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Using the LSAT as a labor market thermometer for lawyers

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Abstract

We rely upon a 50-state, 20-year panel to find that the number of Law School Admissions Test (LSAT) takers is only loosely related to economic conditions—although slightly more for men than for women, who in 2020 accounted for 58% of all LSAT takers. The number of test takers rose more than 35% between 2014 and 2020. This wave accentuated an already existing downtrend in the median real income of lawyers, and thus provides support for the hypothesis that most states have more lawyers than they need.

Can a society have too many lawyers? The supposition that there is an optimal number of lawyers, above which additional lawyers will stifle economic growth remains an important and controversial topic that provokes strident commentary (prominent among them, Galanter, 1974; Blake-Gonzalez & Koch, 2022; Magee, 1991; Maurizi, 1979; Olson, 1992). However, these discussions nearly always have ignored a proverbial canary in the coal mine—the number of individuals who take the Law School Admissions Test (LSAT).

If there are too many lawyers, then holding constant for a moment the demand for all lawyers, then this likely means that years earlier, an apparently excessive number of individuals decided to sit for the LSAT. Why does this conclusion follow? Because historically the LSAT has been required as one part of the admissions materials submitted by law school applicants.¹ Unless a prospective student takes the LSAT, described by the *Wall Street Journal* (Paul, 2022) as “a rigorous test of abilities in logic, analytical reasoning and reading comprehension” that individual cannot be admitted to an ABA-accredited law school. Additionally, in all but four states, a person’s failure to graduate from an ABA-accredited law schools means that individual cannot acquire a license to practice law.² Hence, there is a direct, although delayed connection between the number

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of individuals who take the LSAT and subsequent labor market conditions for lawyers. This is a connection that has been accorded little attention.

In theory, anyone can sign up and take the 3-h, 30-min LSAT, but there is a financial barrier. The 2021–2021 cost of sitting for the exam was \$200 for a single test report plus \$45 for every law school to which a test taker wishes to receive her LSAT scores. Furthermore, most law schools require applicants to subscribe to the Credential Assembly Service, and this was \$195 in 2021. Thus, the cost to law school aspirants of taking the LSAT and sending their scores to a single law school is \$440 (Princeton Review, 2022).

Apart from the cost of taking the exam, however, the LSAT has long been a target of criticism from those who argue that it is subtly biased against minority candidates (for example, Nussbaumer, 2006) and that it exhibits gender bias (Kidder, 2000). Some assert that the LSAT's dominance has enabled some law schools to increase their prices (Organ, 2017). Critics have opined further that the LSAT is overused (Edwards, 2006) and that its scores do not necessarily predict success in law school (Marks & Moss, 2016). In addition, some argue that the LSAT ultimately has little to do with the actual activities of practicing lawyers (in this vein, see Richter, 2013). The literature on these issues extends well beyond the studies just cited but those noted were influential in shaping what has turned out to be a continuing debate.

This vein of critical commentary is among the reasons why the ABA may decide to make the LSAT optional in the future. Heretofore, however, the Law School Admission Council (LSAC) has exercised almost total control over nearly all aspects of the exam since the first test was administered in 1948. The LSAC periodically publishes research that seeks to rebut criticisms and argues that “The LSAT is still the most accurate predictor of law school success” (Knezevich & Camara, 2020). Whatever one's views on these matters, it is fair to say that the LSAT continues to occupy a central position in legal education and thus there is little disagreement that, as Powell and Steelman (2012) put it, “Test results are used to winnow persons for admittance...”

Reality is that the LSAT serves as the first substantive, visible gate that nearly all aspiring lawyers must pass through if they hope eventually to practice as a lawyer. Although it has obvious importance, the factors that influence the flow of those who take the LSAT have not received great attention in terms of rigorous empirical work. An exception is the unpublished work of Miller (2004), although his data now are 20 years old and therefore miss the decline in the median real income of lawyers that has occurred in the United States since the turn of the century (Blake-Gonzalez & Koch, 2022). In any case, Miller's interesting work has received scant attention. Miller was a student at the time,³ subsequently graduated from law school, and now is a practicing attorney.

Miller found that potential law students are “myopic and consider immediate job prospects more than future streams of earnings.” He also concluded that the immediate cost of attending law school (for example, tuition expense) was unimportant compared with whether lawyers at that moment were earning income premiums compared with workers in other occupations.

Given the lack of published, referred analyses of LSAT examination behavior, we are left with the speculations of the popular media. Accordingly, when the annual number of individuals taking the LSAT oscillates by a significant amount, this usually spawns speculative commentary in the media focusing on why this has occurred. Various, reporters invoke an improving (or declining) economy, an oversupply of lawyers, the impact of new legislation, or a rise in public-spirited social awareness as reasons for significant variations in the number of LSAT aspirants.⁴ The analysis seldom proceeds further.

