity to take on debt, net of other factors found in previous studies of higher education debt and professional socialization. More specifically, these studies point to three broad factors to weigh in an explanation of debt behavior at UCI Law. First, research suggests that fear of debt can impact law students’ behavior and decision making around debt accrual. Second, research suggests that students’ background, including race, gender and social class, may shape decisions on accruing debt. Third, research on drift in career aspirations, particularly at more elite law schools, suggests that by students’ 2L summer, they are quite likely to opt for private sector employment and, consequently, have latitude to accrue greater debt; recognizing, however, that first jobs are often viewed as an apprenticeship,<sup>56</sup>

51. See, e.g., JOHN P. HEINZ & EDWARD O. LAUMANN, *CHICAGO LAWYERS: THE SOCIAL STRUCTURE OF THE BAR* 193-96, 328-29 (1982); Ronit Dinovitzer et al., *Buyers’ Remorse? An Empirical Assessment of the Desirability of a Lawyer Career*, 63 J. LEGAL EDUC. 211, 226 (2013).

52. See, e.g., Jonathan D. Glater, *High Tuition Debts And Low Pay Drain Public Interest Law*, N.Y. TIMES, Sept. 12, 2003, at A1; Stewart, *supra* note 7.

53. SULLIVAN ET AL., *supra* note 40. See also Editorial, *Legal Education Reform*, N.Y. TIMES, Nov. 26, 2011, at A18.

54. Carrie Hempel & Carroll Seron, *An Innovative Approach to Legal Education: The Founding of the University of California, Irvine, School of Law*, in *THE PARADOX OF PROFESSIONALISM: LAWYERS AND THE POSSIBILITY OF JUSTICE* 169, 184-187 (Scott L. Cummings ed., 2011).

55. *Id.* at 185.

56. STOVER, *supra* note 42, at 81-82.

we also consider a measure of “intentional persistence”<sup>57</sup> to capture students’ career aspirations to work in the public or private sector five years post-graduation. In the next part, we discuss the context of UCI Law’s natural experiment, our hypotheses, research design, and analytical strategy.

## II. Studying the UCI School of Law’s Natural Experiment

### *A. The Research Site: A New Law School in an Era of Financial Crisis*

In 2009, amid the financial crisis, the University of California opened the first new public law school in Irvine in 40 years. In response to increasing criticism about legal education, UCI Law set out to create an innovative model that emphasizes the practice of law with the goal of producing lawyers who pursue careers dedicated to the public good.

To recruit law students to a brand new, experimental law school lacking any ranking or initial accreditation, UCI Law provided free tuition for the first class. The Dean secured additional funding to offer tuition remission to the second and third classes as well, but at reduced amounts: the second class received one-half off their tuition and the third class received one-third remission. Tuition and fees at UCI Law were estimated to be \$36,198.50 for in-state students and \$46,838.50 for out-of-state students in the 2009-2010 academic year; as of the 2014-2015 academic year, tuition and fees had risen to \$44,717 for in-state students and \$51,211 for out-of-state.<sup>58</sup> Beginning with the fourth class (the class of 2015), students were expected to pay the full tuition, although there are merit and need-based scholarships, as well as a program for public interest fellows. Recruiting successful cohorts at this early stage of the law school was seen as important for establishing the school’s reputation. That endeavor was successful and the cohorts have grown in size over time without compromising admissions standards. The experiment appears to have contributed to the school’s success, at least as measured by *US World News and Report*: its first ranking in 2015 was 30 and as of 2016 it is 28.<sup>59</sup>

More broadly, however, UCI Law’s tuition intervention presents an opportunity to augment our broader understanding of the role that law school financing of education has on overall levels of student indebtedness. We exploit this opportunity to design a unique, natural experiment that allows us to analyze these relationships. Specifically, we see the full tuition remission offered to the first class as an intervention that should affect how much debt students take on. Given that two additional classes also received partial tuition support, we do not have a traditional randomized controlled trial, which

57. Erin Cech et al., *Professional Role Confidence and Gendered Persistence in Engineering*, 76 AM. SOC. REV. 641, 644 (2011).
58. *UC Irvine School of Law - 2014 Standard 509 Information Report*, AMER. BAR ASS’N, <http://www.abarequireddisclosures.org/Disclosure509.aspx> (last visited May 30, 2018).
59. *Our History*, UCI LAW, <http://www.law.uci.edu/about/our-history/> (last visited May 30, 2018). *But see* ESPELAND & SAUDER, *supra* note 22.

usually consists of a treatment and control group. However, our study has a partial-treatment group, which we include in our analyses.

In light of the literature review discussed above, we test two hypotheses. The first hypothesis directly tests the impact of the tuition remission experiment at UCI Law. As UCI Law shifts from providing a guarantee of full tuition remission to more traditional forms of financial support for students, we anticipate that levels of indebtedness will rise in a linear fashion across the cohorts.

*Hypothesis 1: Declining guarantees of tuition remission will result in rising levels of debt to finance legal education.*

The second hypothesis tests the impact of fear of debt on students' financing decisions of their legal education. As we discussed, fear of debt has been shown to be a salient factor in students' decision making around debt behavior; fear of debt has, moreover, become particularly relevant in the post-Great Recession context.