The focus of this paper is what determines the annual number of individuals who opt to take the LSAT. Specifically, we look at the annual number of individuals who sit for the LSAT for the

first time and we do this on a state-by-state basis by relying on a panel data set involving the 50 states plus the District of Columbia for the period 2001–2020. Our LSAT data were supplied by the Law School Admission Council. We utilize conventional ordinary least squares and fixed effects regressions to generate answers. Our findings may not be revolutionary because they highlight economic factors, but they will improve the ability of universities and the legal profession to predict both enrollments and the future supply of lawyers. Furthermore, if an excessive number of lawyers does reduce economic growth, then this problem effectively starts with the LSAT. Understanding the role played by the LSAT enables one to predict the future supply of lawyers more accurately.

This paper is organized as follows. In the first section, we provide general data that show the number of individuals who take the LSAT.

In second section, we document several important economic factors that might influence the number of individuals who take the LSAT.

In third section, we present more rigorous regression analyses of the determinants of the number of individuals who take the LSAT in the 50 states plus the District of Columbia. We test a variety of hypotheses in this regard.

In fourth section, we discuss the implications of our findings.

VARIATIONS IN THE NUMBER OF INDIVIDUALS WHO TAKE THE LSAT FOR THE FIRST TIME

The number of individuals taking the LSAT for the first time in 2020 was 102,470, down 16.39% from the 122,554 test takers in 2001 (see [Table 1](#) and [Graph 1](#)). Between 2001 and 2020, however, the total of test takers sank as low as 76,672 in 2015 and rose as high as 123,384 in 2009. However, between 2014 and 2020, the number of test takers rose by 35.2%. Hence, there is substantial variability in the number of individuals who annually sit for the LSAT.

One can see in [Table 1](#) that the number of individuals sitting for the LSAT for the first time in the median state fell from 0.379 per 1000 individuals in 2001 to 0.352 in 2010 and declined further to 0.299 in 2020. During this period, however, the ratio fell as low as 0.229 per 1000 individuals in 2014 and rose as high as 0.401 in 2009.

Since 2012, the percentage of women first-time LSAT takers always has exceeded that of men. In recent years, the gap between women and men test takers has widened such that in 2020, 58.95% of all first-time test takers were women (Law School Admissions Council, [2021a](#)). [Graph 2](#) illustrates the increasing dominance of women in the realm of first-time LSAT takers.

A variety of reasons might explain the ascendancy of women LSAT takers, including the expanding panoply of occupational choices available to women, one of which is the pursuit of a meaningful law career. But economic factors play a role and as we will see in a moment, men appear to have been more sensitive to the declining median real incomes that have afflicted lawyers as a group since the turn of the century. This has meant that proportionately fewer men now sit for the LSAT.

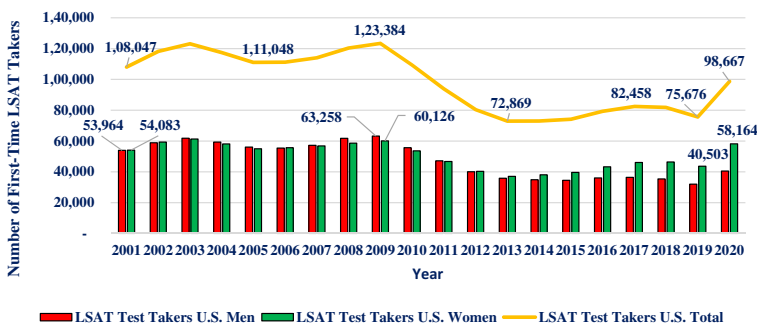
The data in [Table 1](#) reflect only those individuals taking the LSAT for the first time—the Law School Admissions Council's preferred metric to describe LSAT activity. The Council usually supplies only limited information concerning those who retake the LSAT. Thus, test retakers are not included in our analysis.

However, numerous individuals fail to achieve a score that is sufficient to get the admitted to a law school they wish to attend and subsequently decide to retake the test, sometimes 10 times

TABLE 1 Number of individuals who sat for the LSAT for the first time: United States, by gender, 2001–2020

Year	Men first-time LSAT takers	Women first-time LSAT takers	Total first-time LSAT takers	Total first-time LSAT takers per 000
2001	53,964	54,083	108,047	0.379
2002	58,909	59,308	118,217	0.410
2003	61,817	61,305	123,122	0.423
2004	59,346	58,113	117,459	0.400
2005	56,052	54,996	111,048	0.375
2006	55,456	55,695	111,151	0.372
2007	57,229	56,818	114,047	0.378
2008	61,790	58,600	120,390	0.395
2009	63,258	60,126	123,384	0.401
2010	55,669	53,661	109,330	0.353
2011	47,189	46,703	93,892	0.301
2012	40,059	40,301	80,360	0.256
2013	35,825	37,044	72,869	0.230
2014	34,886	38,071	72,957	0.229
2015	34,495	39,631	74,126	0.231
2016	36,045	43,252	79,297	0.245
2017	36,404	46,054	82,458	0.253
2018	35,391	46,415	81,806	0.250
2019	32,024	43,652	75,676	0.230
2020	40,503	58,164	98,667	0.299

Source: Law School Admission Council (2021a). Note that approximately 2% of individuals do not self-select the male or female genders and are not included in these data. These data also do not include foreign LSAT takers, including those from Canada.