*Hypothesis 2: Students' fear about the impact of debt on their future decisions will reduce their overall level of law school debt.*

Net of tuition support provided by UCI Law, we hypothesize that when students are more fearful about the role that debt will have on their personal and professional lives after graduation, they will take on less debt during law school. Therefore, we anticipate an inverse relationship between fear of debt and level of indebtedness.

Finally, to take account of findings from studies of professional socialization, we control for students' social background, reported GPA, 2L summer employment, and intentional persistence.

## B. RESEARCH DESIGN

### 1. Longitudinal Panel Survey of UCI Law Students

We draw from an original, longitudinal survey of law students. Along with important individual characteristics, we collected data on student debt, attitudes toward debt, and career expectations and outcomes. The survey was conducted online. An initial invitation to participate in the study was sent to all students from the Dean and several follow up reminders were sent by the Principal Investigator in an effort to increase response rates. We surveyed students at two points in time: once in the very beginning of the fall of their first year (1L) and again following graduation in their third year (3L).<sup>60</sup> To increase the response rate among 3L students, we incorporated a raffle and awarded

60. Surveys were administered through the Survey Research Institute (SRI) at Cornell University. The first cohort completed the 3L survey immediately after graduation. Subsequent cohorts completed the 3L survey during the winter following graduation to allow for more time between graduation and career launch.

every tenth respondent who completed the survey with a \$50 Amazon gift card. Unlike previous cross-sectional surveys, our longitudinal design allows us to capture student attitudes across the law school experience. Our response rates ranged from 64 percent to 96 percent, which are generally higher compared to other online survey studies of students.<sup>61</sup> Expectedly, on average, our response rates for the 1L survey were higher than the 3L survey, 87.6 percent versus 74.2 percent, respectively, which indicates a nominal amount of attrition across waves in the panel. We received responses from 468 students across our five-year panel, although not every student completed both the 1L and 3L survey. In this paper, our analyses include questions from both the 1L and 3L waves of the survey. Thus, our initial sample of those that completed both waves of the survey is 295 students.<sup>62</sup>

## *2. The Natural Experiment*

We exploit the unique tuition remission intervention described above, resulting in a natural, quasi-experiment. Unlike traditional randomized control trial (RCT) designs, quasi-experimental designs often lack randomized individual assignment into both the control and treatment groups.<sup>63</sup> The lack of random assignment raises important concerns about the potential for selection bias across the different cohorts of students. In other words, our design cannot definitively tease out whether differences in debt are attributable to variation in the unobserved characteristics of students admitted to UCI Law or whether they are due to the tuition remission intervention. For instance, it is possible that UCI Law attracted a unique group of students due to the offered tuition waiver compared to later classes, possibly confounding the causal inferences we can make about the intervention.

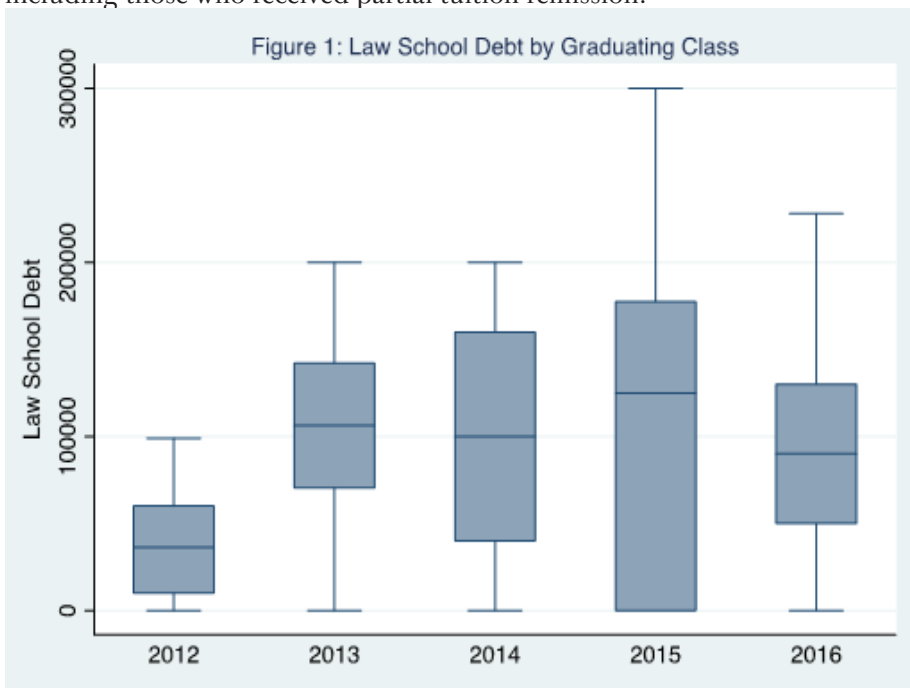
In order to account for this possibility, we analyzed differences across a selection of observed characteristics to detect any possible selection bias across our treatment and control groups. On average, the first cohort (our full treatment group) reported a higher level of fear of debt (mean=4.0) compared to the partial treatment group (mean=2.9) and control group (mean=2.6). With the addition of the class of 2016, the size of the cohorts increased; some significant differences in racial composition emerge. As we demonstrate below, fear of debt remains a significant factor for all cohorts in predicting debt; social background characteristics are not significant.