GRAPH 1 Number of Individuals Who Sat for the LSAT for the First Time: United States, Overall and by Gender, 2001–2020. Source: Law School Admission Council (2021a). Note that approximately 2% of test takers do not self-select the male or female genders and are not included in these data. These data also do not include foreign LSAT takers, including those from Canada. [Colour figure can be viewed at wileyonlinelibrary.com]

or more. Between July 2020 and June 2021, only 55.6% of all test takers were first timers (Law School Admissions Council, 2021b) although between 2010 and 2018, 68% of test takers were first timers (PowerScore, 2021). There is limited evidence that those who retake the LSAT improve



GRAPH 2 Percent of U.S. gross domestic product devoted to legal services (NAICS 5411), 2001–2019.

Sources: Bureau of Labor Statistics (2021b) for legal services, May 2020 and preceding years, www.bls.gov/oes/2020/may/naics4_541100.htm. Federal Reserve Bank of St. Louis, GDP Devoted to Legal Services (NAICS 5411), [Gross Domestic Product: Legal Services \(NAICS 5411\) in the United States \(USLEGALNGSP\) | FRED | St. Louis Fed \(stlouisfed.org\)](https://fred.stlouisfed.org/series/USLEGALNGSP), gross domestic product, [Gross Domestic Product \(GDP\) | FRED | St. Louis Fed \(stlouisfed.org\)](https://fred.stlouisfed.org/series/GDP). [Colour figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com)]

their scores, but by an average of less than 3% each for the second and third times they retake the exam (PowerScore, 2021). Regardless, the Law School Admissions Council reports all the exam attempts made an individual when it reports scores to specific law schools.

The distribution of scores achieved by test takers on the LSAT is sensitive to the total number of individuals taking the exam. In our sample, the simple correlation coefficient between the number of men taking the LSAT and the percent of men scoring 165 or above on the exam is +0.799, whereas the comparable correlation coefficient for women still was a substantial +0.464.⁵ Thus, when greater numbers of individuals take the exam, this enhanced group includes larger proportions of individuals who score well on it. Often these are men. We offer an economic explanation for this behavior below.

THE ECONOMIC ROOTS OF LSAT EXAMINATION NUMBERS

A wide variety of motives influence the number of individuals who sit for the LSAT, including perhaps a desire to serve humanity, free unjustly imprisoned individuals, save the environment, promote world peace, and follow family traditions. We do not gainsay these motives but argue that economic motives are at least as important.

Consider initially [Graph 2](#), which reports the percent of US gross national product accounted for by salary payments to lawyers and in addition the percent connected to those involved in the wider provision of general legal sector services (which includes paralegals, judges, arbitrators, etc., in addition to lawyers). Note that between 2008 and 2019, the relative shares of lawyers and law-related individuals of the total income pie (as measured by gross domestic product) fell in all but 2 years and by 2019 were only about four-fifths of their 2008 values. Were we to observe a similar phenomenon in another industry, likely we would characterize that industry as declining, struggling, or failing.

If we view law as a prototypical struggling/declining industry, then it is easier to explain why during the same 2008–2019 period that the number of individuals taking the LSAT for the first

time declined from 123,384 to 75,676 (−38.7%). In effect, the legal industry was contracting (in relative terms) and therefore we should not be surprised that some prospective LSAT sensed this and reacted accordingly.

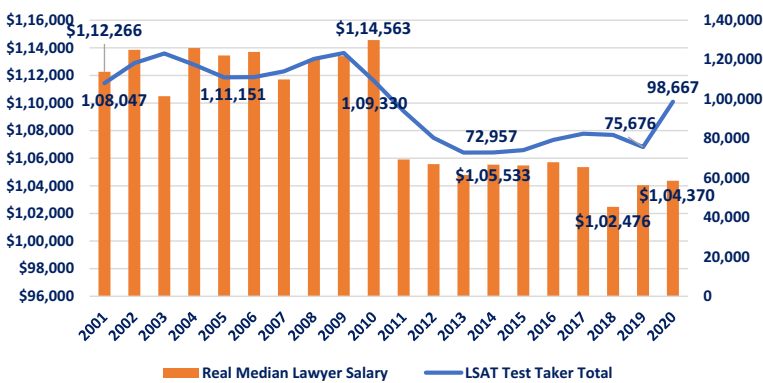
We note parenthetically that the numerical dominance of women LSAT takers carries over to the number of individuals who subsequently apply for admission to at least one law school. A total of 26,972 men and 34,430 women did so in 2020. Of those individuals who applied for admission and were admitted, 18,437 men and 20,894 women ultimately became first-year J.D. students (American Bar Association, 2021). Thus, of those individuals admitted, larger proportions of men than women opted to attend law school. But men represented a larger proportion of a smaller total number of law school attendees.