61. In an experimental study of college students at the University of Michigan, for example, McCabe enlisted respondents through both mail and online surveys. The online response rate was 63 percent compared to 40 percent for the mail survey. Sean Esteban McCabe et al., *Mode Effects for Collecting Alcohol and Other Drug Use Data: Web and U.S. Mail*, 63 J. STUD. ON ALCOHOL 755, 757 (2002).
62. In the models presented below, the total number of respondents across each model is less than 295 due to missing responses on some of our key independent variables.
63. NATALIE L. SPROULL, *HANDBOOK OF RESEARCH METHODS: A GUIDE FOR PRACTITIONERS AND STUDENTS IN THE SOCIAL SCIENCES* 150 (2d ed. 1995).

### 3. Measures

#### Dependent Variable: Law School Debt

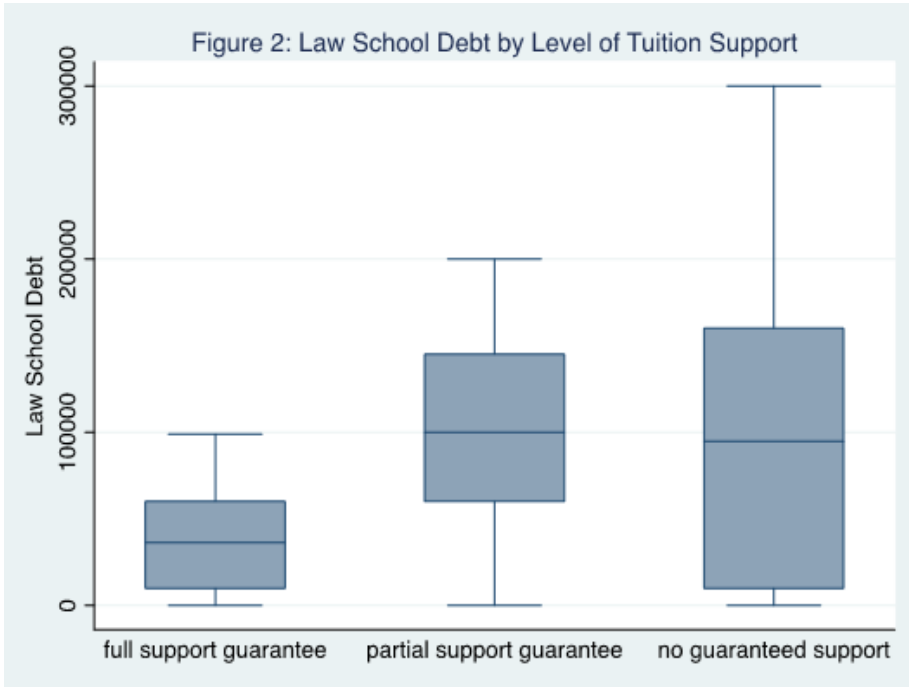
Respondents were asked to self-report their total educational debt after their 3<sup>rd</sup> year and indicate the percentages from undergraduate education, law school, and other graduate programs. For this study, we only focus on the level of law school debt. Thus, if a student reported \$100,000 in total debt with 75 percent attributed to law school, then their law school debt would be \$75,000. Figure 1 shows the range of debt reported across all five cohorts using box and whisker plots; these plots should be interpreted vertically, with the bars at the top and bottom showing the maximum and minimum law school debt as reported by students in that cohort. The solid box at the center of each image represent the 25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup> percentiles in the overall distribution. For example, the 2015 cohort shows that the 25<sup>th</sup> percentile of the distribution is the same as the minimum level of debt reported; in other words, 25 percent of that class reported no law school debt upon graduation. As shown in Figure 1, the average debt for the full tuition remission group is significantly lower with less variation compared to all subsequent cohorts, including those who received partial tuition remission.



#### Independent Variables

*The Intervention:* Our primary question focuses on whether the level of tuition remission affects a student's overall level of debt in law school. Thus, our main independent variable is the experiment itself. As mentioned above, our natural

experiment does not have just a treatment and control group, but includes five different cohorts that received different levels of tuition remission.<sup>64</sup> Further analysis indicated no statistically significant difference between the 2013 and 2014 cohorts, which received one-half and one-third tuition remissions, respectively. Thus, we collapsed these two cohorts into one “partial-treatment” group, leaving us with three groups: a *full treatment* group (2012 cohort), a *partial treatment* group (2013 and 2014 cohorts), and a *control* group (2015 and 2016 cohorts).<sup>65</sup> Figure 2 shows the distribution of law school debt across these three groups.