Another lens through which one can view LSAT takers is to compare that flow of individuals to what was happening to the real incomes of lawyers. Graph 3 does so, and there one can see that while the relationship is not precise, the number of individuals taking the LSAT appears to track roughly the median real incomes of lawyers in the same year. For our entire sample of states and years, the simple correlation coefficient between the real median income of lawyers in a year and the same-year number of LSAT takers is 0.559.

What is apparent, however, is that during the first two decades of this century declining lawyers' real incomes caused the number of individuals taking the LSAT to decline but hardly to crash. In many other labor markets, declining real incomes cause current and prospective workers to head for the exits. Not so here. Perhaps the prestige attached to being a lawyer and an apparent lack of information about lawyers' incomes are among factors that have moderated labor market responses. While this is consistent with the notion that society has too many lawyers, it does not prove that hypothesis.

We experimented with a variety of lagged relationships, for example, pairing this year's number of LSAT takers with last's year's median real income of lawyers, but this did not improve the fit between the real incomes and the number of LSAT takers.

If we disaggregate the LSAT taker data by gender, interesting differences arise between men and women. Graph 4 shows that since 2012, the reactions of male and female LSAT takers have diverged in terms of their responses to changes in real median lawyers' incomes. The percentage of test takers who were women rose from 50.15% in 2012 to 58.95% in 2020 and in several years this occurred when the real median incomes of lawyers were in decline. Indeed, over the



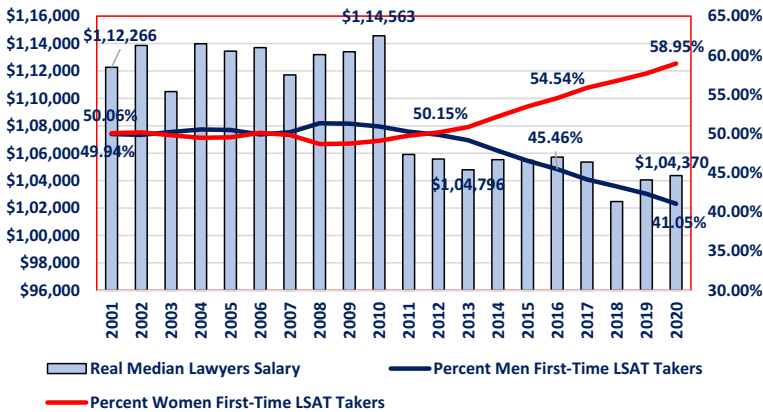
GRAPH 3 Comparing the number of first-time LSAT takers to the median of state median real lawyers' salaries: U.S., 2001–2020. Sources: Law School Admissions Council for LSAT takers and the Bureau of Labor Statistics, Occupational Employment and Wages (various years). [Colour figure can be viewed at wileyonlinelibrary.com]

period 2012–2020, the percentage of women taking the LSAT increased by 8.80% even while the real median income of lawyers in the United States declined by \$837 during the same period.

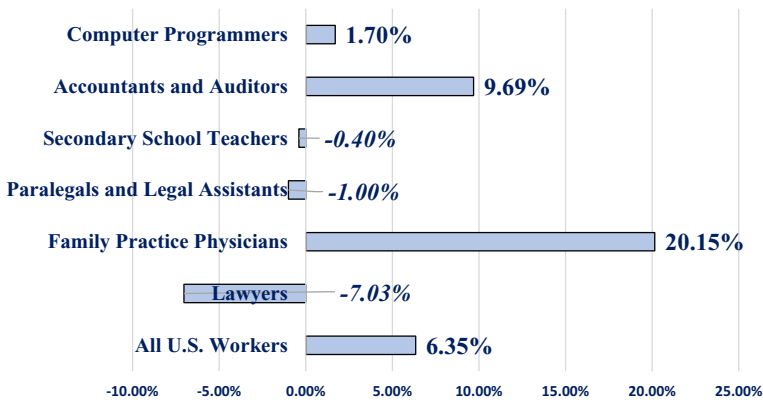
Thus, in terms of decisions concerning whether to take the LSAT, men appear to be more sensitive than women to contemporary labor market conditions for lawyers. One can see in **Graph 4** that many women gave limited heed to the slump that occurred in lawyers’ earnings; many chose to sit for the LSAT anyway.

In any case, financially speaking, the past two decades have not been kind to the typical lawyer. **Graph 5** reports that the real median income of American lawyers fell 7.03% between 2001 and 2020. Note that the economic situation for all workers was different; the representative worker’s real income rose 6.35% during these two decades.

Illustrative of lawyers’ earning woes is the widening gap between the incomes of lawyers and physicians—an apt comparison because physicians and lawyers often have been considered comparable in terms of their professional prestige and status. The real median incomes of family practice physicians rose 20.15% between 2001 and 2020 while those of lawyers fell 7.03%. Thus, the economic deterioration that was occurring for lawyers’ incomes did not hold true generally among professionals.



GRAPH 4 Contrasting men’s and women’s LSAT taking percentages with real median lawyer income, 2000–2020. [Colour figure can be viewed at wileyonlinelibrary.com]



GRAPH 5 Percent change in the real median incomes of workers in various occupations, 2001–2020. [Colour figure can be viewed at wileyonlinelibrary.com]

A MULTIVARIATE INVESTIGATION OF THE DETERMINANTS OF THE NUMBER OF FIRST-TIME LSAT TAKERS

We rely upon both ordinary least squares and fixed effects estimating techniques. We use ordinary least squares to estimate semi-logarithmic equations for the performance metrics noted above:

$$\log Y_{it} = a + \beta_{it}X_{it} + e_{it}, \quad (1)$$

where $\log Y_{it}$ = logarithm of a dependent variable Y for state “ i ” in year “ t ,” a = constant term, b_{it} = regression coefficient for state “ i ” in year “ t ,” X_{it} = independent variable characteristic for state “ i ” in year “ t ,” and e_{it} is a stochastic error term.

To deal with potential unobserved influences upon our performance metrics, we also rely upon semi-log fixed effects estimating models represented by:

$$\log Y_{it}^* = u_t + \beta X_{it}^* + \varepsilon_{it}^*, \quad (2)$$

where u_t = changes in dependent variable Y over time; Y_{it}^* = a time-demeaned deviation score for a state at time t relative to its mean value \bar{Y}_{it} and is equal to $Y_{it} - \bar{Y}_{it}$; X_{it}^* = a time-demeaned deviation score for independent variables X equal to $X_{it} - \bar{X}_{it}$; and ε_{it}^* = a time-demeaned disturbance term equal to $\varepsilon_{it} - \bar{\varepsilon}_{it}$.

The variables we employ are the following:

LSAT takers = Total number of LSAT takers, or the total number of male takers, or the total number of female takers (all are first-time takers). Source: Law School Admissions Council (2021a).

Real median income of lawyers by state = The real median income of lawyers in a given state. Source: Bureau of Labor Statistics (2021a).

State bar pass rate = Percent of first-time test taking individuals who pass the bar examination in a state. Source: American Bar Association (2021).

Legal workers per 1000 persons = Number of individuals employed as lawyers and in related occupations such as paralegals, magistrates, and judges in a state. Source: Bureau of Labor Statistics (2021b).

Ratio of paralegals and legal assistants to lawyers = Number of paralegals and legal assistants as a percent of lawyers in a state. Source: Bureau of Labor Statistics (2021a).

Percent of state resident in poverty = Percent of a state's population that the Census says live in poverty. Source: Federal Reserve Bank of St. Louis, 2021a.

Real state gross domestic product = Real annual gross domestic product of a state expressed in billions. Source: Federal Reserve Bank of St. Louis (2021b).

All financial variables are real and stated in terms of July 2020 prices.

Total test takers (men and women)

Consider Table 2, which explores the determinants of the total annual numbers of individuals who sat for the LSAT for the first time in the United States between 2001 and 2020. Equation (1) generates strong results with estimated coefficients that correspond to expectations. Test takers as a group are sensitive to lawyers' incomes. A \$5000 increase in a representative state's real median income for lawyers is associated with a 1.29% absolute increase in LSAT takers.

TABLE 2 Determinants of the annual total number of first-time LSAT takers: State level, 2001–2020. The dependent variable is logarithm of the total number of first time LSAT takers, 2001–2020

State-level variable	(1) Ordinary least squares	(2) Cross-section and period fixed effects
Constant	−1504.927 (352.615)***	3694.153 (308.401)***
Real median lawyer annual income (000s)	0.0129 (0.0021)***	0.0028 (0.0017)*
Bar examination pass rate	4.4449 (2.9113)	−3.0941 (1.6522)*
Legal workers per 1000 persons	−13.1274 (3.5143)***	−29.2673 (10.8251)***
Ratio of paralegals and legal assistants to lawyers	−7.9455 (1.5213)***	−1.4590 (1.2075)
Percent poverty	30.4662 (7.5493)***	−8.9407 (7.5886)
Real state GDP (billions)	4.8278 (0.2374)***	−4.3534 (0.4827)***
R^2 Adj.	0.866	0.977
States	51	51
Cross-sections	959	959

Note: White corrected diagonal standard errors in parentheses appear below estimated coefficients. All monetary values are real and expressed in terms of June 2020 prices. *** = Statistically significant at the 0.01 level; * = 0.10 level.

The estimated coefficient on the state bar examination pass rate variable is positive but fails to achieve statistical significance. Thus, it does not appear that state bar examination pass rates have much influence over the number of LSAT takers.

Test takers do, however, appear to be sensitive to the possibility of crowding in their prospective profession. The mean number of legal sector employees in a state per 1000 residents was 8.34 in 2020. A 1.00-unit increase in this number would evoke a 13.12% absolute decline in those taking the LSAT. Test takers may sense when the employment of legal personnel is sufficiently high that adding themselves to this number would not be wise. This is a phenomenon separate from earned incomes.