*Fear of debt:* We include a unique measure to capture a student’s fear of debt, which might affect the propensity to take on debt. Recall above that the first cohort had a statistically significant higher level of debt aversion compared to subsequent cohorts, which indicates the importance of including it in our models predicting debt. In order to capture fear of debt, our survey asked students: “To what extent will having educational debt upon graduation from law school influence your decisions about the following.” Students were then asked to score the following sub-questions from 1 (debt has no influence) to 7 (debt has a high influence): what job to take, what sector to work in, where to

64. The 2012 cohort received a full tuition remission, the 2013 cohort received a 50% remission, the 2014 cohort received a 33% remission, and the 2015 and 2016 cohorts received no tuition remission (but did have access to other forms of financial aid).

65. The average debt for each cohort is as follows: Class of 2012=\$37,144; Class of 2013=\$101,946; Class of 2014=\$98,099; Class of 2015=\$106,077; Class of 2016=\$89,049.

live, when to have children, and home ownership. We then used factor analysis to include all of these components in a single index ( $\alpha=0.852$ ).<sup>66</sup>

*Social background: Race, Gender & Parents' Education:* In addition to the intervention and debt aversion, we control for several other indicators that literature has shown to be germane to an analysis of law student debt. *Gender* is self-reported and is a dichotomous measure (female=reference). We include a categorical race variable that captures whether the student is from an *underrepresented minority* group, which includes those that self-identified as either Black, Latino, or Native American; we also included separate categories for two groups: students who self-identified as multiracial or students who identified as either white or Asian.<sup>67</sup> We also include a measure of parents' social capital by capturing their level of education.<sup>68</sup> We constructed a dummy variable comparing those with at least a bachelor's degree to those with less education.<sup>69</sup>

*Professional Socialization:* We also include measures related to the institutional context of law school. First, we include the student's self-reported *law school*

66. Factor analysis is a statistical method used to identify the correlations between variables and then assess how well they combine to form a factor that incorporates them all into a single variable (in this case, fear of debt as expressed by questions about the impact of debt on major life decisions). See SPROULL, *supra* note 63, at 315. Cronbach's alpha is an estimate of the reliability of both the relationships among individual items in an instrument and their relationship to the total instrument. Alpha ranges from 0 to 1; an alpha of 0 indicates no covariance and an alpha approaching 1 indicating complete covariance. In social science research, the generally accepted threshold for Cronbach's alpha is 0.7. See Robert A. Peterson, *A Meta-Analysis of Cronbach's Coefficient Alpha*, 21 J. CONSUMER RES. 381 (1994).
67. Students were offered a wide range of racial categories for them to self-identify their race, but could only select one category. We tested multiple ways of collapsing these responses into categorical variables to include in the statistical analyses. These tests revealed that Asian students in the sample were more similar to white respondents than to those who identified as URM. We chose to retain multiracial as an independent category because it was commonly selected, but since respondents were not asked to indicate the composition of that racial identity, we did not want to incorrectly label them.
68. Parents' level of educational attainment, alongside their occupations and income, are often used as indicators of a student's socio-economic status. See Sara Goldrick-Rab & Fabian T. Pfeffer, *Beyond Access: Explaining Socioeconomic Differences in College Transfer*, 82 SOC. EDUC. 101, 103-04 (2009). With regards to debt in particular, prior research has shown that parents with higher levels of education can provide greater guidance and support for students entering higher education, even when controlling for income. See Houle, *supra* note 14, at 62-67.
69. Respondents were asked to identify their parents or guardians as "Parent 1," "Parent 2," etc. Our measure includes the response listed under "Parent 1": out of 281 valid responses, 63.0% were father or step-father and 37.0% were mother or step-mother. For "Parent 2", there were 261 valid responses and 64.4% of respondents reported their mother or step-mother, while 35.6% reported their father or step-father. Once we reached "Parent 3", the majority of the values were missing and the most commonly cited relationship was step-father (n=10). We did include education level for "Parent 2" in earlier iterations of the model, but found that (much like for "Parent 1") it did not have statistical significance. We also tried different ways of categorizing parental education, including dummy and categorical variables, but they did not prove statistically significant in the models. More details about this variable are available by request.

*GPA*. Second, we include the type of summer job held between the second (2L) and third (3L) years, coded as public sector, private sector, or other, with those responding with public sector as the reference category.<sup>70</sup> We expect that 2L jobs in the public sector will pay less, possibly affecting students' decision about how much debt to take out to cover their living situation. Finally, we include a measure of *intentional persistence*, which reflects the sector of the profession the student expects to be working in five years post-graduation.<sup>71</sup> (See Table A1 in the appendix for a summary of the variables used in this study, including means and standard deviations as appropriate.)

#### 4. Analytic Strategy

We use ordinary least squares (OLS) regression to estimate law school student debt. Because our research question asks whether the level of tuition remission affects a student's law school debt load, we include students that reported no law school debt. We do not transform our debt measure because analyses indicated a better model fit without a log transformation and we also had little evidence of large skewness in the distribution. Breusch-Pagan tests indicated a linear form of heteroskedasticity (i.e., error variances increased with larger levels of debt). To correct for this, we include robust standard errors in each of our models.

We run a series of four nested models. The first model includes only our two central theoretical variables: the experimental intervention and debt aversion. Model 2 includes gender, race, and parent's education. Model 3 includes the student's law school GPA and summer job held between their 2L and 3L years. Finally, in Model 4, we include our measure of *intentional persistence*—where the student plans to be working in five years.

## IV. Results

Table 1 reports the results of our OLS regression models. Model 1 includes only our intervention and debt aversion variables. We find that both the partial-treatment and control group hold higher debt on average relative to the full-treatment group. Further, the control group has higher debt than the partial-treatment. Moreover, we find that students who held higher levels of fear of debt had lower debt on average after controlling for level of tuition support. This suggests that fear of debt acts as a factor in students' decisions to take on debt independent of the level of tuition remission they received.

70. Public sector summer jobs include these settings: government, the judiciary, a non-profit, or doing research for a law school faculty member. Private sector employment includes jobs in private firms or in-house counsel. The third category includes students that had a mix of both public and private positions or were employed in another setting that could not be categorized (for example, "a part-time job" with no additional details).
71. The survey includes a range of different types of jobs within the profession including small/solo firms, large firms, in-house counsel, public interest, government, etc. We collapsed these responses into three categories: public sector, private sector, and no particular plans or other. Public sector employment is the reference category.



**Table 1: OLS Regression Models Predicting Law School Debt**

	Model 1	Model 2	Model 3	Model 4
<i>Tuition Support Level</i> (full tuition support = reference)				
Partial Tuition Remission	46676.1 *** (8008.7)	45333.5 *** (7949.5)	56461.3 *** (8736.5)	56341.1 *** (8824.5)
No Tuition Remission	46680.3 *** (8798.5)	42743.0 *** (9799.2)	50829.7 *** (10535.4)	50842.8 *** (10709.8)
Fear of Debt (index)	-12971.5 *** (2438.9)	-12384.8 *** (2596.6)	-11078.0 *** (2659.4)	-11785.7 *** (2703.3)
Gender (1=female)		9451.9 (8205.3)	7022.0 (8374.4)	6061.6 (8532.5)
<i>Race</i> (White or Asian = reference)				
Underrepresented Minority		-2503.1 (11300.3)	8572.4 (12227.5)	9080.0 (12898.1)
Multiracial		8866.4 (11586.5)	-2624.3 (11809.3)	-2238.3 (11914.8)
Parents' Education (1 = college degree or higher)		-11117.5 (8073.5)	-6200.6 (8090.3)	-7165.2 (8232.6)
Law School GPA			4118.3 (9246.9)	1053.9 (9442.6)
<i>Summer Job during 2L</i> (public sector = reference)				
Private			21284.8 * (8515.0)	26374.9 ** (8952.8)
Mix/Other			-13280.7 (14025.4)	-10507.8 (14506.3)
<i>Intentional Persistence</i> (plan to be in public sector in 5 years = reference)				
Private Sector				-4247.3 (9519.0)
No plans/other				-13106.5 (10092.0)
Constant	93896.2***	98156.0***	61777.5	76509.5*
N	255	227	212	202
adjusted R2	0.193	0.200	0.219	0.227
Robust Standard Errors in Parentheses				
* p < 0.05, ** p < 0.01, *** p < 0.001				

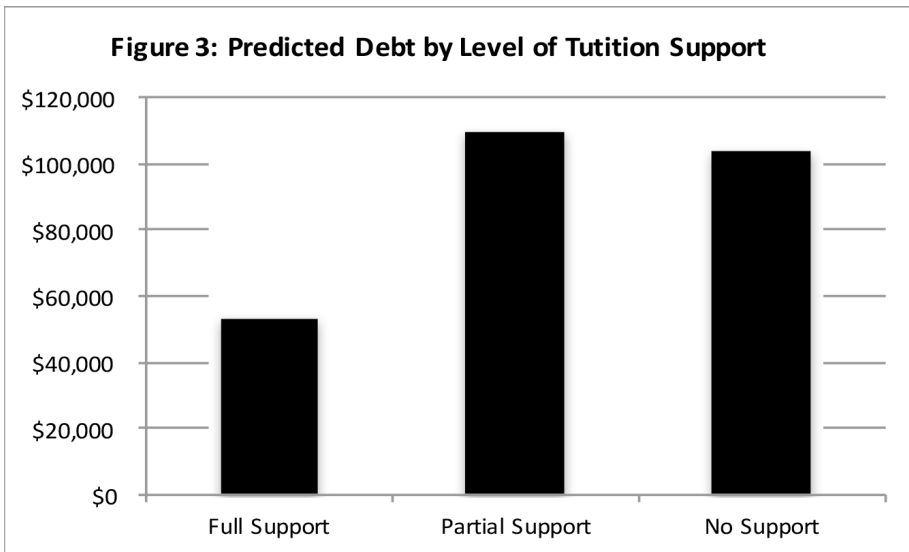
Model 2 adds our social background controls to our main effects. Here, we continue to find support for the intervention as well as for fear of debt, net of social background. That is, we find no differences in student debt when looking across gender, race, or parents' educational background. It is important to note that while these variables were not statistically significant in our models with a small sample from a single institution, prior research has documented important disparities in debt across legal education, particularly in relationship to race.<sup>72</sup>

Model 3 includes law school GPA and the type of summer job held between the 2L and 3L year. Our main theoretical effects continue to hold. Law school GPA shows no statistical effect on debt, net of the other variables in the model. Additionally, we find support that the type of job taken in their 2L summer affects average level of debt. Students who held a 2L summer job in the private sector had higher debt on average relative to students who worked in the public sector.