The rise in the use of paralegal and legal assistant personnel in law firms has been widely documented. In 2001, there were 38.29 paralegals and legal assistants per 100 lawyers present in the typical state. By 2020, this number had risen to 56.82 (Bureau of Labor Statistics, 2021b). However, *a priori*, the impact of this on the number of those taking the LSAT is not clear. Do prospective lawyers and employers view paralegals and legal assistants as individuals who take the place of lawyers, or instead does it turn out that these individuals increase the productivity of lawyers and thus make them more valuable (which in turn presumably stimulates the number of individuals who take the LSAT)? Our Equation (1) supplies evidence that test takers usually view these individuals as substitutes for lawyers. A 1.0% absolute increase in the number of paralegals and legal assistants to lawyers stimulates a 7.95% absolute decline in the number of LSAT aspirants.

Poverty, *per se*, could determine who can afford to attend law school and prior to that who can afford to take the LSAT. But poverty also is positively associated with a range of other behaviors that influence the demand for lawyers, including criminal acts, divorce, and applications for disability. Thus, our expectations are mixed with respect to the sign on the estimated coefficient

for the poverty variable. Equation (1) records a positive and statistically significant coefficient for our poverty variable, but our confidence in that estimate is reduced by the negative coefficient on this variable in Equation (2), which will discuss shortly.

It is reasonable to expect more populous states to field more LSAT takers. It is vital to control for this factor and in Equation (1) of Table 1 the positive and statistically significant coefficient on the variable measuring the size of each state's economy conforms to the expectation that larger states will have more LSAT takers. Once again, however, this coefficient changes sign in our fixed effects estimate in Equation (2).

We note that the adjusted R^2 (coefficient of determination) for Equation (1) is 0.866, suggesting that we have captured a substantial proportion of the influences that determine the number of individuals who attempt the LSAT in the various states. An explanation that highlights economic influences, then, works rather well and gives us less reason to give heed to the fixed effects estimates that we now present.

Equation (2) of Table 1 reports a fixed effects estimating equation that produces results similar to Equation (1) for the real median lawyer annual income variable, the legal workers per 1000 people variable, and the paralegal/legal assistant variable. The signs on the estimated coefficients change for the other variables in Equations (1) and (2), sometimes in ways that are difficult to fathom. One would expect, for example, larger states (as measured by the sizes of their real gross state products) to have more LSAT takers. It is not sensible to expect the opposite—that California, for example, should have fewer examination takers than Montana. Thus, even although there are econometric reasons why one might prefer fixed-effects estimates over ordinary least squares estimates, we believe in this case the fixed effects Equation (2) is less useful for the purposes at hand. If the coefficient of determination (R^2) with respect to Equation (1) were lower, we might reach a different conclusion. We present the fixed effects estimates because it is *de rigueur* to present fixed-effects estimates in panel data situations such as we have and not because they appear to have considerable relevance.

Lagged relationships

It is plausible that this year's number of LSAT takers might be a function of conditions in years past. We tested several versions of this hypothesis and report in Table 3 one in which all independent variables are lagged 1 year. Thus, this year's LSAT score for a state is a function of last year's lawyers' incomes in that state, etc.

As one can see in Table 3, this makes very little difference—the same explanatory variables are statistically significant. The R^2 statistic rises slightly in the ordinary least squares version but falls in the fixed effects estimate.

The import of Table 3 is straightforward—LSAT takers react predominantly to current circumstances when they decide whether or not to sit for the examination. They do not appear to take a long view of what is happening in the legal profession. The evidence is mixed whether test takers pay attention to pass rates on state bar examinations (another gate through which they must pass to practice law).

The LSAT circumstances of men and women considered separately

We already have seen that both the proportion and the number of men taking the LSAT fell substantially beginning in 2012 so that now almost three-fifths of all test takers are women. The

TABLE 3 Determinants of the annual total number of first-time LSAT takers: State level, 2001–2020, with 1-year lags on independent variables

State-level variable	(1) Ordinary least squares	(2) Cross-section and period fixed effects
Constant	−904.048 (349.936)***	3384.857 (370.883)***
Real median lawyer annual income (−1)	0.0103 (0.0020)***	0.0024 (0.0016)
Bar pass rate (−1)	1.7938 (2.9092)	−3.5635 (1.8187)*
Legal workers per 1000 persons (−1)	−8.7373 (3.1712)***	−7.2899 (14.1588)
Ratio of paralegals and legal assistants to lawyers (−1)	−7.2117 (1.5039)***	−0.6990 (1.1876)
Percent poverty (−1)	13.4243 (6.5680)**	−17.7763 (8.3266)**
Real state GSP (billions) (−1)	4.9203 (0.2220)***	−3.3302 (0.6390)***
R^2 Adj.	0.871	0.973
States	51	51
Cross-sections	959	959

Note: White corrected diagonal standard errors in parentheses appear below estimated coefficients. All monetary values are real and expressed in terms of June 2020 prices. *** = Statistically significant at the 0.01 level; ** = 0.05 level; * = 0.10 level.

equations in [Table 4](#) (for men) and [Table 5](#) (for women) provide interesting information concerning the ways men and women have differed in terms of their reactions to changing conditions. Our estimate is that a \$5000 decline in the real median income of lawyers in a representative state is associated with a decline in male LSAT takers that ranges between 0.90% and 3.95%, while the comparable decline for women is between 0.4% and 2.6% (both estimates holding other things constant). Men appear to attach more importance to lawyer's incomes than women when both decide whether to take the LSAT.

The only other difference of note between men and women test takers is with respect to the bar examination pass rate in the state where they took the LSAT. Men are attracted by higher bar examination pass rates, while the opposite is true for women. There is no ready explanation for this dichotomy.

WHAT WE HAVE LEARNED

The analysis presented here reveals that on a per capita basis, fewer individuals now sit for the LSAT than held true two decades ago. In absolute terms, however, the decline has been relatively modest and the number of individuals who took the LSAT for the first time in 2020 was more than 35% higher than in 2014.

Economic conditions for lawyers make a difference in the number of LSAT takers but less than one might suspect. In any case, it is current economic conditions rather than longer-term trends that are most influential in determining the number of LSAT takers.

TABLE 4 Determinants of the annual number of first-time men LSAT takers: State level, 2001–2020

State-level variable	(1) Ordinary least squares	(2) Cross-section and period fixed effects
Constant	−1134.352 (194.618)***	2005.872 (176.784)***
Real median lawyer annual income	0.0079 (0.0012)***	0.0018 (0.0008)**
Bar pass rate	5.9264 (1.5585)***	−1.8520 (0.9665)*
Legal workers per 1000 persons	−9.0942 (1.9465)***	−9.1977 (6.8823)
Ratio of paralegals and legal assistants to lawyers	−4.7553 (0.8476)***	−0.5113 (0.6059)
Percent poverty	19.7395 (4.2361)***	−8.89609 (4.2532)**
Real state GDP (billions)	2.2128 (0.1301)***	−2.7054 (0.2814)***
R^2 Adj.	0.834	0.968
States	51	51
Cross-sections	959	959

Note: White corrected diagonal standard errors in parentheses appear below estimated coefficients. All monetary values are real and expressed in terms of June 2020 prices. *** = Statistically significant at the 0.01 level; ** = 0.05 level; * = 0.10 level.

TABLE 5 Determinants of the annual number of first-time women LSAT takers: State level, 2001–2020

State-level variable	(1) Ordinary least squares	(2) Cross-section and period fixed effects
Constant	−424.174 (169.307)**	1699.134 (159.488)***
Real median lawyer annual income	0.0052 (0.0010)***	0.0008 (0.0009)
Bar pass rate	−1.1059 (1.4420)	−1.6591 (0.8198)**
Legal workers per 1000 persons	−4.3722 (1.6747)***	−10.4421 (5.6359)*
Ratio of paralegals and legal assistants to lawyers	−3.2625 (0.7154)***	−0.5498 (0.6156)
Percent poverty	11.5803 (3.542)***	−5.4129 (3.8752)
Real state GDP (billions)	2.5780 (0.1121)***	1.5634 (0.2502)***
R^2 Adj.	0.881	0.978
States	51	51
Cross-sections	959	959

Note: White corrected diagonal standard errors in parentheses appear below estimated coefficients. All monetary values are real and expressed in terms of June 2020 prices. *** = Statistically significant at the 0.01 level; ** = 0.05 level; * = 0.10 level.

Hence, if there exists an oversupply of lawyers, one reason is that those attempting to qualify for attendance at a law school by means of the LSAT sometimes appear to be insensitive to long-term labor market conditions for lawyers.⁶

Our evidence applies to individuals taking the LSAT for the first time. It would be interesting to see how first timers compare with those taking the examination more than once. Is the latter group more or less economically motivated? What if we were able to incorporate variables that represent the social and political leanings of the test takers? It seems reasonable that emergence of particular issues, for example, global warming or abortion, might attract a specific group of individuals anxious to address such situations by practicing law. What if we knew more about the incomes and other circumstances of test takers in the various states? The Law School Admission Council's closely held data bank might be able to provide such information.

While lawyers' declining real incomes by themselves do not tell us that society hosts too many lawyers, declining real incomes constitute relevant evidence on the issue. This is especially true because the real incomes of most workers in most occupations have been increasing.

Even so, by their actions, the number of LSAT takers also appears to transmit a message that declining real incomes may not restrain the supply of lawyers as much as might be assumed. Indeed, non-monetary factors such as the prestige attached to being an attorney may carry a heavier weight than lawyers' incomes in the eyes of a sizable proportion of those considering the LSAT (Law Crossing, 2022).

CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

DATA AVAILABILITY STATEMENT

LSAT data were supplied confidentially to the authors by the Law School Admissions Council. All other data are available on request from author James V. Koch, jkoch@odu.edu.