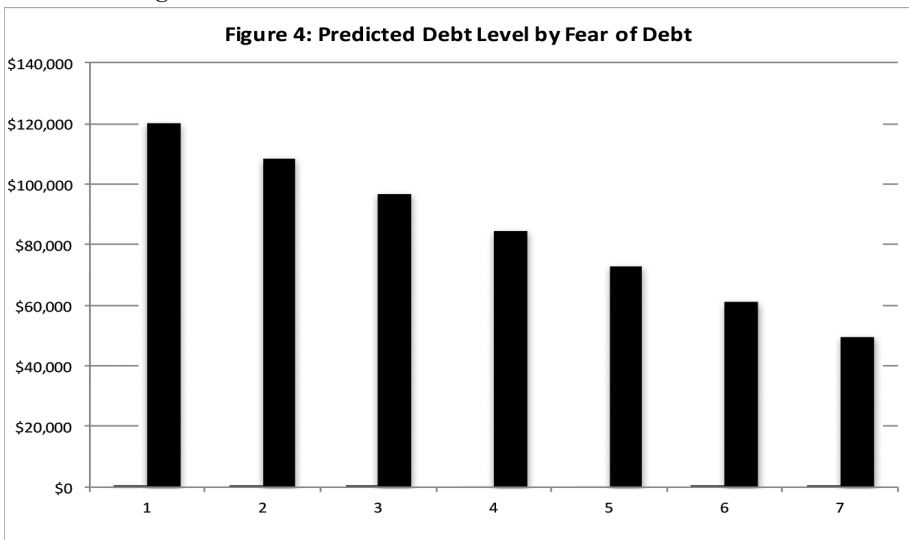
Model 4 presents our full model, which includes our measure for intentional persistence, or students' career plans five years post-graduation. Our full model shows that our main theoretical variables remain consistently significant and in the hypothesized direction. Like the previous model, the only control variable that reaches statistical significance is the 2L summer position. Students who took a summer job in the private sector continue to have higher debt on average, net of all of the other factors in the model.

What are the predicted levels of debt across the three experimental groups? Drawing from the results in Model 4, we estimated the predicted level of debt, holding all of the other variables constant at their mean. Figure 3 shows these predicted levels of debt. These results predict that the average level of debt for the full-treatment group, which received a full-tuition remission for all three years of law school, is \$53,118. For the partial-treatment group, the predicted level of debt is \$108,943. Finally, for the control group, which received no tuition support as a group, the predicted level of debt was \$104,285. More importantly, however, there is not a statistically significant difference between the partial-treatment and control groups, although there is a nominal difference in average predicted debt loads between them. We return to this finding in the discussion below.

72. LAW SCHOOL SURVEY OF STUDENT ENGAGEMENT, 2015 ANNUAL SURVEY RESULTS: HOW A DECADE OF DEBT CHANGED THE LAW STUDENT EXPERIENCE 12 (2015), <http://lssse.indiana.edu/wp-content/uploads/2016/01/LSSSE-Annual-Report-2015-Update-FINAL-revised-web.pdf>.



What are the predicted levels of debt by different levels of fear of debt? Recall that our measure is an index ranging from 1 to 7, with the higher the index value indicating more debt aversion. Figure 4 shows a downward linear relationship between fear of debt and predicted levels of debt. Holding all other variables constant in Model 4, the predicted level of debt at the lowest value of the index is \$120,049 compared to only \$49,335 at the highest level of the index. These findings suggest that regardless of whether students were in the full, partial, or control group, fear of debt in and of itself is an important factor in students' behavior around debt accrual; we return to a consideration of this finding in the discussion and conclusion.



## Robustness Tests

We ran a series of robustness tests to ensure that our results were consistent across different model specifications. All robustness tests were run using the full equation in model 4. Table 2 shows the results of these tests. Model 1 is a quantile regression to predict the median level of debt across the predictors. Quantile regression is better when outcome measures like debt are heavily skewed. Results indicate no substantive differences in our effects from the OLS results. In model 2 we run a robust regression, which reduces the weight given to outlier values in the regression. This model indicates the same pattern of substantive results. Finally, in model 3, we run a tobit model due to the left-hand censoring of the outcome measure (i.e., debt cannot go below zero). The results are substantively similar to our OLS regression results.

**Table 2: Robustness Checks Using Alternative Model Specifications**

	Quantile	Robust	Tobit
<i>Tuition Support Level</i> (full tuition support = reference)			
Partial Tuition Remission	66833.3 *** (16233.8)	57107.2 *** (12817.3)	55684.3 *** (9654.8)
No Tuition Remission	57038.4 *** (16972.0)	49775.1 *** (13400.1)	45656.3 *** (12247.7)
Fear of Debt (index)	-12928.1 *** (3793.2)	-13057.9 *** (2994.9)	-14142.5 *** (3206.4)
Gender (1 = female)	7759.7 (11134.1)	9898.3 (8790.8)	5043.2 (9068.2)
<i>Race</i> (White or Asian = reference)			
Underrepresented Minority	5691.6 (18754.3)	4454.3 (14807.3)	13016.4 (13059.6)
Multiracial	-5438.9 (17319.2)	-3887.0 (13674.2)	-557.8 (12820.1)
Parents' Education (1 = college degree or higher)	-5703.0 (11761.9)	-10235.8 (9286.5)	-8708.0 (8634.9)
Law School GPA	-16742.3 (12785.0)	-2742.7 (10094.3)	3253.4 (9792.3)
<i>Summer Job during 2L</i> (public sector = reference)			
Private	26594.8 * (12306.0)	25386.5 ** (9716.1)	29639.7 ** (9565.8)
Mix/Other	-11963.0 (21053.5)	-12359.8 (16622.7)	-10565.9 (15851.4)
<i>Intentional Persistence</i> (plan to be in public sector in 5 years = reference)			
Private Sector	1459.3 (12418.3)	-3180.6 (9804.8)	-6095.4 (10259.3)
No plans/other	-15326.7 (16620.7)	-13045.8 (13122.8)	-13426.5 (10422.2)
Constant	135787**	95338.6*	75444.0*
<i>N</i>	202	202	202

Standard Errors in Parentheses

\* p &lt; 0.05, \*\* p &lt; 0.01, \*\*\* p &lt; 0.001

Taken together, these findings suggest that the type of tuition remission program matters; that is, the full tuition remission model made a significant difference whereas the two types of partial tuition remission did not. Hence, we reject our first hypothesis; the findings show that there is not a linear relationship between level of tuition support and debt accrual. Also, these findings suggest that the full tuition remission model had the effect of reducing inequalities, as measured by debt, within the cohort. Though variation in debt load is narrowest for the full remission model, the effect of the partial tuition plans also reveals less variation in debt accrual compared to the control group; we return to this finding in the discussion and conclusion. Supporting our second hypothesis, our findings show that fear of debt is a key and independent factor in an explanation of students' decisions to finance their legal education through debt. The professional socialization of these cohorts of law students coincides with the Great Recession of 2008 and its aftermath; speculating, these findings suggest that this experience remains salient for students' behavior around debt accrual. Finally, these findings demonstrate that professional socialization continues to play a role: those students who took a 2L summer job in the private sector appear to be more comfortable accruing greater debt.

The findings reported here are based on a robust research design that includes longitudinal data to capture students' actual behavior and attitudes in real time (1L and 3L), rather than retrospectively. Further, this study is enhanced by a specific intervention, various degrees of tuition remission, to test its effect on debt behavior. Nonetheless, there are limitations. First, this quasi-experiment was conducted at one site; second, the sample sizes are relatively small. Thus, these findings should be interpreted with some caution, though their robustness does raise the importance of replication at other sites and suggests important policy options.

### Discussion & Conclusion

The findings reported here demonstrate that innovative educational financing interventions can have important effects for overall levels of indebtedness. In our experiment, the full tuition remission intervention had two important effects on student debt. First, as a group, students receiving the full remission had lower *overall* levels of debt upon graduation compared to students in the other groups. Indeed, on average, this group had about half as much debt. Second, and equally important, the level of *variation* in debt is much smaller compared to the partial tuition and control groups. In other words, full tuition remission leads to much more equality in debt between students, where even the highest levels of debt are not outliers.

Contrary to hypothesis 1, we did not find support for a linear relationship between the level of tuition remission and debt accrual. Only the full tuition remission had a significant effect on lowering overall debt levels; students who received a partial tuition remission had similar levels of debt, on average, compared to those who received no tuition remission. That said, students in

the partial tuition remission group did exhibit less variation in the amount of debt accrued compared to the control group. Though not as great as full tuition remission, this finding around variation in debt level for the partial tuition group also appears to have an equalizing effect within the cohort as measured by debt accrual. Speculation suggests that tuition remission is not limited to its effect on individual behavior but extends to the broader cultural context of legal education.

Constraining the level of variation in debt between students, these findings suggest, should be an important component of our collective conversations around financing legal education through debt. Certainly, we should continue to be concerned about overall debt levels, but it is equally important to consider how much variation exists between students because this may affect the culture of legal education and lead to differential paths into the profession. For instance, a commonly held assumption is that students who desire working in the public interest who have high debt will take higher-paying jobs in the private sector to pay down their debt; another assumption holds that only those students from wealthier social backgrounds who do not need to accumulate large amounts of debt can afford to pursue a career in public interest law. To the extent that the full and the partial tuition remission models reduce the variation in debt among *all* students in the cohort, it has an equalizing effect; we might speculate that this equalizing effect may also open up a space for a broader swath of students to explore a wider range of career options, including public service, at career launch.