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ENDNOTES

- ¹ Some law schools, however, allow students to submit their scores on the Graduation Record Examination (GRE) in lieu of LSAT scores.
- ² California, Virginia, Vermont and Washington permit individuals to take their state bar examination without their having attended a law school. Maine and New York permit individuals to apprentice themselves to a lawyer in lieu of law school. See Bar Prep Hero, "Do you have to go to law school to take the Bar? <https://barprephero.com/learn/take-the-bar-exam-without-law-school>."
- ³ Miller was an undergraduate student at Stanford University at the time.
- ⁴ One illustrative example among many is Lerner (2012).
- ⁵ This evidence is limited, however, because it relates only to a seven-year period, 2012 to 2018, because of limited data availability.
- ⁶ However, the recent contraction or demise of law schools that historically have accepted lower LSAT score students could reverse this situation. Among law schools that recently have closed are those at Whittier, Arizona Summit, and Concordia. In addition, the American Bar Association revoked the accreditation of the Thomas Jefferson School of Law in 2019. Further, some law schools have on their own decided to admit fewer students. In such cases, however, it often is difficult to separate those deciding on their own to contract their student bodies from those are forced to do so.

REFERENCES

- American Bar Association. (2021). Statistics archives. www.americanbar.org/groups/legal_education/resources/statistics/statistics-archives
- Blake-Gonzalez, B., & Koch, J. (2022). Why has the median real income of lawyers been declining? *Journal of Economics and Finance*, 46, 646–665. <https://doi.org/10.1007/s12197-022-09588-6>
- Bureau of Labor Statistics. (2021a). Legal services, NAICS 5411, May 2020 and preceding years. www.bls.gov/oes/2020/may/naics4_541100.htm
- Bureau of Labor Statistics. (2021b). Occupational employment and wage statistics, May 2020 and preceding years. www.bls.gov/oes/current/oes_stru.htm#23-0000
- Edwards, P. D. (2006). The shell game: Who is responsible for the overuse of the LSAT in law school admissions? *St. John's Law Review*, 80, 5.
- Federal Reserve Bank of St. Louis. (2021a). *Estimated percent of people of all ages in poverty by state*. GeoFRED Map (stlouisfed.org).
- Federal Reserve Bank of St. Louis. (2021b). *Gross domestic product: All industry total by state*. GeoFRED Map (stlouisfed.org).
- Galanter, M. (1974). Why the “Haves” come out ahead: Speculations on the limits of legal change. *Law & Society Review*, 9(1), 95–160. <https://doi.org/10.2307/3053023>
- Kidder, W. (2000). Portia denied: Unmasking gender bias on the LSAT and its relationship to racial diversity in legal education. *Yale Journal of Law and Feminism*, 12(1), 1–42.
- Knezevich, L., & Camara, W. (2020). The LSAT is still the most accurate predictor of law school success. *LSAC*. <https://www.lsac.org/data-research/research/lsat-still-most-accurate-predictor-law-school-success>
- Law Crossing. (2022). *Is law still a prestigious and profitable business?* LawCrossing.com.
- Law School Admissions Council. (2021a). *First-time LSAT takers reported by year, state, and gender*. Supplied Privately to the Authors.
- Law School Admissions Council. (2021b). Test registrants and test takers. <https://report.lsac.org/TestTakers.aspx>
- Lerner, C. (2012, February 8). LSAT takers on the decline. *Michigan Daily*. www.michigandaily.com/uncategorized/fewer-students-taking-lsats-year/
- Magee, S. (1991). A taxing matter: The negative effect of lawyers on economic activity. *International Economic Insights*, 2, 34–35.
- Marks, A., & Moss, S. (2016). What predicts law student success? A longitudinal study correlating law student applicant data and law school outcomes. *Journal of Empirical Legal Studies*, 13, 205–265.
- Maurizi, A. (1979). Occupational licensing and the public interest. *Journal of Political Economy*, 82(2, Part 1), 399–413.
- Miller, J. A. (2004). *Why is everyone taking the lsat?* Department of Economics, Stanford University.
- Nussbaumer, J. (2006). Misuse of the law school admissions test, racial discrimination, and the de facto quota system for restricting African-American access to the legal profession. *St. John's Law Review*, 80, 167–181F.
- Olson, M. (1992). Do lawyers impair economic growth? *Law and Social Inquiry*, 17(4), 625–633.
- Organ, J. (2017). Tuition trends by LSAT category from 2010 to 2014 with thoughts on variable return on investment. *Journal of Legal Education*, 67, 51–85.
- Paul, D. (2022, May 20). No Lsat required? Law school admissions tests could be optional under new proposal. *Wall Street Journal*. Retrieved May 25, 2022, from <https://www.wsj.com/articles/is-the-lsat-required-fate-of-test-for-law-school-admissions-to-be-decided-11653048001>
- Powell, B., & Steelman, L. (2012). Research reports: Equity and the LSAT. *Harvard Educational Review*, 53, 32–44.
- PowerScore. (2021). LSAT repeater statistics. www.powerscore.com/lsat/help/lsat-repeater-statistics.cfm
- Princeton Review. (2022). About the LSAT. www.princetonreview.com/law/lsat-information
- Richter, M. (2013, June 12). What does the LSAT have to do with being a lawyer? *Manhattan Prep* www.manhattanprep.com/lsat/blog/what-does-the-lsat-have-to-do-with-being-a-lawyer-everyone-studying-for-the-lsat/

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