The first cohort of students entered UCI Law immediately after the Great Recession when the financial future of the country was quite uncertain and the riskiness of a law degree was reflected in the poor employment outcomes of recent graduates.<sup>73</sup> One concern that we had was that this exogenous event might have influenced students' decisions about how much debt to take when deciding whether to enroll in law school. For instance, were the students in the first class solely attracted to UCI because of the tuition remission? Were these students generally more debt averse than subsequent cohorts simply because they enrolled during the midst of an economic meltdown? To account for this possibility, we hypothesized that a student's level of debt aversion would be a significant factor in their decision to take on debt to fund their education. Indeed, we were concerned that fear of debt would be significantly more salient for the first compared to later cohorts. From a methodological perspective, the exogenous event of the Great Recession could confound any results from our natural experiment if not taken into account in our analyses. Thus, for theoretical and methodological reasons, we found it important to control for debt aversion. Our findings support our hypothesis that higher levels of debt aversion have an *independent* effect on law school indebtedness, net of the tuition intervention. In other words, while the full tuition remission had an independent and statistically significant effect on reducing debt, a student's fear of debt also played a significant role in reducing overall

73. Editorial, *supra* note 2.

indebtedness, across all cohorts. This finding might suggest that one legacy of the Great Recession is that it may have caused a ripple effect for young adults, casting a shadow over decisions about how much debt is manageable or even appropriate for the value of the credential, even after the labor market for lawyers regained some stability. That this is the case for law graduates from a well-regarded school suggests that the phenomenon of fear of debt may have wider implications for how this emerging generation of law graduates manages their careers, a finding that is certainly worth pursuing in future research among graduates across a range of law schools.

Interestingly, and *contra* discussion in the wider literature, our findings do not demonstrate that social background characteristics, including gender, race/ethnicity or parents' educational attainment, had a significant effect on debt accrual. While this is a promising finding, it must be interpreted with caution and certainly requires further study with larger samples of students.

Our findings suggest that the wider culture of professional socialization in law remains salient in explaining students' debt behavior at UCI Law. Those students at UCI Law who took a 2L summer position in the private sector were significantly more likely to accrue greater debt compared to their counterparts. These students' decisions complement a wide-ranging literature in the professional socialization of law students, and a drift toward the more taken-for-granted values of the profession. Of course, positions at career launch are an increasingly noisy indicator of a longer horizon in lawyers' careers.<sup>74</sup> In light of UCI Law's mission to place legal practice and public service front and center, whether and to what extent UCI Law students are more likely to pursue careers in the public sector over the life course remains an open question worthy of study.

We note the policy implications of this study. Widespread debates abound about the contemporary model of financing higher education and the consequences it has for student outcomes.<sup>75</sup> Financing legal education with debt has important consequences for professional career trajectories, and we see an important role for law schools to intervene with innovative funding models to reduce ballooning debt burdens of graduates. Offering a tuition remission, like those at UCI Law, can be one such financing model. Contrary to our expectations, UCI's experiment with tuition remission had unintended effects on debt levels. Although the full tuition remission led to a substantially lower level of debt for students, the partial tuition remissions had no significant difference in average debt relative to the control group. But, and this is very important, both the full and partial tuition models did reduce the level of variation in debt within the cohorts suggesting, as we noted above, a greater degree of equality in students' behavior around debt. For those law schools contemplating steps to reduce students' debt load at graduation with tuition

74. RONIT DINOVTIZER ET AL., NAT'L ASS'N FOR LAW PLACEMENT & A.B.A., *AFTER THE JD: FIRST RESULTS OF A NATIONAL STUDY OF LEGAL CAREERS* 53-54 (2004).

75. SARA GOLDRICK-RAB, *PAYING THE PRICE: COLLEGE COSTS, FINANCIAL AID, AND THE BETRAYAL OF THE AMERICAN DREAM* (2016).

remission, our findings suggest that when all students, regardless of need, receive the same incentive, it appears to influence the behavior of all students to be more conservative in their borrowing behavior.

We close with a call for more empirical research on the relationship between law school educational financing, student debt, and career outcomes. These topics are not just timely, but have important implications for the future trajectory of legal education, the profession and its role in democratic governance and civic engagement. Ongoing debates about debt are important, but they are conversations that require systematic, empirical analysis. Our study only focuses on the experience of one law school. We hope that law schools, researchers, and advocates will work together on these important issues and that this study will facilitate continued, data-driven conversations.



**Appendix****Table A1: Descriptive Statistics**

	Full Support		Partial Support		No Support	
	Mean	SD	Mean	SD	Mean	SD
Law School Debt	37144.00	28666.00	100075.50	58122.52	97157.34	74490.78
Fear of Debt (index ranges 1 to 7)	3.95	1.52	2.86	1.37	2.58	1.45
Female	0.53	-	0.51	-	0.58	-
Race						
white or asian	0.88	-	0.79	-	0.73	-
underrepresented minority	0.07	-	0.10	-	0.12	-
multiracial	0.05	-	0.11	-	0.15	-
Parent has college degree or higher	0.76	-	0.69	-	0.67	-
Law School GPA	3.53	0.29	3.42	0.56	3.53	0.29
2L Summer Job						
public sector	0.33	-	0.49	-	0.52	-
private sector	0.64	-	0.44	-	0.42	-
mix or other	0.02	-	0.07	-	0.07	-
5 year career plans						
public sector	0.43	-	0.49	-	0.48	-
private sector	0.40	-	0.36	-	0.41	-
no plans/other	0.17	-	0.15	-	0.11	-